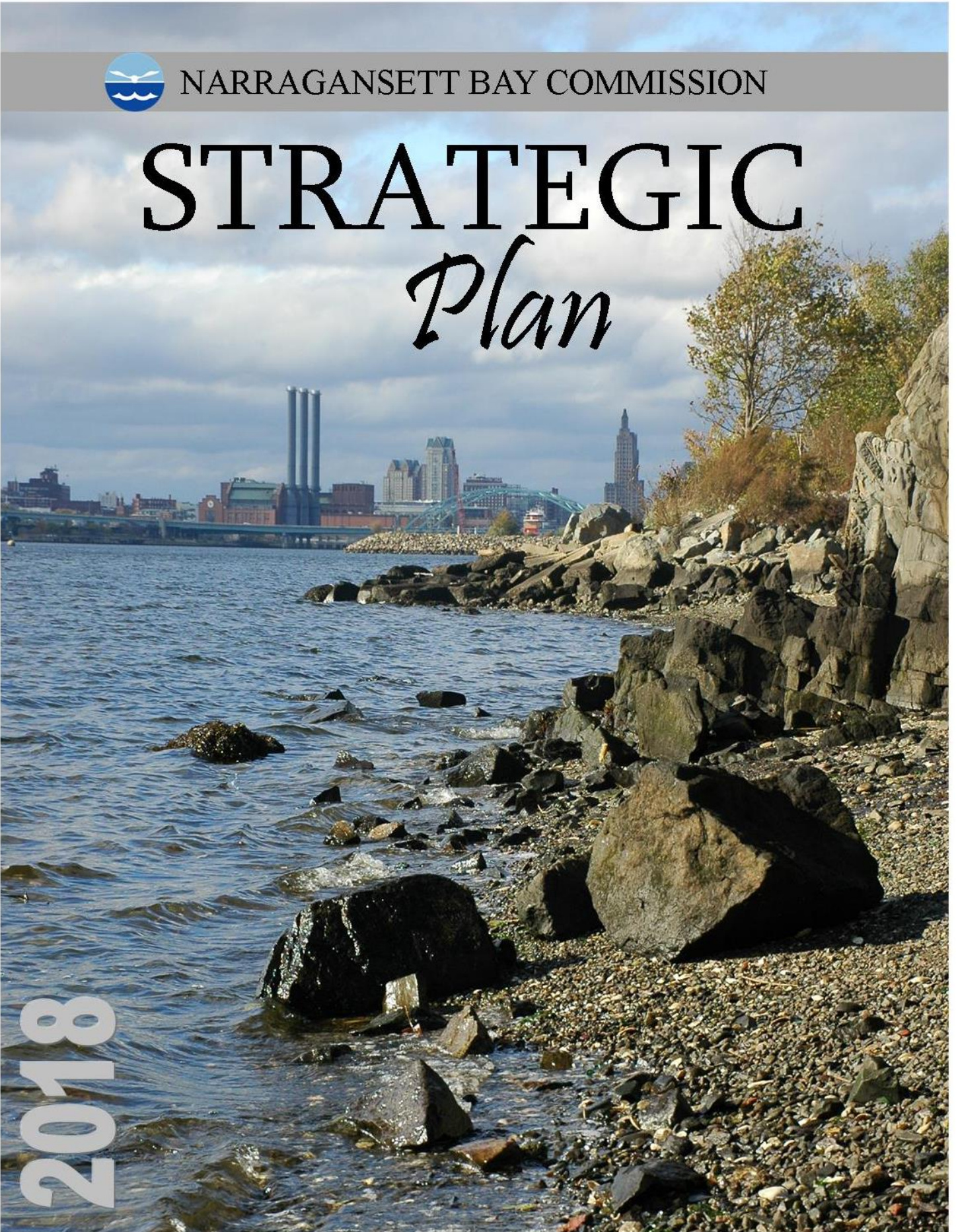




NARRAGANSETT BAY COMMISSION

# STRATEGIC *Plan*

2018



Cover photo provided by Barry Wenskowicz

# Narragansett Bay Commission

## Mission Statement

*“To maintain a leadership role in the protection and enhancement of water quality in Narragansett Bay and its tributaries by providing safe and reliable wastewater collection and treatment services to its customers at a reasonable cost.”*

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## Message from the Chairman



Since 1982, when the Narragansett Bay Commission assumed ownership and operation of the wastewater treatment facilities at Field's Point, this agency has served not only residents of the ten cities and towns in our district, but also every person in Rhode Island who values clean water. Along the way, the Narragansett Bay Commission has responded to the changing needs of the environment and our community with innovation and agility, and has been repeatedly recognized regionally and nationally for environmental, financial, and managerial excellence.

A robust strategic plan supports this service. Our charge and responsibility to the environment and public health requires that we never stop planning, never stop advancing, and never stop improving. So, although the Narragansett Bay

Commission has amassed an impressive list of accomplishments since the 2011 version of the agency's comprehensive Strategic Plan, we recognize that we must move forward to ensure our community waters remain safe and clean for future generations. Since the 2011 Strategic Plan, Phase II of the Narragansett Bay Commission's Combined Sewer Overflow Abatement Project has come to completion and has continued to generate positive benefits for Narragansett Bay and its tributaries. Over the past ten years, the Phase I CSO tunnel and Phase II facilities have prevented more than 10 BILLION gallons of combined sewage from entering Narragansett Bay, sending that flow for advanced treatment at the Commission's Field's Point Wastewater Treatment Facility. As a result, bathing beach closures due to bacterial contamination have decreased dramatically and a portion of Narragansett Bay that has experienced weather-related closures to shellfishing for 70 years has now opened unconditionally. The third and final phase of the CSO program is currently in design and will bring additional water quality enhancements into Pawtucket and Central Falls.

But CSOs are not the agency's only success story: thanks to investment in nitrogen reduction projects at both the Field's Point and Bucklin Point facilities, nitrogen levels in Narragansett Bay have decreased to historic lows. And, in an effort to diminish our reliance on fossil fuels, the Commission has pursued an aggressive renewable energy portfolio---including wind, solar, and biogas---that makes us a model for clean water agencies across the nation. Similarly, our steadfast pursuit to balance our environmental responsibilities with our fiduciary responsibility to our ratepayers has led to a vigorous environmental monitoring program, supported by the most advanced water quality laboratory in New England.

We also understand that a healthy economy demands reliable infrastructure, and I am glad to say that our proactive planning to extend interceptors in the Town of Johnston enabled Citizens Bank to retain their headquarters in Rhode Island, retaining thousands of jobs in the state.

Those of us who were around in 1980 when the General Assembly created the Narragansett Bay Commission remember that the state of Narragansett Bay was disgraceful. Today, the bay is cleaner than it has been in 150 years. Thanks to ratepayer investment, the strategic environmental and economic planning of the Board of Commissioners, and the commitment of the Commission staff, I am very proud that children today will only remember a Bay that is productive, safe, and healthy.

Sincerely,

A handwritten signature in black ink that reads "Vincent J. Mesolella". The signature is written in a cursive, flowing style.

Vincent J. Mesolella  
Chairman

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## Message from the Executive Director

I am pleased to present the Narragansett Bay Commission's Strategic Plan, which will guide the agency's activities over the next five years. This document, my final Plan as Executive Director, clearly demonstrates our environmental commitment to meet and exceed regulatory mandates and to ensure the protection and enhancement of Narragansett Bay.



The NBC's first official Strategic Plan was developed in 2004 with input from the combined creative thinking of stakeholders from outside the agency, our NBC Commissioners and our valued staff. The plan was updated and its content expanded in 2005, 2006, and 2011. The plan's clearly defined strategic map and the quantifiable progress it has generated is evidenced in the many awards and honors the NBC has received over the past seven years, including the prestigious Excellence in Management Award at the Platinum Level from the National Association of Clean Water Agencies (NACWA)---one of only six agencies in the nation to be recognized at this highest level four times---and as one of only sixty-one utilities worldwide to be named a Utility of the Future. Combined with annual awards from the Government Finance Officers Association for our annual budget documents and fiscal audits, awards from NACWA for consistent excellence in water treatment, and awards from the Providence Business News for excellent working environments, we can say with confidence that the agency is on a strong strategic path.

Since the adoption of the last Strategic Plan, the NBC has accomplished much, including completion of Phases I and II of the Combined Sewer Overflow Project and major nitrogen reduction projects at both the Field's Point and Bucklin Point facilities. Throughout this period, the NBC has continued our comprehensive water quality monitoring program for Upper Narragansett Bay and its tributaries, and our continual excellent financial management has led to an envied Standard & Poor's AA- rating. We have also pursued an aggressive program for renewable energy, making the NBC a national leader among clean water utilities in reducing greenhouse gas emissions.

This Plan is a comprehensive document that details the many challenges facing the NBC and provides a blueprint for staff to follow so that we may achieve the NBC's mission. The Strategic Plan is used as the foundation for developing the NBC budget, so that we are assured the financial resources necessary to achieve our commitments and meet our goals.

As I hand the reins into the very capable hands of my successor, Laurie Horridge, I thank our partners, stakeholders, Board of Commissioners and employees for their continued support and efforts toward achieving our goals. While we are gratified by our numerous awards and accolades, we value even more our potential to effect positive change for both our ratepayers and the environment. To fully achieve the vision of a fishable, swimmable Upper Narragansett Bay will require the commitment of everyone from our stakeholders to our ratepayers, but most importantly from our employees, a commitment to personal excellence, creativity, innovation and most importantly teamwork, elements essential for our future success. Through the goals, strategies and approaches contained in this Strategic Plan and the commitment of each of you, we have the potential to achieve our goals of a cleaner, healthier Narragansett Bay for all to enjoy.

Sincerely,

A handwritten signature in black ink, reading "Raymond J. Marshall". The signature is written in a cursive, flowing style.

Raymond J. Marshall, PE  
Executive Director

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## Acknowledgements

This report was written and prepared by the staff of the NBC Water Quality & Compliance section, under the direction and supervision of Thomas P. Uva, Director of Environmental Science & Compliance. Kimberly Kirwan, Environmental Coordinator, is to be acknowledged for taking the lead on this important project. Kimberly, with assistance from Molly Welsh, Environmental Scientist, and Sarah Flickinger, former NBC Environmental Scientist, interviewed all NBC managers and directors in order to evaluate and capture present and proposed changes in every section of the NBC. This was an important step in the strategic planning process so that the plan would accurately detail what staff does daily and what staff will do as the agency moves forward into the future. All NBC Directors, Managers, and supervisory staff are to be recognized for their assistance in updating sections of the report that pertain to their activities and for providing many of the pictures relevant to their sections. It is important to recognize the NBC Board of Commissioners for all of their support in this endeavor and for the support and guidance they provide throughout each year. Lastly, we wish to acknowledge all NBC staff for the hard work they do each day to make the NBC an exemplary award winning agency.

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## Executive Summary

The Narragansett Bay Commission (NBC) was created in 1980 by the Rhode Island General Assembly to rehabilitate and manage the then-failing Field's Point wastewater treatment facility located in Providence. By 1987, the NBC completed a major upgrade to this facility and was recognized by the USEPA for turning it from one of the worst polluting facilities in New England to one of the best performing plants in the nation. Due to NBC's exceptional job at revitalizing the Field's Point facility, the agency was authorized in 1992 by the State of Rhode Island to assume ownership of the Bucklin Point facility, which is located in East Providence.

Charged with unfunded regulatory mandates imposed by Rhode Island Department of Environmental Management (RIDEM) through the Rhode Island Pollutant Discharge Elimination System (RIPDES) program to continually reduce pollutant levels, the capital improvements made by the NBC have resulted in major water quality improvements in Upper Narragansett Bay. This was accomplished while still keeping sewer use fees very competitive with those throughout the state and across the country. Serving over 360,000 residents and 7,900 businesses, the NBC is dedicated to providing reliable, cost-effective wastewater collection and treatment services to a major portion of Rhode Island's population. The NBC mission statement encapsulates its commitment to both its rate payers, as well as the environment:

***NBC Mission Statement:*** *To maintain a leadership role in the protection and enhancement of water quality in Narragansett Bay and its tributaries by providing safe and reliable wastewater collection and treatment services to its customers at a reasonable cost.*

The NBC is a quasi-public agency governed by a Board of Commissioners, which is composed of representatives from the municipalities in the NBC's service district (shown below), as well as ten gubernatorial appointments. These communities include Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence and small sections of Cranston and Smithfield. The NBC is Rhode Island's largest wastewater authority, comprising the two largest wastewater treatment facilities in Rhode Island, 108 miles of sewer interceptor pipes, a three mile Combined Sewer Overflow (CSO) tunnel and six pumping stations.



Narragansett Bay is Rhode Island's most valuable resource. Given the NBC's service area shown above, it is easy to see that the actions of the NBC can have a significant impact on the water quality of Narragansett Bay. This impact can have both positive and negative effects on aquatic life, recreational activities, tourism, waterfront development, and the livelihoods of many who make a living on or near Narragansett Bay. Because the actions of the NBC can have such a profound effect on every Rhode Islander, it is critical for the agency to achieve exemplary environmental performance, and this is routinely done year after year, making the NBC a local and national leader in its industry. By providing wastewater collection and treatment services to our customers at the most reasonable cost possible, while protecting and enhancing water quality in the Narragansett Bay, the NBC can do its best to ensure the Bay remains Rhode Island's most valuable resource for generations to come.



Aerial photograph of the Bucklin Point Wastewater Treatment Facility.

An agency charged with such an important responsibility must have a clearly defined plan to ensure priorities are established and goals are attained. The NBC's Strategic Plan is designed to address this need and is intended to accomplish the following:

- Describe a roadmap and direction for the future of the NBC in a continually changing and challenging environment;
- Set priorities for the most important tasks in order to allocate resources to programs and strategies of the highest value;
- Coordinate and align the actions across the various parts of NBC into more unified and focused strategies aimed at continuing to fulfill the agency's mission.



Aerial photograph of the Field's Point Wastewater Treatment Facility.

In February 2003, the Narragansett Bay Commission began working toward its first Strategic Plan with the assistance of an outside consultant. By June, the NBC Board approved the Strategic Planning Report and Recommendations. In early 2004, an effort began to transform the report into a more clearly defined Strategic Plan by establishing Strategic Goals, Objectives and Performance Indicators. A *goal* is a long-term result the agency is working to achieve, encompassing the fundamental strategic issues the organization has to address to achieve its mission and move towards its desired future. An *objective* is an intermediate measurable result that will get the agency closer to achieving its established strategic

goal and will ultimately result in the realization of the stated strategic goal. An *indicator* is any parameter that can be measured and can be used to gauge increments of progress, changes in site conditions or accomplishments and achievements. The inclusion of these specific parameters in the 2004 Strategic Plan more clearly detailed the future direction of the NBC. On June 16, 2004, the Board unanimously approved the first NBC Strategic Plan.

During early 2005, the NBC once again began further development and enhancement of the Strategic Plan. This initiative focused on establishing clearly defined Strategies which would be followed by staff in order to achieve the major Goals and Objectives. Performance Measures, used to gauge the NBC's performance at achieving our Goals and Objectives were also established at this time. The formation of Performance Measures was essential, allowing a direct gauge of NBC progress toward achieving short and long-term goals. These Performance Measures were linked to the budget process to align resources with priorities. This revised Strategic Plan was approved by the Board on June 15, 2005. In 2006 and again in 2011, the Strategic Plan was updated to incorporate new initiatives and priorities. The NBC Board of Commissioners adopted the latest version of the Strategic Plan in 2011. Since that version was adopted, the Strategic Plan has remained intact, continually focusing NBC's direction, activities and priorities.

The revision of the NBC Strategic Plan was timed to be issued following the completion of many critical NBC projects, including the Phase II CSO project, installation of nitrogen removal at the wastewater plants, and the completion of the new Water Quality Science Building, and prior to the start of NBC's largest construction project, the Phase III CSO Abatement project. In addition, we wanted to incorporate into this plan all requirements specified in the new RIPDES permits, which became effective December 2017, and the accompanying Consent Agreement signed September 5<sup>th</sup>, 2018.



The grand opening of NBC's state-of-the-art Water Quality Science Building, which is home to NBC's Laboratory and EMDA departments.

This updated Strategic Plan reflects several organizational changes designed to align the organization to make operations more efficient and meet future demands. Several changes to division and section names have been implemented to accurately reflect primary duties and to proactively address succession planning. The Engineering section was moved into the Construction Division and the division is now named Engineering & Construction Services Division, the Operations and Engineering Division has been updated to the Operations & Maintenance Division (O&M) and the Planning, Policy & Regulation Division is now known as the Environmental Science & Compliance Division (ES&C). The Human Resources section and Information Technology sections have both moved to the newly named Administration Division, formerly the Executive Division, and the Administration and Finance Division is now the Finance Division.

The NBC Strategic Plan remains a living document. Throughout the years to come, the NBC will periodically update and re-evaluate the Strategic Plan, establishing new priorities, readjusting agency focus and making changes necessary to guide the agency along a successful and award-winning path into the future. The planning process for this Strategic Plan revision resulted in the reaffirmation of the established strategic goals that are well understood and supported by NBC employees. It has assisted in creating an increased understanding among employees of NBC's history, mission, and the important contributions each employee makes to the success of the NBC and that the NBC makes to Rhode Island and its environment. NBC management and employees were fully committed throughout the entire strategic planning process and the continued dedication of every employee is critical to the success of the NBC to achieve its ambitious goals. The Strategic Goals, Objectives and Strategies outlined in this document are NBC's roadmap to the future.

### *Recent Accomplishments*

Since the approval of the 2011 Strategic Plan, the NBC has made great strides to realize many of the established goals and objectives and completed many projects. From infrastructure and the operation of the treatment plants, to data collection and customer service, NBC has maintained a culture of continual improvement in all departments, contributing towards excellence in wastewater treatment and water quality protection. This section will highlight the major NBC achievements since the NBC Board approved the 2011 Strategic Plan on June 15, 2011.

Numerous upgrades have been made to NBC infrastructure over the last decade. The NBC has had tremendous success with the construction and operation of the Phase I CSO tunnel. The positive impacts of this project have only become clearer since 2011. The tunnel captures almost 1 billion gallons of combined sewer overflow each year, reducing CSO volume and bacterial loads by about half. NBC's Narragansett Bay monitoring efforts have revealed significantly higher percentages of samples meeting water quality standards after the tunnel was constructed. In 2011 and again in 2017, the RIDEM relaxed shellfishing rainfall closure guidelines due to the success of the NBC CSO project. Additionally, the Rhode Island Department of Health (RIDOH) is considering opening several urban beach sites in the Providence River to public swimming as a result of the recent water quality improvements. These CSO project successes were recognized by the Water Environment Federation in 2014 with the National Water Quality Improvement Award for enhancement and protection of Narragansett Bay. These CSO abatement efforts are further supported by the NBC Stormwater Mitigation Program. Since the implementation of this program in 2003, over 7 million gallons of stormwater has been diverted from entering NBC's combined sewer system during wet weather events, providing additional collection and treatment capacity in the tunnel for more contaminated flows.



Award received by NBC from the Water Environment Federation in 2014.



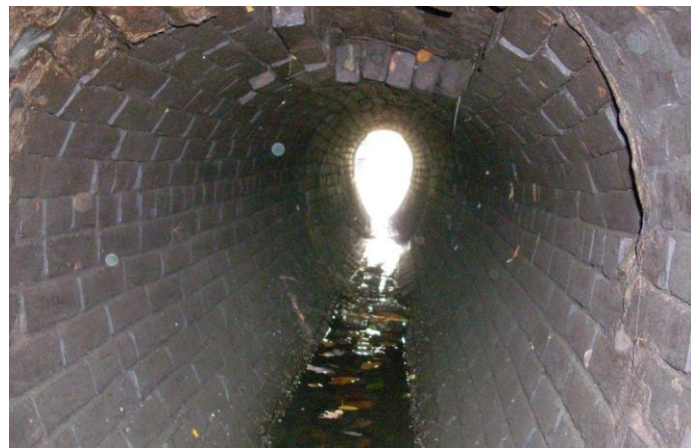
In addition to the success of the Phase I CSO tunnel, the completion of Phase II of the CSO Abatement Project was a major NBC accomplishment over this report period. This project consisted of building two near surface interceptors along the Seekonk and Woonasquatucket Rivers to bring additional flow to the Phase I tunnel, building a new separate storm drainage system in the Summit neighborhood, and constructing a wetlands treatment system in Central Falls. The Phase II CSO project was completed in the spring of 2015. These projects collect and divert wastewater flow that previously would have been discharged without treatment into the

Woonasquatucket and Seekonk Rivers during rain events. The Seekonk River interceptor is approximately 8,000 feet in length, while the Woonasquatucket interceptor is 18,200 feet long. Together, the two interceptors eliminate most CSOs from ten outfalls. On the East Side of Providence, the new storm drainage system separates the storm flow from combined sanitary/storm sewer system, removing about 62 million gallons of stormwater from the sanitary sewer system each year. The one-acre wetlands treatment area is able to divert and treat 1.05 million gallons that would have been discharged through a CSO during storms. The water quality improvements associated with these Phase II projects are being evaluated at this time, however, it is already clear that these Phase I and II CSO projects have significantly cleaned up and improved water quality in upper Narragansett Bay.

Not only has NBC reduced combined sewer overflows to the Bay, but the NBC has also completed significant work to maintain NBC's existing infrastructure. The pumps at the Ernest Street Pump Station were replaced and the Omega Pump Station was upgraded in 2013. The Interceptor Maintenance (IM) department supervised the television inspection of over 100,000 feet of sewers in the last three years, lined four miles of sewer pipes and evaluated interceptor easements in several communities. The Louisquisset Pike Interceptor was replaced with a larger pipe to accommodate higher flow, the Moshassuck Valley interceptor was replaced and the Branch Avenue interceptor was repaired. Over the last three years, all high voltage equipment was inspected and preventative and corrective maintenance was performed as issues were detected. The Asset Management program now records nearly 95% of all work done on NBC's 4,600 individual pieces of equipment at all NBC facilities.



A small tunnel boring machine used in the construction of Phase II of the CSO Abatement Project.



A CSO outfall pipe being inspected by NBC staff.

Equally important to the many advancements to NBC's existing infrastructure over the past few years, are the upgrades to improve both treatment plants. Biological Nutrient Removal (BNR) systems were completed at both the Field's Point and the Bucklin Point wastewater treatment facilities (WWTFs) in order to meet the new RIPDES seasonal (May to October) permit limit of 5.0 mg/L total effluent nitrogen, which went into effect on July 14, 2014. The Integrated Fixed-Film Activated Sludge (IFAS) process to remove nitrogen was completed at Field's Point in 2013. As a result, the 2014 total nitrogen load at the Field's Point WWTF represented a 4,782 lb/day reduction in comparison to 2003 loads. Facilities to reduce total nitrogen to 8.5 mg/L were first installed at Bucklin Point in 2005. This system went on-line just before the DEM issued more stringent nitrogen limits of 5 mg/L. The aeration tanks at Bucklin Point were then upgraded in 2014 to create one additional anoxic zone and one additional aerobic zone to further remove nitrogen species to meet the much lower limit. Both treatment facilities have met and surpassed the RIPDES permit limit of 5 mg/L. In fact, the NBC has achieved an 81% reduction in total nitrogen seasonal loading from the NBC when compared to 2003 loading levels, the year of the Greenwich Bay fish kill that was the catalyst for the DEM nitrogen reduction mandates. The BNR upgrades were recognized by the Construction Management Association of America with an Excellence Award in 2014 and also by Water & Waste Digest's with an Excellence Award in 2015.



BNR facilities (pictured here at Bucklin Point) were installed at both facilities to meet new RIPDES permit requirements.

In addition to the BNR upgrades, the Bucklin Point WWTF effluent pumps were also upgraded, since they were 10 years old. One pump was replaced and three were rebuilt. Two new blowers were installed in the blower building at Field's Point to provide sufficient air during the aeration treatment process. NBC maintenance staff successfully changed the application method of sodium hypochlorite from one common feed system to two separate feeds to each chlorine tank, ensuring accurate chlorine dosage and precise disinfection going forward. At Bucklin Point, the berm (walls) for the dry weather pump station was raised and a gate was installed for the wet weather pump station along with other improvements to provide protection to the plant from a one-hundred year storm event. This project is part of an effort to ensure that NBC is better prepared for effects of climate change, including sea level rise.



The newly reconstructed berm at Bucklin Point raised the level to better defend against the effects of climate change and sea level rise.

As the treatment plants further reduce effluent parameters such as nitrogen, higher-sensitivity laboratory tests become necessary to assess water quality samples. A new \$24.7 million Water Quality Science Building (WQSB) was constructed and completed in 2016. NBC's newest building at the Field's Point campus has state-of-the-art laboratory facilities, allowing NBC to analyze samples to ultra-low water quality standard levels, providing operations staff with prompt and highly accurate information regarding the performance of each facility. The new Class 10,000 certified clean room is capable of analyzing metal and mercury quantities at much lower detection levels than were previously attainable. Additionally, the laboratory has recently expanded its suite of analyses with new methods for plankton identification, enterococci bacteria analysis and chlorophyll *a* analysis. Procedures for fecal coliform bacteria analysis and Biochemical Oxygen Demand (BOD) have been streamlined with the use of robotics. Finally, a more advanced Laboratory Information Management System (LIMS) was implemented which interfaces with analytical equipment, automatically pulling result values into the database. These upgrades have greatly improved efficiency, productivity, and accuracy.

The new lab facility and lab analyses enables NBC's Environmental Monitoring and Data Analysis (EMDA) staff to maintain the highest standards in their comprehensive monitoring efforts within the plants and the receiving waters to gain a greater understanding of NBC's impact on Narragansett Bay environmental dynamics. The use of more advanced automatic sampling machines within both treatment plants has drastically reduced human intervention and the risk of human-related errors. In addition, the EMDA section introduced two new monitoring initiatives, Benthos Monitoring and Phytoplankton Monitoring, which will provide critical information on how the benthos environment and primary productivity are changing in the Bay in response to NBC's significant nutrients reductions.

Not only is the NBC invested in monitoring the health of the ecosystem, but it remains a leader in the field of sustainability and green energy. NBC seeks to minimize environmental impacts with respect to climate change, while providing cost-effective wastewater treatment. Many renewable energy options have been evaluated by NBC staff to determine what type of projects would best assist the NBC in the mission to reduce costs of reliable wastewater treatment for its ratepayers. One of the first major projects completed was the construction of three 1.5 megawatt wind turbines at the Field's Point WWTF in 2012, which now generate almost 50% of Field Point's electricity needs. Over 2,325 metric tons of carbon dioxide have been offset by the turbines each year since their installation and this project was recognized by *Water & Waste Magazine* on their "Top Projects" list in 2012.



The NBC net meters renewable energy from this solar array facility in Richmond, RI to the electric grid to credit NBC accounts.

In October 2016, three additional 1.5 megawatt wind turbines were purchased in Coventry, Rhode Island. These turbines have been performing well, and generate, through the use of Net Metering Renewable Energy Credits (RECs), an additional 9.3 million kilowatt hours of electricity annually, or 25.8% of NBC's overall electrical needs. At the Bucklin Point facility, a 600 kilowatt Biogas Combined Heat and Power (CHP) system was completed in early 2018 and was undergoing testing throughout 2018. The Biogas Reuse project is expected to reduce carbon dioxide emissions at Bucklin Point by at least 1,000 metric tons per year. The NBC intends to further reduce its carbon footprint by obtaining 100% of its electricity from local renewable energy resources by 2020 and attaining the lofty goal of becoming a "net-zero" organization. Not only will this reduce NBC's energy bills, but it will also lessen the environmental impacts of the facilities. The NBC has reached an agreement with Green Development, Inc., to construct three solar farms, which would virtually net meter renewable energy to NBC facilities. Two projects became operational in early 2018 and the third site is under construction at the time of this writing. Energy efficiency remains a continued goal for NBC in the future. As we move forward there are several Capital Improvement projects planned. These include installing more LED lighting systems throughout the NBC facilities, and an evaluation of conservation and energy efficiency opportunities. The work of all these energy efficiency and renewable energy projects will allow NBC to reach its net-zero goal by 2020.



NBC's Biogas CHP installation at Bucklin Point will help NBC attain its goal of utilizing 100% renewable energy for electricity needs.



NACWA recognized NBC with the Utility of the Future award.

The NBC was bestowed with the honor of being considered a "Utility of the Future" by the National Association of Clean Water Agencies (NACWA) and Water Environment Federation (WEF) as the NBC has transformed from a traditional wastewater treatment system to a community-based resource recovery center and leader in the overall sustainability and resilience of the communities they serve. Additionally, the US Department of Energy awarded NBC a 2017 Better Projects Award in recognition of our sustainable energy projects.

The commitment to sustainability reaches beyond the generation of renewable energy and is reflected in NBC's implementation of low impact design (LID) and efficiency initiatives. In 2012, NBC completed the construction of a Silver LEED-Certified administration building at Field's Point. The Administration Building features green roofs, a grey water system, and numerous energy-saving technologies. Low impact design elements such as porous pavement, swales and rain gardens surround the building. The building was awarded a Merit Award for Sustainable Design from the American Institute of Architects/Rhode Island Chapter in 2012. NBC's ESTA section participated in a joint Rhode Island Office of Energy Resources (RIOER) and Department of Energy (DOE) grant-funded Public Energy Efficiency Partnership Program for ten water/wastewater facilities and developed a methodology to track and measure WWTF efficiency in coordination with the Department of Energy's Better Plants Partnership program. NBC has implemented various energy efficiency projects, including installing variable frequency drive pumps and efficient blowers, and upgrading to LED lighting and sensors. These efforts have resulted in a 9.8% reduction in NBC's total electricity usage. As a result of these green technology and efficiency investments, the Field's Point WWTF was named Most Efficient Large Secondary Wastewater Treatment Facility by the Narragansett Water Pollution Control Association in 2011, 2012 and 2013. In 2018, the NBC implemented water recycling demonstration project at Field's Point with the hope of showing the benefits of reusing recycled wastewater.

In 2002, as a part of the NBC's strategic planning process, the NBC Board of Commissioners began discussions of expanding NBC's interceptors in Johnston and in 2007, the NBC developed a Facilities Plan for the area. In 2016, Citizens Bank was considering moving its headquarters out of Rhode Island and taking with it over 3000 jobs. Although Citizens had expressed interest in moving its corporate office to Johnston, the lack of sewer and water infrastructure was a roadblock. Fortunately, because of the NBC's strategic planning, the 2007 Facilities Plan evolved expeditiously into a 2017 construction project that extended both sewer and water lines to the new Citizens headquarters. In addition to bringing a new reliable revenue stream to the NBC, the project brought 21<sup>st</sup> century sewer and water infrastructure to Johnston, offered Greenville Avenue residents the opportunity to move from ISDS systems to sewer connections, and vastly improved the conditions on Greenville Avenue. Construction was completed in August 2018.



Sewer line installation on Greenville Avenue expanded NBC's service area further into Johnston.

The NBC has continued to provide exemplary service to its customers, especially through the continuous implementation of new technology. The Customer Service team began twice monthly billing to ease burdens on the largest users, created an easy online payment option through the RI.gov website, updated tariffs for output meters and water shut-off fees, and added a calculator to the NBC website that determines credit card and debit card fees. The use of tablet technology has improved the efficiency of environmental sampling activities in EMDA and of Pretreatment inspections, which

combined with upgraded Pretreatment software, has improved program performance. These technologies have helped Pretreatment achieve an average of 1,954 annual inspections and permit 2,077 companies. The Permits Team improved customer service by creating an online portal for permit application filing and fee payments. They also worked with Information Technology (IT) to develop a sewer and stormwater connection permit database compatible with the Customer Service database. IT has worked to upgrade and improve NBC technology, implementing a virtual environment for both servers and desktops. Oracle software was updated, which allows for two file systems to run on one server, greatly improving functionality, and resulting in repairs not requiring any downtime.

Along with providing excellent service to our customers, educating and communicating effectively with other industry professionals, the public and key stakeholders remains an NBC strength. Over the last several years, the NBC has often collaborated with local institutions to contribute to science and gain knowledge regarding the impact of NBC activities on Narragansett Bay water quality. The collaboration of NBC's water quality professionals with the University of Rhode Island Graduate School of Oceanography (GSO) to model the Upper Bay, Providence River, and Seekonk River using the Regional Ocean Modeling System (ROMS) has led to insights regarding circulation, transport, and residence time of nutrients and other pollutants. Together with the University of Rhode Island (URI), the ESTA section designed a greenhouse gas study which has measured emissions from the Field's Point wastewater treatment plant processes for two years, and will measure emissions from the Bucklin Point plant in the coming years. NBC is not yet regulated regarding greenhouse gas emissions, but this study is pre-emptive groundwork to be prepared for future regulatory requirements. The Pretreatment Section has assisted several organizations across the country with developing programs for dental amalgam and grease control. Pretreatment staff members have been instrumental in training Pretreatment



NBC staff explaining water quality to students in the NBC Watershed Explorers program on a field trip.

coordinators in Rhode Island as well as across New England. NBC staff members also educate many young minds each year through the NBC Watershed Explorers program. Over six hundred local elementary school children participate in the program and these students explore water quality testing through field trips and in-class lessons throughout the year, becoming engaged environmental stewards at a young age. Over the last few years, this education program was rebranded from the original Woon Watershed Explorers to become more comprehensive and to include activities about alternative energy and flushables.

The NBC Public Affairs group has also worked on establishing NBC’s social media presence on Facebook, Twitter, and Instagram. In addition to these outward facing social media sites, the NBC created an educational DVD entitled *Environmentalism at Work*, which was awarded a National Achievement Award from the National Association of Clean Water Agencies for Excellence in Public Education in 2011. Also, NBC’s EMDA Section and the newly named Water Quality & Compliance section have led an effort to allow easy public access to all monitoring data and activities through the NBC webpage, Snapshot of Narragansett Bay, which allows the public to access NBC’s real-time data and read blogs about various conditions of the upper Narragansett Bay. The Snapshot of Narragansett Bay webpage received a 2012 National Environmental Achievement Award from the National Association of Clean Water Agencies for Excellence in e-media.



NACWA award for achieving “Excellence in e-media”.

NBC is considered to be an exceptional and safe place to work, as evidenced by several recognitions received since the last Strategic Plan was written. The Human Resources department ensures that the employee benefits plans have been evaluated and that all state and federal required disclosures were reported to staff in a timely manner. The NBC has been named one of the *Best Places to Work in Rhode Island* for excellence in employee engagement several years running (2011, 2013, 2014, 2015, 2016,



George W. Burke, Jr. Facility Safety Award received from the WEF organization in 2016.

2017) and was recognized for its outstanding employee wellness programs with United Healthcare’s “Well Deserved” award for demonstrating exceptional commitment to employee health and well-being in 2013 and the 2012 Worksite Wellness Award from Blue Cross/Blue Shield of Rhode Island. The ESTA department continues to provide high quality and thorough safety training program for all employees, which contributed to a 33% decrease in NBC Occupational Safety Health Act (OSHA) recordable injuries from 2013-2014. Jointly with IT, ESTA implemented an online safety training and tracking program. The NBC Safety Program was awarded the A. Joseph Mattera Safety Award from the Narragansett Water Pollution Control Association in 2007 and 2014 as well as the George W. Burke, Jr. Facility Safety Award from the Water Environment Federation in 2010 and 2016.

Given the high achievements of all NBC divisions, it is not surprising that NBC management is similarly highly regarded. The financial arm of NBC has maintained its track record of distinction since the previous Strategic Plan in 2011. The Narragansett Bay Commission won the Excellence in Financial Reporting Award from the Government Finance Officers Association (GFOA) in 2011, 2012, 2014, 2015, 2016, and 2017, and the Distinguished Budget Presentation Award from the GFOA each year from 2011-2017.

Additionally, the Narragansett Bay Commission AA- rating was reaffirmed by Standard & Poor's, reflecting the NBC's long-term financial stability and consistently strong financial performance. NBC was awarded the 2011 Excellence in Management Award from the National Association of Clean Water Agencies and the 2014 Platinum Award for Excellence in Management, one of only ten utilities nationwide to receive the designation three times. *Rhode Island Monthly Magazine* presented Field's Point WWTF Administration a Silver Award in 2012. In 2017, Executive Director Ray Marshall received the Elizabeth Cutone Executive Leadership Award from the New England Water Environment Association for his outstanding leadership. Additionally, Chairman Vincent Mesoella was named one of "Seventeen Rhode Islanders to Watch" by GoLocalProv for his leadership and civic responsibility.

### ***Future Projects***

Looking ahead, the Narragansett Bay Commission has several exciting and complex initiatives that will continue to further the NBC's goals. The multi-year CSO abatement project is continuing with Phase III. Phase III plans have recently been reevaluated for feasibility and cost efficiency. A 13,000 foot long deep rock tunnel is planned along the Seekonk and Blackstone Rivers to collect and store CSO flows during storm events, diverting that flow from CSO outfalls. The Engineering & Construction Services Division will oversee the design of the tunnel and three near surface interceptors which are planned in Central Falls and Pawtucket, connecting to the tunnel. Storm sewer separation is planned for four additional CSOs. Once all three CSO abatement projects are completed, they are expected to reduce the number of annual CSOs by 95%, while reducing the CSO fecal coliform load by 98% and CSO TSS and BOD loads by 78% and 89%, respectively. The Finance department will be charged with the tasks to obtain the funding necessary to finance this ambitious project with the least impact on ratepayers.

The NBC plans to focus on reducing all storm water flow, not just from CSO outflows. An initiative to reduce system wide inflow from storm water is underway. In areas with separate storm sewers, storm water flow will be evaluated to ensure that sump pump and downspout outflows are not connected to the sanitary sewer, which is not designed to handle storm water flow capacities. This will further reduce untreated wastewater entering Narragansett Bay, decreasing nutrient and bacterial loadings.

The ESTA section has several sustainable environmental projects planned, including: on-site and off-site wastewater reuse, increasing in-house recycling efforts to include plastic bags and Styrofoam as well as reducing NBC's overall consumption of solid waste, using grey water at the new Laboratory facility for plant irrigation, explore treatment methods to reclaim biosolids for beneficial use, evaluating and reporting on NBC's carbon footprint, investigating the potential use of electric vehicles and on-site renewable energy storage options, and achieving NBC's goal of 100% "net zero" electricity use through additional efficiency, conservation and further renewable energy projects. In addition to



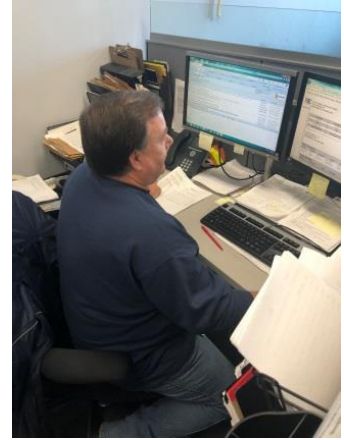
Irrigation systems operating at the Field's Point treatment facility utilizing recycled wastewater.



reducing the environmental impacts from all NBC facilities, NBC leadership is mindful of anticipated impacts from climate change with plans to continually evaluate NBC facilities for climate resiliency. As required by our new RIPDES permits, the NBC must develop a Resiliency Plan to prepare for climate change and sea level rise and will implement the findings of the plan once approved by RIDEM. Customer Service will extend these sustainability goals by evaluating the implementation of paperless billings, and further maximize efficiency by instituting automated billing, automated collections, and automated phone calls for accounts that are 30 days past due.

Several improvements are planned for the NBC Health & Safety Program, including an expanded online presence at [www.narrabay.com](http://www.narrabay.com), which will include a web-based Emergency Action Plan training program for all NBC employees. New safety programs and trainings will include 10-hour OSHA General Industry classes, an Electrical Safety/Arc Flash program and an Accident Investigation Program. Finally, ESTA will implement an Injury & Illness Reporting and Recordkeeping Program to more accurately track NBC injury data. IT plans to implement a third party Customer Service and Billing application with assistance from the Finance Department, expand the use of virtual desktops, and replace the storage area network. Finally the NBC will continue to evaluate areas where the service area can be expanded to provide needed services to the communities we serve and additional financial benefit to the agency.

With such forward thinking projects, NBC is poised to maintain its leadership position as a “Utility of the Future” and as a valuable resource for Rhode Island. This Strategic Plan outlines current and future plans and provides a roadmap for the Narragansett Bay Commission to continue to uphold its mission as a protector and improver of water quality in our rivers and Bay and provider of reliable, safe wastewater treatment for the coming years.



Customer Service staff working with a new payment system which allows for paperless billing.

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# NBC Strategic Goals

## Goal 1

**Core Business Goal:** Operate, maintain and protect our collection and treatment systems to ensure that all state and federal requirements are met or surpassed.

## Goal 2

**Environmental Performance Goal:** Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.

## Goal 3

**Financial Management Goal:** Manage NBC's finances through strong financial planning and controls such that sewer user charges are minimized.

## Goal 4

**Customer Focus Goal:** Maintain a customer-focused attitude throughout the organization.

## Goal 5

**Staffing Goal:** Attract, develop and retain highly qualified employees.

## Goal 6

**Communication Goal:** Improve and enhance internal and external communications.

## Goal 7

**Organizational Performance Goal:** Ensure that the NBC organization is aligned with and supports our strategic goals.

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# GOAL 1

## OBJECTIVES:

1. Maintain full compliance with all requirements for RIPDES Permits & Consent Agreements.
2. Design & construct CIP projects necessary to ensure compliance with RIDEM.
3. Ensure full compliance with all other Federal and State regulations.
4. Operate & maintain all NBC facilities in a cost-effective manner.
5. Ensure existing and future NBC facilities are not vulnerable to adverse impacts related to climate change.
6. Ensure full compliance & cost effectiveness of biosolids disposal practices.
7. Ensure proper execution of the NBC Asset Management Plan.
8. Ensure CMOM guidelines are followed for the NBC collection system.
9. Maximize the full use of technology agency wide.
10. Maintain high quality Laboratory resources to meet state & federal certifications, environmental requirements & proper WWTF operations.
11. Ensure IT resources to maintain & improve NBC Operations.
12. Provide environmental legal defense with regard to USEPA & RIDEM regulatory compliance matters & prosecute violations of NBC's Rules & Regulations.

*Core Business Goal: Operate, maintain and protect our collection and treatment systems to ensure that all state and federal requirements are met or surpassed.*

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**Core Business Goal: Operate, maintain and protect our collection and treatment systems to ensure that all state and federal requirements are met or surpassed.**

*The Narragansett Bay Commission’s mission is to provide safe and reliable wastewater collection and treatment services to its customers at a reasonable cost. The NBC’s most important strategic goal, our core business goal, is to comply with all state and federal regulations, especially those outlined in NBC’s Rhode Island Pollution Discharge Elimination System (RIPDES) permit. It is the responsibility of every employee to take steps on a daily basis toward performing strategies and objectives that will ensure the NBC meets this important goal. Real-time plant data is constantly monitored by staff, so plant performance can be optimized. Systems in the plant are routinely cleaned and maintained to minimize failures and unplanned expenditures. With 110 miles of sewer interceptors, a 3-mile long 26-foot diameter tunnel and associated pump station, as well as eight remote pumping stations and 66 CSOs, it is a constant process to examine the collection system to ensure that flows to the plants are maximized and the collection system does not fall into disrepair. Industrial users are inspected and monitored so their discharges do not adversely affect the collection system or the plants. These steps and many more are undertaken by NBC staff on a daily basis to guarantee our systems are operated, maintained and protected at the highest level possible, so that our goal of perfect compliance can be realized.*

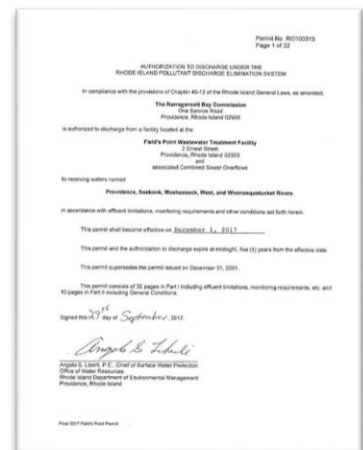
**Objective 1:** Maintain full compliance with all requirements specified in RIPDES Permits and Consent Agreements, including compliance with:

- *RIPDES effluent discharge limitations;*

Strategy: Operations will strive to ensure effluent permit limits are met at all times and surpass compliance levels whenever possible. Operations will promptly review daily printouts generated through the data archival system or manually produced from operator log sheets, along with all other available monitoring data. They will utilize this information to adjust WWTF operations as necessary to optimize plant performance and promptly make process parameter adjustments as needed.

Performance Indicators/Measures:

- Strive to obtain 100% compliance with effluent discharge limitations.
- Number of effluent discharge violations annually.



Signed RIPDES permit issued to the NBC by DEM in 2017.

Strategy: Operations staff will ensure proper operation of all system alarms and instruments to prevent non-disinfected discharges and secondary bypass events. They will conduct regularly scheduled alarm inspections per the Preventative Maintenance (PM) program

Performance Indicators/Measures:

- Strive to obtain zero non-disinfected discharges or dry weather discharge events.
- Number of non-disinfected discharges or dry weather discharge events annually.

Strategy: Operations will promptly notify the Pretreatment section of all unusual influents. Pretreatment will immediately respond to all plant incidents and will investigate all reports of unusual influents, interferences, and pass-through events, as well as immediately report any pass-through events to RIDEM. Environmental Monitoring staff will assist as needed with sample collection. Pretreatment will track all incidents and report on each event in the Annual Pretreatment Report.

Performance Indicators/Measures:

- Number of unusual influent reports, interference and pass-through events investigated by Pretreatment.
- Detail 100% of incidents in the Pretreatment Annual Report.

Strategy: All users permitted by Pretreatment with non-compliance incidents will be referred to the Environmental, Safety & Technical Assistance (ESTA) Section. ESTA staff will provide free technical assistance whenever requested to advise the user regarding how to rectify the non-compliance issue and to ensure the same incident does not occur another time.

Performance Indicators/Measures:

- Number of repeat non-compliance incidents.
- Number of technical assistance assessments conducted.

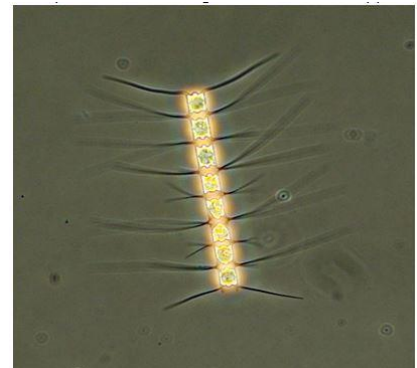
Strategy: The Laboratory will immediately send e-mail notifications to all pertinent staff via the Laboratory Information Management System (LIMS) upon completion of any analyses which exceeds the set range of results, to make certain the problem can be remedied and discharge limits can be met.

Performance Indicators/Measures:

- Notification emails sent 100% of the time any analysis result is out of range.



Signage at NBC Outfall #104 is typical of signage throughout NBC's district to notify the public of CSO outfalls.



A picture of a microbiology organism found in a river water sample analyzed by NBC's biologist.



▪ *RIPDES Interceptor Maintenance (IM) sewage system inspection and maintenance requirements;*

Strategy: IM will submit a biannual Best Management Practices (BMP) report to RIDEM on time as part of the Environmental Protection Agency's Capacity, Management, Operation and Maintenance (CMOM) Program. The BMP report will detail NBC inspection and maintenance activities. IM will comply with all scheduled activities as noted in the approved BMP report. Specifically, sewer line inspections and upgrades will be tracked, including length cleaned, length inspected, material removed and length of sewer line repairs or upgrades. IM will continue to perform routine television inspections of the sewerage system to identify any needed repairs, and will repair any damaged sewers, as needed. All emergency situations will be addressed within 24 hours of notification and all repairs will be monitored and documented in monthly reports submitted to the Executive Director.

Performance Indicators/Measures:

- 100% compliance with BMP practices and RIDEM schedules.
- Address 100% of emergency situations within 24 hours of notification.

Strategy: NBC sections will follow protocols outlined in the United States Environmental Protection Agency (USEPA)'s Nine Minimum Controls Program and take precautions to prevent any Dry Weather Overflows (DWO). IM will install and maintain meters at regulators specified by DEM with alarms to monitor for DWOs. They will also complete sewer capacity evaluations where necessary to identify locations in the sewer system that may have capacity problems. Pretreatment will investigate all reports of blockages and backups within one business day, inspect and permit all potential sources in the area and will require users to install pretreatment equipment as needed to prevent blockages. The EMDA section will sample the urban rivers weekly and promptly report any high bacteria results to IM. IM will investigate areas of the NBC collection system where reported high bacteria results in receiving waters may indicate potential concern. IM will insure a prompt response to pump station alarms within three hours of receiving the call. Also, if deemed appropriate, IM may increase the inspection frequency of problematic tide gates and CSO regulators. In an event that a DWO does occur, IM will report all DWOs to RIDEM within 24 hours of identification and submit a written report within five days.



IM staff inspecting NBC facilities to ensure they are functioning properly.

Performance Indicators/Measures:

- Number of DWOs occurring annually.
- 100% compliance with RIDEM DWO procedures.
- Report 100% of DWOs to RIDEM within 24 hours of identification.
- 100% of reported blockages and backups due to illicit discharges will be investigated by Pretreatment within one business day.

▪ *RIPDES Discharge Monitoring Report (DMR) monitoring requirements;*

Strategy: EMDA and Operations staff will conduct process sampling and monitoring on a daily basis throughout the year, 24 hours a day at both treatment facilities, and will immediately notify the DMR compliance team of sampling problems to allow timely resolution of any monitoring situation before a violation occurs. The Laboratory staff will ensure all samples are analyzed according to all regulatory specifications. EMDA will track the sampling compliance rates monthly for the two NBC facilities.

Performance Indicators/Measures:

- Sample treatment plants daily, every day of the year.
- Achieve 100% compliance with DMR sample collection requirements for both facilities.
- Notify the DMR compliance team within 2 hours of any sampling complications or regulatory monitoring issue.

Strategy: EMDA will certify that proper sampling equipment inspections, maintenance and protocols, such as Quality Assurance and Quality Control (QA/QC), are implemented at all times with clean and fully functional equipment to minimize the potential for sample collection malfunction, as well as sample contamination.

Performance Indicators/Measures:

- Number of sampling equipment inspections conducted annually.
- Percentage of samples that satisfy QA/QC laboratory protocols.

Strategy: EMDA will develop a Quality Assurance Project Plan (QAPP) to document all sample collection, handling, and analytical procedures for all sampling activities done at NBC

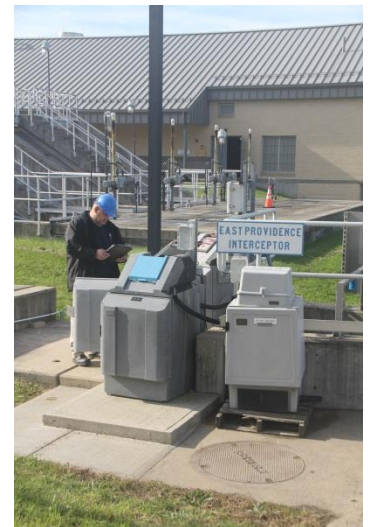
Performance Indicators/Measures:

- Number of sample collection, handling and analytical procedures for which a QAPP is completed.

Strategy: Operations & Maintenance staff will ensure proper performance and timely maintenance of all plant monitoring devices. Operations staff will make sure data are properly collected and stored, and input records from the Operations data archival system into the Plant Information System (PI) and LIMS in a timely manner to meet the DMR due date.

Performance Indicators/Measures:

- Number of calibrations and inspections of plant monitoring equipment conducted by O&M staff annually.
- Percentage of time the data archival system is uploaded to LIMS on the first day of the following month prior to each DMR submittal.

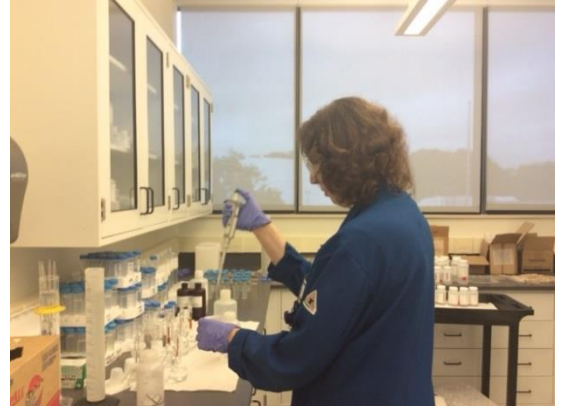


NBC staff conducting a regular daily inspection of the plant monitoring devices.

Strategy: The Laboratory staff will conduct prompt and accurate analyses in accordance with the USEPA, the Rhode Island Department of Health (RIDOH) and RIDEM rules and regulations, and will provide timely analytical reports to ensure incorporation into the DMR. The Laboratory will ensure all regulations for calibration of instruments that generate regulatory data have been satisfied.

Performance Indicators/Measures:

- Analyze 100% of RIPDES required parameters on time.
- Achieve 100% accuracy on USEPA and RIDOH annual Proficiency Testing for required DMR analyses.
- Analyze 100% of samples within regulatory sample holding times.
- Calibrate 100% of fume hoods and small instruments in all NBC facilities annually.
- Ensure the Clean Room is properly certified.



Laboratory staff conducting routine sample analysis necessary to comply with regulatory permits.

Strategy: Environmental Science & Compliance (ES&C) staff will have the DMR ready for internal review as soon as the data is available to ensure timely on-line submittal to the EPA Central Data Exchange (CDX) website.

Performance Indicators/Measures:

- Submit 100% of DMRs on time.

▪ *RIPDES Construction & Engineering requirements and deadlines;*

Strategy: The Construction & Engineering Division will complete planning and design of all Capital Improvement Program (CIP) projects for the two WWTFs and the NBC collection system, and will oversee these projects in accordance with the master schedule and will ensure compliance with the RIDEM requirements and deadlines.

Performance Indicators/Measures:

- Meet RIDEM requirements and deadlines 100% of the time.

▪ *RIPDES 9 Minimum CSO Controls program;*

Strategy: The Engineering Section will design any necessary facilities to comply with the NBC Floatables Control Plan. IM will maintain the Floatables Control Plan by following approved Standard Operating Procedures (SOPs).

Performance Indicators/Measures:

- 100% compliance with the Floatables Control Plan.

**Strategy:** Pretreatment will conduct inspections of all industrial facilities to ensure that each firm’s spill control measures are adequate. Pretreatment will respond to all reports of spills, illegal discharges and accidental releases. Pretreatment will educate Significant Industrial Users (SIUs) regarding the effect of litter on the sewer and stormwater systems.

Performance Indicators/Measures:

- Annually inspect 100% of SIUs in both of the NBC districts.
- Respond to 100% of all reports of spills, illegal discharges and accidental releases.
- Annually educate each SIU about litter.

**Strategy:** EMDA will conduct surveillance sampling and monitoring of all NBC SIUs to verify their compliance status, conduct wet weather CSO monitoring events to verify the effectiveness of NBC 9 Minimum Control procedures, and monitor rivers to locate any dry weather discharges.

Performance Indicators/Measures:

- Annually monitor 100% of SIUs.
- Conduct CSO wet weather sampling of several CSOs annually.
- Sample 100% of the urban rivers weekly in the NBC district.
- Number of dry weather discharges that are discovered and reported each year.

**Strategy:** The Engineering Section will require all property owners who wish to connect to and use the NBC collection system to apply for a permit to ensure the sewer lines have sufficient capacity to handle the additional flow. Commercial and industrial developers will be required to develop a stormwater mitigation plan to minimize stormwater flow into the sanitary collection system.

Performance Indicators/Measures:

- Number of sewer connection permits issued annually.
- Number of stormwater mitigation plans developed.
- Gallons of stormwater flow mitigated from the sanitary system.
- Gallons of stormwater flow mitigated from the Phase I CSO tunnel.



NBC staff conducting sampling at a SIU facility.



A residential sewer connection being installed in the NBC service district.

▪ *RIPDES stormwater permitting requirements;*

Strategy: The NBC RIPDES Stormwater Permit Compliance Team will conduct stormwater inspections of the Field's Point and Bucklin Point Facilities annually, revise stormwater plans as necessary and reapply for RIPDES General Stormwater permits as required. To comply with the permits, EMDA will conduct and document the required RIPDES stormwater monitoring at both facilities and submit reports to the plant managers and ES&C Division on a quarterly basis.

Performance Indicators/Measures:

- Submit 100% of permit applications at least 30 days prior to RIDEM due date.
- Number of facility stormwater inspections conducted annually.
- EMDA will submit 100% of stormwater monitoring reports on time to plant managers and the ES&C Division.

Strategy: ES&C staff will annually provide training for O&M staff to review the Storm Water Management Plan (SWMP) as required by the General Stormwater Permit and Spill Prevention, Control and Counter Measures (SPCC) Plan to ensure that all facility staff are aware of Stormwater and Emergency Spill Control procedures annually.

Performance Indicators/Measures:

- Maintain 100% compliance with the NBC Storm Water Management Plan and Spill Prevention, Control and Counter Measures Plan requirements and procedures.
- Ensure 100% of plant supervisors and staff are trained on SPCC and SWMP annually.
- Percent of facility spills properly contained each year.

Strategy: Construction Services will oversee any construction contractors that may be on site to ensure they comply with all Stormwater and Spill Control Plan requirements that are outlined in their contract documents.

Performance Indicators/Measures:

- Number of spill incidents caused by contractors.

▪ *RIPDES Pretreatment Program requirements;*

Strategy: Pretreatment will inspect and regulate industrial and commercial users, follow the approved Enforcement Response Plan and submit the NBC Pretreatment Annual Report detailing all data required by the RIPDES permit to the RIDEM.

Performance Indicators/Measures:

- Annually conduct non-sampling inspections of 100% of SIUs in the NBC district.
- Issue Notices of Violation (NOVs) for 100% of the instances of user non-compliance.
- Report required information to the RIDEM in the Pretreatment Annual Report by March 15<sup>th</sup> of each year.



NBC staff conducting SIU sampling at a company in the NBC district.

Strategy: EMDA will conduct monitoring of all SIUs annually and will conduct surveillance monitoring of industrial and commercial users via manhole sample monitoring to verify their compliance status.

Performance Indicators/Measures:

- Monitor and sample 100% of SIUs annually.
- Number of surveillance manholes monitored annually.

Strategy: Laboratory will maintain high quality QA/QC on all Pretreatment samples collected from industrial facilities and manholes and provide prompt and accurate analyses in accordance with USEPA, RIDEM and RIDOH regulations.

Performance Indicators/Measures:

- 100% accuracy on Proficiency Testing and all Pretreatment samples collected from industrial facilities and manholes.

▪ *All other various RIPDES requirements;*

Strategy: EMDA will develop new Local Limits Evaluation per RIPDES requirements. Legal will update NBC regulations to adopt the new limits and Pretreatment will revise all permits to incorporate the new local limits.

Performance Indicators/Measures:

- Completion of the technical local limits evaluation and on-time submittal to DEM.
- Revision of NBC Regulations to adopt new local limits completed per DEM schedule.
- Revision of user discharge permits to incorporate new local limits.

Strategy: Construction & Engineering will complete a Resiliency Plan per RIPDES requirements, identifying NBC infrastructure vulnerabilities and detailing NBC's planned actions to protect collection and treatment system assets and maintain operation with respect to climate change impacts.

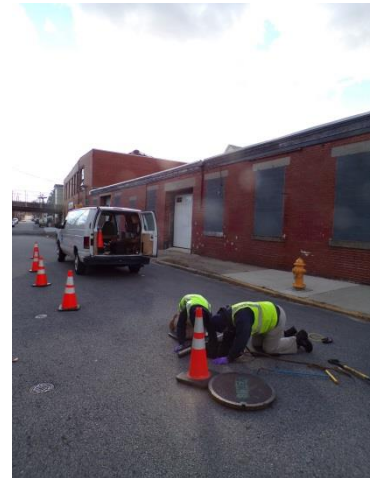
Performance Indicators/Measures:

- Completion of the Resiliency Plan with schedule of long and short term actions and on-time submittal to DEM.
- Implementation of recommended actions to protect NBC infrastructure.

Strategy: EMDA will track all RIPDES milestones and requirements monthly and will notify any section in advance that may have a RIPDES requirement due to RIDEM.

Performance Indicators/Measures:

- 100% of RIPDES requirements are met on time each year.



NBC staff installing a manhole sampler to conduct surveillance monitoring of industrial users.

Strategy: EMDA will conduct all other sampling and monitoring studies necessary to satisfy RIPDES requirements and enhance facility performance.

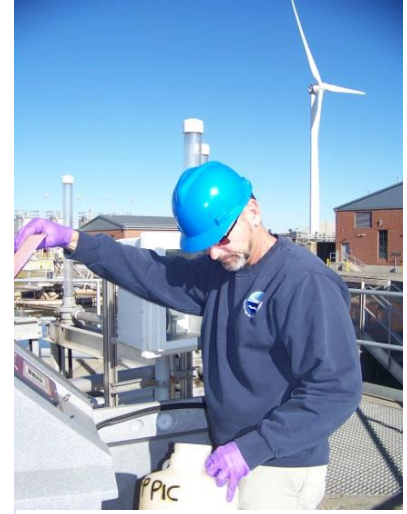
Performance Indicators/Measures:

- Number of special monitoring requests performed each year.

Strategy: The NBC will promptly investigate all odor complaints and promptly initiate corrective actions if NBC is the source. NBC will ensure that the biosolids contractor will minimize odors by conducting routine preventative maintenance and initiate immediate corrective maintenance to resolve odor scrubber system problems to comply with all RIPDES permit requirements.

Performance Indicators/Measures:

- Number of odor complaints received annually.
- Promptly investigate 100% of odor complaints.



EMDA staff conducting routine monitoring of the Field's Point plant.

***Objective 2: Complete the design and construction of projects identified in the Capital Improvement Program necessary to ensure compliance with RIDEM requirements.***

Strategy: The Engineering & Construction Services Division will develop, maintain, and oversee the master schedule for design and construction of all contracts.

Performance Indicators/Measures:

- Master schedule is up to date 100% of the time.

Strategy: The Engineering Section will complete planning and design of all projects in accordance with the master schedule and in compliance with RIDEM requirements. The Construction Services will monitor and manage the contracts in accordance with established designs, specifications, schedules and budgets, will develop solutions to anticipated and encountered changes as contracts progress from design to construction, and will resolve problems fairly, expeditiously and in the best interest of the NBC and its ratepayers.



NBC Construction Services staff overseeing the construction of a new building on the NBC Field's Point property.

Performance Indicators/Measures:

- Number of problems resolved in line with the master schedule.
- Number of projects managed by NBC staff annually.
- 85% of CIP contracts will be completed within six months of master schedule.

Strategy: The Engineering & Construction Services Division will ensure that all future NBC construction projects meet resiliency requirements to ensure protection from climate change and sea level rise.

Performance Indicators/Measures:

- 100% of all new projects are projected to be resilient throughout the life of the project.
- 100% of projects will be evaluated for resiliency.

Strategy: Legal will monitor and coordinate all claims and litigation matters and ensure compliance with RIDEM requirements.

Performance Indicators/Measures:

- 100% compliance on RIDEM requirements.
- Percentage of claims and litigation matters resolved in a timely manner.

**Objective 3:** *Maintain programs to ensure full compliance with all other regulations, such as the Clean Air Act, Clean Water Act, Occupational Safety Health Act (OSHA), Resource Conservation Recovery Act (RCRA), Emergency Planning and Community Right-to-Know Act (EPCRA), etc.*

Strategy: Environmental, Safety & Technical Assistance (ESTA) will compile and maintain an updated written inventory of hazardous materials at all NBC facilities and coordinate the internal tracking of hazardous waste manifests. ESTA will schedule hazardous waste training annually and will also work with NBC employees to ensure they are following established protocols for proper handling, storage, and disposal of hazardous materials.

Performance Indicators/Measures:

- Properly handle, store and dispose of 100% of hazardous materials annually.
- Number of employees trained in hazardous waste handling annually.
- Number of hazardous waste training sessions conducted annually.



NBC staff receive HAZWOPER training to learn how to properly handle hazardous materials.

Strategy: ESTA will organize a Hazard Communication "Train the Trainer" Program for Supervisors, track OSHA training throughout the agency, and assist supervisors to ensure that annual training is being conducted. Periodically, ESTA will reevaluate the OSHA required annual training program. They will also automate training tracking to ensure compliance with the NBC Health and Safety Program and compile and process annual OSHA 300 Logs and Tier II Reports prior to respective due dates.

Performance Indicators/Measures:

- Number of employees trained each year in OSHA required programs.
- File 100% of OSHA 300 Logs prior to the due date.
- File 100% of Tier II reports prior to the due date.
- Perform eight (8) internal safety audits annually.



Strategy: Section Managers will make certain that assigned staff members are properly trained to perform all assigned job duties and ensure that training and retraining of assigned staff is provided on time. The trainings may include, but are not limited to the following: lockout/tag out, confined space entry, right to know, power industrial trucks, traffic control safety, etc.

Performance Indicators/Measures:

- Ensure 100% of assigned employees are fully trained to perform all assigned duties.
- Number of training hours logged per section.

**Objective 4:** Operate and maintain all NBC facilities in a cost-effective manner.

Strategy: O&M staff will proactively perform preventative maintenance on equipment, buildings and structures within each facility to maintain proper operation. They will enter all repair history information on major equipment into the Hansen Computerized Maintenance Management System (CMMS) on a continual basis and generate monthly reports from the CMMS detailing work orders that have been generated and completed. O&M will continue to utilize and update an inventory control system into the Hansen CMMS system as required by NBC's Asset Management Program.

Performance Indicators/Measures:

- Perform preventative maintenance tasks on 25% of NBC buildings and structures annually.
- Percent of scheduled vs. unscheduled work completed each year.
- Percent of capitol items purchased.
- Ensure 100% of new project equipment is entered into the CMMS system.
- Number of completed vs. open work orders.
- Ensure 100% compliance with all new equipment and treatment plant warranties.

Strategy: Purchasing will manage all Corporate Office Building (COB) maintenance requests, will coordinate repairs with the facilities maintenance staff in a cost-effective manner and will invest in COB building capital improvements as needed.

Performance Indicators/Measures:

- Complete 85% of COB building maintenance requests within two weeks.
- Cost per square foot of maintained COB facilities will average \$8.50.
- Complete 9 COB facility inspections each year on time.
- Correct 100% of COB deficiencies within 30 days.
- Complete 100% of budgeted COB operating capital projects annually.



NBC staff cross-training with the Providence Fire Department.



NBC Maintenance staff working together to maintain necessary equipment in the plant.

Strategy: Finance will manage the development of the NBC five year operating capital plan and will work with Section Managers to ensure budgeted capital items are implemented or appropriately substituted.

Performance Indicators/Measures:

- Percentage of capital expenditures spent on planned items.

Strategy: EMDA staff will maintain all plant, industrial user, manhole, river and bay sampling equipment, including NBC's boats and EMDA laboratory equipment to ensure proper operation in a cost effective manner.

Performance Indicators/Measures:

- Percent of capital expenditures spent on unplanned emergency repair or equipment replacement costs.



NBC's research vessel R/V Monitor is properly maintained to ensure operation year round.

Strategy: IM will minimize unplanned capital expenditures with the guidance used in our Asset Management Program. Various repairs and/or upgrades deemed cost effective will be scheduled.

Performance Indicators/Measures:

- Review and update Asset Management Program on a regular basis.

Strategy: Engineering & Construction Services will oversee infrastructure improvements to ensure projects remain within budget and are completed in the most cost-efficient manner. All construction projects will be evaluated for future climate change effects and sea level rise projections to ensure that future costs will not be incurred due to climate change.

Performance Indicators/Measures:

- 15% of construction costs (non-CSO contracts) will be saved due to resident engineering.
- Percent of contract costs over original bid amount on a yearly basis.
- Percentage of projects completed within budget.

Strategy: ESTA will assist all NBC sections to investigate and implement cost saving hazardous material source reduction, renewable energy such as wind and solar, energy conservation and efficiency opportunities.

Performance Indicators/Measures:

- Track NBC overall energy use and power demand.
- Achieve a voluntary 10% overall reduction in NBC normalized energy use compared to FY2014 NBC energy consumption by the end of RI FY2019.
- Achieve a 25% reduction in NBC normalized energy use compared to 2012 calendar year as required by the USDOE Better Plants Program.
- Amount of money saved by implementing various recommendations.

Strategy: Executive will be accountable for overall management responsibilities for all facilities and infrastructure, including supervising NBC's finances for those facilities through extensive planning so that user fees are minimized.

Performance Indicators/Measures:

- Amount of user fee increases due to unplanned financial expenditures.

**Objective 5:** *Ensure existing and future NBC facilities are not vulnerable to adverse impacts related to climate change.*

Strategy: *Develop a Resiliency Plan in conformance with RIPDES requirements to evaluate all existing NBC structures for vulnerability from sea level rise, flooding and inundations associated with climate change. Identify vulnerable structures and take steps to eliminate or minimize impacts that could jeopardize NBC's environmental performance.*

Performance Indicators/Measures:

- Submit Resiliency Plan to DEM by December 1, 2019.
- Number of vulnerabilities reduced annually.

Strategy: The Construction & Engineering Division will evaluate all new construction projects for vulnerability due to climate change impacts, such as sea level rise, inundation and flooding and will address these projections to ensure all new projects are not vulnerable over the life of the structure.

Performance Indicators/Measures:

- 100% of new projects evaluated to ensure no effect from climate change.



Using CRMC's StormTools application, this image shows how vulnerable NBC Field's Point property is to a 100-year coastal storm, resulting in 2-6 feet of water in various areas of the facility.

**Objective 6:** *Ensure full compliance and cost effectiveness of biosolids disposal practices.*

Strategy: O&M will monitor the biosolids project, expediting resolution of issues, interpreting contract provisions and promoting good communication between the NBC, the biosolids vendor and regulatory agencies. O&M will ensure the amount of biosolids reused annually meets contract provisions.

Performance Indicators/Measures:

- Percent increase of biosolids fees due to contract concerns.
- Percent of biosolids beneficially reused annually.

Strategy: The ES&C section will work to ensure USEPA Part 503 biosolids regulations are met. Pretreatment and ESTA staff will work with industrial users to minimize metal loading, which accumulate in the biosolids. EMDA will monitor and sample NBC biosolids and the Laboratory will analyze the samples to ensure regulations are being met. ES&C will ensure that the Biosolids Annual Report is submitted to EPA on time each year.

Performance Indicators/Measures:

- 100% compliance with Part 503 of the biosolids regulations.
- Submission of Biosolids Report on time each year.

**Objective 7: Ensure proper execution of the NBC Asset Management Plan.**

Strategy: Operations & Maintenance will oversee the Hansen Asset Management System.

Performance Indicators/Measures:

- Percent of scheduled vs. unscheduled items purchased.
- Percent of scheduled work completed.

Strategy: O&M will update information within the CMMS, implement inventory controls, manage the service request system and track equipment history for cost effective repair or replacement.

Performance Indicators/Measures:

- Inventory and update 100% of new equipment and supplies on a continuous basis.

**Objective 8: Follow the Capacity, Management, Operations and Maintenance (CMOM) plan for the collection system (based on guidelines from the USEPA).**

Strategy: The Engineering Section will maintain a hydraulic model of the sewer system to ensure that the collection system has adequate capacity for current flows, future development and other changes to the sewer system.

Performance Indicators/Measures:

- Number of model runs performed for capacity concerns using the hydraulic model.

Strategy: IM will maximize the capacity of the collection system through continuous sewer inspections, line cleaning, and improvements to the collection system as needed.

Performance Indicators/Measures:

- Miles of sewer lines inspected each year.
- Number of miles cleaned to increase collection system capacity.



NBC's IM staff inspecting and cleaning lines to increase the capacity of the collection system.

**Objective 9: Maximize the full use of technology agency wide and maintain maximum capability with adequate resources.**

Strategy: O&M will continue to enhance the facility's Supervisory Control and Data Acquisition (SCADA) computer control systems to optimize plant operations and will utilize other software programs for efficient facility operation. They will periodically review and upgrade the computer control strategies and software programs to ensure efficient facility operation, as well as expand their use of electronic recordkeeping, by recording shift briefings and daily logs electronically.

Performance Indicators/Measures:

- Amount of time saved using new efficient software programs.
- Number of logs and briefings electronically updated.



Operations staff monitoring Bucklin Points SCADA systems.

Strategy: IM will continue to enhance existing programs and will review current technologies to improve efficiencies. Periodically, IM will review existing programs and systems, including the Geographic Information System (GIS) and CMMS program, the Closed Circuit Television (CCTV) Data Acquisition program and the vehicle tracking system, to determine optimal efficiency.

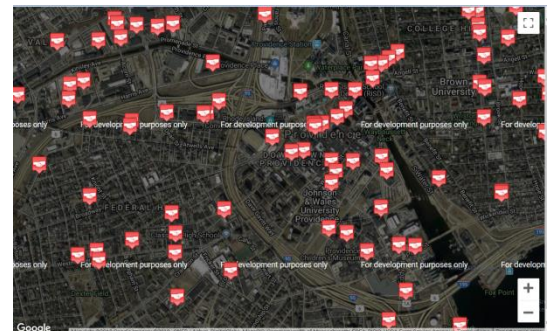
Performance Indicators/Measures:

- Number of programs updated on an annual basis.

Strategy: The Engineering Section will input data and maintain all sewer and stormwater connection information in the Permits database, adding new permit information as permits are issued and as new connections are made to document the most current collection system data. The Engineering Section will add new NBC sewer lines to the NBC GIS system and will revise, maintain or add new layers to the GIS and the Google Map database when necessary.

Performance Indicators/Measures:

- Upload 100% of new sewer connection and permit data into the Customer Service Permits database.
- Number of updates to the Permits system.



An image from the NBC Permits database showing all sewer connections that have been made in a certain area.

Strategy: Pretreatment and EMDA will expand remote and continuous on-line monitoring equipment to maximize sample collection efficiency, data review and reporting processes. The Pretreatment Software will be completely upgraded with substantially increased functionality including but not limited to manhole sample tracking, grease control program pages, industrial area inspection tracking. The software will be accessible to staff in the field via the tablet. EMDA will continuously improve automated sample collections at both WWTFs, as well as in the NBC receiving waters to continuously improve data, maximize scientific knowledge and improve efficiencies.

Performance Indicators/Measures:

- Number of updated remote and on-line monitoring systems instituted annually.
- Percentage of automated collections at WWTFs.
- Number of updates to the Pretreatment Software annually.



Pretreatment staff utilizing tablets in the field allowing for immediate access to all relevant accounts and information.

Strategy: Laboratory and EMDA staff will work with IT and a software vendor to improve the LIMS functionality so that sampling results can be made available more readily to enhance plant operations and ensure regulatory compliance. Specifically, they will work to program LIMS to automatically populate the DMR and a central database, as well as maintain connectivity from all analytical equipment to LIMS with computer drivers and by maximizing the use of electronic laboratory notebooks (ELNs).

Performance Indicators/Measures:

- Number of updated LIMS functions improved annually.
- Completion of the central database.
- Completion of ELN implementation.

Strategy: The Information Technology (IT) Section will provide end-user technology and systems to meet NBC's needs and strategic goals.

Performance Indicators/Measures:

- Maintain and improve NBC systems and applications.
- Provide ongoing technical training.
- Number of on-line training programs offered to NBC employees each year.



IT staff is on-call to help all NBC departments and staff with excellent internal customer service.

Strategy: IT will provide support to all departments to optimize NBC's daily operations by providing applications, networking, software and hardware to ensure the NBC is taking full advantage of technological advances, including automation and computerization, where appropriate. The IT department will review all technology infrastructure throughout the NBC and compare with like systems in other private and public environments. They will periodically review critical systems and improve NBC systems to exceed industry norms, while providing adequate training opportunities to ensure user comfort with all NBC systems.

Performance Indicators/Measures:

- Successfully complete 95% of all IT budgeted projects annually.
- Migrate 99% of systems to the latest operating systems and applications upon approval.
- Offer 185 user training sessions each year.
- Number of Help Desk requests IT responds to from each NBC section.
- Respond to 100% of Help Desk requests within 2 hours.
- Review 100% of NBC systems and upgrade systems coinciding with lease expirations annually.

Strategy: The NBC will provide permitting information, permit applications and permit reporting forms on-line for developers, industrial users and commercial users so that customers can promptly learn about and apply for NBC sewer connection and wastewater discharge permits.

Performance Indicators/Measures:

- Number of permit applications and forms available online.
- Number of new forms added online annually.
- Number of permits applied for online.

***Objective 10: Maintain high quality Laboratory and Monitoring resources necessary to meet state and federal certifications, mandated environmental requirements, and ensure proper WWTF operations.***

Strategy: The Laboratory and EMDA employees will ensure proper SOPs, QA/QC procedures and chain of custody (COC) procedures are followed by all staff performing monitoring or analysis by providing initial and refresher training.

Performance Indicators/Measures:

- Number of SOP, QA/QC and COC training sessions conducted per year.
- 100% compliance with proficiency testing programs.



Laboratory staff following proper SOPs while performing analyses in the Laboratory.

Strategy: EMDA will minimize the risk of tampering with sampling equipment by utilizing advanced technology sampling equipment that minimizes human intervention, as well as using proper chain of custody procedures.

Performance Indicators/Measures:

- Number of compromised samples occurring annually.

Strategy: Laboratory will perform high quality wastewater analyses required by USEPA, RIDEM and RIDOH for State Licensing and Proficiency Testing, will submit Renewal License application to the RIDOH annually and will minimize deficiencies by proactively performing self-audits of all laboratory procedures. Laboratory staff will attend a minimum of 15 training hours annually to meet certification requirements by the National Registry of Environmental Professionals.

Performance Indicators/Measures:

- Review and update the Laboratory License whenever a new procedure is added or an existing procedure is changed.
- Receive 100% accuracy on annual USEPA, RIDEM and RIDOH Proficiency Testing.
- Complete and submit RIDOH Renewal License application by December 1<sup>st</sup> each year.
- Perform self-audits of two Laboratory procedures each month.
- Complete a minimum of 15 training hours per Laboratory staff member annually.

***Objective 11: Ensure necessary Information Technology resources are readily available to maintain and improve NBC operations, including security systems in buildings, structures and facilities, Vulnerability Self-Assessment Tool (VSAT), and back-up systems in case of a catastrophic incident.***

Strategy: IT will ensure all production systems and networks are available during prime hours, and will review all hardware throughout the NBC and upgrade when necessary to ensure the best system security.

Performance Indicators/Measures:

- Number of upgrades completed to prevent security breaches.
- Perform a biennial Security Assessment to ensure that NBC is adhering to security's best practices.
- Maintain highest level of service uptime and system availability 99.999% of the workday.
- NBC computer systems, servers, applications or facilities will strive to achieve zero incidents of security breaches.



Video monitors in the EMDA office allow oversight of the sampler stations located throughout the treatment plants.

Strategy: Engineering & Construction Services, O&M, and IM will make certain the CMMS reflects the most up to date GIS information.

Performance Indicators/Measures:

- Percentage of GIS information not current on CMMS.



Strategy: ESTA will assist all sections with understanding, collecting and updating VSAT data, as needed.

Performance Indicators/Measures:

- Number of outstanding VSAT updates needed.

Strategy: IT will continue to follow back-up procedures and ensure the Disaster Recovery site remains operational for critical applications.

Performance Indicators/Measures:

- Percentage of business hours computer systems are unavailable.

***Objective 12: Provide environmental legal defense with regard to USEPA and RIDEM regulatory compliance matters and prosecute violations of NBC's Rules and Regulations.***

Strategy: Legal will monitor USEPA and RIDEM regulatory matters to determine percentage of matters handled in house, and will track turnaround time for Administrative Order issuance to ensure compliance with approved Enforcement Response Plan. Legal will assist Pretreatment in enforcement of all pretreatment standards required by wastewater discharge permits, state or federal laws, or NBC Rules and Regulations.

Performance Indicators/Measures:

- Provide environmental legal assistance on regulatory compliance matters within statutory time standards 100% of the time.
- Comply with approved Enforcement Response Plan 100% of the time.
- Issue 100% of Administrative Orders within two weeks of request submittal.
- All agency NOVs received are transmitted to Legal within two days of receipt.
- Percent of NOVs responded to within the designated timeframe.
- Percent of USEPA and RIDEM compliance matters responded to by in-house Legal staff.

Strategy: Legal will review NBC Rules and Regulations and update periodically to reflect changes in state and federal law, as well as file amended rules and regulations and public disclosures as required by law.

Performance Indicators/Measures:

- Number of updates to the NBC rules and regulations each year to incorporate changes in local and federal laws.

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# GOAL 2

## OBJECTIVES:

1. Develop data and findings necessary to demonstrate to the public and stakeholders the actual pollutant loadings discharged from NBC facilities and the effect of these pollutants on the environment.
2. Take an active role in a statewide effort to fully understand water quality in NBC's receiving waters to ensure NBC programs and construction projects result in positive impacts on water quality.
3. Develop an annual monitoring plan and schedule for data collection and analysis to determine relative contributions to water quality from NBC facilities and to continuously evaluate and improve NBC environmental performance, while minimizing NBC capital expenditures for unnecessarily mandated projects.
4. Ensure the most current NBC monitoring data and other environmental information is utilized for decision making regarding NBC priorities, programs and projects.

### *Environmental Performance Goal:*

*Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.*

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**Environmental Performance Goal: Continuously evaluate NBC environmental performance to identify, quantify and minimize NBC impacts to the environment in a cost effective manner.**

*The Narragansett Bay Commission is committed to minimizing the discharge of pollutants that have a deleterious influence on Narragansett Bay and its tributaries. In order to identify NBC's impacts on its receiving waters, the NBC has made evaluating water quality a priority and continuously monitors the environmental conditions in the Upper Bay to ensure that the NBC makes a positive impact on water quality. It is important for the NBC to monitor water quality in its receiving waters to better evaluate the agency's environmental performance and generate sound scientific data. The data will demonstrate to the public and various stakeholder groups the actual pollutant discharges from NBC facilities, the effect these pollutants have on the environment and the actions the NBC takes to reduce the impacts of the pollutants. The NBC will ensure that future regulatory decisions are based upon sound science and this will protect NBC ratepayers from unnecessary capital construction costs, while also allowing the NBC to use its monitoring results to tailor its programs in the most cost effective manner.*

**Objective 1:** *Develop data and findings necessary to demonstrate to the public and stakeholder groups the actual pollutant loadings discharged from NBC facilities and the effect these pollutants have on the environment.*

Strategy: EMDA will evaluate and document all water quality data and improvements promptly, including publishing an annual monitoring report and project status reports as completed.

Performance Indicators/Measures:

- Number of published project status reports throughout the course of the year.
- Publish annual data monitoring report by April 30<sup>th</sup> of each year.
- Percentage of reports published within three months of completion of data being reported by the Laboratory.



EMDA conducting water quality sampling aboard the NBC R/V Monitor.

Strategy: Public Affairs will work with ES&C to optimize the distribution of data to the general public, provide graphic assistance on documents, post completed documents and data on NBC's internal and external websites, and issue press releases to the media regarding major findings from NBC's monitoring data.

Performance Indicators/Measures:

- Number of positive news articles or reports distributed to the media detailing positive results of NBC projects.
- Number of press releases issued within 14 days of each positive aspect of NBC's performance.

Strategy: Pretreatment will track user pollutant loading data and will report the NBC data findings to the public in the Pretreatment Annual Report.

Performance Indicators/Measures:

- Annually compile data for inclusion in the Pretreatment Annual Report by March 15<sup>th</sup>.
- Present findings to stakeholders, such as the Citizen's Advisory Committee (CAC), each year.
- Compile a list of companies in Significant Non-Compliance to be published in newspaper each year.

Strategy: ES&C staff will work on projects to reduce and track the impacts of pollutant loadings on the treatment facilities, write BMPs for users to help them reduce toxic discharges, and publish technical papers on findings from various studies and projects.

Performance Indicators/Measures:

- Number of technical papers and abstracts written and submitted for publication each year.
- Number of papers published annually.
- Number of new BMPs developed each year.

Strategy: ES&C will oversee the continued development and enhancement to the Regional Ocean Modeling System (ROMS) modeling project, allowing NBC to predict the impact NBC discharges have on the Providence River and Narragansett Bay.

Performance Indicators/Measures:

- Number of ROMS project meetings held annually.
- Number of model runs performed annually to evaluate loading scenarios.

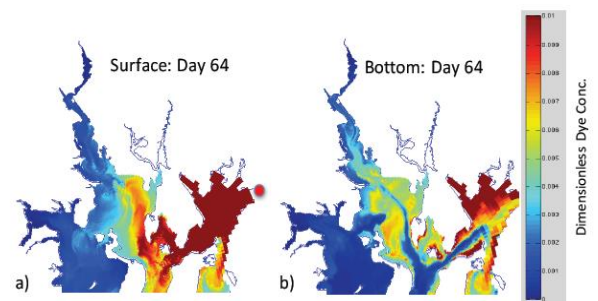


Figure showing the results from a model run from the ROMS modeling project.

**Objective 2:** *Take an active role in statewide efforts to fully understand water quality in NBC's receiving waters to ensure NBC programs and construction projects will result in positive impacts on water quality.*

Strategy: The NBC will participate in statewide stakeholder meetings such as the RI Monitoring Collaborative, the Executive Climate Change Council (EC4), and others to ensure that stakeholders and regulators are fully aware of NBC monitoring data and study findings. The NBC will also work with the local universities that are studying Narragansett Bay water quality to fully understand water quality issues. The NBC will enhance internal and external communications about water quality.

Performance Indicators/Measures:

- Number of environmental stakeholder meetings attended annually.
- Enhance regulatory relations.
- Continuously educate internal and external customers on NBC initiatives.
- Number of technical papers and abstracts published annually.

Strategy: EMDA will conduct monitoring activities and collect data from NBC facilities and from our receiving waters and will maintain continuous data monitoring sites within the NBC's receiving waters to evaluate the effect NBC facilities have on the receiving waters. To supplement this data, EMDA will conduct specialized sampling in response to unusual situations, will promptly analyze resulting data to evaluate the NBC impacts on receiving waters and will disseminate data to NBC personnel, stakeholders, and the public as appropriate.

Performance Indicators/Measures:

- Number of bacteria and nutrient samples collected from NBC's receiving waters annually.
- Hours of underwater video footage collected for observing benthic habitat and ecological conditions and changes attributable to NBC upgrades.
- Number of samples collected for special studies or from natural or manmade incidents.
- Number of days required to process data and distribute to personnel, stakeholders and the public.
- Percent of unusual situations sampled and studied.



A still picture taken from footage of an underwater video segment made while NBC staff were on the R/V Monitor conducting benthic monitoring surveys.

Strategy: The Laboratory will provide accurate, precise and quality analysis of all samples, as well as expedient analytical services for all special studies and samples collected necessary to evaluate NBC's impact on Narragansett Bay.

Performance Indicators/Measures:

- Analyze 100% of bacteria and nutrient samples from bay and river monitoring efforts.
- Complete 100% of all analyses within the USEPA's required holding times.
- Analyze 100% of the WWTF effluent samples in accordance with RIPDES requirements.

**Objective 3:** *Develop an annual monitoring plan and schedule for data collection and analysis to determine relative contributions to water quality from NBC facilities and to continuously evaluate and improve NBC environmental performance, while minimizing NBC capital expenditures for unnecessarily mandated projects.*

Strategy: EMDA, in coordination with the Laboratory and other entities, will annually develop a monitoring plan outlining activities and projected costs for the upcoming fiscal year as an element of the budget development process. This plan will be used to establish and clearly detail monitoring initiatives and budgetary requirements for both EMDA and the Laboratory.

Performance Indicators/Measures:

- Publication of the annual monitoring plan by January 1<sup>st</sup> of each year.
- Percentage of budget spent on unplanned monitoring activities.

**Objective 4:** *Ensure the most current NBC monitoring data and other environmental information is promptly available and utilized for decision making regarding NBC priorities, programs and projects.*

Strategy: IM will minimize environmental pollution by immediately responding to reports of high bacteria results in a timely manner and will respond to reports of system problems and take appropriate measures to improve conditions.

Performance Indicators/Measures:

- Alleviate dry weather discharge events in 6 hours or less from initial notification to end of event.
- Remove material from full trash nets within 72 hours from the end of rain event in order to prevent pollution from entering receiving waters.
- Tons of material removed from trash nets annually.



IM staff removing solid debris collected from a netting facility at the discharge of outfall #220 in Pawtucket.



Strategy: The Executive and Construction & Engineering Divisions will fully utilize all internal and external monitoring data and other information to ensure that regulatory construction mandates required of NBC are truly necessary to improve water quality and are based upon sound environmental science.

Performance Indicators/Measures:

- Amount of money saved from avoiding unnecessarily mandated construction projects due to sound scientific conclusions based upon actual environmental data.

Strategy: The Engineering and IM Sections will monitor CSO flows and alarm systems and make data available in computer data archival system for all to review and will conduct a study to determine the feasibility of developing a web based CSO public notification system.

Performance Indicators/Measures:

- Number of CSOs monitored and number of alarm calls received.
- Respond to 100% of CSO alarm calls within 24 hours.
- Submit CSO public notification feasibility study to DEM by June 1, 2019.

Strategy: The Engineering Section will update GIS sewer coverage, as necessary, and provide technical assistance to other sections in the use of GIS.

Performance Indicators/Measures:

- Number of GIS instructional sessions provided to other NBC departments.
- Complete two project tasks related to the GIS program each year.

Strategy: Laboratory will provide the Operations Division with key process parameter results daily and Operations will utilize the information to make daily process decisions to improve facility performance.

Performance Indicators/Measures:

- Number of facility adjustments made based on laboratory reports.
- Percent of Laboratory reports provided to operations daily.



NBC Staff received the prestigious Gold Peak Performance Award from NACWA for having zero operations violations in a year.

Strategy: Laboratory will maximize full use of LIMS by making reports and sample data promptly available to all NBC users. Parameter results exceeding levels of concern will immediately be transmitted to staff via the LIMS email alarm system to ensure prompt action.

Performance Indicators/Measures:

- Percentage of data available to NBC staff.
- Number of hours/days from analysis of samples to having data available to staff.
- Number of alarm emails issued.

Strategy: EMDA will conduct monthly meetings to present and distribute data and will assist other sections with operational problems or monitoring needs.

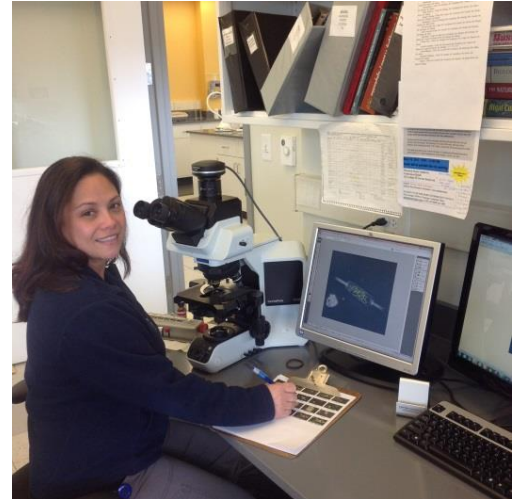
Performance Indicators/Measures:

- Conduct 12 data meetings annually.
- Number of special monitoring requests satisfied.

Strategy: ESTA will continuously evaluate sustainable energy conservation and renewable energy opportunities at all NBC facilities to continually reduce greenhouse gas emissions, will evaluate pollutant loads associated with these projects and will provide data and results of these evaluations for NBC management decisions.

Performance Indicators/Measures:

- Number of Energy Conservation or Renewable Energy projects implemented each year.
- Dollars saved by implementing energy projects.
- Pounds of pollutants avoided by implementing energy projects.
- Track, register, and report Renewable Energy Credit generation for NBC renewable energy projects.



Laboratory biologist analyzing plant samples to help Operations staff run the plant as efficiently as possible.



Combined Heat & Power (CHP) generator installed at Bucklin Point to convert biogas to renewable energy.

Strategy: ESTA will evaluate the NBC Carbon Footprint and will continually evaluate ways to reduce carbon emissions. ESTA will report on carbon emissions annually.

Performance Indicators/Measures:

- The number of pounds of carbon emissions reduced annually.
- Annual publication of NBC Carbon Footprint Report.



NBC Staff receiving the LEAD by Example Energy Award at the State House for NBC's work on implementing clean renewable energy and energy efficiency.

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# GOAL 3

## OBJECTIVES:

1. Ensure sufficient operating budget and capital funding with the least ratepayer impact.
2. Ensure equitable cost allocation among users.
3. Ensure timely and accurate payments of vendor invoices.
4. Maintain “AA-“ credit rating or better.
5. Explore the development of new grant funding for various projects.
6. Evaluate sewer system expansion opportunities to increase revenues.
7. Compliance with legal requirements associated with debt issuance.
8. Maximize the efficiency and effectiveness of the billing and collection process.
9. Effectively administer the risk management program.
10. Maintain compliance with financial regulatory agency requirements.
11. Effectively manage employee benefits to maximize benefits and minimize costs.
12. Ensure purchase of the highest quality goods and services.
13. Provide timely and accurate financial information for use by NBC managers in the decision making process.

### *Financial Management Goal:*

*Manage NBC’s finances through strong financial planning and controls such that sewer user charges are minimized.*

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**Financial Management Goal: Manage NBC's finances through strong financial planning and controls such that user charges are minimized.**

*The Narragansett Bay Commission takes pride in providing first-class wastewater collection and treatment services to its ratepayers at a reasonable cost. As part of NBC's prudent financial practices, the NBC utilizes a long-term financial planning model, which includes large capital projects, as well as operating costs and revenue projections. This model is the basis for NBC's annual operating budget and the NBC exercises strong financial controls to comply with the established budget each year. The NBC takes steps to maximize efficiency throughout all sections of the agency in the operation of its facilities, as well as billing, collections and payments. The NBC ensures that the most accurate and up to date financial information is available to base all agency-wide strategic decisions. The NBC also complies with all financial regulatory requirements and strives to obtain the highest credit rating, so it can achieve the lowest cost of borrowing and minimize rate increases for its customers.*

**Objective 1:** *Ensure sufficient operating budget and capital funding with the least ratepayer impact.*

**Strategy:** The NBC will maximize safe, efficient and cost-effective operation of all NBC facilities. O&M will optimize the efficiency of the Solids Handling Areas, reduce the number of changes to the current year's budget due to operational changes, and reduce monthly emergency maintenance orders due to a more comprehensive use of the asset management program by O&M staff.

**Performance Indicators/Measures:**

- Reduce the number of changes to each fiscal year O&M Budget to less than 5 per year.
- Percent reduction in the number of monthly emergency maintenance orders.



NBC Board of Commissioners breaking ground on NBC's new Water Quality Science Building, a planned capital project.

**Strategy:** The NBC management shall continually evaluate technology, equipment, operations, and staffing levels to maximize agency efficiency and minimize operating costs and unplanned expenditures.

**Performance Indicators/Measures:**

- Number of cost saving initiatives implemented.
- Monitor capital expenditures spend on planned items.

Strategy: Finance will employ sound budget development and management practices to ensure actual expenses are within budget. Finance will ensure budget development and financial management practices meet or exceed GFOA standards and will strive to receive awards recognizing excellence in their field.

Performance Indicators/Measures:

- Strive to receive the GFOA Distinguished Budget Presentation Award.
- Receipt of the GFOA's Certificate of Excellence in Financial Reporting Award.

Strategy: Finance will monitor large budget line items closely and perform budget reviews with each section to identify variances and ensure sections are operating within their annual budgets. Finance will notify section managers of budget issues in a timely manner.

Performance Indicators/Measures:

- Notification of budget issues will be sent to section managers within 5 days of month end.

Strategy: Finance will sell Renewable Energy Credits at maximum market value.

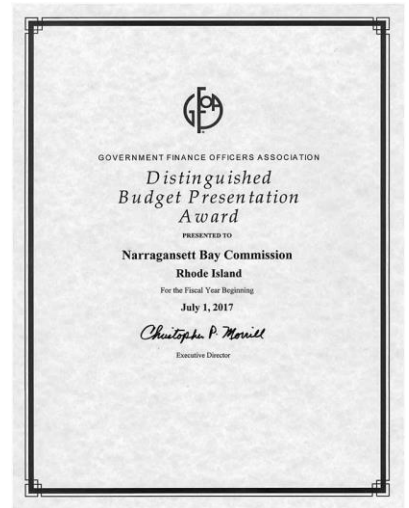
Performance Indicators/Measures:

- Market price obtained.

Strategy: Finance shall ensure NBC obtains the lowest cost of capital through the review of capital needs, available funding and market conditions. They will file with the Public Utilities Commission (PUC) when necessary to maintain sufficient operating and capital funding and will minimize the amount of revenue spent on outside rate case assistance.

Performance Indicators/Measures:

- Number of filings with PUC to maintain sufficient operating and capital funding, when applicable.
- Spend 0.5% or less of revenue increase on outside rate case assistance.



Finance staff strives to and routinely receives the Distinguished Budget Presentation Award each year.



Finance staff accepting an award at a Board of Commissioners meeting.



Strategy: Finance will work with Project Managers to assess project costs, schedules, priorities and the five-year CIP. They will evaluate NBC's long-term financing strategy, as well as conduct a semi-annual update of projected cash flows based upon information provided by Project Managers.

Performance Indicators/Measures:

- Update NBC's long-term debt model semi-annually.
- Update the capital cash flows semi-annually.
- Prepare the five year CIP annually.

Strategy: Executive will work closely and strengthen liaison with the Rhode Island Congressional Delegation and national organizations to develop and secure funding for capital projects.

Performance Indicators/Measures:

- Make no less than 4 contacts with RI's Congressional Delegation annually.
- Actively participate in one major professional wastewater group to shape legislation, regulations and guidance documents.
- Number of "shovel ready" projects authorized by Executive and prepared by Construction & Engineering Division ready to submit to secure federal funding when programs are available.

Strategy: ESTA will track all NBC electric usage and renewable electricity generated to minimize electric cost and ensure the NBC is on a path toward net-zero.

Performance Indicators/Measures:

- Percent of electricity generated by renewable resources annually.
- Amount of electricity generated by NBC alternative energy projects annually.



NBC owned wind turbine located in Coventry. The NBC net meters electricity credits from 3 Coventry turbines to help achieve the goal of becoming net-zero.

Strategy: ESTA will work with NBC sections to conduct Energy Management Assessments of NBC facilities and their operations to help identify and implement energy savings opportunities. ESTA will enter NBC energy use data into USEPA Energy Star Portfolio manager to evaluate agency energy efficiency.

Performance Indicators/Measures:

- Conduct three energy assessments/follow up activities annually.
- Update six utility meters on the NBC's Energy Star Portfolio Manager each year.
- Amount of savings associated with each energy project implemented.

Strategy: The NBC will analyze all maintenance costs at each treatment facility and compare the results with other wastewater treatment facilities, which are similar in size and process.

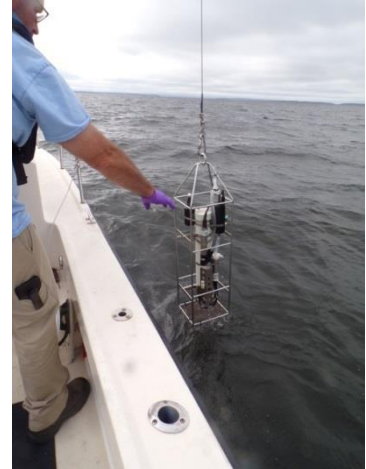
Performance Indicators/Measures:

- Periodically benchmark operation and maintenance costs at each facility through NACWA surveys.

Strategy: NBC will ensure that regulatory mandates that require major capital expenditures are truly necessary based upon sound science.

Performance Indicators/Measures:

- Capital expenditures determined to be unnecessary and avoided.



EMDA staff routinely monitor the upper Bay to obtain accurate scientific data needed to ensure that regulatory mandates are based on sound science.

***Objective 2: Ensure equitable cost allocation among users.***

Strategy: Finance will perform user class evaluations when appropriate, to ensure proper cost allocations. Finance will also conduct a statewide sewer-user-rate survey and compare NBC's user fees to other similar utilities, as well as perform rate structure analysis during future rate filings as needed.

Performance Indicators/Measures:

- Ranking of NBC's user fees in relation to other utilities.

***Objective 3: Ensure timely and accurate payment of vendor invoices.***

Strategy: Accounting will pay invoices, resolve accounts payable issues in a timely manner, and take advantage of discounts when available.

Performance Indicators/Measures:

- Percentage of invoices paid within one month of receipt.

***Objective 4: Maintain "AA-" credit rating or better with Standard & Poor's (S&P) rating to ensure NBC receives the lowest cost of borrowing.***

Strategy: Finance will employ strong financial management and planning.

Performance Indicators/Measures:

- Maintain at least an AA- bond rating from S&P.



Accounting staff being recognized by NBC's Board of Commissioners for receiving a finance award.

**Objective 5: Explore the development of new grant funding for various projects.**

Strategy: The NBC will continually seek out grant funding opportunities, and apply for grants annually to help fund technical assistance and capital projects.

Performance Indicators/Measures:

- Submit a minimum of one grant application annually.
- Amount of grant funding received during each fiscal year.

**Objective 6: Evaluate sewer system expansion opportunities to increase revenues.**

Strategy: Executive and Construction & Engineering Divisions will explore opportunities to provide services to new users and municipalities when requested and will expand the NBC service area and user base as deemed appropriate.

Performance Indicators/Measures:

- Number of new users and municipalities requests reviewed.
- Number of new users resulting from expansion projects.
- Additional revenues realized annually from expansion projects.



Construction and expansion of NBC interceptors can provide an opportunity for NBC's service area to increase.

**Objective 7: Compliance with legal requirements associated with debt issuance.**

Strategy: Finance will ensure compliance with Continuous Disclosure, IRS and Trust requirements.

Performance Indicators/Measures:

- Compliance with Continuous Disclosure.
- Compliance with federal tax laws and regulations.
- Compliance with Post-Issuance Compliance.
- Compliance with Arbitrage Liability.

Strategy: Accounting will ensure compliance with the cash management requirements of the Trust Indenture, as well as all Supplemental Indentures and other financial regulatory requirements.

Performance Indicators/Measures:

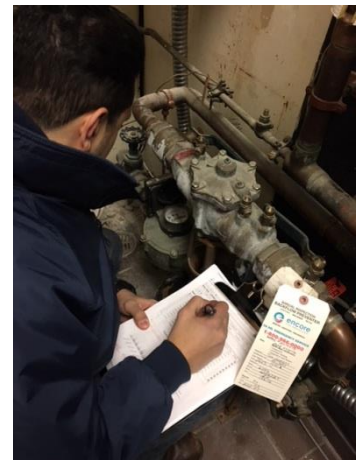
- Prepare the restricted account report on a monthly basis 100% of the time.
- Complete 100% of the fund transfers by the fourth business day from the end of the month.

**Objective 8: Maximize the efficiency and effectiveness of the billing and collection process.**

Strategy: Customer Service will obtain actual meter readings and bill customers on a monthly basis to ensure timely collection of accounts.

Performance Indicators/Measures:

- Obtain an actual meter reading within the prior 12 months for 98% of all NBC accounts.
- Call 90% of customers with over 30-day receivables each month.
- Process at least 3,200 accounts through Water Shut off for collection.



Customer Service staff in the field conducting routine meter readings.

Strategy: Customer Service staff shall meet regularly to review and assess collection activity. Permits staff in the Engineering Section and Customer Service staff shall meet each month to review all new accounts to ensure accurate billing of new users.

Performance Indicators/Measures:

- Number of Customer Service staff meetings held per year.
- Number of meetings between the Engineering Permits staff and Customer Service Sections annually.

Strategy: Legal will initiate legal actions to minimize outstanding accounts receivable and bad debt.

Performance Indicators/Measures:

- Number of proof of claims filed annually.
- Prepare and file proofs of claims within 30 days of receipt notice.
- Collect payments and/or remove 65% of accounts prior to lien sale.
- Conduct two lien sales each year.
- Amount of money collected as a result of the lien sale process annually.

Strategy: The Engineering Permits and Pretreatment Sections will administer the permit fee structure in a fair and accurate manner.

Performance Indicators/Measures:

- Invoice and collect 100% of fees for every permit issued annually.

**Objective 9: Effectively administer the risk management program.**

Strategy: Human Resources (HR) will ensure that accident investigations are a critical part of the NBC safety procedures and the worker's compensation program to reduce claims and ensure a safe work environment. ESTA will assist HR performing accident investigations.

Performance Indicators/Measures:

- Number of accident investigations performed annually for all workplace injuries.
- Maintain a workers' compensation experience modification rating of 1.00 or lower.

Strategy: In an effort to reduce the number of claims filed, the NBC will routinely review Worker's Compensation injury reports to identify areas where improvements can be made. The ESTA Section will perform a Job Safety Analysis (JSA) when workers compensation injuries occur to ensure safe work protocols are in effect and being followed.

Performance Indicators/Measures:

- Number of work related injuries on an annual basis.
- Number of changes implemented annually to reduce worker's compensation injuries.
- Number of JSAs conducted annually.

Strategy: Finance will work with various NBC sections to update the inventory of NBC property annually for insurance coverage and shall conduct risk management activities for all lines of coverage, other than worker's compensation.

Performance Indicators/Measures:

- Number of risk management activities conducted annually.
- Number of NBC inventory updates conducted for insurance coverage each year.



NBC and Providence Fire Department conducting confined space rescue training.

***Objective 10: Maintain compliance with financial regulatory agency requirements.***

Strategy: Finance will ensure compliance with all financial and regulatory requirements.

Performance Indicators/Measures:

- Transmit financial documents within required deadline.
- Send compliance reports to the PUC as required.

Strategy: Accounting will ensure all financial statements and records are prepared in compliance with the Generally Accepted Accounting Principles (GAAP). They will prepare and transmit financial statements to the appropriate persons at the Rhode Island House and Senate as required, as well as generate the Disclosure of State Government Consultants Report annually, which Legal will submit.

Performance Indicators/Measures:

- Transmit 100% of financial statements to the Rhode Island House and Senate each month by the deadline.
- Post quarterly financial statements on NBC's website.
- Percent of annual Disclosure of State Government Consultants Reports submitted on time.

Strategy: Accounting shall ensure that all audited financial statements comply with the GAAP. The annual audit shall be completed and approved by the Board of Commissioners by September 30<sup>th</sup> of each year.

Performance Indicators/Measures:

- Receive a clean opinion and no management letter in the annual audit.
- Complete the annual audit by September 30<sup>th</sup> each year.

**Objective 11:** *Effectively manage employee benefits to maximize compensation and minimize costs.*

Strategy: Human Resources will evaluate all benefit options to provide the most comprehensive and cost-effective options to NBC employees within 6 months of contract renewal dates.

Performance Indicators/Measures:

- Evaluate 100% of alternative comparative benefit solutions within 6 months of renewal.



Human Resources staff manage and assist NBC staff with all benefit inquiries.

**Objective 12:** *Guarantee purchase of the highest quality goods and services while ensuring compliance with federal and state purchasing laws.*

Strategy: Purchasing will continuously review purchase requisitions to ensure purchase orders are issued in a timely manner.

Performance Indicators/Measures:

- Complete 97% of purchase requisitions within two weeks.
- Average number of days taken to complete a typical purchase order.

Strategy: Purchasing will prepare and review bid specifications and takes steps to encourage maximum participation by bidders so NBC can purchase high quality products at the lowest possible price.

Performance Indicators/Measures:

- Complete 100% of bid specifications within 30 days.
- List 100% of bid specs for non-sole source, non-emergency purchase requisitions over \$2,500 on the State of RI Vendor Information Program website.

Strategy: Purchasing will review utility contracts and chemical purchase orders well before their expiration date to ensure the best possible pricing.

Performance Indicators/Measures:

- Review 100% of utility contracts 3 months prior to the expiration date.

**Objective 13:** *Provide timely and accurate financial information for use by NBC managers in the decision making process.*

Strategy: Finance will notify managers of budget issues within five days of the month end.

Performance Indicators/Measures:

- Provide budget variance and analysis reports to managers on a monthly basis.

Strategy: Accounting will provide financial statements and reports to the NBC's Finance Committee and Board of Commissioners.

Performance Indicators/Measures:

- Percentage of detailed financial reports, including the financial statements, provided on a monthly basis.

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# GOAL 4

## OBJECTIVES:

1. Continuously strive to improve and enhance internal and external communications.
2. Ensure procedures are in place agency-wide to effectively respond promptly to internal and external customers.
3. Maximize automation and computerization throughout the agency.
4. Establish an agency-wide training program to improve internal and external customer focus and have all employees participate.
5. Maintain programs and conduct projects that give back to the community.

***Customer Focus Goal:** Maintain a customer-focused attitude throughout the organization.*

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**Customer Focus Goal: Maintain a customer-focused attitude throughout the organization.**

*The Narragansett Bay Commission is committed to providing the best customer service possible. While it is obvious that the NBC Customer Service section interacts with the NBC's customers daily, every NBC section interacts with external customers in one way or another. Therefore, it is the responsibility of every section and every employee throughout the agency to interact with NBC's customers in an exemplary fashion including the internal customers we deal with daily at the NBC. To ensure the customer-focused approach is properly instituted, the NBC has established procedures, training programs and technology to provide prompt and effective service to both external and internal customers, while keeping the sewer rates at a reasonable cost for customers. In addition to optimizing the customer service process, the NBC sponsors programs that give back to our customers and the communities in our district.*

**Objective 1:** Continuously strive to improve and enhance internal and external communications.

Strategy: The NBC will ensure prompt, courteous and accurate customer service both internally and externally.

Performance Indicators/Measures:

- Enhance communications, conduct presentations and ensure timely responses to customers.
- Strengthen relations with regulatory agencies and stakeholder groups.
- Provide education relative to NBC initiatives.
- Provide consistent and reliable information.



NBC's friendly Customer Service staff, trained and ready to assist customers.

Strategy: Customer Service will track statistics related to inquiries, disputes, and abandoned calls.

Performance Indicators/Measures:

- Resolve 96% of customer disputes within 30 days.
- Percentage of abandoned calls acknowledged.
- Number of customer calls received.

**Objective 2: Ensure procedures are in place agency-wide to respond effectively & promptly to internal and external customers.**

Strategy: NBC departments will respond to inquiries from any source in a timely manner. Managers will institute timeframes for staff to meet when responding to a customer inquiry or request, incorporate timeframes into their SOPs, and ensure these timeframes are continually met.

Performance Indicators/Measures:

- Average number of business days to respond to customer requests and inquiries.
- Number of business days to review NBC permit applications and issue NBC permits.

Strategy: Legal will track and respond to all public record requests within required legal timeframes.

Performance Indicators/Measures:

- Percentage of record inquiries made within legal timeframe.
- Number of business days to reply to public record requests.

Strategy: Legal will work with the Engineering and IT sections to maintain and continually update the centralized real estate database. Legal will obtain, coordinate and consolidate all records pertaining to NBC real estate holdings. Paper files will be organized in one area of the Legal section and the documents (deeds, maps) will be scanned into the Document Imaging System for easy retrieval and to ensure prompt responses to internal and external requests for such information on NBC real estate holdings. Legal will establish a tracking protocol to determine the time necessary to obtain information, retrieve documents and respond to requests regarding real estate matters.

Performance Indicators/Measures:

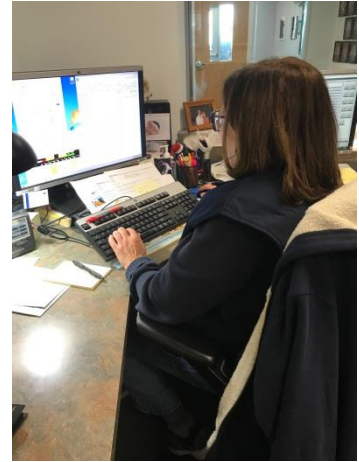
- Percentage of real estate information scanned and available electronically.
- Amount of time required to respond to NBC real estate matters.

**Objective 3: Maximize automation and computerization throughout the agency.**

Strategy: IT will provide the appropriate tools and equipment to allow the best access to our Web environment and periodically update the NBC operating systems and servers to provide the most efficient internet access.

Performance Indicators/Measures:

- Percentage of NBC operating systems and servers updated annually.
- Percentage of time the NBC website is available annually.



Customer Service staff assisting customers with their accounts and requests.

Strategy: The NBC will ensure on-line information, permit applications and forms are available and up-to-date, accurate and promptly uploaded to the NBC Internet and Intranet websites.

Performance Indicators/Measures:

- Provide applications, fact sheets and forms online.
- Maintain systems and applications to evaluate and assess the NBC's webpage annually.

Strategy: IT and Customer Service will ensure online bill payment is operational, secure and easy to use.

Performance Indicators/Measures:

- Percentage of payments made through the online bill payment system.

Strategy: ES&C will work with IT to establish a centralized environmental data warehouse for plant, sewer system, receiving waters and other monitoring data so that specific data can be promptly and easily accessed by internal and external customers via the Intranet or Internet.

Performance Indicators/Measures:

- Amount of new data available to staff via the Intranet annually.
- Amount of new data available to the public via the internet annually.



NBC staff assisting customers with a smile.

Strategy: Human Resources will maintain and continually update the employee benefits webpage on BayNet ensuring employees have the most up to date information.

Performance Indicators/Measures:

- Maintain 100% of HR/employee benefits forms and information online.

Strategy: ESTA will maintain an Environmental Health & Safety webpage on NBC's internal website, providing fast, easy access of each employee's training record by the employee and appropriate management.

Performance Indicators/Measures:

- Percentage of employees meeting all training requirements.

**Objective 4:** *Establish an agency-wide training program to improve internal and external customer focus and have all employees participate.*

Strategy: The NBC will work to create a customer-focused attitude throughout the agency and ensure staff is provided training as needed or requested.

Performance Indicators/Measures:

- Number of employee training programs offered by the NBC annually.
- Number of employees trained in non-technical, customer service and communications areas annually.
- Average of two hours of customer service training provided to all employees.
- Percentage of employees who attend in-house training annually.
- Encourage professional development.
- Conduct annual certification opportunities.

Strategy: The Customer Service Section will provide customer focus training for their staff annually.

Performance Indicators/Measures:

- Hold 8 customer focus training sessions annually.
- Number of staff members trained annually.

Strategy: The NBC Customer Service section will maximize their customer-focused attitude and develop relationships with significant customers.

Performance Indicators/Measures:

- Review 15 significant user accounts per year.

Strategy: Accounting and Purchasing will provide training to users on their respective Oracle modules, as needed.

Performance Indicators/Measures:

- Number of employees trained in the Accounting and Purchasing applications.
- Train 100% of purchasing system users.

**Objective 5:** *Maintain programs and conduct projects that give back to the community.*

Strategy: The NBC will provide opportunities, support and foster programs that improve the environment or the customers and communities in the NBC service area through the NBC Environmental Enforcement Fund (EEF).

Performance Indicators/Measures:

- Number of EEF projects awarded funding annually.
- Amount of NBC contributions made to the local community annually.
- Number of public outreach programs in service area supported by NBC.

Strategy: Various NBC sections will provide internship opportunities to students interested in various environmental and business fields.

Performance Indicators/Measures:

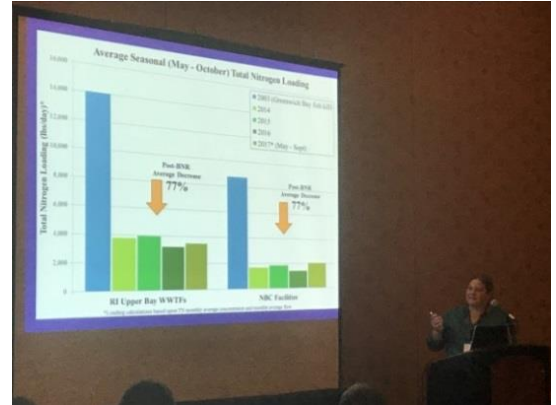
- Number of interns employed by the NBC each year.
- Number of students that are mentored by NBC staff annually to help students learn more about a career they are pursuing in a professional setting.

Strategy: The NBC will conduct presentations and occasionally sponsor educational workshops.

Performance Indicators/Measures:

- Number of educational workshops sponsored by NBC each year.
- Number of educational presentations made by NBC staff annually at workshops and conferences.

Strategy: ESTA will continue to assist businesses to achieve and improve compliance with NBC regulations by performing free educational and technical site visits to help those customers.



NBC scientist presenting and sharing NBC's monitoring data at a public conference.

Performance Indicators/Measures:

- Number of pollution prevention technical assistance site visits conducted annually.
- Conduction health and safety audits.
- Submit technical papers and abstracts for publication.

Strategy: Executive and Public Affairs will publicize community events internally and externally to encourage maximum participation.

Performance Indicators/Measures:

- Amount of donations received through NBC's casual day donations program.
- Number of NBC staff that participate as judges at the RI Science Fair.
- Number of grade K-6 artistic poster entries received from schools in NBC's service area as part of NBC's annual poster contest.
- Sponsor community activities and bestow 40 NBC awards or scholarships annually.
- Number of students from the Metropolitan Regional Career and Technical Center mentored by NBC staff each year.
- Number of NBC staff members participating in the NBC Watershed Explorers program annually.

Strategy: The NBC will assist member communities with evaluating their sewer systems periodically to maximize overall capacity and provide guidance regarding operational issues.

Performance Indicators/Measures:

- Executive will conduct three meetings with affiliated member communities annually.

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# GOAL 5

## OBJECTIVES:

1. Provide ongoing technical training to optimize team performance and provide equipment to ensure safe and environmentally sound management practices are followed.
2. Provide comprehensive training programs to ensure staff perform their jobs with a high level of skill and quality.
3. Provide an Employee Recognition Program to acknowledge employee and team accomplishments.
4. Periodically evaluate the effectiveness of NBC benefits & compensation programs.
5. Create a culture within the NBC for protecting employees by using safe and sound practices.
6. Practice & enhance succession planning activities to ensure continuity of institutional knowledge.
7. Ensure compliance with Federal & State labor laws.
8. Ensure positive working relationships with the collective bargaining units.
9. Encourage long-term career employment to retain knowledgeable and trained employees.
10. Maintain a culture of wellness throughout the NBC community to maintain overall health & well-being.

*Staffing Goal: Attract, develop and retain highly qualified employees.*

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**Staffing Goal: Attract, develop and retain highly qualified employees.**

*The Narragansett Bay Commission must attract and retain highly qualified employees in order to ensure that the agency reaches its goals and continues to be a leader in the field of wastewater treatment. The NBC routinely evaluates its employee benefits and compensation package to remain competitive with other agencies and to ensure the long-term commitment of our workforce to the NBC. By encouraging promotion from within, the NBC ensures a path of upward mobility for qualified employees, maintaining the valuable institutional knowledge employees have gained over their years of employment with the agency. To build on this knowledge, the NBC has comprehensive training programs to provide staff with the instruction necessary to develop and improve the skills needed to perform their individual jobs at the highest level and prepare them for future advancement. The NBC also continually implements new programs to encourage professional growth and development, so employees will excel both within the workplace and in their personal lives. The NBC strives to provide a flexible workplace, recognize staff for a job well done and encourages health and well-being through healthy lifestyle choices for all members of the NBC community.*

**Objective 1:** Provide programs with mechanisms and opportunities for continued growth and professional development.

Strategy: NBC management will encourage employee professional development, licensing and certification opportunities.

Performance Indicators/Measures:

- Number of employee training and seminar opportunities provided annually.
- Number of internal cross-training opportunities conducted annually.
- Number of incentive classes completed by to union employees each year.
- Number of college courses taken through the tuition reimbursement program each year.
- Number of employees obtaining professional certifications and licenses annually.
- Percentage of employees receiving training annually to optimize team performance.
- Ensure employee licensing and certifications are valid.
- Number of financial planning/individual meetings offered to employees.

Strategy: Government Affairs will encourage career enhancement for all employees and preside as Chair of educational committees for the Non-Union, Local 1033 and Council 94 tuition reimbursement committees to review and approve tuition reimbursement applications. Information regarding soliciting and reviewing applications from staff for tuition reimbursement will be posted three times per year.

Performance Indicators/Measures:

- Number of tuition reimbursement applications accepted and reviewed annually.
- Percentage of tuition reimbursement applications approved.
- Amount of funds provided for tuition reimbursement program annually.

Strategy: The NBC will provide abundant opportunities for employees to increase their knowledge level by annually offering NBC computer courses and/or courses for incentive credits.

Performance Indicators/Measures:

- Number of NBC computer courses taken by NBC staff members.
- Number of incentive credits earned annually by NBC union employees.
- Number of employees attending trainings annually.

Strategy: Directors and Managers will notify employees of outside training opportunities provided through other agencies and professional organizations, and will allow employees to attend job related training sessions where appropriate.

Performance Indicators/Measures:

- Number of outside training sessions attended by NBC staff annually.
- Number of professional organizations NBC employees are members of.

***Objective 2: Provide comprehensive training programs to ensure NBC staff have the knowledge necessary to perform their jobs with a high level of skill and quality.***

Strategy: Each section will conduct activities and trainings related to building a team oriented atmosphere in the workplace.

Performance Indicators/Measures:

- Number of annual teambuilding training activities each section conducts.
- Percent of sections conducting annual teambuilding training activities.



NBC offers a comprehensive training program for all staff members to ensure staff can perform their job duties safely at a high level of skill.

Strategy: The NBC will continue to encourage and support adequate levels of internal and external training opportunities for staff to enhance their knowledge.

Performance Indicators/Measures:

- Number of employees attending internal training sessions annually.
- Number of employees attending external training sessions annually.

Strategy: ESTA will conduct and coordinate all OSHA required annual training sessions, maintain proper records of training events and automate tracking to ensure compliance with the NBC Health and Safety Program. ESTA will also offer frequent First Aid and Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED) training classes annually and track the number of employees certified in CPR/AED training, as well as establish an NBC Employee Safety Month for all sections to perform annual Right-to-Know training sessions.



NBC offers in-house CPR/AED/First Aid training to all staff members each year.

Performance Indicators/Measures:

- Number of employee training sessions offered each year.
- Percentage of training events tracked automatically.
- Offer three CPR/AED training classes annually.
- Certify/recertify 45 employees per year in CPR/AED training.

Strategy: Section Managers will work with ESTA staff to ensure that their staff is provided basic training and annual refresher trainings, such as Defensive Driver, Healthy Back, and Supervisor Safety Awareness, where necessary or relevant.

Performance Indicators/Measures:

- Percentage of NBC sections whose staff is up to date on all trainings.

Strategy: O&M will provide ongoing technical training on the manual operation of equipment to optimize team performance and will track the training progress for each area for each employee.

Performance Indicators/Measures:

- Percentage of employees trained on all manual equipment.

**Objective 3:** *Provide an Employee Recognition Program to acknowledge employee and team accomplishments.*

Strategy: Executive will recognize employees at various events, such as Board meetings, to acknowledge jobs well done by individuals and groups.

Performance Indicators/Measures:

- Number of employees and teams recognized by the NBC annually.

Strategy: Public Affairs will encourage staff to use existing outlets, such as the Pipeline, to recognize fellow employees for exemplary performance.

Performance Indicators/Measures:

- Number of articles published recognizing NBC staff accomplishments.

**Objective 4:** *Periodically evaluate the effectiveness of NBC benefits and compensation programs to ensure competitive and consistent compensation practices.*

Strategy: Executive will work with the outside management advisory groups, national wastewater associations and other public agencies to periodically compare and update the NBC compensation and benefit package.

Performance Indicators/Measures:

- Rank of NBC compensation package in comparison to other similar agencies.

Strategy: Human Resources (HR) will evaluate the NBC benefit program alternatives before each contract renewal, as well as compare retention and turnover rates against industry standards biannually.

Performance Indicators/Measures:

- Rank of NBC compensation package in comparison to similar agencies.
- Assess alternative benefit packages at least 6 months prior to contract renewal.
- Percentage of NBC retention and turnover rates as compared to industry standards.

Strategy: The NBC will strive to maintain positive employee relationships by implementing Good Health and Wellness programs.

Performance Indicators/Measures:

- Number of employees participating in the Good Health and Wellness programs annually.
- Amount of Wellness Incentive credits paid to employees annually through preventative care programs.



NBC staff accepting a “Best Places to Work” award from RI Monthly.

Strategy: The NBC will offer programs that appeal to employees, such as offering flexible work schedules where appropriate and tuition reimbursement programs.

Performance Indicators/Measures:

- Number of employees participating in the flextime program.
- Amount of funds provided to tuition reimbursement program annually.
- Number of employees receiving tuition reimbursement annually.

**Objective 5:** Create a culture within the NBC for protecting employees by using safe and environmentally sound management practices, while providing a healthy and safe working environment.

Strategy: All Section Managers will ensure each assigned staff member receives all appropriate OSHA required trainings, are provided all necessary safety equipment, and have a section representative attend NBC safety meetings. Section Managers will also annually review the training status of each staff member to ensure employees are properly trained.

Performance Indicators/Measures:

- Ensure designated staff receives an average of 24 hours of Health and Safety training each year.
- Percentage of NBC departments represented at each safety meeting.
- Percentage of each section with staff current with required trainings.
- Ensure compliance with all State and Federal health and safety regulations.



NBC staff regularly receives confined space training to comply with OSHA regulations.

**Objective 6:** Practice and enhance succession planning actions to ensure continuity of institutional knowledge.

Strategy: Directors and Managers will mentor staff and provide paths for advancement within the agency to ensure that institutional knowledge is passed on and retained (succession planning).

Performance Indicators/Measures:

- Percentage of job advancements awarded through promotion to existing employees.

Strategy: Executive will routinely evaluate the NBC's staffing situation to ensure that NBC's succession plan for long-term transitional change is implemented.

Performance Indicators/Measures:

- Percentage of upper management positions vacated due to retirement that are filled by promoting existing staff members.

**Objective 7:** Ensure compliance with Federal and State labor laws.

Strategy: Labor Relations and HR will remain current in labor related issues, human resources topics and federal and state labor laws by attending conferences and seminars, and will also update NBC policies, procedures, and forms as necessary to ensure compliance with changing laws and regulations.

Performance Indicators/Measures:

- 100% compliance with all labor laws.
- Each representative will attend one outside HR or labor seminar per year.
- Percentage of labor related forms and policies updated annually.

Strategy: HR and Government Affairs will work with the NBC Affirmative Action Committee (AAC) to prepare and submit the Affirmative Action Plan (AAP) to the State Equal Employment Opportunity Office on time each year.

Performance Indicators/Measures:

- Submit annual AAP report by the State imposed deadline.
- Achieve 100% compliance with AAP goals annually.

***Objective 8: Ensure positive working relationships with the collective bargaining units, union employees and non-union employees.***

Strategy: The NBC will respond to all calls and letters from Union leadership in a timely manner, as normally expected in the business community.

Performance Indicators/Measures:

- Percentage of responses to Union leaders within a reasonable time period.

Strategy: Executive and Labor Relations will maintain an open line of communication between Union leadership and NBC staff members. The Executive Director will meet with unionized and non-union staff members at least twice per year informing them of ongoing NBC projects and programs as well as fostering a positive working relationship with employees through effective communication by addressing their issues and concerns.

Performance Indicators/Measures:

- Hold two semi-annual meetings with the Executive Director and staff.
- Number of NBC contacts with Union leadership.

***Objective 9: Encourage long-term career employment to retain knowledgeable and trained employees required to effectively operate and maintain NBC's operations.***

Strategy: The NBC will ensure employee benefits are attractive and provide experienced employees an incentive to continue their careers at the NBC. HR will develop a survey to determine employee satisfaction and will distribute this employee survey as directed by the Executive Director. HR will conduct exit interviews for all voluntary terminations to track exit trends and gather data regarding employee attitudes and perceptions. The Executive Director will review the results of every exit interview to determine areas needing improvement and will recommend areas for improvement as deemed necessary.

Performance Indicators/Measures:

- Percentage of positive feedback from employee satisfaction surveys.
- Number of exit interviews conducted with staff leaving on a voluntary basis.
- Percentage of job postings prepared and distributed within forty-eight hours of approval.



**Objective 10:** Maintain a culture of wellness throughout the NBC community through educating, supporting, and empowering staff to improve and maintain their overall health and well-being through healthy lifestyle choices.

Strategy: HR will promote nutrition education, physical activity and early screenings as a means of eliminating or reducing the incidence of health problems, such as obesity, diabetes, cancer and heart disease among employees. HR will leverage current communication channels, such as e-mail, Pipeline, written communications, bulletin boards and the intranet to promote a healthy exchange of ideas and conduct a wellness program review every two years to help determine future programs.

Performance Indicators/Measures:

- Coordinate and implement two Wellness Program events annually.
- Number of awards received for NBC Wellness programs.
- Number of communications used to share health information among employees each year.

Strategy: HR will coordinate programs that promote worker satisfaction and improve job performance, as well as support and coordinate programs that help eliminate tobacco use and drug and alcohol abuse. With the help of IT, HR will develop and maintain a Wellness Website for employee access with links to relevant sites, such as the Department of Health, Mayo Clinic, Quit Smoking, and American Cancer Society. HR will also coordinate and complete two wellness programs per year and conduct one or more Employee Assistance Program (EAP) training programs/seminars each year.










Performance Indicators/Measures:

- Number of Wellness Website updates conducted each year.
- Number of wellness programs and EAP training programs/seminars conducted each year.

**Narragansett Bay Commission  
Wellness Incentive Program  
2017/2018**

Effective July 1, 2017, eligible employees can earn a maximum of \$500 in Wellness Incentive Credits by completing any of the programs outlined below. The Wellness Incentive Credits will be paid to eligible employees in the form of a check or you may elect to contribute one annual wellness incentive to your Health Savings Account (HSA) through payroll deduction.

The Wellness Incentive Credits shown below are in addition to the incentives that can be earned through United Healthcare's "Simply Program" program (which are paid through gift cards).

Programs & Activities	Program Description	Incentive Credit
	1. Obtain Annual Vision Exam	\$100
	2. Obtain Annual Physical Exam from primary care physician. Certification of physical examination is required if screening is completed at the physician's office or if results obtained at an on-site Health Fair do not meet the following guidelines: • Blood Pressure: Equal to or less than 140/90 • Cholesterol: Less than 225 • Body Mass Index (BMI): Less than 30.0	\$100
	3. Obtain an age appropriate preventive screening performed by a dermatologist (skin cancer screening), gynecologist (pap-smear), colonoscopy or mammography.	\$100
	4. Obtain Annual Oral Exam (typically performed at the time of a semi-annual cleaning).	\$100
	5. Obtain Blood Pressure, Cholesterol and Body Mass Index (BMI) Screening at on-site Health Fair or at physician's office.	\$100
	6. Complete a 12-week (3-month) Weight Watchers® program.	Community Setting \$150 Online \$300
	7. Complete an on-site or designated community-based smoking cessation program.	\$100
	8. Complete a Free Wellness Coaching Program (by telephone) in any of the following areas: • Weight Management • Nutrition • Exercise • Stress • Diabetes Lifestyle Phone Number: 1-800-478-1057	\$50 each
	9. Complete United Healthcare's 12-week "Walking for Fitness" program.	\$100

HR staff promotes a Wellness Program to staff which includes incentives to stay healthy.

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# GOAL 6

## OBJECTIVES:

1. Strengthen and expand NBC's base of support for its programs through continued positive and effective relationships with our key stakeholders to ensure the purpose and benefits of NBC are well understood and appreciated.
2. Strengthen and enhance internal communications between sections, divisions, the Board of Commissioners and the CAC.
3. Strengthen and enhance external communications by identifying target audiences and promptly providing important information to our audiences by using all available media.
4. Educate employees and the public to make them fully aware of what the NBC is doing to protect and enhance the environment.
5. Continually enhance & update the information provided via the Internet, Intranet & other medias to promote and enhance the image of the NBC.

*Communication Goal: Improve and enhance internal and external communication.*

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**Communication Goal: Improve and enhance internal and external communications.**

The Narragansett Bay Commission recognizes that good communication is an essential component for a successful operation. Internal communication between the various NBC sections is vital to ensuring all NBC operations run smoothly. Through exemplary internal communications all employees can better understand the importance of the jobs they perform on a daily basis and how critical their work is to making the NBC the successful organization it is. The NBC has instituted many avenues for effective internal communication throughout the agency, such as regular staff meetings, semiannual NBC employee meetings with the Executive Director, monthly distribution of the NBC Pipeline newsletter, and BayNet, the NBC’s intranet. It is also imperative for NBC to communicate its purpose and mission to the public, stakeholders and regulators through effective external communication. The NBC must ensure people are fully aware of the important public health mission performed by the agency and what the NBC does on a daily basis to project and enhance the environment.

**Objective 1:** Strengthen and expand NBC’s base of support for its programs through continued positive and effective relationships with our key stakeholders (customers, Board, elected officials, regulatory officials and the public) to ensure that the purpose and benefits of the NBC are well understood and appreciated.

Strategy: The NBC will distribute the annual report and other external publications and presentations will be made to key stakeholders.

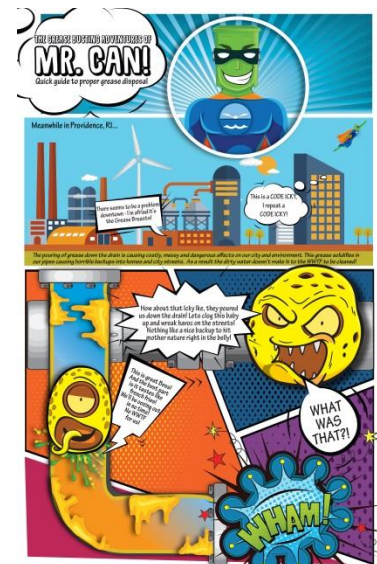
Performance Indicators/Measures:

- Number of external publications and reports provided to the public annually.
- Number of external presentations made annually.
- Number of publications and presentations uploaded to the NBC website.

Strategy: The NBC will participate in business events to educate local and national businesses to fully understand the resources, functions and initiatives of the NBC.

Performance Indicators/Measures:

- Number of business events NBC participates in annually.



Public Affairs and Pretreatment created a Mr. Can campaign to promote and educate the public about NBC’s grease removal program.

**Strategy:** The NBC will continue to expand its public outreach efforts by inviting the public, elected officials and key stakeholders to informational forums on NBC initiatives.

**Performance Indicators/Measures:**

- Number of students participating annually in watershed education programs.
- Number of neighborhood meetings convened in areas affected by NBC construction projects, such as the CSO Abatement Project.
- Provide construction related activity to the NBC website.

**Strategy:** The NBC will strengthen its base of support for its programs by ensuring they are fully publicized and comprehended by key stakeholders. This will be accomplished by issuing press releases, publishing technical papers, and presenting programs, projects and findings at workshops and public events.



NBC staff participated in the filming of a panel discussion on the topic of “Is Narragansett Bay Too Clean?” for the RI Monthly Community Conversation television show.

**Performance Indicators/Measures:**

- Number of workshops and presentations offered annually to educate users, stakeholders, Cities and Towns about NBC programs.
- Number of technical papers submitted to various mediums for publication.
- Establish communications plans and protocols for major NBC projects, as necessary.

**Strategy:** ES&C will organize an awards ceremony annually to present Environmental Merit Awards, Perfect Compliance Awards, Pollution Prevention Awards, and Stormwater Management Awards to recognize exemplary environmental performance.

**Performance Indicators/Measures:**

- Number of NBC awards presented each year.



NB’s Chairman at a ceremony to recognize companies in the NBC district that display exemplary environmental performance with Perfect Compliance Awards.

Strategy: The NBC will expand the successful NBC Watershed Explorers (NBCWE) educational program for schools and students in the NBC service area. Each year an annual presentation of water quality findings from student participants of the NBCWE program will be presented to the Board of Commissioners.



NBC's Watershed Explorer students in the field learning about water quality testing.

Performance Indicators/Measures:

- Number of hours of NBC staff time dedicated annually towards educating schoolchildren in NBC's service area about water quality.
- Number of participating schools in the NBCWE program.
- Conduct 100 school visits each year.
- Number of students reached annually through the NBCWE program.

Strategy: The NBC will periodically incorporate educational information on NBC bills and make that information available online via the Internet.

Performance Indicators/Measures:

- Number of months in which bills included educational information about the NBC.
- Amount of educational information included in bills that is provided on the internet.

Strategy: The NBC will update both the internal and external websites and social media accounts, using the most current technology, to ensure NBC information is up-to-date and publically available, educating customers and the public about NBC's core mission.

Performance Indicators/Measures:

- Number of website and social media updates completed annually.

***Objective 2: Strengthen and enhance internal communications between sections, divisions and the Board of Commissioners.***

Strategy: The NBC Board of Commissioners will hold numerous meetings annually to discuss ongoing NBC projects and to conduct business. For each board meeting, the Executive Director will prepare a monthly report for the Board to review.



An award given to staff at a Board of Commissioners meeting shows the Board members the success of the NBC.

Performance Indicators/Measures:

- Number of Board meetings held annually.

Strategy: Executive will encourage the enhancement of internal communications so that all staff are fully aware of NBC activities and overall mission through meeting with the Executive Director on a semiannual basis, electronic distribution of monthly reports, providing jobs sharing opportunities between sections, allowing staff opportunities to attend board meetings, etc.

Performance Indicators/Measures:

- Number of Executive monthly reports available electronically to all sections.
- Number of employees participating in job exchange day programs annually.
- Provide quarterly updates on the status of capital projects to NBC staff, Board members and the public each year.

Strategy: The Engineering Section will meet with the Customer Service Section monthly to maintain internal communication on the status of newly issued permits to ensure all new customers are added to the billing system.

Performance Indicators/Measures:

- Number of new customers added to the CS system each month.
- Conduct 12 internal meetings between the Engineering and the Customer Service Sections each year.

***Objective 3: Strengthen and enhance external communications by identifying target audiences and promptly providing important information to our audiences by utilizing all available media.***

Strategy: Government Affairs, Public Affairs and the Executive Director will proactively manage public and legislative affairs related to the NBC's ongoing activities. They will periodically provide information to the General Assembly regarding the status of the NBC and its current projects through briefing packets and annual reports.

Performance Indicators/Measures:

- Prepare and distribute briefing packets and the annual report to members of the General Assembly by January 31<sup>st</sup> of each year.

Strategy: Executive will continually track response time in relation to all requests for information (e.g., media, elected officials, customers) and will conduct an annual audit to quantify average response time and depth of information requested.

Performance Indicators/Measures:

- Number and type of requests for information annually, and category of requestor.
- Response time for each request.



NBC Executive Director on WPRI morning News responding to a media inquiry about clean water.



Strategy: The NBC will enhance and use the operating budget, CIP and PUC Compliance Reports as communication devices to share information about the NBC to our stakeholders. The NBC will ensure the operating budget receives a proficient rating or better as a communication device by the GFOA and will transmit Compliance Reports on capital projects to the PUC as completed.

Performance Indicators/Measures:

- Receipt of the GFOA budget communication device award.
- Transmit two compliance reports on capital projects to the PUC each year.
- Transmit four restricted accounts reports to the PUC annually.
- Complete the MWRA and NACWA User fee surveys annually.

Strategy: Government Affairs will provide information to legislators during the legislative session regarding the effects of specific legislation on the NBC and will keep the NBC Board and staff apprised of any laws that pass each session which affect the NBC. Government Affairs will supply legislators with position papers on legislation as needed during the legislative year, as well as present staff and the Board with a cumulative report of all laws passed during each General Assembly session.

Performance Indicators/Measures:

- Number of pieces of legislation reviewed annually.
- Number of position papers prepared annually.
- Percentage of legislation introduced each year that affects the NBC.

***Objective 4: Educate employees and the public to make them fully aware of what the NBC is doing to protect and enhance the Narragansett Bay and the environment.***

Strategy: Executive will make full use of information and data from various internal and external sources and will issue press releases to ensure the public is aware of the effect NBC activities has on the NBC receiving waters of Narragansett Bay.

Performance Indicators/Measures:

- Number of positive press releases issued annually.

Strategy: Public Affairs will present articles focusing on agency activities and initiatives in the Pipeline newsletter.

Performance Indicators/Measures:

- Number of Pipeline newsletters issued each year.

Strategy: Sections of the NBC will coordinate or conduct presentations to educate stakeholders and employees on NBC activities and issues. The Executive Director will meet with all staff to brief them on activities within NBC and inform personnel on NBC issues, projects and activities. EMDA will hold monthly data meetings and routinely meet with Operations and other interested stakeholders to ensure prompt dissemination of data.

Performance Indicators/Measures:

- Conduct annual meetings with union and non-union staff.
- Conduct monthly data meetings.
- Number of data presentations made to external stakeholders annually.



Interdepartmental meetings are routinely held at NBC to ensure that staff are informed on current projects and activities.

Strategy: The NBC will keep management staff apprised of all NBC projects and issues by periodically holding management retreats or meetings with NBC managers and Directors.

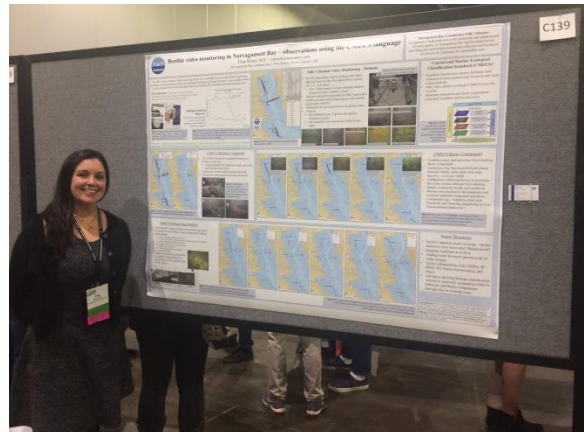
Performance Indicators/Measures:

- Number of management retreats or management meetings held annually.

Strategy: EMDA will publish project reports as projects or studies are completed and will annually develop a full comprehensive data report detailing the NBC's environmental achievements and accomplishments.

Performance Indicators/Measures:

- Number of project reports published each year.



NBC staff displaying a poster at a conference to relay information that the NBC science team has collected and analyzed to the public.

***Objective 5: Continually enhance and update the information provided via the Internet, Intranet, and other media to promote and enhance the image of the NBC.***

Strategy: The Executive Director or Director's designee will transmit the Strategic Plan to the Board of Commissioners and all employees, asking that their efforts be focused toward achieving the agency goals outlined in the plan. The Executive Director will present any updated versions of the NBC Strategic Plan to the full Board of Commissioners and to any new Board members upon appointment. Management will notify employees regarding any updated strategic planning goals and the Strategic Plan will be available to all NBC staff via NBC's internal website.

Performance Indicators/Measures:

- Present all Strategic Plan updates to the Board of Commissioners and employees.
- Provide the Strategic Plan on the Intranet.
- Presentation of all Strategic Plan updates to the Board of Commissioners.
- Presentation of all Strategic Plan updates provided to employees.
- Availability of the Strategic Plan on the Intranet.

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# GOAL 7

## OBJECTIVES:

1. Continue to assess and evaluate NBC's organizational structures, systems and practices and make improvements as needed to ensure they support continued superior performance of the agency.
2. Publish a formal statement of NBC Strategic Plan goals and communicate to employees the importance of their roles in meeting these expectations.
3. Conduct NBC business in an open manner and in conformance with all state ethics standards.

***Organizational Performance Goal:***  
*Ensure that the NBC organization is aligned with and supports our strategic goals.*

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**Organizational Performance Goal: Ensure the NBC organization is aligned with and supports our strategic goals.\***

*\*That is, the structures (reporting relationships, boundary permeability, span of control, level of authority, staff deployment, etc.), processes (management control, reporting, decision-making, communications, etc.), HR/people systems (succession planning, compensation and reward, performance measurement, etc.), and culture/work environment (values, beliefs, how things are done at the NBC).*

*The Narragansett Bay Commission's mission is clear: **To maintain a leadership role in the protection and enhancement of water quality in Narragansett Bay and its tributaries by providing safe and reliable wastewater collection and treatment services to its customers at a reasonable cost.** With such a clearly stated mission the NBC began work in 2003 to clearly define its main strategic goals into a formalized strategic Plan. This plan has since been the driving force behind daily employee roles and responsibilities necessary to achieve this important mission, and has served as the foundation for NBC's annual operating budget and Capital Improvement Program. The NBC continually evaluates its performance and progress and strives to ensure that each decision made is aligned with and supports the agency's strategic goals. By following a clearly defined Strategic Plan, the NBC will achieve and exceed environmental requirements and serve its customers at the highest level possible, clearly reaffirming the agency as a local and national leader in the wastewater treatment industry.*

**Objective 1:** *Continue to assess and evaluate NBC's organizational structures, systems and practices and make improvements as needed to ensure they support the continued superior performance of the agency.*

Strategy: Executive will be active with local and national wastewater agencies and will research structures and systems employed by other large wastewater agencies throughout the country to identify potential improvements to NBC practices. Executive will periodically evaluate each component of the strategic plan and ensure that each objective has been assigned to a division, section and/or individual.

Performance Indicators/Measures:

- Rank of NBC's operation and maintenance costs in comparison with NACWA's Clean Water Central Survey.
- Rank of NBC's retention and turnover rates against industry standards.
- Percentage of strategic plan strategies and objectives delegated to the correct division/section/person.

Strategy: Executive will periodically assess and evaluate the overall agency organizational structures, systems and practices to determine if they achieve the goals established in the Strategic Plan. Directors will review areas under their purview annually to determine if goals, objectives and performance measures are properly assigned and are being attained. Each Director will periodically report their findings to the Executive Director so that the Board of Commissioners can be advised of NBC's progress. Finance will also facilitate working sessions to align budget goals with the Strategic Plan.



The three wind turbines constructed at Field's Point provide a grand statement and show NBC's strong commitment to the strategic goal of obtaining 100% of NBC's electricity needs from renewable sources.

Performance Indicators/Measures:

- Executive will periodically evaluate the need to implement alternative courses of action to better achieve goals and performance measures.
- Conduct working sessions to ensure the budget upholds the Strategic Plan goals.

***Objective 2: Publish a formal statement of the NBC Strategic Plan goals and communicate to employees the importance of their roles in meeting these expectations.***

Strategy: The Executive Director will transmit the Strategic Plan to the Board of Commissioners and all employees, asking that their efforts be focused toward achieving the agency goals outlined in the plan. The Executive Director will present any updated versions of the NBC Strategic Plan to the full Board of Commissioners and to any new Board members upon appointment. Management will notify employees regarding any updated strategic planning goals and the Strategic Plan will be available to all NBC staff via NBC's internal website.

Performance Indicators/Measures:

- Presentation of all Strategic Plan updates to the Board of Commissioners.
- Presentation of all Strategic Plan updates provided to employees.
- Availability of the Strategic Plan on the Intranet.

Strategy: Directors will work with managers and supervisors to ensure elements of the Strategic Plan are incorporated into the departmental goals and tasks and the evaluation and budget development processes, as well as annually review the NBC Strategic Plan performance measures to ensure objectives, strategies and goals are assigned to staff and are being met.

Performance Indicators/Measures:

- Percentage of Strategic Plan performance measures accomplished or showing positive progress for the agency.



**Objective 3: Conduct NBC business in an open manner and in conformance with all state ethics standards.**

Strategy: Executive will post, complete, and file all meeting notices, agendas and meeting minutes of the CAC and the Board of Commissioners, as well as file meeting minutes and notices with the Secretary of State on time as required by RI Law.

Performance Indicators/Measures:

- Post 100% of notices, agendas and meeting minutes on time.
- File 100% of meeting minutes with the Secretary of State within required time limit.

Strategy: Legal will respond to staff inquiries regarding ethics questions, ensure compliance and submit all required filings in a timely fashion. Legal will file Disclosure of Government Consultant submittals annually.

Performance Indicators/Measures:

- Percentage of non-financial regulatory filings tracked.
- Prepare and file regulatory agendas subject to RIGL.
- File Disclosure of Government Consultant submittals at required intervals.



Legal staff receiving a tour of NBC's receiving waters in upper Narragansett Bay aboard the R/V Monitor.

Strategy: NBC will ensure compliance with Federal and State labor laws.

Performance Indicators/Measures:

- Number and percent of Affirmative Action hiring goals met annually.
- 100% compliance with state ethics requirements.
- Submit the Equal Employment/Affirmative Action report on time annually.
- Prepare and file all ethics reports within required time periods.

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## Appendix I - List of Recent NBC Awards

The following is a list of the Narragansett Bay Commission's awards since the previous Strategic Plan was adopted in 2011.

### 2011

- The NBC's DVD *Environmentalism at Work* receives a National Achievement Award from the National Association of Clean Water Agencies for Excellence in Public Education.
- NBC is presented the Exemplary Worksite Health Award from the Greater Providence Chamber of Commerce and Blue Cross/Blue Shield of Rhode Island to honor local companies that encourage their employees to lead healthy lifestyles.
- NBC is selected by Best Companies Group as one of the "Best Places to Work in RI" based on responses to a management questionnaire as well as a confidential employee survey.
- NBC is awarded an Operations Excellence Award from the Atlantic States Rural Water & Wastewater Association, which promotes and supports excellence in the wastewater and clean water fields.
- The NBC Field's Point facility wins the Most Efficient Large Secondary Treatment Facility Award from the Narragansett Water Pollution Control Association.
- The NBC is awarded the Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association for FY 2010 Comprehensive Annual Financial Report.

### 2012

- Narragansett Bay Commission's Wind Turbine Project is named in *Water & Waste Magazine's* "Top Projects" list.
- NBC's Field's Point WWTF Administration Building wins a Merit Award for Sustainable Design from the American Institute of Architects/Rhode Island Chapter.
- Narragansett Bay Commission's Field's Point WWTF Administration wins a Silver Award from *Rhode Island Monthly Magazine*.
- NBC Executive Director, Raymond J. Marshall, P.E., receives Freeman Award from the Providence Engineering Society for professional excellence.
- Narragansett Bay Commission wins Distinguished Budget Presentation Award from the Government Finance Officers Association for Fiscal Year 2012 Budget.
- NBC's World Toilet Day exhibit receives a National Achievement Award from the National Association of Clean Water Agencies for Excellence in Public Education.
- Narragansett Bay Commission's Field Point Wastewater Treatment Facility named EPA's 2011 regional excellence award for Region 1.
- Narragansett Bay Commission's Field's Point Wastewater Treatment Facility named Most Efficient Large Secondary Wastewater Treatment Facility from the Narragansett Water Pollution Control Association.
- Narragansett Bay Commission's Field's Point Wastewater Treatment Facility wins a Gold Award and the Bucklin Point Wastewater Treatment Facility receives a Silver Award from the National Association of Clean Water Agencies for treatment excellence.
- Narragansett Bay Commission wins 2012 Worksite Wellness Award from Blue Cross/Blue Shield of Rhode Island.

## 2013

- Narragansett Bay Commission wins Distinguished Budget Presentation Award from the Government Finance Officers Association for Fiscal Year 2013 Budget.
- Narragansett Bay Commission wins Excellence in Financial Reporting from the Government Finance Officers Association for FY 2012 Comprehensive Annual Financial Report.
- The Field's Point Wastewater Treatment Facility is named the Most Efficient Large Secondary Treatment Plant from the Narragansett Water Pollution Control Association.
- The Field's Point Wastewater Treatment Facility receives a Gold Award from the National Association of Clean Water Agencies for treatment excellence.
- NBC is only one of sixteen organizations nationwide to receive United Healthcare's "Well Deserved" award for demonstrating and exceptional commitment to employee health and well-being.
- Narragansett Bay Commission named receives *Best Places to Work in Rhode Island Award* for excellence in employee engagement.
- Narragansett Bay Commission's "Snapshot of Narragansett Bay" web module receives a National Environmental Achievement Award from the National Association of Clean Water Agencies for Excellence in e-media.

## 2014

- The Water Environment Federation awards Narragansett Bay Commission the national Water Quality Improvement Award for enhancement and protection of Narragansett Bay resulting from the NBC's CSO Abatement Project.
- The Narragansett Water Pollution Control Association awards the Narragansett Bay Commission the 2014 Excellence Award for Safety.
- The Construction Management Association of America recognizes the Narragansett Bay Commission's Field's Point WWTF NR Upgrade project with an Excellence Award. Narragansett Bay Commission Operators win the New England Water Environment Association's Operations Challenge.
- Both the Field's Point and Bucklin Point WWTFs receive Silver Awards from the National Association of Clean Water Agencies for treatment excellence.
- Narragansett Bay Commission wins Distinguished Budget Presentation Award from the Government Finance Officers Association for Fiscal Year 2014 Budget.
- Narragansett Bay Commission wins Excellence in Financial Reporting from the Government Finance Officers Association for FY 2013 Comprehensive Annual Financial Report.
- Narragansett Bay Commission wins Asset Management Award from the New England Water Environment Association.
- NBC receives Honorable Mention for United Healthcare's "Well Deserved" award for demonstrating and exceptional commitment to employee health and well-being.
- Narragansett Bay Commission named receives Best Places to Work in Rhode Island Award for excellence in employee engagement.
- NBC wins a Platinum Award for Excellence in Management from the National Association of Clean Water Agencies.

## 2015

- Narragansett Bay Commission wins Distinguished Budget Presentation Award from the Government Finance Officers Association for Fiscal Year 2015 Budget.
- NBC wins Excellence in Financial Reporting from the Government Finance Officers Association for FY 2014 Comprehensive Annual Financial Report.
- Narragansett Bay Commission named receives *Best Places to Work in Rhode Island Award* for excellence in employee engagement.
- NBC receives EPA Region 1's Environmental Merit Award for clear water contributions to Narragansett Bay. The Massachusetts chapter of the American Council of Engineering Companies awards a Bronze Award to the Integrated Fixed Film Activated Sludge (IFAS) projects at the Field's Point Wastewater Treatment Facility as a successful example of complex engineering to achieve its objectives for water quality protection, energy efficiency, and sustainability.
- Water & Waste Digest conveys its 2015 Excellence Award on the Integrated Fixed Film Activated Sludge (IFAS) projects at the Field's Point Wastewater Treatment Facility.

## 2016

- Narragansett Bay Commission named "Utility of the Future" by the Water Environment Association and the National Association of Clean Water Agencies, one of only sixty-one utilities worldwide to receive this distinction.
- Narragansett Bay Commission Executive Director Ray Marshall elected President of the National Association of Clean Water Agencies.
- Narragansett Bay Commission purchases three off-site wind turbines to more fully develop its portfolio of renewable energy.
- Narragansett Bay Commission wins Distinguished Budget Presentation Award from the Government Finance Officers Association for Fiscal Year 2016 Budget.
- Narragansett Bay Commission wins Excellence in Financial Reporting from the Government Finance Officers Association for FY 2015 Comprehensive Annual Financial Report.
- The Narragansett Bay Commission's ESTA staff receives the 2016 George W. Burke, Jr. Award from the New England Water Environment Association for the NBC's excellent Safety Program.
- Narragansett Bay Commission named receives *Best Places to Work in Rhode Island Award* for excellence in employee engagement.

## 2017

- Narragansett Bay Commission Chairman Vincent Mesolella named one of "Seventeen Rhode Islanders to Watch" by GoLocalProv for his leadership and civic responsibility.
- Narragansett Bay Commission Executive Director Ray Marshall receives Elizabeth Cutone Executive Leadership Award from the New England Water Environment Association for outstanding leadership.
- Narragansett Bay Commission announces an agreement with Green Development, Inc. (formerly Wind Energy Development, Inc.) to construct two solar energy farms to enhance the NBC's sustainable energy portfolio, achieving essentially net zero energy use by the end of 2018.
- Narragansett Bay Commission receives Excellence in Management Award-Platinum Level from the National Association of Clean Water Agencies (NACWA), only one of two Platinum Awards in the nation.

- Narragansett Bay Commission's Field's Point WWTF receives Gold Award for Excellence in Treatment from NACWA. The Bucklin Point WWTF receives a Silver Award for Excellence in Treatment.
- Narragansett Bay Commission receives *Best Places to Work in Rhode Island Award* for excellence in employee engagement.
- The US Department of Energy awards the Narragansett Bay Commission with a 2017 Better Projects Award for sustainable energy projects.
- The RI Office of Energy Resources awards the Narragansett Bay Commission with a Lead by Example Award for sustainable and renewable energy projects.
- Narragansett Bay Commission wins 2016 Campaign Award from the State Employees Charitable Appeal.
- Narragansett Bay Commission wins Distinguished Budget Presentation Award from the Government Finance Officers Association for Fiscal Year 2017 Budget.
- Narragansett Bay Commission wins Excellence in Financial Reporting from the Government Finance Officers Association for FY 2016 Comprehensive Annual Financial Report.

## 2018

- The RI Office of Energy Resources awards the Narragansett Bay Commission with a Lead by Example Award for sustainable and renewable energy projects.
- The Narragansett Bay Commission's Field's Point Wastewater Treatment Facility in Providence receives a 2017 Regional Wastewater Treatment Plant Excellence Award from the U.S. Environmental Protection Agency.
- Narragansett Bay Commission's *MR. CAN vs The Grease Beasts* educational program receives a National Environmental Achievement Award from the National Association of Clean Water Agencies for Excellence in environmental education.
- Narragansett Bay Commission receives *Best Places to Work in Rhode Island Award* for excellence in employee engagement.
- Narragansett Bay Commission wins Excellence in Financial Reporting from the Government Finance Officers Association for FY 2017 Comprehensive Annual Financial Report.

## Appendix II - List of Abbreviations & Acronyms

AAC	Affirmative Action Committee
AAP	Affirmative Action Plan
AED	Automated External Defibrillator
BMP	Best Management Practices
BNR	Biological Nutrient Removal
CAC	Citizen’s Advisory Committee
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
CMOM	Capacity, Management, Operation, and Maintenance
COB	Corporate Office Building
COC	Chain of Custody
CPR	Cardiopulmonary Resuscitation
CSO	Combined Sewer Overflow
DMR	Discharge Monitoring Report
DWO	Dry Weather Overflow
EAP	Employee Assistance Programs
EEF	Environmental Enforcement Funds
EMDA	Environmental Monitoring & Data Analysis
EPCRA	Emergency Planning and Community Right-To-Know Act
ES&C	Environmental Science & Compliance
ESTA	Environmental, Safety & Technical Assistance
GAAP	Generally Accepted Accounting Principles
GFOA	Government Finance Officers Association
GIS	Geographic Information System
FHR	Human Resources
IM	Interceptor Maintenance
IT	Information Technology
LEED	Leadership in Energy and Environmental Design
LIMS	Laboratory Information Management System
NACWA	National Association of Clean Water Agencies
NBC	Narragansett Bay Commission
NBCWE	Narragansett Bay Commission Watershed Explorers

## List of Abbreviations & Acronyms (continued)

NOV	Notice of Violation
O&M	Operations & Maintenance
OSHA	Occupational Safety and Health Act
PUC	Public Utilities Commission
QA/QC	Quality Assurance / Quality Control
RCRA	Resource Conservation and Recovery Act
RIDEM	Rhode Island Department of Environmental Management
RIDOH	Rhode Island Department of Health
RIPDES	Rhode Island Pollutant Discharge Elimination System
ROMS	Regional Ocean Modeling System
SCADA	Supervisory Control and Data Acquisition
SIUs	Significant Industrial Users
SOP	Standard Operating Procedure
S&P	Standard and Poor's
USEPA	United States Environmental Protection Agency
VSAT	Vulnerability Self-Assessment Tool
WWTF	Wastewater Treatment Facility



## Appendix III - Strategic Plan Terms and Definitions

**Goal:** The long-term results the agency is working to achieve. These are the fundamental strategic issues the organization has to address to achieve its mission and move towards its desired future.

**Objective:** Intermediate measurable results that will get the agency closer to achieving established goals. Objectives should be viewed as the milestones that will result in the realization of the stated strategic goal. Objectives should be stated in terms of measurable and verifiable outcomes.

**Indicator:** Any parameter that can be measured and can be used to gauge increments of progress, changes in site conditions or accomplishments and achievements.

**Strategies:** Multiple activities organized to meet objectives and goals. Strategies may involve more than one program, division, or organization and may affect more than one media or activity.

**Performance Measures:** Specific targets to verify that our work results in actual progress towards our established goals and objectives. There are several types of performance measures. The federal and state budget offices are particularly interested in outcome measures.

**Input Measure** – are resources devoted to a program. They include dollars allocated and employee work hours, etc.

**Output Measure** – quantify the units produced or services provided. They may also report on the amount of effort expended to produce or deliver a product or service. Examples include number of clients served, permits issued, inspections conducted, etc.

**Efficiency Measure** – normally used as an internal management tool to relate resource costs in dollars or employees time to unit of product or service output.

**Outcome Measure** – gauge the results of activities or services, in terms of progress toward meeting the specified targets. Example: If a target is to evaluate 50 miles of sewer line in a 5-year period, then a performance measure could be attaining a 10-mile sewer line evaluation annually.

**Baseline:** A set of data that represents conditions of indicators at a given point in time from which to measure changes. Example: The NBC could determine pounds of nutrient loadings to Narragansett Bay for 2004 and use this figure as a baseline to compare future loadings.