Environmental Assessment Two Rivers Water Reclamation Authority – Main Pump Station Monmouth County, New Jersey

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U.S. Department of Homeland Security Federal Emergency Management Agency Region 2 26 Federal Plaza, New York, NY 10278

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Document 2 – USACE Nationwide Permit

Document 3 – 8-Step Wetland and Floodplain Review

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Document 5 – NJDEP Coastal Area Facility Review Act Individual Permit

LIST OF ACRONYMS

BMP – Best Management Practices CFR - Code of Federal Regulations COAH - Council on Affordable Housing CWA – Clean Water Act CZMP – Coastal Zone Management Plan DDT - Dichloro-Diphenyl-Trichloroethane EA – Environmental Assessment EFH – Essential Fish Habitat EO – Executive Order FEMA – Federal Emergency Management Agency FIRM – Flood Insurance Rate Maps FONSI - Finding of No Significant Impact GHG - Greenhouse Gas HMGP - Hazard Mitigation Grant Program IPaC – Information for Planning and Consultation MBI – Monmouth Beach Interceptor mgd – Million Gallons per Day MPS – Main Pump Station NEPA - National Environmental Policy Act NJAC - New Jersey Administrative Code NJDEP – New Jersey Department of Environmental Protection NJSA - New Jersey Statues Annotated NMFS - National Marine Fisheries Service NPDES – National Pollution Discharge Elimination System NWI – National Wetland Inventory PBI – Pleasure Bay Interceptor PCB – Polychlorinated Biphenyls PM – Particulate Matter SHPO – State Historic Preservation Office TRWRA – Two Rivers Water Reclamation Authority USACE - U.S. Army Corps of Engineers USEPA – Environmental Protection Agency USFWS – U.S. Fish and Wildlife Service USGS – U.S. Geological Survey WFD - Waterfront Development WWTP – Wastewater Treatment Plant

1.0 INTRODUCTION

On October 29, 2012, Hurricane Sandy caused storm damage to several areas across the State of New Jersey. On October 30, 2012, the President of the United States declared Hurricane Sandy a major disaster. Starting on Jan 20, 2020, the COVID-19 Pandemic caused a public health emergency across the State of New Jersey. On Mar 25, 2020, the President of the United States declared the COVID-19 Pandemic a major disaster. These declarations authorized the United States Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide assistance to the State of New Jersey per federal disaster declaration DR-4086-NJ for Sandy and DR-4488-NJ for COVID-19 Pandemic Relief. The Two Rivers Water Reclamation Authority (TRWRA) has applied to FEMA for Hazard Mitigation Grant Program (HMGP) funding under DR-4488-NJ and for Public Assistance Program funding under DR-4086-NJ for funding through the New Jersey Office of Emergency Management in accordance with Sections 404 and 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 United States Code [USC] 5170c), as amended, and the Sandy Recovery Improvement Act of 2013.

FEMA prepared this Environmental Assessment (EA) in accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; and the Regulations for Implementation of the National Environmental Policy Act (40 Code of Federal Regulations [CFR] Parts 1500 through 1508). FEMA intends to use this EA is to analyze the potential environmental impacts of the Proposed Action and alternatives, including a No Action alternative, and to determine whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI). In accordance with above-referenced regulations and FEMA Directive 108-1 and FEMA Instruction 108-1-1, FEMA is required, during decision-making, to evaluate and consider the environmental consequences of major federal actions it funds or undertakes.

2.0 PURPOSE AND NEED

FEMA's HMGP and Public Assistance mitigation grants foster the protection of health, safety, and welfare of citizens; assist communities in mitigating damage caused by disasters; and reduce future losses resulting from natural disasters. The purpose of the Proposed Action is to reduce hazards from flooding and storm events that could damage the TRWRA's existing Pleasure Bay Interceptor (PBI) and the existing Main Pump Station (MPS) and to increase sewage conveyance capacity. The project is needed because damage to these critical facilities could disrupt the flow of sewage to the wastewater treatment plant (WWTP), cutting off service to the local community. Storm damage also could result in the release of sewage into the environment with adverse consequences to human and environmental health.

3.0 BACKGROUND

The proposed project area includes an underground crossing of Pleasure Bay between Oceanport Borough and Monmouth Beach Borough, specifically at Sommers Scout Park in Oceanport, and the WWTP complex on Raccoon Island in Monmouth Beach Borough, Monmouth County, New Jersey (**Appendix A, Figure 1**). The project area also includes the existing MPS on Meadow Avenue approximately 900 feet south of the WWTP and the existing MBI. TRWRA owns and operates the wastewater conveyance and treatment facilities that serve approximately 90,000 people across six member towns (Fair Haven, Little Silver, Monmouth Beach, Oceanport, Shrewsbury, and West Long Branch) and six customer towns (Red Bank, Eatontown, Rumson, Sea Bright, Shrewsbury Township, and Tinton Falls). The TRWRA WWTP treats, on average, more than 11 million gallons per day (mgd) of wastewater and can handle up to 50 mgd. Wastewater collected at TRWRA's WWTP is treated, disinfected, and discharged a half-mile off Monmouth Beach into the Atlantic Ocean. Solid waste collected at TRWRA's WWTP is treated and transported off-site for use as a soil amendment or to be incinerated (TRWRA 2022).

The existing PBI is an approximately 3,250-foot-long gravity sewer that traverses under Pleasure Bay from Sommers Scout Park in the Borough of Oceanport to the existing MPS in the Borough of Monmouth Beach. The existing PBI was constructed approximately 7 to 15 feet below the bottom of Pleasure Bay, using a 48-inch-diameter reinforced concrete pipe. According to a preliminary design report conducted by TRWRA, a portion of the existing PBI has reportedly settled into soft soil. Internal inspection of the existing PBI found pipe sags, slime buildup, corrosion, spalling, cracks, and evidence of surcharge into the pipe likely due to settling in the soil. Internal corrosion has adversely impacted the integrity and reliability of the existing PBI, increasing its risk of failure and susceptibility to storm-related damage.

The existing MPS is within a residential neighborhood and conveys the entire influent wastewater flow from the TRWRA's sanitary sewer system to its WWTP through the MBI. The existing MPS wet well was damaged during Superstorm Sandy. The existing MPS is within an AE flood zone where it is at risk from flooding during a 100-year storm or greater. The flood risk to the existing MPS is expected to increase due to climate change–related storm surge and sea level rise. The wet well of the existing MPS surges during high flow conditions, indicating insufficient pump capacity for peak flow conditions. In addition, under low flow conditions, the existing MPS may intermittently shut down, resulting in undesirable flow cycling through the WWTP.

4.0 ALTERNATIVES

FEMA and TRWRA considered alternatives that would fulfill the purpose and need for this proposed project. This consideration was based upon engineering constraints, environmental impacts, and available property. Budgetary constraints were included but were not the controlling factor.

Additionally, a No Action alternative, also known as the "Future without Federal Project Condition," is included in the analysis. This section describes the No Action alternative, feasible alternatives that would satisfy the purpose and need (including the Proposed Action), and alternatives that were considered and dismissed from further analysis.

4.1 Alternative 1: No Action Alternative

Under the No Action alternative, there would be no federal financial assistance provided for the construction of a new pump station or new interceptor sewer line. FEMA anticipates that, because of budgetary constraints within the state and the community, the proposed flood mitigation work would remain unfunded or deferred indefinitely. The existing PBI would likely continue to deteriorate, increasing the risk of failure, particularly during storm events, and result in the release of sewage into the surrounding environment. The consequences of failure of the existing PBI would include interruption of service to the communities and significant damage to the surrounding environment because up to 700 million gallons of untreated sewage could be released into the bay.

The existing MPS would remain vulnerable to flooding that is expected to increase in frequency, duration, and depth due to climate change–related sea level rise and storm surge. The existing wet well would remain in disrepair, occasionally shutting down during low flow periods, and there would continue to be insufficient pump capacity during high flow conditions. This alternative would not meet the overall purpose and need.

4.2 Alternative 2: Proposed Alternative

Under the Proposed Action, TRWRA would construct a new PBI under Pleasure Bay. The new PBI would convey sewage from an intake structure at Sommers Scout Park in the Borough of Oceanport under Pleasure Bay to a new MPS station at the WWTP (**Appendix A, Figure 2**). The new MPS would be constructed within the fence line on the southwest corner of the WWTP. TRWRA would also construct a new Monmouth Beach Interceptor (MBI) that would run from the existing MPS to the new MPS. Lastly, the existing MPS would be decommissioned and demolished.

The new PBI would be 54 inches in diameter, approximately 3,250 feet long, and constructed of fiberglass-reinforced plastic. The new pipeline would be installed with a tunnel boring machine under Pleasure Bay at a depth of approximately 87 feet below the water surface and would range from 87 to 24 feet below the soft soil line to avoid existing soft marine soils below the bay. The tunnel boring machine would be launched from the new MPS site and then removed at a reception shaft in Sommers Scout Park, approximately 50 feet from the water's edge. The shaft at the new MPS site would be approximately 80 feet in diameter and the shaft at the reception site would be approximately 30 feet in diameter. The shaft would be approximately 84 feet deep. The reception

shaft would include a 42-inch drop shaft and an adjacent 8-foot-diameter access manhole for future access.

The new 54-inch pipe would run southeast from the reception shaft and connect to a new junction box that would be attached to the existing 48-inch sewer line at the Oceanport end. Access and staging would be at Sommers Scout Park and the 50 feet of Pocana Avenue in front of the park. Installation of the reception shaft would require the temporary removal of two benches, a flagpole, a monument, and a tree with a monument plaque. All of the removed elements would be reinstalled at their current location post-construction. Topsoil and the grass that would be disturbed during construction would be restored as well.

On the Monmouth Beach side of Pleasant Bay, the new PBI would run under the residential area on the western side of Raccoon Island, under Highland and Meadow Avenues and the existing recreational field, and would connect to the new MPS at a depth of (**Appendix A, Figure 2**). The new MPS is proposed to be installed within the WWTP property line on the southwest corner of the WWTP.

The new MPS would be a 115-foot-deep, 50-mgd, state-of-the-art pump station, designed to minimize pump station cycling and surges into the treatment plant. The new MPS would include a new biofilter, a dedicated electrical building, and a new 36-inch force main that would connect it to the WWTP. The force main would leave the new MPS and extend through existing TRWRA property before connecting to the TRWRA WWTP Headworks/Blower Building. The new MPS would also include three influent channels that would feed into a new semicircular wet well, where the flow would be conveyed to six dry pit submersible pumps. A superstructure would house the screenings compactors, a screw conveyor, and a front-loading dumpster. The new MPS would be within the 500-year floodplain, which has an elevation of 8.9 feet. The new MPS and the electrical building would be constructed above elevation 12 feet, or 3 feet above the current 500-year flood elevation. Staging would occur on pavement and previously disturbed land within the WWTP.

The MBI is a 30-inch-diameter pipe that connects the existing MPS to the WWTP. The MBI would be replaced with a new 30-inch-diameter pipe and rerouted from the existing MPS to the new MPS. The alignment would be parallel to Meadow Avenue and in a new permanent easement up to Highland Avenue. The alignment would cross Highland Avenue to the treatment plant property and continue under the existing recreational field before connecting to the new MPS. The new MBI would convey sewage from the local area by gravity to the new MPS. The new MBI is not part of the FEMA grants and would be funded by TWRWA, however, the new MBI is dependent on the Proposed Action and will be considered a connected action throughout the EA.

The project would also include demolishing the existing MPS because it would no longer be needed. The existing PBI would be abandoned in place following the construction of the new PBI. However, the existing PBI would be available to use if issues occur at the new MPS or the new PBI. The line would be flushed thoroughly when taken out of service to remove solids and prevent

corrosion. All at-grade structures would be removed at the existing MPS site, including the existing masonry building, portions of the driveway, site fencing, and sidewalks. Utilities serving the building would be removed or abandoned. A portion of the existing wet well is anticipated to remain in service, to be used for emergency pumping if the new MPS or PBI are out of service. The wet well would be cleaned thoroughly following decommissioning of the pump station to prevent the formation of odors and corrosive gases. The existing pump station site would be restored to a level grassed lot with lockable access hatches. The existing 33-inch reinforced concrete pipe force main from the existing pump station to the Headworks/Blower Building would be cleaned and abandoned in place after the new MPS and force main are in service. Construction activity for all project elements is expected to take 27 months.

4.3 Alternatives Considered and Dismissed

Several alternatives to the Proposed Action were considered but dismissed from further consideration. Alternatives may be dismissed because they are not technically feasible or do not meet the purpose and need for the project. There were three additional alternatives that included different alignments and sizing for the proposed new PBI:

- The first additional alternative was for a new 54-inch PBI to be installed from Sommers Scout Park to Highland Avenue on the WWTP property using microtunneling. The microtunneling shaft within Highlands Avenue would require a temporary access road.
- The second additional alternative was for a new 48-inch PBI to be installed from Sommers Scout Park to the existing MPS property using microtunneling.
- The third additional alternative was for a new 54-inch PBI to be installed from Sommers Scout Park to the existing MPS property using microtunneling.

All three alignments were rejected because the new PBI in each alternative would be constructed at a depth of approximately 20 feet in existing soft marine soils below Paradise Bay, which would allow the same degradation to occur to the new pipe that is occurring in the existing PBI.

4.4 Summary of Alternatives

TRWRA considered five alternatives for implementation. Three alternatives were eliminated, the remaining alternatives evaluated in the EA are as follows:

- 1) No Action Alternative
- 2) Pleasure Bay Crossing and Main Pump Station Replacement Proposed Action

5.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

The following sections discuss the potential environmental impacts and proposed mitigation measures associated with the No Action alternative and the Proposed Action. When possible, FEMA considers quantitative information to establish potential impacts; the significance of potential impacts are evaluated based on the criteria presented in **Table 5.1**. Potential cumulative environmental impacts are discussed in Section 5.20.

Impact Scale	Criteria	
No Impact	The resource area would not be affected and there would be no impact.	
Negligible	Changes would either be non-detectable or, if detected, would have impacts that would be slight and local. Adverse impacts would be well below regulatory standards, as applicable.	
Minor	Changes to the resource would be measurable, but the changes would be small and localized. Adverse impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse impacts.	
Moderate	Changes to the resource would be measurable and have either localized or regional scale impacts. Adverse impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse impacts.	
Major	Changes to the resource would be readily measurable and would have substantial consequences on regional levels. Adverse impacts would exceed regulatory standards. Mitigation measures to offset the adverse impacts would be required to reduce impacts, though long-term changes to the resource would be expected.	

Table 5.1. Impact Significance and Context Evaluation Criteria for Potential Impacts

The following resources would not be affected by either the No Action alternative or the Proposed Action because the resources do not exist in the project area or the alternatives would have no effect on the resource (**Table 5.2**). These resources were removed from further consideration in this EA.

Торіс	Reason
Seismicity	Executive Order (EO) 12699 requires that federal preparedness and mitigation activities include the development and promulgation of specifications, building standards, design criteria, and construction practices to achieve appropriate earthquake resistance for new structures. Seismic hazards are very low in Monmouth County (United States Geological Survey [USGS] 2014) and none of the alternatives would be affected by seismic hazards, so EO 12699 would not apply.
Coastal Barrier Resource Act	The closest Coastal Barrier Resource System unit is approximately 2 miles from the project area. No impacts on Coastal Barrier Resource System units would occur as a result of the proposed project (U.S. Fish and Wildlife Service [USFWS] 2022).
Wild and Scenic Rivers	The closest wild and scenic river is the Lower Delaware Wild and Scenic River, approximately 25 miles from the project area (National Park Service [NPS] 2022). No impacts on wild and scenic rivers would occur because of the proposed project.

 Table 5.2. Eliminated Resource Topics

5.1 Geology, Topography, and Soils

5.1.1 Existing Conditions

The geologic setting in the vicinity of the project consists of Quaternary estuarine and alluvial deposits overlying late Cretaceous and early Tertiary sediments. Most of the Tertiary sediments appear to have been eroded during episodes of sea level change. The late Cretaceous sediments in this area consist of Red Bank and Tinton Formations. The soil types around the launch shaft and reception shaft are also classified under Tinton and Red Bank Formations, characteristically consisting of quartz sand, clayey, and fine- to coarse-grained, micaceous soils (Dalton R.F., et al. 2014). In this assessment, these late Cretaceous formations and early Tertiary sediments are referred to as "marine soil."

Sandy soils and low hills, generally formed by erosive forces of the Navesink and Shrewsbury River outlets and Atlantic Ocean coastal action, characterize the topography in the project area vicinity. The area is within the Atlantic Coastal Plain, a segment of the North American coast that extends from Newfoundland to Central America.

Subsurface investigations conducted to support the design of the project included standard penetration test borings, Shelby tube sampling, cone penetrometer testing, and laboratory testing. As determined by the subsurface investigations, fill and alluvial deposits at Monmouth Beach, where the launch shaft is proposed, extending approximately 12 feet below the surface and consist of fine to coarse sand and gravel intermixed with varying amounts of silt and clay. Fill and alluvial deposits at Oceanport, where the reception shaft is proposed, extending to approximately 6 feet below the ground surface and consist of sand with clayey silt, clays, and silts with a trace of sand and gravel. Very soft estuarine sediments are present in the Shrewsbury River across Pleasure Bay. It is anticipated that these sediments extend down to a depth of 50 feet below mean sea level.

A marine soil underlies the fill and alluvial deposits at Monmouth Beach and Oceanport, and the very soft estuarine sediments in the Shrewsbury River. The upper portion of marine soil at Monmouth Beach and Oceanport consists of stratified layers of granular and cohesive soils, extending down to about 45 feet below ground surface at Monmouth Beach and about 20 feet below ground surface at Oceanport.

The upper portion of the marine soil beneath the very soft estuarine sediments in the Shrewsbury River consists of stratified layers of granular and cohesive soils and in some sections has thick sand deposits. The marine soil becomes generally finer grained with increasing depth, composed of mostly silt and clay intermixed with varying amounts of fine to medium sand and trace gravel.

5.1.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, routine repairs and maintenance would be required to the existing facilities. New excavations or earth movement that could affect geology, topography, or soils would not be required. The No Action alternative would not involve excavation or earth movement; therefore, it would not affect the underlying geology or topography, and it would have no additional impacts on geology, topography, and soils.

Under the No Action alternative, failure of the existing PBI could result in the uncontrolled release of sewage into the surrounding environment, which could adversely impact aquatic and shoreline vegetation; loss of vegetation could result in secondary impacts on soils in Pleasure Bay. Aquatic vegetation stabilizes soils, so the loss of aquatic vegetation could lead to potential soil erosion causing soil loss and topography change. The soil erosion would have a long-term negligible impact on soil and topography within the affected area.

Alternative 2: Proposed Action

Under the Proposed Action, excavation would not reach depths that would encounter bedrock or otherwise affect the underlying geology. Construction of the shafts and tunnel would require soil excavation that could increase the risk of soil erosion and impact soil stability by increasing the risk of gradual settling or sinking of the soil surface due to the displacement of these soils. This risk would be temporary and only present during the construction period. Best management practices (BMPs) would minimize the extent of temporary soil erosion impacts, including those discussed under Section 5.4, Water Quality. Areas of topsoil and grassed areas in Sommers Scout Park that are disturbed by construction activities would be restored at the end of the construction period. For the Monmouth Beach Borough project area, construction staging would occur on pavement and previously disturbed land within the WWTP. The launch shaft would not require backfilling and would be used during project operation for the new MPS; the reception shaft would be backfilled with a cementitious material that would be used during project operation for manhole access. The Proposed Action would not involve excavation or earth movement that would reshape topography within the project area.

The tunnel would be located within fine grained marine soils and below any significant potential water-bearing granular layers. Fine grained marine soils offer greater soil stability than soft soils and would ensure that the tunnel would not sag or collapse in the future. The tunnel would be supported behind the boring machine during construction to maintain soil stability.

As described in Section 4.2, the existing PBI would be abandoned in place following the construction of the new PBI. Therefore, no impact on soils would occur at the exiting PBI because subsurface demolition, excavation, or ground disturbance to decommission it would not occur. The new PBI and MPS would reduce the risk of infrastructure failure, reducing the risk of sewage

leaking into the surrounding environment. This would reduce the risk of aquatic and shoreline vegetation loss in the area and prevent soil erosion from occurring due to the loss of soil stabilization the plants provide.

The Proposed Action would have a negligible short-term adverse impact on soils from temporary construction activities with BMPs in place. The Proposed Action would have no short-term impact on geology or topography. The Proposed Action would have no long-term impact on geology and a minor beneficial impact on topography and soils.

5.2 Air Quality

The Clean Air Act of 1970 (42 U.S.C. 7401–7661 [2009]) requires the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) for six pollutants harmful to human and environmental health, including lead, nitrogen dioxide, ozone, carbon monoxide, sulfur dioxide, and Particulate Matter (PM) (including PM that is less than 10 micrometers in diameter [PM10] and fine particulate matter less than 2.5 micrometers in diameter [PM2.5]). Fugitive dust, which is considered a component of PM, also can affect air quality. Fugitive dust is released into the air by wind or human activities, such as construction, and can have human and environmental health impacts. Federally funded actions in nonattainment and maintenance areas for these pollutants are subject to conformity regulations (40 CFR Parts 51 and 93) to ensure that emissions of air pollutants from planned federally funded activities would not cause any violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone.

5.2.1 Existing Conditions

According to USEPA's Green Book, Monmouth County is within the NY-NJ-CT nonattainment area for 8-Hour Ozone (2008) (Serious) and 8-Hour Ozone (2015) (Moderate). According to 40 CFR § 93.153(b), the applicable rate and de minimis threshold for direct and indirect emissions of the ozone precursors, including carbon monoxide, volatile organic compounds, or nitrogen oxides is 50 tons per year per pollutant. Monmouth County is in attainment for all other NAAQS criteria pollutants (sulfur dioxide, PM_{2.5}, PM₁₀, nitrogen dioxide, and lead) (USEPA 2022a).

5.2.2 Potential Impacts and proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, air emissions within the project area would not change except as influenced by normal background changes (population changes, technological changes, policydriven changes). However, if the existing PBI were to fail, it would result in the uncontrolled release of sewage into the surrounding environment, which would require an emergency response action to control the release and repair the existing PBI. Likewise, if the existing MPS were to fail, an emergency response action would be required to restore operation. Emergency response actions would generate emissions from the operation of vehicles and construction equipment. These emissions would likely be below de minimus thresholds. The No Action alternative would have no impact on air quality during normal operation of the wastewater system; however, because the likelihood that the existing infrastructure will fail would remain high, the No Action alternative would have a potential reoccurring adverse negligible short-term impact on air quality.

Alternative 2: Proposed Action

The Proposed Action would require the operation of vehicles and equipment for construction. Operational electricity used under the Proposed Action would be substantially similar to operational electricity used under the No Action alternative. During construction, equipment and construction-related vehicles would produce volatile organic compounds and nitrogen oxide emissions from internal combustion engines burning fossil fuels (USEPA 2022b). Construction activities could generate airborne dust, a source of PM, from ground-disturbing activities. Construction activities would proceed in compliance with the regulatory requirements of New Jersey's Air Rules (New Jersey Administrative Code [NJAC] 7:27) to reduce air quality impacts. Activities would meet New Jersey's Air Pollution Control Act of 1954 requirements, including obtaining permits, adhering to idling limitations, and implementing all reasonable measures to mitigate dust and fugitive emissions from demolition and construction (NJSA 26:2C). Based on the short construction schedule and Proposed Action scope, FEMA has determined that the net total of volatile organic compounds and nitrogen oxide emissions from both short-term construction and long-term operation would be less than the prescribed de minimis level of 50 tons per year per pollutant.

Upon completion of construction, the Proposed Action would not produce any direct operational emissions. An emergency generator would be installed that would become operational in the event of power failures. The emergency generator would operate only in emergency events and only as a temporary power solution. Operation of the emergency generator would result in negligible short-term air quality emissions and would have a negligible impact on air quality. Electricity would be required to operate some elements of the project, mostly within the new MPS, which would produce indirect emissions from power generation. Electricity consumption would be substantially similar to that under the No Action alternative and new indirect emissions would be negligible, representing a fraction of overall power consumption within the state. In addition, New Jersey currently has policies in place to advance and diversify its clean energy portfolio with Renewable Portfolio Standards that require 35 percent of the energy sold in the state to come from qualifying energy sources by 2025 and 50 percent by 2030, further reducing future indirect emissions from energy consumption (New Jersey Department of Environmental Protection [NJDEP] 2022a). Therefore, this action would comply with the USEPA general conformity provisions and would have a negligible short-term and long-term impact on air quality.

5.3 Climate Change

Climate change refers to changes in the Earth's climate caused by a general warming of the atmosphere. Its primary cause is emissions of greenhouse gases, including carbon dioxide and methane. Climate change is capable of affecting species distribution, temperature fluctuations, and weather patterns. The Council on Environmental Quality's *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews* recommends that agencies quantify a proposed agency action's projected direct and indirect greenhouse gas (GHG) emissions, taking into account available data and GHG quantification tools that are suitable for the proposed agency action; agencies use projected GHG emissions (to include, where applicable, carbon sequestration implications associated with the proposed agency action) as a proxy for assessing potential climate change effects when preparing a NEPA analysis for a proposed agency action; and where agencies do not quantify a proposed agency action's projected GHG emissions for a quantitative analysis, agencies include a qualitative analysis in the NEPA document and explain the basis for determining that quantification is not reasonably available (CEQ 2021).

5.3.1 Existing Conditions

The climate in the northeastern United States is changing. Consequences of climate change include heat waves, coastal flooding, and river flooding. Infrastructure will be increasingly compromised by climate-related hazards, including sea level rise, coastal flooding, and intense precipitation events. Between 1895 and 2011, temperatures increased in the region by almost 2 degrees Fahrenheit, and temperatures are projected to increase by 4.5 degrees to 10 degrees Fahrenheit by the 2080s. The total amount of precipitation and frequency of heavy precipitation events has also increased; between 1958 and 2012, the northeast experienced a more than 70 percent increase in the amount of rainfall measured during heavy precipitation events. U.S. Global Change Research Program projections indicate that precipitation will continue to increase, especially during the winter and spring seasons (Melillo et al. 2014).

Sea levels are increasing in New Jersey; by 2050, there is a 50 percent chance that sea level rise will meet or exceed 1.4 feet and a 17 percent chance it will exceed 2.1 feet. Those levels increase to 3.3 and 5.1 feet by the end of the century (under a moderate emission scenario). Flooding during non-storm periods is also predicted to increase in frequency across coastal New Jersey (NJDEP 2020).

5.3.2 Potential Impacts and proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, GHG emissions within the project area would not change except as influenced by normal background changes (population changes, technological changes, policy-

driven changes). However, the existing PBI would remain at high risk of failure, which would result in the release of sewage into the surrounding environment that would require an emergency response action to control the release and repair the existing PBI. Likewise, if the existing MPS were to fail, an emergency response action would be required to restore operation. Emergency response actions would generate emissions from the operation of vehicles and construction equipment. The No Action alternative would have a negligible impact on GHG emissions during normal operation of the wastewater system. The effects of climate change would increase the risk of PBI failure as a consequence of sea level rise, coastal flooding, and intense precipitation events. Because the likelihood that the existing infrastructure will fail would remain high, the No Action alternative would have a potential reoccurring adverse short-term negligible impact on GHG emissions.

Alternative 2: Proposed Action

The Proposed Action would require the operation of vehicles and equipment for construction. Operational electricity used under the Proposed Action would be substantially similar to operational electricity used under the No Action alternative. During construction, the combustion of fossil fuels from construction equipment and construction-related vehicles would produce GHG emissions. BMPs, including proper maintenance of construction equipment and compliance with New Jersey's idling restrictions, "Control and Prohibition of Air Pollution From Diesel-Powered Motor Vehicles" (NJAC 7:27-14) and "Control and Prohibition of Air Pollution From Gasoline-Fueled Motor Vehicles" (NJAC 7:27-15), would minimize GHG emissions. Upon completion of construction, the Proposed Action would not produce any direct operational emissions. An emergency generator would be installed, which would be used in the event of power failures and only as a temporary power solution. The emergency generator would result in short-term negligible emissions of GHGs. Electricity required to operate some elements of the project would be substantially similar to electricity consumption under the No Action alternative. As described in Section 5.2, Air Quality, indirect GHG emissions from power consumption would be negligible.

Based on the short construction schedule and Proposed Action scope, FEMA has determined that the temporary GHG emissions from construction would not increase GHGs to the extent that the Proposed Action would contribute to measurable levels of climate change. The Proposed Action would generate negligible amounts of GHGs from the intermittent use of the generators at the pump station during emergency conditions over the long term. GHG emissions from repair-related construction would be reduced. These sources of emissions would be temporary and would not increase GHGs to the extent that the Proposed Action would contribute to measurable levels of regional climate change. Thus, the Proposed Action would have both short-term and long-term negligible impacts on climate. The effects of climate change, including sea level rise, coastal flooding, and intense precipitation events, would continue to exist under the Proposed Action. The Proposed Action would have no adverse long-term impact relative to climate resiliency. The Proposed Action would reduce the vulnerability of the PBI and MPS to climate change driven effects and allow continued operations despite increased flooding and severe storms. Thus, the Proposed Action would have a minor long-term beneficial impact relative to climate resiliency.

5.4 Water Quality

The Clean Water Act (CWA) of 1977, as amended, regulates discharge of pollutants into water with sections falling under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and USEPA. Section 404 of the CWA establishes the USACE permit requirements for discharging dredged or fill materials into waters of the United States and traditional navigable waterways. Under the National Pollution Discharge Elimination System (NPDES), USEPA regulates both point and nonpoint pollutant sources, including stormwater and stormwater runoff, via a permitting system. Activities that disturb one or more acres of ground are required to apply for an NPDES permit through the NJDEP, as authorized by USEPA. In addition, the jurisdictional soil conservation district, the Freehold Soil Conservation District, is responsible for implementing the New Jersey Soil Erosion and Sediment Control Act (New Jersey Statues Annotated [NJSA] 4:24-39), requiring certification of soil erosion and sediment control plans within the jurisdiction.

Relevant state regulations include the New Jersey Ground Water Quality Standards (NJAC 7:9C), New Jersey Surface Water Quality Standards (NJAC 7:9B), New Jersey Water Pollution Control Act (NJSA 58: 10A-1 et seq.), New Jersey Stormwater Management Rules (NJAC 7:8), and Pollutant Discharge Elimination System Rules (NJAC 7:14A). These regulations maintain the quality of ground and surface water by controlling pollution and ensuring that new developments meet stormwater management design standards. Section 1424(e) of the Safe Drinking Water Act of 1974 [Public Law 93–523] authorizes USEPA to designate an aquifer for special protection under the sole-source aquifer program if the aquifer is the sole or principal drinking water resource for an area and if its contamination would create a significant hazard to public health. The sole or principal source is defined as supplying 50 percent or more of the drinking water for a particular area. No commitment for federal financial assistance may be provided for any project that USEPA determines may contaminate a sole-source aquifer such that a significant hazard to public health is created.

5.4.1 Existing Conditions

The project area is within the Shrewsbury River watershed and Pleasure Bay between the Boroughs of Oceanport and Monmouth Beach, and includes the waters of Branchport Creek, Troutmans Creek, and Manhasset Creek (Hydrologic Unit Code 02030104) (**Appendix A, Figure 3**). The bay joins the Shrewsbury River immediately north of the project area (USGS 2022). Tidal waters enter the Shrewsbury River Basin via Sandy Hook Bay. Pleasure Bay is classified as a

Category One waterway in accordance with the Department's Water Quality Standards and has a 300-foot riparian zone in the project area (NJDEP 2022b). A Category One waterway is a type of antidegradation designation that provides additional protection to specific waterbodies.

The 2020 New Jersey 303(d) list of impaired waters classifies the Lower Shrewsbury as impaired based on the following parameters: dissolved oxygen, pH, arsenic, dichloro-diphenyl-trichloroethane (DDT) in fish tissue, polychlorinated biphenyls (PCBs) in fish tissue, and unknown biological parameter. The list classifies Branchport Creek as impaired based on the following parameters: dissolved oxygen, chlordane in fish tissue, DDT in fish tissue, Dieldrin in fish tissue, and PCBs in fish tissue (USEPA 2021).

Groundwater is present at depths ranging from approximately 4 feet to 12 feet below the surface within land-based borings at Monmouth Beach and Oceanport. The groundwater level varies due to seasonal and tidal fluctuations according to the *2020 Geotechnical Baseline Report for Pleasure Bay Crossing and Main Pump Station Replacement* produced for this project. (Hazen and Sawyer, 2020). The project area overlies the New Jersey Coastal Plain Aquifer System, designated as a sole-source aquifer under the Safe Drinking Water Act. There are no wellhead protection areas within 250 feet of the project area (NJDEP 2022c).

5.4.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, construction or operational changes would not occur that could adversely affect water quality. However, if the existing PBI were to fail, it would result in the uncontrolled release of sewage into the surrounding environment, which would adversely impact water quality within Pleasure Bay and surrounding water bodies. Such a failure would have a minor-to-moderate short-term adverse impact depending on the speed of the response action and volume of the release. The No Action alternative would not directly or indirectly modify water infiltration or groundwater recharge dynamics and therefore would have no impact on sole-source aquifers or groundwater.

Alternative 2: Proposed Action

The Proposed Action would have minor short-term adverse impacts on water quality from construction-related activities. The most common impact on surface waters from construction activities is the release of sediment and increases in turbidity; however, metals, trash and debris, nutrients, organic matter, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and other toxic organics can also be construction-derived pollutants (USEPA 2009). Construction activity would be temporary, and implementation of BMPs would reduce the risk of soil erosion during construction. Construction would be compliant with the "Standards for Soil Erosion and Sediment Control in New Jersey" and the "Environmental Assessment Requirements for State Assisted Environmental Infrastructure Facilities" (NJAC 7:22-10), including using silt fences, hay bales,

mulching, or other erosion and sediment control measures around all areas of excavation and exposed slopes to control soil erosion during and after construction. Additional BMPs may be required by federal, state, and local permits; representative BMPs may include, but are not limited to, the following:

- Prior to grading, sediment or other erosion control barriers would be installed in key areas. Erosion blankets may be installed, if needed.
- Installing erosion control bio-nets in any area graded steeper than a three to one slope.
- Monitoring and inspecting vehicular access points at the same frequency as erosion control features to ensure that deposits of sand, silt, or other material are not being deposited on public roadways. Immediately cleaning up significant deposits and replace tracking pads.

Because the area of disturbance would be more than one acre, authorization to discharge stormwater under NJPDES Stormwater Construction General Permit NJG0088323 (5G3) pursuant to NJAC 7:14-1.2 would be required prior to construction, including preparation of a stormwater pollution prevention plan. TRWRA would ensure the Proposed Action complies with the New Jersey Soil Erosion and Sediment Control Act by preparing and obtaining approval of a soil erosion and sedimentation control plan. Compliance would include implementation of standards promulgated by the State Soil Conservation Committee and obtaining a Report of Compliance from the Freehold Soil Conservation District (**Appendix B, Document 1**). Constructing the Proposed Action would not create new discharge points or sources of pollution to surface waters. Construction activities would be managed to prevent pollutants from entering stormwater runoff and, thus, from entering surface waters in compliance with the NJPDES permit for stormwater discharge.

On June 3, 2021, TRWRA contacted the New York District of USACE to request a Department of the Army authorization for the Proposed Action. USACE determined that the Proposed Action would be covered under the Department of the Army Nationwide General Permit Number 58, Utility Line Activities for Water and Other Substances, in accordance with Section 10 of the Rivers and Harbors Act (33 USC 403). USACE issued an authorization to TRWA for coverage for the project under Nationwide Permit Number 58 on April 19, 2022 (**Appendix B, Document 2**).

The Proposed Action does not require modification of the TRWRA outfall or any other construction activities within the Shrewsbury River. Where the new PBI would cross beneath Pleasure Bay, the tunnel would be underground and well below the lower extent of the surface water. BMPs established at shaft locations and staging areas in accordance with the NJPDES permit would minimize the potential for deposition of sediment during construction. With these measures in place, construction activities associated with the Proposed Action would have negligible adverse impacts on water quality in Pleasure Bay.

The Proposed Action would result in no net change in impervious surface area at the Sommers Scout Park project area in Oceanport, a reduction in impervious surface area where the existing pump station will be decommissioned, and an increase in impervious surface area at the new MPS site in Monmouth Beach.

The Proposed Action would not result in a permanent increase in impervious surface to a degree that would have the potential to affect aquifer recharge, nor would it result in groundwater withdrawal. During construction, shafts would be constructed but would not reach a depth potentially affecting local aquifers. For the construction of the initial 20 feet of the shafts, above the deeper hard marine soil, a panel system would be installed from the ground surface into the stiff-to-hard marine soil prior to shaft excavation. The panel system would consist of sheet piles, secant piles, or concrete diaphragm walls. Dewatering to lower the groundwater elevation for shaft construction would not be necessary. Any groundwater that seeps into the shaft site would be containerized, tested, and disposed of at a licensed facility, if it is determined to be contaminated. The limited infiltration into the shafts would not change the natural direction of groundwater flow or result in the depletion of the groundwater supply.

Minimal groundwater inflow during the construction of the tunnel is expected; the maximum anticipated steady-state inflow is 100 gallons per minute for the entire length of the tunnel. Thin seams or lenses of sandy silts containing trapped water could occasionally be encountered and initially yield local flows or seeps up to several gallons per minute; however, these localized flows are expected to diminish quickly since recharge conditions are poor at the elevation of the tunnel.

With the implementation of BMPs, and compliance with federal, state, and local permits, the Proposed Action would have no short- or long-term adverse impact on water quality in Pleasure Bay, the New Jersey Coastal Plain Aquifer System, or groundwater. The Proposed Action would significantly reduce the risk of infrastructure failure and thereby reduce the risk of sewage release into Pleasure Bay and surrounding water bodies. Therefore, the Proposed Action would have a long-term minor-to-moderate beneficial impact on water quality in Pleasure Bay.

5.5 Wetlands

EO 11990, Protection of Wetlands, requires federal agencies to avoid funding activities that directly or indirectly support occupancy, modification, or development of wetlands whenever there are practicable alternatives. In addition, the proposal must include all practicable measures to minimize harm to wetlands that may result from such use. FEMA uses the eight-step decision-making process to evaluate potential effects on and mitigate effects to wetlands in compliance with EO 11990 and 44 CFR Part 9. USACE and NJDEP regulate activities within wetlands in the State of New Jersey. Section 404 of the CWA regulates the discharge of fill into the waters of the United States, including wetlands. The New Jersey Freshwater Wetlands Protection Act (NJSA 13:9B-1 et seq.) and the Freshwater Wetlands Protection Act Rules (NJAC 7:7A) regulate activities in freshwater wetlands.

5.5.1 Existing Conditions

The USFWS National Wetland Inventory (NWI) maps identify wetlands near the project area at Monmouth Beach, but there are none near the project area at Oceanport. Wetlands in the Monmouth Beach project area are present along the western and eastern edges of the peninsula; these wetlands are classified in the NWI as estuarine and marine wetland (USFWS 2022).

On September 20, 2019, an on-site survey of the Oceanport and Monmouth Beach project areas identified freshwater wetlands. Freshwater wetlands were delineated and flagged at the Sommers Scout Park project area in Oceanport and the TRWRA property in Monmouth Beach. On October 20, 2021, and on November 18, 2021, NJDEP issued Freshwater Wetlands Letters of Interpretation confirming the accuracy of the delineation for Oceanport and Monmouth Beach, respectively. **Appendix A, Figure 4** shows the NWI and delineated wetlands within the project area.

5.5.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, the risk of existing PBI failure would remain, the existing MPS wet well would remain in disrepair, and the existing MPS would remain susceptible to flooding in its current location. No construction or operational changes would occur that would adversely affect wetlands in the project area. No filling or alteration of wetlands would occur and no alterations affecting wetland hydrology would occur. However, if the existing PBI were to fail, it would result in the uncontrolled release of sewage into the surrounding environment, which would adversely impact wetland areas along Pleasure Bay and surrounding water bodies. Such a failure would have a minor to moderate short-term adverse impact depending on the speed of the response action and volume of the release.

Alternative 2: Proposed Action

Based on the wetland delineation described under Section 5.5.1, construction of the Proposed Action would not directly impact delineated wetlands. Wetland areas would not be directly disturbed, filled, or otherwise altered. However, the construction activities would encroach within 50 feet of the delineated freshwater wetlands at both the Oceanport and Monmouth Beach sites, representing disturbance of the wetland transition area as defined in NJAC 7:7A-3.3. Approximately 0.41 acres (17,860 square feet) of wetland transition area would be disturbed.

NJDEP regulations allow for certain regulated activities to occur in a transition area only if the activity would not result in a substantial impact on the adjacent freshwater wetlands and only if the implementing party has made every effort to minimize impacts on freshwater wetlands and transition areas on the site (NJAC 7:7A). Consequently, a Transition Area Waiver from NJDEP would be required to construct the Proposed Action. The Transition Area Waiver requires that the applicant record a conservation restriction on a transition area "compensation area." Other

conditions may include recording a conservation restriction on all or part of the transition area. In addition, during construction, silt fencing and other sedimentation control BMPs would be implemented to protect the delineated wetlands as described in Section 5.4. The BMPs are specified in the Soil Erosion and Sedimentation Control Plans and conditioned in the Freehold Soil Conservation District Certification Letter (**Appendix B, Document 1**) and the USACE Nationwide Permit (**Appendix B, Document 2**).

The Proposed Action would not directly disturb wetlands. The Proposed Action would temporarily disturb land within the wetland transition area; however, implementation of BMPs and compliance with the NJDEP Transition Area Waiver permitting process would minimize impacts on wetland transition areas and ensure that the Proposed Action would have a negligible long-term adverse impact on wetlands.

The Proposed Action would significantly reduce the risk of infrastructure failure and thereby reduce the risk of uncontrolled sewage release into Pleasure Bay and wetland areas. Therefore, the Proposed Action would have a long-term minor beneficial impact on wetlands.

5.6 Floodplains

EO 11988, Floodplain Management, requires that a federal agency avoid direct or indirect support of development within the floodplain whenever there is a practicable alternative. FEMA uses Flood Insurance Rate Maps (FIRM) to identify floodplains in determining compliance with the EO. Federal actions within the 1 percent annual chance floodplain (100-year floodplain) or 0.2 percent annual chance floodplain (500-year floodplain) for critical facilities require the federal agency to conduct an eight-step process. This process, like NEPA, requires the evaluation of alternatives prior to funding the action. FEMA's regulations on conducting the eight-step process are contained in 44 CFR Part 9.

For critical facilities, FEMA uses the 0.2 percent chance floodplain as the minimal area for the floodplain impact evaluation. FEMA defines the 1 percent chance floodplain and 0.2 percent chance floodplain as areas subject to inundation from a flood that has a 1 percent chance or 0.2 percent chance of being equaled or exceeded in any given year, respectively. The elevation of the surface water resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year is known as the base flood elevation.

The NJDEP Division of Land Use Regulation, under the authority of the Flood Hazard Area Control Act (NJSA 58:16A: -50 et seq.), has adopted rules, regulations, and minimum standards concerning development and use of land within the floodplain, including drainage improvements and flood protection measures.

5.6.1 Existing Conditions

The project area falls within FEMA FIRM panels 34025C0184H (effective June 15, 2022) and 34025C0203G (effective June 20, 2018), as shown in **Appendix A, Figure 5**. The FIRMs show that the entire Oceanport project area and the edges of the Monmouth Beach project area are within the Zone AE 1 percent chance floodplain. The center areas of the Monmouth Beach project area are within the Zone X 0.2 percent chance floodplain. There are portions of the Monmouth Beach project area project area that are also outside the floodplain.

5.6.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, the existing MPS would remain susceptible to flooding in its current location. No filling or floodplain alteration would occur and no alterations affecting hydrology would occur. Because the No Action alternative would not alter the existing flood regime, there would be no change in the effects of flooding. The existing MPS would remain in the Zone AE flood zone where it is at risk from flooding during a 1 percent chance flood. The existing MPS is a critical asset because the main wastewater flow has to pass through it to reach the TRWRA's WWTP. Failure of the existing MPS as a result of flooding would have a significant short-term adverse impact depending on the speed of the response action, due to the disruption of sewage treatment capabilities. The No Action alternative would have no direct impact on floodplains; however, if the existing MPS were to flood, the No Action alternative would have a moderate to major short-term adverse impact affecting TRWRA's ability to receive and treat wastewater from its service area.

Alternative 2: Proposed Action

As described in Section 4.2, the Proposed Action would result in the following surface disturbance actions in the 1 percent chance floodplain: construction of a shaft at Sommers Scout Park in Oceanport to support the new PBI and to allow access to the new PBI once operational, and demolition of the existing MPS and restoration of the site to grade. The following surface disturbance actions would be in the 0.2 percent chance floodplain: construction of the shaft at the new MPS site in Monmouth Beach and the new MPS, which includes the at-grade valve vault to house check and plug valves for pump discharge piping with a superstructure housing the screenings compactors, screw conveyor, and front-loading dumpster.

Where practicable, laydown and stockpiling areas would be located outside the 1 percent chance and 0.2 percent chance floodplains and construction would proceed as approved under the NJDEP Waterfront development (WFD) IP-Commercial/Industrial/Public (Waterward) Permit, issued August 19, 2021, and the accompanying Water Quality Certificate (**Appendix B, Document 5**). These permits determined that the Proposed Action meets the requirements of the Flood Hazard Area Control Act and Coastal Zone Management Rules. As described in Section 5.4, a stormwater pollution prevention plan would be required prior to construction in accordance with the general permit for construction activity, and erosion and sedimentation controls would be implemented in compliance with the New Jersey Soil Erosion and Sediment Control Act. The minimal occupancy of the floodplain by portions of the Proposed Action would have no impact on the base flood elevation nor would it increase flood risks in adjacent areas. Therefore, the Proposed Action would have a negligible short-term impact on floodplains resulting from construction.

The new MPS would be located partially in and partially outside of the 0.2 percent chance floodplain and have a design flood elevation of +12 feet North American Vertical Datum of 1988 (NAVD88), approximately 3 feet higher than the current 0.2 percent chance flood elevation of 8.9 feet. While the facility would be designed to avoid flooding, the pumps would be dry pit submersible, allowing them to operate in flooded conditions should that occur. Decommissioning the existing MPS and construction of the new MPS at a higher elevation would reduce the risk of system failure due to flooding. The Proposed Action would significantly reduce the risk of new MPS flooding and thereby reduce the risk of interruptions to sewage treatment. Therefore, the Proposed Action would have a long-term minor beneficial impact relative to flooding.

The Proposed Action would not result in permanent changes to flood elevation or increase flooding risks in areas adjacent to the project area. Therefore, the Proposed Action would have no adverse long-term impact on floodplains resulting from operations.

FEMA completed an eight-step decision making process for the Proposed Action, which indicated that implementation of the Proposed Action would have more beneficial than detrimental impacts on floodplains and flood hazards and that there is no practicable alternative to conducting the project within the floodplain. **Appendix B, Document 3** provides the eight-step checklist.

5.7 Coastal Resources

The Coastal Zone Management Act is administered by states with coastal shorelines to manage coastal development through a Coastal Zone Management Plan (CZMP). Federal agencies must evaluate actions within designated coastal zones to ensure they are consistent with the CZMP. Projects receiving federal assistance must follow the procedures outlined in 15 CFR 930.90 through 930.101 for federal coastal zone consistency determinations. To guide development and resource management within the State's coastal area, NJDEP has identified and promulgated substantive policies. The New Jersey Coastal Management Program is administered via the Coastal Zone Management Rules (NJAC 7:7). The NJDEP's Division of Land Use Regulation regulates the use and development of coastal resources though the Coastal Area Facility Review Act (NJSA 13:19-1 et seq.), the Wetlands Act of 1970 (NJSA 13:9A-1 et seq.), the Waterfront Development Law (NJSA 12:5-1 et seq.), and the Coastal Zone Management Rules (NJAC 7:7). The Division of Land Use Regulation determines whether an activity is regulated based on the activity itself and its location within the coastal zone.

5.7.1 Existing Conditions

The Proposed Action is located within the regulated coastal zone for New Jersey. The Proposed Action is not within a scenic area or a waterfront revitalization area.

5.7.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, there would be no filling and no alterations that would affect coastal resources. The No Action alternative would not support several goals defined in the Coastal Zone Management Rules (NJAC 7:7) and therefore would not be consistent with the CZMP.

The No Action alternative would not support either Goal 1: Healthy Coastal Ecosystems or Goal 6: Safe, Healthy, and Well-Planned Coastal Communities and Regions. The No Action alternative would not support these goals (and their supplemental policies) because it would not address the potential risk of uncontrolled sewage release if the existing PBI failed or the risk of interruption to wastewater treatment activities from the failure of the existing MPS. These risks would result in impacts on the coastal ecosystems of Pleasure Bay and surrounding water bodies and would impact the safety and health of the coastal communities served by the treatment facility. The No Action alternative would not support the Coastal Zone Management Rules goals and therefore would not be consistent with the New Jersey CZMP. Therefore, the No Action alternative would have a minor, long-term, adverse impact on coastal resources.

Alternative 2: Proposed Action

As described in Section 5.5, Pleasure Bay is a Category One waterway that has a designated 300foot riparian zone. Proposed improvements would be located only in existing disturbed areas, which include areas on which vegetation has been permanently or periodically cleared, cut, removed, or otherwise altered by humans to accommodate ongoing, lawfully existing land uses. However, the limits of disturbance for the Proposed Action extend into the 300-foot riparian zone. Consequently, the Proposed Action would be subject to permitting in compliance with the Rules on Coastal Zone Management.

On August 19, 2021, NJDEP issued a WFD IP-Commercial/Industrial/Public (Waterward) Permit and accompanying Water Quality Certificate (**Appendix B, Document 4**) for the Proposed Action and determined that the Proposed Action meets the requirements of the Flood Hazard Area Control Act and Coastal Zone Management Rules. The permit includes standard conditions and several special conditions, which include adherence to seasonal restrictions for using heavy equipment to protect ospreys, development of a frac-out contingency plan for the tunneling work, location of staging areas outside of tidal areas, and management of underground cutting lubricants. In addition, during construction, silt fence and other sedimentation control BMPs described in Section 5.4 would be implemented to minimize the potential for deposition of sediment into Pleasure Bay, freshwater wetlands, and tidal wetlands. Therefore, construction activities associated with the Proposed Action would result in negligible short-term adverse impacts on coastal resources.

The Proposed Action would be consistent with the CZMP. Unlike the No Action alternative, the Proposed Action would support the CZMP goals as defined in the Coastal Zone Management Rules. The Proposed Action would reduce the risk of failure of the interceptor infrastructure by constructing a new line. The Proposed Action would also reduce the risk of flooding impacting pumping station capacity by constructing a new MPS at an elevation where it is less likely to be affected by potential flooding. These actions would support the goals in the Coastal Zone Management Rules. Specifically, the Proposed Action would support Goal 1: Healthy Coastal Ecosystems and Goal 6: Safe, Healthy, and Well-Planned Coastal Communities and Regions by protecting the coastal ecosystems of Pleasure Bay and surrounding water bodies and ensuring the safety and health of the coastal communities served by the treatment facility. Therefore, the Proposed Action would be consistent with New Jersey CZMP and support the Coastal Zone Management Rules goals. Therefore, the Proposed Action would have a minor, long-term, beneficial impact on coastal resources.

5.8 Vegetation

5.8.1 Existing Conditions

The project area is primarily developed, and vegetation is limited to managed lawn, trees, and shrubs in landscaped areas. Tree species in the project area include pitch pine (*Pinus rigida*), eastern redcedar (*Juniperus virginiana*), and Allegheny serviceberry (*Amelanchier laevis*).

EO 13112 Invasive Species requires federal agencies, to the extent practicable, to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause. Invasive species prefer disturbed habitats and generally possess high dispersal abilities, enabling them to out-compete native species. Invasive plant species in the project area include the common reed (*Phragmites australis*), which is present along the western boundary of Sommers Scout Park.

5.8.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, there would be no construction and no impact on existing vegetation. If the existing infrastructure fails, there could be minor impacts on vegetation from emergency repairs and associated equipment and vehicle access, and from raw sewage contamination within the surrounding area (Section 5.1).

Alternative 2: Proposed Action

Under the Proposed Action, impacts on vegetation would include the following:

- At the new MPS, an area of 261,835 square feet would be developed that currently supports grass and trees. The Proposed Action would remove 29 trees and replant 62 trees, as shown below. New trees to be planted would be a minimum of 3 inches in diameter at breast height. **Table 5.3** presents the tree species to be removed and replaced.
- At Sommers Scout Park, one tree containing a memorial plaque would be removed and replaced following construction.

Tree Species	Number Removed	Number Replaced
Allegheny serviceberry (Amelanchier laevis)	4	11
Pitch pine (<i>Pinus rigida</i>)	25	25
Eastern redcedar (Juniperus virginiana)	0	26

Table 5.3. Trees to be Removed and Replaced in Monmouth Beach Project Area

According to the NJDEP Coastal Area Facility Review Act Individual Permit (Permit No. 1300-21-0004.1 LUP210001) (**Appendix B, Document 5**), the Proposed Action would result in 1.55 acres of temporary impacts and 0.339 acres of permanent impacts in the riparian zone (within 300 feet of the Pleasure Bay shoreline). Following construction, all temporarily disturbed areas would be restored to the original topography and revegetated (i.e., trees would be replaced/replanted and grass would be replaced). However, large mature trees would be replaced with smaller ones (minimum of 3 inches diameter at breast height). Therefore, there would be short- and long-term minor effects on vegetation in the project area from the construction of the Proposed Action, until the trees become mature in 15 to 20 years. At the same time, the Proposed Action would have a minor beneficial impact on vegetation because it would more than double the number of trees in the area and would avoid vegetation impacts that could result from emergency repairs and raw sewage contamination from infrastructure failure.

Impacts on vegetation caused by the spread of invasive plants would not be expected. Known invasive plants, including common reed at Sommers Scout Park, would be avoided during construction.

5.9 Wildlife and Fish

State laws that regulate hunting, trapping, fishing, and habitat alteration protect fish and wildlife. Federal laws such as the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act, and the Magnuson-Stevens Fishery Conservation and Management Act also protect species. Section 5.7 presents the evaluation of potential impacts on threatened and endangered species listed under the ESA. Section 5.8 presents the evaluation of potential impacts on Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act.

The MBTA of 1918 provides a program for the conservation of migratory birds that fly through lands of the United States. USFWS is the lead federal agency for implementing the MBTA. The law makes it unlawful at any time, by any means, or in any manner to take any part, nest, or egg of migratory birds. "Take" is defined in regulation (50 CFR 10.12) as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities."

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, provides for the protection of bald and golden eagles by prohibiting the take, possession, sale, purchase, barter, transport, export, or import of any bald or golden eagle, alive or dead, including any part, nest, or egg unless allowed by permit. This Act requires consultation with the USFWS to ensure that proposed federal actions do not adversely affect bald or golden eagles.

5.9.1 Existing Conditions

The project area includes limited terrestrial and aquatic habitat, as described below.

Terrestrial

As described in Section 5.8, the project area is predominantly developed and vegetation is limited to managed lawns, trees, and shrubs in landscaped areas. Terrestrial wildlife present in the project area includes species common to suburban and/or disturbed environments, including eastern gray squirrel (*Sciurus carolinensis*), eastern cottontail rabbit (*Sylvilagus floridanus*), and raccoon (*Procyon lotor*). In addition, many species of migratory birds may use trees in the project area for foraging, roosting, and nesting including American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), and song sparrow (*Melospiza melodia*).

Bald eagles (*Haliaeetus leucocephalus*) have been observed foraging in the project area, but there are no large nesting trees or known bald eagle nests or roosts in or near the project footprint, based on a search of the New Jersey Natural Heritage Database (NJDEP 2020). Golden eagles (*Aquila chrysaetos*) are known to migrate through New Jersey; however, there is no suitable golden eagle habitat for resting or foraging within or near the project area.

Aquatic

Aquatic habitat in the project area is associated with the shoreline areas of Pleasure Bay. Species common to this habitat include red-eared slider (*Trachemys scripta elegans*), common snapping turtle (*Chelydra serpentine*), and eastern garter snake (*Thamnophis sirtalis sirtalis*). Pleasure Bay supports many species of fish and aquatic wildlife, including Atlantic striped bass (*Morone saxatilis*), summer flounder (*Paralichthys dentatus*), and bluefish (*Pomatomus saltatrix*). Common bottlenose dolphin (*Tursiops truncates*) and other marine mammals are observed occasionally in Pleasure Bay.

5.9.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, there would be no construction and no associated impacts on wildlife from construction. If there was an accidental release of sewage from the existing PBI into Pleasure Bay, there could be moderate impacts on aquatic wildlife and fish, as well as some terrestrial wildlife such as eagles that prey on fish. Aquatic wildlife and fish could be directly harmed if sewage was released because of water quality degradation. Impacts on aquatic wildlife and fish could result in loss of food resources for other aquatic species and terrestrial wildlife if prey are contaminated or killed or if aquatic wildlife and fish are displaced from affected areas. Therefore, under the No Action alternative, there could be moderate impacts on wildlife.

Alternative 2: Proposed Action

Under the Proposed Action, there would be minor impacts on wildlife from construction if wildlife were displaced due to noise, vibration, or other disturbances. Displacement could cause direct harm because of the loss of shelter and food resources, increased competition, or predation. Following construction, wildlife that can adapt to displacement would be expected to return to the project area. Trees that support migratory birds would be removed and if tree cutting occurs during the migratory bird breeding season, tree removal could result in the destruction of nests, eggs, or young birds in the nest. To avoid this impact, the Proposed Action would implement a general timing restriction on tree removal from April 1 through August 31 as conditioned in the February 2022 NJDEP Environmental Review. As described in Section 5.8.2, trees removed during construction would be replanted or replaced with native tree species, resulting in a total increase in the number of trees. However, large mature trees would be replaced with smaller ones (minimum of 3 inches diameter at breast height), which could take 15 to 20 years to reach the size of existing trees and provide the same habitat for nesting birds. The temporal loss of this habitat would be localized, and the common migratory birds using the existing habitat could readily find other nesting opportunities nearby. Therefore, with the implementation of BMPs, the Proposed Action would have a minor impact on migratory birds.

There are no known bald eagle nests or roosts in or near the project area; therefore, there would be no impact on bald eagles under the Proposed Action.

Since no in-water work would occur, and with the implementation of BMPs described in Sections 5.1 and 5.4 and the measures required by the Soil Erosion and Sediment Control Plan to avoid or minimize soil erosion into surface waters, there would be no construction-related impacts on fish or aquatic wildlife. The Proposed Action would have a moderate long-term beneficial effect on fish and aquatic wildlife and some terrestrial wildlife such as eagles from the prevention of accidental sewage release into Pleasure Bay; thus avoiding potential water quality degradation and associated direct harm, loss of food resources, or displacement.

5.10 Threatened and Endangered Species

The ESA of 1973 provides a program for the conservation of threatened and endangered plants and animals and their habitats. The lead federal agencies for implementing the ESA are USFWS and the National Marine Fisheries Service (NMFS). The law requires federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitats of such species. The law also prohibits any action that causes a "taking" of any listed species.

5.10.1 Existing Conditions

Information on the presence of threatened and endangered species was obtained from the USFWS Information for Planning and Consultation (IPaC) system, accessed July 12, 2022. In addition, a search of the New Jersey Natural Heritage Database, Landscape Project habitat mapping and the Biotics Database was conducted for the Proposed Action (NJDEP 2020) to identify any rare wildlife species or wildlife habitat in the project area.

The IPaC system reported one federal threatened species, the northern long-eared bat (*Myotis septentrionalis*), and one federal candidate species, the monarch butterfly (*Danaus plexippus*), as potentially present in the general area. Critical habitat has not been designated for any species in the project area.

The project area is located within the range of the northern long-eared bat, and the species may use the project area for foraging. However, the project area does not support suitable habitat for roosting or breeding. The monarch butterfly may be found in a variety of habitats but requires milkweed (*Asclepias* sp.) as a host plant for larval development.

Based on the search of the New Jersey Natural Heritage Database (NJDEP 2020) for the Proposed Action, the following species with state protection status are known to use the project area for foraging: black skimmer (*Rynchops niger*) (state endangered), black-crowned night-heron (*Nycticorax nycticorax*) (state threatened), common tern (*Sterna hirundo*) (special concern), least tern (*Sternula antillarum*) (state endangered), and osprey (*Pandion haliaetus*) (state threatened). The state database search indicated the potential for the following species to nest in the project area: piping plover (*Charadrius melodus*) (federal threatened and state endangered), American oystercatcher (*Haematopus palliates*) (special concern), osprey, black-crown night-heron, and common tern. The piping plover may nest in suitable sandy beach habitat within one mile of the project area; however, there is no such habitat in or near the project footprint. The American oystercatcher nests on vegetation in coastal dunes and islands, and this habitat is not present in or near the project footprint. Black-crowned night-herons nest in colonies in large trees over water. No known nesting colonies are present in or near the project footprint. Common terns nest in colonies on the ground in coastal areas with loose sand, gravel, shell, or cobble substrates, and

low-growing vegetation. No known nesting colonies or suitable habitat are present in or near the project footprint.

Osprey nest on trees or platforms near water. Osprey nests are known to occur in the project vicinity, including a nest platform located on Patten Avenue, approximately 0.5 mile east of Sommers Scout Park (eBird 2022).

The state database search also identified the potential for one plant, saline orache (*Atriplex subspicata*) (state endangered), to occur in the project area. This species is found on coastal beaches, intertidal, and subtidal areas, which are not present in the project footprint.

Federally listed marine species identified in the state database search include the following: fin whale (*Balaenoptera physalus*) (federal and state endangered), humpback whale (*Megaptera novaeangliae*) (federal and state endangered), North Atlantic right whale (*Eubalaena glacialis*), (federal and state endangered), and Atlantic leatherback turtle (*Dermochelys coriacea*) (federal and state endangered). These marine species may occur transiently in marine habitat near the project area; however, there are no known nesting areas for the Atlantic leatherback turtle in the project area (NJDEP 2020).

5.10.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, there would be no construction and no associated impacts on listed species from noise, vibration, or other disturbances during construction. There could be moderate impacts on federally and state listed species if they were to be present in Pleasure Bay during an accidental release of sewage from the existing PBI. A significant sewage release into Pleasure Bay could result in a moderate impact on federally and state listed species because it would degrade water quality and potentially harm federally listed whales, the Atlantic leatherback turtle, and state listed birds that prey on fish (e.g., black skimmer, common tern, least tern, and osprey) through toxicity, loss of food resources, or displacement from affected areas.

Alternative 2: Proposed Action

Under the Proposed Action, there would be no impact on federally listed species from construction-related activity because there is no suitable habitat for threatened and endangered species within or near the project footprint. There is one state listed species, the osprey, that may nest in the project area and impacts would occur if construction disrupted nesting behavior. In compliance with the Waterfront Development Individual Permit obtained from the NJDEP, a seasonal restriction on the use of heavy construction equipment/machinery within 300 meters of any active osprey nest along the project limit of disturbance would be implemented from April 1 through August 31 of each calendar year. The seasonal restriction must also be applied if nest

building activity is observed at any given osprey nest location prior to April 1 of the given calendar year of work. Therefore, there would be no impacts on nesting osprey.

The Proposed Action would have a moderate long-term beneficial impact on federally listed species and state listed species that may be present in Pleasure Bay (e.g., federally listed whales, the Atlantic leatherback turtle, and state listed birds including black skimmer, common tern, least tern, and osprey) because it would avoid accidental sewage release into Pleasure Bay that could cause water quality degradation and associated direct harm, loss of food resources, or displacement.

5.11 Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act is the primary law governing marine fisheries management in U.S. waters and designates NMFS as the lead federal agency responsible for its implementation. First passed in 1976, the act fosters the long-term biological and economic sustainability of our nation's marine fisheries. EFH is defined by the Act as "those waters and substrate necessary for federally managed species to spawn, breed, feed, and/or grow to maturity." One primary provision of the act is the designation of EFH for all species managed under the act. All federal agencies are required to assess the potential effects of proposed actions and alternatives on EFH, and federal agencies are to consult on any actions that could adversely affect EFH.

5.11.1 Existing Conditions

Pleasure Bay is designated EFH for winter flounder (*Pseudopleuronectes americanus*), little skate (*Leucoraja erinacea*), Atlantic herring (*Clupea harengus*), red hake (*Urophycis chuss*), windowpane flounder (*Scophthalmus aquosus*), winter skate (*Leucoraja ocellata*), clearnose skate (*Raja eglanteria*), smoothhound shark complex (*Mustelus sp.*), sand tiger shark (*Carcharias taurus*), scup (*Stenotomus chrysops*), longfin inshore squid (*Doryteuthis pealeii*), bluefish (*Pomatomus saltatrix*), Atlantic butterfish (*Peprilus triacanthus*), and summer flounder (*Paralichthys dentatus*).

5.11.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, there would be no construction-related impacts on EFH. The potential for accidental sewage release into Pleasure Bay would continue to have the potential to degrade water quality, which is a primary component of EFH. Therefore, under the No Action alternative, there could be moderate impacts on EFH in Pleasure Bay from an accidental release of sewage.

Alternative 2: Proposed Action

Under the Proposed Action, impacts on EFH could result during construction from water quality degradation if disturbed soils were allowed to run off into Pleasure Bay. However, with the implementation of BMPs and measures required by the Soil Erosion and Sediment Control Plan, erosion of disturbed soils and associated water quality impacts on EFH would be avoided, and there would be no impact on EFH. The Proposed Action would have a moderate long-term beneficial effect on EFH from the prevention of accidental sewage releases and associated water quality degradation in Pleasure Bay.

5.12 Cultural Resources

FEMA must consider the potential effects of its funded actions on cultural resources prior to engaging in any undertaking in accordance with Section 106 of the National Historic Preservation Act (NHPA), as amended and implemented by 36 CFR Part 800. The NHPA of 1966 defines a historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register." Eligibility criteria for listing a property on the National Register of Historic Places (NRHP) is detailed in 36 CFR Part 60.

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is the geographic area(s) within which the undertaking may directly or indirectly affect cultural resources. FEMA evaluates impacts on cultural resources prior to the undertaking for both standing structures (aboveground resources) and archaeology (belowground resources) within the APE.

5.12.1 Consultation

On August 22, 2022, FEMA initiated consultation with the New Jersey State Historic Preservation Office (SHPO) by letter pursuant to Section 106 of the NHPA. FEMA defined the APE to include the PBI under Pleasure Bay, Sommer's Scout Park in Oceanport Borough, and the existing WWTP, MPS, and MBI in Monmouth Beach Borough. The new MPS would be constructed within the fence line on the southwest corner of the WWTP. Based on identification and evaluation steps, FEMA determined that the buildings that comprise the existing WWTP and the existing MPS are not eligible for listing in the NRHP. FEMA also concluded that the APE was extensively disturbed historically due to filling in tidal marshes, lagoon dredging, and construction of the current facility, and therefore has no potential to contain intact archaeological resources. FEMA requested SHPO concurrence that the undertaking will result in No Historic Properties Affected. On September 1, 2022, the New Jersey SHPO concurred with this assessment. Due to the documentation of comprehensive disturbance and fill placement within the APE, as well as the absence of known large pre-Contact Native American archaeological habitation sites within or near the APE, no consultation with Tribal Nations was completed. Existing Conditions –Historic Standing Structures and Archaeological Sites

Based on a review of the LUCY: New Jersey's Cultural Resources geographic information system (NJ CRGIS) online map viewer, there are no historic properties listed in or eligible for the NRHP within or adjacent to the project limits of disturbance, or direct APE. No archaeological resources have been identified within or adjacent to the project's direct APE.

FEMA conducted background research and identified one historic archaeological site and three prehistoric archaeological sites within one and a half miles of the APE. The historic George Warner House Site (28-Mo-388) was documented in 2008 as the burned remains of a 19th century home. The Corcione Collection Site (28-Mo-308) was identified in 1976 and contained non-diagnostic prehistoric and modern artifacts, while the Horseneck Point Site (28-Mo-364) was identified in 1980 as a shell midden complex. The Alatmo Terrace Site (28-Mo-032) included a range of Archaic Period artifacts redeposited on Monmouth Beach as a result of offshore dredging. Based on a review of the USDA mapped soil types, historic aerial photographs, and topographic maps that show landscape changes during the 20th century, FEMA concluded that the APE is comprehensively disturbed and unlikely to contain any intact historic or prehistoric archaeological resources.

There is one resource over 50 years of age within the direct APE that has not been evaluated previously for NRHP eligibility: the TRWRA property, which includes the WWTP and the existing MPS, built in the 1960s. The majority of buildings within the WWTP will not be directly impacted by the proposed undertaking, though the existing MPS on Meadow Avenue is slated for demolition. The majority of new aboveground infrastructure would be constructed at the southwest corner of the WWTP, which does not currently contain any buildings or structures. The closest NRHP-eligible property is the Patten Point Yacht Club (SHPO Opinion: 6/5/2002), which is located approximately 2,500 feet southeast of the proposed PBI tie in at Sommers Scout Park in the Borough of Oceanport and approximately 3,500 feet south of the WWTP.

FEMA evaluated the existing buildings within the WWTP and the existing MPS and determined that they are not a significant example of a type, style, or method of construction, nor do they have any association with important events or significant persons throughout history. As a result, FEMA determined the buildings are not eligible for listing in the NRHP. On September 1, 2022, the New Jersey SHPO concurred with this assessment.

5.12.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action Alternative, there would be no effect on historic standing structures or archaeological sites as there would be no construction activity nor would current PBI or MPS failure impact these resources.

Alternative 2: Proposed Alternative

FEMA has determined and SHPO concurred that construction of the Proposed Alternative would result in No Historic Properties Affected. The WWTP and the existing MPS were determined not eligible for listing in the NRHP.

In the unlikely event of inadvertent discoveries during construction, the Subapplicant will cease all construction activities within the vicinity of the discovery and notify FEMA according to the Programmatic Agreement I.A.III.B (*Amendment to Programmatic Agreement Among the FEMA, The New Jersey State Office of Emergency Management, Advisory Council on Historic Preservation and Participating Tribes as a Result of Hurricane Sandy,* dated April 20, 2013), and follow the unexpected discoveries protocol outlined therein.

5.13 Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires agencies to identify and address the disproportionately high and adverse human health or environmental effects its activities may have on minority or low-income populations. USEPA's Environmental Justice Screening and Mapping Tool (EJScreen) was used to evaluate the demographic characteristics of the project area and surrounding community. The EJScreen analysis is based on the U.S. Census Bureau 2015 through 2019 American Community Survey 5-year summary data at the census block group level (USEPA 2022b).

Overburdened communities include minority and low-income populations and are defined as those that meet any of the following criteria:

- Populations within 0.5 mile of the project area contain 50 percent or more minority persons or more low-income persons.
- Percentage of minority or low-income population within 0.5 mile of the project area is more than 50 percent greater than the average of the surrounding borough.

5.13.1 Existing Conditions

The project areas intersect three Census Block Groups. The existing MPS and the project area for the proposed new MPS in Monmouth Beach is in Census Block Groups 340258041003 and 340258041002. The existing PBI in Oceanport is in Census Block Group 340258053005 (**Appendix A, Figure 6**). **Table 5.4** summarizes demographic characteristics for the Census Block Groups. According to USEPA's EJScreen (Version 2.0), none of the Block Groups within the project area or surrounding Pleasure Bay meet the criteria for an environmental justice population. In addition, the population of the TRWRA service area also do not meet the criteria for overburdened communities as it contains approximately 22 percent minority and 17 percent low income.
Census Block Group	Total Population	Percent Minority	Percent Low Income
340258041003	697	5%	6%
340258041002	748	4%	7%
340258053005	1,137	11%	7%
Total	2,582	7% (185)	7% (174)
Monmouth County	621,659	25%	16%
State of New Jersey	8,878,503	45%	23%

 Table 5.4. Summary Demographic Characteristics of the Census Block Groups

Source: USEPA 2022b

5.13.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, no construction-related impacts would occur, but failure of the existing PBI would release up to approximately 700 million gallons of untreated sewage to the surrounding environment. Failure of the infrastructure immediately upstream of the WWTP (the interceptor and pump station) could affect a large portion of the TRWRA service area and result in the disruption of sewer service. However, because there are no environmental justice populations in or near the project area or in the TRWRA service area, there would be no effect on overburdened communities.

Alternative 2: Proposed Action

Although the Proposed Action would have temporary and localized impacts from implementation, such as construction noise, there are no environmental justice populations in or near the project area or in the TRWRA service area. Therefore, the Proposed Action would have no disproportionately high and adverse impacts on minority or low income populations.

5.14 Land Use and Planning

5.14.1 Existing Conditions

Primary existing land uses within and adjacent to the project area include residential, community services, parks, and open space. The existing MPS is zoned as A (Low-Density Single Family) (Borough of Monmouth Beach Planning Board 1994) and the existing PBI intake area is in an R-3 zone (Residential Single Family) (Borough of Oceanport 2020). Both the existing PBI and MPS are surrounded by single-family residential uses (**Appendix A, Figure 7**).

5.14.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, construction of mitigation measures would not occur and there would be no temporary impact on access to existing buildings, parking, or use of facilities, and no temporary changes to zoning would occur. Therefore, there would be no short-term impact on land use and planning. In event of a sewage leak into Pleasure Bay, recreational shoreline uses would be disrupted, such as Sommers Scout Park. A loss of sewer service within the TRWRA service area could result in the temporary displacement of residents. This could reduce the ability of property owners to use the land for its existing or intended purposes and would not align with the land use and zoning plans of the Boroughs of Monmouth Beach and Oceanport. However, because the effects would be short-term and temporary and repairs would not require any change in zoning or land use, the No Action alternative would have a minor long-term impact on existing residential land uses.

Alternative 2: Proposed Action

During construction, Sommers Scout Park would be closed for approximately 720 days for the construction of the new intake to the new PBI. Construction of the new MBI under Highland Avenue and the existing recreational field would require temporary closures of road lanes (Section 5.16) and the field. Temporary closures of the park would prevent the intended recreational land use from occurring; however, lane closures would not prevent access to any areas preventing their intended land use. Therefore, there would be a short-term minor adverse impact on land use access within the study area. Post-construction, the park and field would be restored to their previously zoned use and there would be no change to any zoning designations. Residentially zoned areas would be protected from sewage leakage which could reduce landowners' ability to use the land properly either through evacuation or loss of services. Therefore, there would be no long-term impact on land use.

5.15 Noise

The Noise Control Act of 1972 required USEPA to create a set of noise criteria. In response, USEPA published Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety in 1974, which explains the impact of noise on humans. The USEPA report found that keeping the maximum 24-hour day-night average sound level below 70 A-weighted decibels (dBA) would protect the majority of people from hearing loss. USEPA recommends an outdoor average sound level of 55 dBA to prevent interference with daily human activities such as sleeping, working, and recreation. According to published lists of noise sources, sound levels, and their effects, causes pain starting at approximately 120 to 125 dBA and can cause immediate irreparable damage at 140 dBA. The Occupational Safety and Health Administration has adopted a standard of 140 dBA for maximum

impulse noise exposure for workers in noisy environments. There are no restrictions on sound levels generated by construction equipment and activities; however, local ordinances, including Chapter 267 of the Borough of Oceanport Ordinances (Borough of Oceanport 2022) and Chapter 3-1-1 of the Borough of Monmouth Beach (Borough of Monmouth Beach 2022), regulate the time of day during which construction activities may be conducted. For the Borough of Oceanport, construction related noise can occur during the hours 8:00 a.m. and 6:00 p.m. Monday thru Friday and during the hours 7:00 a.m. and 6:00 p.m. for the Borough of Monmouth Beach.

5.15.1 Existing Conditions

The existing PBI intake is located within a residential area and Sommers Scout Park and the existing MPS is located on the shore of Pleasure Bay near residences. Typical noise sources in and near the project area are vehicular traffic, recreational activities such as motorized boats and personal craft on Pleasure Bay, and the operation of the existing WWTP. The proposed new MPS is adjacent to a recreational ball field and inside the fence line of the WWTP. Parks and residences are generally considered to be sensitive noise receptors.

5.15.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, there would be no construction activity; therefore, no noise generation from construction equipment would increase noise levels. Emergency repair equipment and vehicles would temporarily increase noise levels in the vicinity of the work in the event of infrastructure failure. Emergency repair activities would not necessarily be required to comply with local construction noise ordinances and work may even be needed at night depending on the severity of the failure. Emergency night construction work close to residences could produce disruptive levels of noise. Therefore, there would be no impact on noise levels unless there is an infrastructure failure and the need for emergency repairs, in which case, there would be a moderate to major short-term adverse impact related to noise.

Alternative 2: Proposed Action

The Proposed Action would result in a temporary localized increase in noise levels during construction from vehicles and equipment. The temporary increase in noise levels would be minimized through compliance with local noise ordinances, including time-of-day work limitations. During construction, all equipment would be required to operate with proper mufflers as stated in the February 2022 NJDEP Environmental Review of the project. Additionally, any noise-generating equipment associated with operation of the new MPS would be inside the structure and would have a negligible impact on ambient noise levels at surrounding land uses. Periodic maintenance at the new PBI intake area would also be conducted in accordance with local noise ordinances and would have a negligible impact on receptors in and adjacent to Sommers

Scout Park. Therefore, the Proposed Alternative would have a minor temporary impact on noise levels during construction and a negligible impact long term.

5.16 Transportation

5.16.1 Existing Conditions

Regional access to the project area is provided by New Jersey Route 36, approximately one mile to the east. Several local roadways with minimal traffic are within the project area, including Pocona Avenue, Highland Avenue, and Meadow Avenue. The other roads that are in or adjacent to the project site are small residential streets. The New Jersey Transit provides transit service via bus and train to Monmouth County but does not operate routes proximate to the project areas (Monmouth County 2022a). The closest train station is the Monmouth Park Station, approximately a mile and a half to the south of the project area. Monmouth County provides on-demand transit for senior and disabled residents through their Demand-Responsive Services Monmouth County Division of Transportation (Monmouth County 2022b).

5.16.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, construction activity would not occur and would not cause any interruption to traffic patterns. Failure of the existing infrastructure would likely require emergency repairs and construction activity that would add a small increase in traffic load on local roadways. Repairs to the existing PBI and MPS, whether on an ongoing routine or an emergency basis may require lane closures for repairs. Therefore, there would be minor, recurring, long-term impacts on transportation from infrastructure failure-related repairs.

Alternative 2: Proposed Action

During construction there would be a slight increase in traffic from construction vehicles, equipment, and workers leaving and entering the project areas. There would be lane closures on Pocano Avenue in Oceanport at Sommers Scout Park for equipment staging, and Highland Avenue in Monmouth Beach would require a temporary lane closure during installation of the new MBI. Smaller residential streets could become congested due to the increased construction traffic. This would result in a minor short-term adverse effect on traffic and transportation. Post-construction, there would likely be no increase in traffic since the project would not change the capacity of the WWTP, and thus, would not encourage population growth in the area. The Proposed Action would reduce the risk of infrastructure failure and interruption to existing sewer services. This would reduce the need for emergency work that could potentially close lanes or roads in the project area. Therefore, there would be a minor beneficial effect on traffic patterns and access post-construction.

5.17 Public Services and Utilities

5.17.1 Existing Conditions

The project area is located within a highly developed urban area and is served by major utilities and infrastructure, including electric, natural gas, and water and sewer lines. New Jersey-American Water provides water service and TRWRA provides sewer collection and treatment services. Jersey Central Power & Light Company provides electricity via elevated power lines. New Jersey Natural Gas provides natural gas (Monmouth County 2022c).

5.17.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, construction activity would not occur. The existing PBI would continue to degrade, potentially to the point of failure, and the existing MPS wet well would continue to provide inconsistent pumping during flood conditions and would remain susceptible to flooding in its current location. Failure of the existing PBI could pose a potential health risk to residential areas and residents along the shoreline of Pleasure Bay. Failure of the infrastructure could affect sewer service in a significant portion of the TRWRA service area and large numbers of residents could be without sewer utilities until emergency repairs are made. Depending on the location and nature of required emergency repairs, other utilities may need to be shut down over small areas for short periods of time. Therefore, there would be negligible short-term adverse effects on electric, gas, or water supply utilities and a moderate to major adverse effect on sewer utilities under the No Action alternative.

Alternative 2: Proposed Action

The Proposed Action would require ground disturbance during construction that could potentially disrupt existing utility services or require short-term localized disruptions in service. During construction, TRWRA would be responsible for temporarily supporting or relocating any utilities that could be affected by construction or connection to the Proposed Action. Affected residents would be notified in advance in the unlikely need of any required short-term disruptions in services. With these measures in place, construction activities associated with the Proposed Action would result in negligible short-term adverse impacts on utilities. The Proposed Action would reduce the risk of infrastructure failure and therefore, reduce risks associated with the release of untreated sewage or interruption of sewer services. Therefore, there would be a moderate beneficial effect on sewer service post-construction.

5.18 Public Health and Safety

5.18.1 Existing Conditions

The Monmouth Beach Police Department, Oceanport Police Department, and various other agencies within Monmouth County are responsible for the general protection of public health and safety in the vicinity of the project area. The Monmouth Beach Fire Department and two volunteer fire companies, the Hook and Ladder Fire Company and the Port Au Peck Chemical Hose Company, provide fire protection services to the project area. The Monmouth Beach Volunteer Emergency Medical Services and Oceanport Volunteer First Aid and Rescue Squad provide emergency medical responders, and Monmouth Medical Center is the local medical center serving the project area (**Appendix A, Figure 7**).

5.18.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, the risk of failure of the existing PBI would remain and the existing MPS wet well would remain in disrepair and susceptible to flooding in its current location. This alternative could require increased assistance from public emergency medical services due to the continued risk of sewer services failure leading to health risks associated with raw sewage release into Pleasure Bay or the failure of services at residences and businesses throughout the TRWRA service area. Further, potential transportation network disruptions due to emergency repair work may impact emergency response times impacting public health and safety outcomes from other causes if emergency responders are delayed. Therefore, the No Action alternative could have the potential to result in a moderate long-term impact on public health and safety.

Alternative 2: Proposed Action

During construction, there would be a short-term adverse effect within the project area because the construction of the Proposed Action would require temporary lane closures on Highland Avenue and Pocano Avenue during the installation of the new PBI. Coordination with local emergency services would ensure that access to critical facilities is maintained. Both affected streets are short residential streets that serve relatively few households and there are alternate routes available. Therefore, an increase in emergency response times from construction-related activities would be unlikely and there would be a negligible short-term impact on public health and safety.

The Proposed Action would reduce the risk of infrastructure failure and the associated public health and safety concerns. There would be a reduced need for emergency repairs that could affect the delivery of emergency services and health issues related to raw sewage release in Pleasure Bay would be avoided. Therefore, the Proposed Action would have a minor long-term beneficial impact on public health and safety.

5.19 Hazardous Materials

Hazardous materials and wastes are regulated under several federal laws, including 40 CFR 260; the Resource Conservation and Recovery Act (RCRA) of 1976; the Solid Waste Act; the Toxic Substances Control Act; the Comprehensive Environmental Response, Compensation, and Liability Act as amended by the Superfund Amendments and Reauthorization Act; and the Clean Air Act of 1970. Occupational Safety and Health Administration standards under the Occupational Safety and Health Act seek to minimize adverse effects on worker health and safety (29 CFR 1926). The evaluation of hazardous substances and wastes considers whether any hazardous substance would be generated by the proposed activity and/or already exists at or in the general vicinity of the project area (40 CFR 300.5).

5.19.1 Existing Conditions

Brinkerhoff Environmental Services consultants prepared a hazardous materials survey report of the existing MPS building in June 2020 to identify potential sources of hazardous or contaminated materials. They inspected the site to determine whether there are asbestos-containing materials, universal waste, lead-based paint, or PCB-containing materials that would be encountered during decommissioning and demolition of the existing MPS building. They determined that asbestos, PCBs, lead paint, and universal waste were all present in the existing MPS building. A search of the USEPA Enviromapper (USEPA 2022c) showed no superfund sites located within half a mile of the project site. The TRWRA is a registered RCRA waste producer due to the materials that are used in the wastewater treatment processes (USEPA 2022b). No other RCRA sites are within half a mile of the project area (USEPA 2022c).

5.19.2 Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action alternative, construction work would not occur and there would be no impacts related to hazardous materials either from the use of construction equipment or from the exposure of contaminated soils through ground-disturbing activities for planned repairs. The existing MPS would not be demolished and hazardous materials in the structure would not be released or require disposal. However, infrastructure failure would lead to emergency repairs that would employ construction equipment that could generate hazardous substances such as fuels and oils, and that may encounter contaminated substances in soils. An emergency repair would be less likely to conduct thorough soil testing before excavation than a planned repair and thus might be more likely to risk exposure of workers and nearby residents if an unknown source is encountered. Therefore, the No Action alternative could have a minor, long-term negative impact from emergency repair work.

Alternative 2: Proposed Action

Under the Proposed Action, the use of construction equipment would pose the risk of leaks and spills of hazardous materials, such as fuels and lubricants. Construction contractors would be required to use, store, and transport hazardous materials in compliance with federal, state, and local regulations. The Proposed Action could pose a risk to the environment and human health of onsite workers and nearby residents because hazardous substances could be encountered through direct contact or inhalation during ground-disturbing activities and with the demolition of the existing MPS. Adherence to the BMPs within the February 2020 NJDEP Environmental Review would reduce short-term adverse effects from construction activity (including demolition of the existing MPS and installation of the new force main from the new MPS to the WWTP and the new PBI) to a negligible short-term impact. Post-construction, flood mitigation measures at the new MPS location would reduce the potential for release of hazardous materials that may be stored or used in the new MPS during operation. The Proposed Action would reduce the risk of infrastructure failure, reducing potential risks of encountering hazardous materials during emergency repairs. Therefore, the Proposed Action would have an overall minor beneficial impact from the reduced overall risk of release of hazardous materials and would reduce the potential for exposure to hazardous materials within the community.

5.20 Cumulative Effects

This EA considers the overall cumulative impact of the Proposed Action and other actions that are related in terms of time or proximity. Cumulative effects represent the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7 pre-2020). In the context of evaluating the scope of a Proposed Action, direct, indirect, and cumulative effects must be considered.

In addition to NEPA, other statutes require federal agencies to consider cumulative effects. These include the CWA Section 404(b)(1) guidelines, the regulations implementing the conformity provisions of the Clean Air Act, the regulations implementing Section 106 of the NHPA, and the regulations implementing Section 7 of the ESA.

Independent of the Proposed Action, there are two projects within the TRWRA district that could have cumulative effects with the Proposed Action effects. The first is the construction of a new odor control building on the western side of the WWTP property. The odor control building is a 50-foot by 50-foot annex of the disinfectant building. The odor control building replaces a 50-foot by 300-foot biofiltration field southwest of the new odor control building. The second project State of New Jersey Council on Affordable Housing (COAH) housing development that is anticipated to be constructed within the TRWRA's sewer service area in the future, with the current location

unknown. The additional wastewater flows associated with this community have been calculated to be approximately 4 mgd.

5.20.1 Conclusion

The projects described above, in combination with the Proposed Action, would not have additional construction-related impacts as construction of the odor control building was completed in 2022 and the COAH housing development's location would not be placed in or near the project area. There would also be no expected long-term impact as the odor control building would not impact the operation of the PBI and MPS as it is a separate part of the wastewater treatment process. The COAH housing development's increased wastewater flow of 4 mgd would not cause additional strain on the Proposed Action as it is designed to handle beyond the increased load the housing development would produce.

6.0 PERMITS AND PROJECT CONDITIONS

TRWRA is responsible for obtaining all applicable federal, state, and local permits and other authorizations for project implementation prior to construction and adherence to all permit conditions. Any substantive change to the approved scope of work will require re-evaluation by FEMA for compliance with NEPA and other laws and EOs. The Subapplicant must also adhere to the following conditions during project implementations and consider the following avoidance and minimization measures to reduce potential impacts. Failure to comply with grant conditions may jeopardize federal funds.

6.1 Federal

- TRWRA will comply with all conditions within the Department of the Army Nationwide General Permit Number 58 Utility Line Activities for Water and Other Substances.
- Subapplicant will notify FEMA of all inadvertent discoveries, according to the Programmatic Agreement I.A.III.B (*Amendment to Programmatic Agreement Among the FEMA, The New Jersey State Office of Emergency Management, Advisory Council on Historic Preservation and Participating Tribes as a Result of Hurricane Sandy, dated April 20, 2013*), and follow the unexpected discoveries protocol outlined therein.

6.2 State

- Construction would proceed compliant with the "Environmental Assessment Requirements for State Assisted Environmental Infrastructure Facilities" (NJAC 7:22-10).
- Construction equipment is to comply with New Jersey's idling restrictions, "Control and Prohibition of Air Pollution From Diesel-Powered Motor Vehicles" (NJAC 7:27-14) and "Control and Prohibition of Air Pollution From Gasoline-Fueled Motor Vehicles" (NJAC 7:27-15).

- Activities would meet New Jersey's Air Pollution Control Act of 1954 requirements, including obtaining permits, adhering to idling limitations, and implementing all reasonable measures to mitigate dust and fugitive emissions from demolition and construction (NJSA 26:2C).
- TRWRA will obtain authorization to discharge stormwater under an NJPDES Stormwater Construction General Permit NJG0088323 (5G3) pursuant to NJAC 7:14-1.2 and follow all conditions therein. Before construction, TRWRA will prepare a stormwater pollution prevention plan in accordance with the NJPDES Construction General Permit.
- TRWRA will comply with the New Jersey Soil Erosion and Sediment Control Act by preparing and obtaining approval of a soil erosion and sedimentation control plan. Compliance would include implementation of standards promulgated by the State Soil Conservation Committee and attainment of a Report of Compliance from the Freehold Soil Conservation District.
- TRWRA will obtain a Transition Area Waiver from NJDEP for work within transitional wetlands and follow all conditions therein.
- TRWRA will follow all conditions in the NJDEP WFD IP-Commercial/Industrial/Public (Waterward) Permit, issued August 19, 2021, and the accompanying Water Quality Certificate.
- A seasonal restriction on the use of heavy construction equipment/machinery within 300 meters of any active osprey nest along the project limit of disturbance is to be implemented from April 1 through August 31 of each calendar year.
- TRWRA will follow all conditions within the NJDEP Environmental Review document.

7.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

TRWRA conducted public and agency outreach for the New Jersey State Environmental Review that concluded February 2022. Outreach included holding monthly Authority Board meetings that were open to the public and a public hearing on October 27, 2021, to receive public comments regarding the Proposed Action. Notice of this hearing was advertised in the Asbury Park Press in northeastern New Jersey on September 18, 2021, which began a 30-day comment period for the Environmental Review. The comment period ended October 19, 2021, and there were no objections included in the public comments. Following is a list of agencies that were consulted about the project during the New Jersey State Environmental Review process:

- NJDEP
 - Division of Fish and Wildlife
 - Division of Water Quality
 - o Division of Watershed Management
 - o Division of Land Use Resource Protection
 - o Division of Parks and Forestry
 - Natural Heritage Program

- o Green Acres Program
- New Jersey SHPO
- USACE

This EA is available for agency and public review and comment for a period of 30 days. The public information process will include a public notice with information about the Proposed Action in the Asbury Park Press. The EA is available for download at <u>https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository</u> and <u>https://www.trwra.org</u>. A hard copy of the EA will be available for review at:

Monmouth Beach Library 18 Willow Avenue Monmouth Beach, NJ 07750

~

Borough of Monmouth Beach City Office 22 Beach Road Monmouth Beach, NJ 07750

Interested parties may request an electronic copy of the EA by emailing FEMA at FEMAR2COMMENT@fema.dhs.gov. This EA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action; however, FEMA will take into consideration comments submitted during the public review period. The public is invited to submit written comments by emailing FEMAR2COMMENT@fema.dhs.gov or via mail to:

Federal Emergency Management Agency, Region II Environmental Planning and Historic Preservation One World Trade Center, Suite 53 New York, NY 10007 Attn: Two Rivers Water Reclamation Authority EA Comments

If FEMA receives no substantive comments from the public and/or agency reviewers, FEMA will adopt the EA as final and will issue a FONSI. If FEMA receives substantive comments, it will evaluate and address comments as part of the FONSI documentation or in a Final EA.

8.0 LIST OF PREPARERS

CDM Smith:

- Alex Kessel (Environmental Planner)
- Matt Egge (Environmental Planner)
- Jennifer Jones (Biologist)
- Mary Lynne Rainey (Historic Preservation Specialist)
- Brandon Webb (Lead Environmental Specialist)
- Malena Foster (GIS Specialist)
- Kate Stenberg, PhD (Senior NEPA Specialist, Quality Assurance/Quality Control Reviewer)

FEMA:

- John McKee (Regional Environmental Officer, Region 2)
- Emily Hodecker (Environmental Planning and Historic Preservation Supervisor, NJ)
- John Dawson (Regional UFR Coordinator, Region 2)
- Tiffany Alves (Environmental Protection Specialist, NJ)
- Erin Leswing (Historic Preservation Specialist, NJ)

9.0 SUMMARY OF IMPACTS

Table 9.1 provides a summary of the potential environmental impacts from implementation of the No Action alternative and the Proposed Action.

EA Section	Торіс	No Action Alternative	Proposed Action: Short-term / Temporary Impacts	Proposed Action: Long-term / Permanent Impacts
5.1	Geology	No Impact	No Impact	No Impact
5.1	Topography and Soils	Minor Adverse	Negligible Adverse	Minor Beneficial
5.2	Air Quality	Negligible Adverse	Negligible Adverse	Negligible Adverse
5.3	Climate Change	Negligible Adverse	Negligible Adverse	Negligible Adverse
5.4	Water Quality	Minor to Moderate Adverse; No Impact on Single-Source Aquifer	Minor Adverse; No Impact on Single- Source Aquifer	Minor to Moderate Beneficial; No Impact on Single-Source Aquifer
5.5	Wetlands	Minor to Moderate Adverse	Negligible Adverse	Minor Beneficial
5.6	Floodplains	Moderate to Major Adverse	Negligible Adverse	Minor Beneficial
5.7	Coastal Resources	Minor Adverse	Negligible Adverse	Minor Beneficial
5.8	Vegetation	Minor Adverse	Minor Adverse	Minor Beneficial
5.9	Wildlife and Fish	Moderate Adverse	No Impact	Moderate Beneficial
5.10	Threatened and Endangered Species	Moderate Adverse	No Impact	Moderate Beneficial
5.11	Essential Fish Habitat	Moderate Adverse	No Impact	Moderate Beneficial
5.12	Cultural Resources	No Impact	No Impact	No Impact
5.13	Environmental Justice	No Impact	No Impact	No Impact
5.14	Land Use and Planning	Minor adverse	Moderate to Major Adverse	No Impact
5.15	Noise	Minor Adverse	Minor Adverse	Negligible Beneficial
5.16	Transportation	Minor Adverse	Minor Adverse	Minor Beneficial
5.17	Public Services and Utilities	Moderate to Major Adverse	Negligible Adverse	Moderate Beneficial
5.18	Public Health and Safety	Moderate Adverse	Negligible Adverse	Minor Beneficial
5.19	Hazardous Materials	Minor Adverse	Negligible Adverse	Minor Beneficial

Table 9.1. Summary of Impacts

10.0 REFERENCES

- Borough of Monmouth Beach. August 9, 2022. *Borough of Monmouth Beach Ordinance, Chapter 1-1*. <u>https://ecode360.com/31997728</u>
- Borough of Oceanport. July 15, 2022. *Borough of Oceanport Ordinances, Chapter 265 Noise*. <u>https://ecode360.com/11275061#:~:text=The%20making%2C%20creation%20or%20per</u> <u>mitting,emanate%20from%20any%20source%20or</u>
- Council on Environmental Quality. February 19, 2021. *Final guidance on consideration of greenhouse gas emissions and the effects of climate change (for revision and update)*. <u>https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html</u>.
- County of Monmouth. July 22, 2022a. SCAT Routes. https://www.visitmonmouth.com/page.aspx?Id=2906
- _____. July 22, 2022b. Demand Responsive Services/SCAT. https://www.visitmonmouth.com/page.aspx?Id=2902
- _____. July 22, 2022c. Office of Economic Development Energy & Utilities. https://www.visitmonmouth.com/Page.aspx?Id=1539
- Dalton R.F., et al. 2014. Bedrock geologic map of New Jersey: New Jersey Geological Survey, scale 1:250,000. <u>http://ngmdb.usgs.gov/ngmdb/ngmdb_home.html</u>.
- eBird. 2022. "Search of the project area for osprey sightings noting nests." Accessed July 2022. https://ebird.org/species/osprey/US-NJ-025.

Hazen and Sawyer. October 2020. Contract 200 Geotechnical Baseline Report for Pleasure Bay Crossing and Main Pump Station Replacement.

- Intergovernmental Panel on Climate Change (IPCC). April 4, 2022. *Climate Change 2022: Mitigation of Climate Change. Summary for Policymakers.* https://www.ipcc.ch/report/ar6/wg3/.
- Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds. 2014. 2014: Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program, 841 pp. doi:10.7930/J0Z31WJ2. https://nca2014.globalchange.gov/.
- National Oceanic and Atmospheric Administration (NOAA). National Weather Service. NOWData – NOAA Online Weather Data. Monthly summarized data, Long Branch, NJ, 2000-2020. Accessed July 2022. <u>https://weather.gov</u>.

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- National Park Service (NPS). 2022. "Wild and Scenic Rivers Map." Accessed July 13, 2022. <u>https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e 353142.</u>
- New Jersey Department of Environmental Protection (NJDEP). 2022a. "New Jersey's Clean Energy Picture." Accessed August 2022. <u>https://www.nj.gov/dep/aqes/opea-clean-energy.html</u>.
- _____. 2022b. "Division of Water Monitoring and Standards." Accessed July 2022. https://www.state.nj.us/dep/wms/bears/swqs-overview.htm.
- _____. 2022c. "NJ-GeoWeb." Accessed July 2022. https://njdep.maps.arcgis.com/.
- . 2020a. Search of the Natural Heritage Database and the Landscape Project (Version 3.3) for the Pleasure Bay Crossing and Main Pump Station Replacement. New Jersey Forest Service Office of Natural Lands Management.
- 2020b. "New Jersey Scientific Report on Climate Change," Version 1. 0. (Eds. R. Hill, M.M. Rutkowski, L.A. Lester, H. Genievich, N.A. Procopio). Trenton, NJ. 184 pp. Accessed August 2022. <u>https://nj.gov/dep/climatechange/docs/nj-scientific-report-</u>2020.pdf.
- Two Rivers Water Reclamation Authority (TRWRA). 2022. "Overview." Accessed July 8, 2022. https://www.trwra.org/overview/.
- United States Environmental Protection Agency (USEPA). 2022a. USEPA Green Book. <u>https://www.epa.gov/green-book</u>.
- _____. June 30, 2022b. "Greenhouse Gas Emissions from a Typical Passenger Vehicle." Accessed August 2022. <u>https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle</u>.
- . 2022c. "EJSCREEN EPA's Environmental Justice Screening and Mapping Tool (Version 2.0)." Accessed August 8, 2022. <u>https://ejscreen.epa.gov/mapper/</u>.
- _____. 2020c. "EnviroMapper." Accessed July 22, 2022. https://enviro.epa.gov/enviro/em4ef.home.
- . 2021. New Jersey 2020 Impaired Waters List. <u>https://www.epa.gov/tmdl/new-jersey-impaired-waters-list</u>.
- . 2009. Environmental Impact and Benefits Assessment for Final Effluent Guidelines and Standards for the Construction and Development Category. <u>https://www.epa.gov/eg/construction-and-development-effluent-guidelines-documents</u>.

- . 2005. Introduction to Hazardous Waste Identification (40 CFR Parts 261). September 2005. https://www.epa.gov/sites/production/files/2015-09/documents/hwid05.pdf
- U.S. Fish and Wildlife Service (USFWS) 2022a. "Coastal Barrier Resources Units Mapper." Accessed July 13, 2022. <u>https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/</u>.
- U.S. Fish and Wildlife Service (USFWS). 2022b. "National Wetlands Inventory Mapper." Accessed July 29, 2022. <u>https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/</u>.
- United States Geological Service (USGS). 2022. "National Water Dashboard. National Hydrography Dataset." Accessed July 2022. <u>https://dashboard.waterdata.usgs.gov</u>.
- _____. 2014. "Frequency of Damaging Earthquake Shaking around the U.S." Accessed July 13, 2022. <u>https://www.usgs.gov/media/images/frequency-damaging-earthquake-shaking-around-us</u>.

Appendix A Figures



Figure 1: Project Location



Figure 2: Project Site



Figure 3: Hydrography Map



Figure 4: National Wetlands Inventory and Delineated Wetlands Map



Figure 5: Floodplain Map



Figure 6: Census Block Groups Map



Figure 7: Land Use Map



Figure 8: Emergency Services Map

Appendix B Documents

Appendix B, Document 1

Freehold Soil Conservation District Certification Letter

FREEHOLD SOIL CONSERVATION DISTRICT



(Serving Middlesex and Monmouth Counties)

4000 Kozloski Road, P.O. Box 5033 Freehold, New Jersey 07728-5033 Tel: (732) 683-8500 Fax: (732) 683-9140 E-mail: info@freeholdscd.org Website: www.freeholdsoil.org **8/16/21**

TWO RIVERS WATER RECLAMATION AUTHORITY 1 HIGHLAND AVENUE MONMOUTH BEACH NJ 07750

Ref.#: 2021-0604 Proj.: TRWRA PLEASURE BAY MAIN PUMP STATION REPLACEMENT Twp. : MONMOUTH BEACH Block: UTL Lots : UTL

CERTIFICATION LETTER

Pursuant to the New Jersey Soil Erosion and Sediment Control Act; N.J.S.A. 4:24-39 et. seq., Chapter 251, P.L. 1975 and as amended by C. 264, P.L. 77 and C. 459, P.L. 79, the Freehold Soil Conservation District hereby grants certification of the soil erosion and sediment control plan for the above referenced project, subject to the following:

- 1. That the applicant carries out all land disturbance activities in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, promulgated by the State Soil Conservation Committee.
- The owner/applicant must obtain a District issued Report of Compliance prior to the issuance of any Certificates of Occupancy by the municipality.
- 3. Changes in the certified plan relating to, or that will affect land disturbance on the site, must be submitted to the District office for certification.
- 4. The owner / applicant must notify the District forty-eight (48) hours prior to any land disturbing activity.

A copy of the certified plan must be kept on the job site at all times.

This plan certification is valid for 3 ½ years (**valid until 2/16/2025**), and is limited to the controls specified in this plan. It is not authorization to engage in proposed land use unless the municipality or other controlling agency has previously approved such use. Failure to comply with the above conditions may result in the issuance of a **STOP CONSTRUCTION ORDER**.

Sincerely,

Ines M. Zimmerman

District Manager

cc: Planning Board Construction Official Municipal Engineer Applicant's Engineer

STATE DEPARTMENT OF AGRICULTURE, STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION, RUTGERS SCHOOL OF ENVIRONMENTAL AND BIOLOGICAL SCIENCES AND UNITED STATES NATURAL RESOURCES CONSERVATION SERVICE, COOPERATING

FREEHOLD SOIL CONSERVATION DISTRICT

(Serving Middlesex and Monmouth Counties)

4000 Kozloski Road, P.O. Box 5033 Freehold, New Jersey 07728-5033 Tel: (732) 683-8500 Fax: (732) 683-9140 E-mail: info@freeholdscd.org Website: www.freeholdsoil.org

TWO RIVERS WATER RECLAMATION AUTHORITY 1 HIGHLAND AVENUE

New Jersey Natural Resources

Conservation Program

MONMOUTH BEACH NJ

8/16/2021

Ref.#: 2021-0604 Proj.: TRWRA PLEASURE BAY MAIN PUMP STATION REPLACEMENT Twp. : MONMOUTH BEACH Block: UTL Lots.: UTL Acres: 6.99

SCD Certification Code: OWBZLYEYYH

07750

Dear TWO RIVERS WATER RECLAMATION AUTHORITY

The project referenced above requires an authorization to discharge stormwater be obtained under NJ Pollutant Discharge Elimination System (MJPDES), Stormwater Construction General Permit No.NJG0088323 (5G3) pursuant to N.J.A.C. 7:14-1.2 prior to beginning construction. It is required that you submit a Request for Authorization (RTA) and process payment electronically utilizing the NJ Department of Environmental Protection (NJDEP) Stormwater Construction Activity E-Permitting System.

In order to access the E-Permitting system, you must first become a registered user of NJDEP online at <u>http://www.nj.gov/dep/online</u>. A certification PIN will be generated and e-mailed to you. Once registered, you may file for a RTA online on the screen titled "SCD Certified Plan" by entering the reference number and the SCD certification code provided above. Please note: the certification code is case sensitive.

If you have any questions regarding this information or any other aspect of the E-Permitting system, please contact, Daniel Kuti, NJDEP Bureau of Nonpoint Pollution Control at (609) 633-7021 or via email at PortalComments@dep.state.nj.us

STATE DEPARTMENT OF AGRICULTURE, STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION, RUTGERS SCHOOL OF ENVIRONMENTAL AND BIOLOGICAL SCIENCES AND UNITED STATES NATURAL RESOURCES CONSERVATION SERVICE, COOPERATING

Appendix B, Document 2

USACE Nationwide Permit



REGULATORY BRANCH

SUBJECT: Department of the Army Permit Application File Number NAN-2021-00725-EMI by Two Rivers Water Reclamation Authority for a Sanitary Sewer Interceptor Main Pipe beneath Pleasure Bay between Monmouth Beach and Oceanport, Monmouth County, New Jersey

 PERMITTEE: Two Rivers Water Reclamation Authority Attn: Michael Gianforte
 Highland Avenue Monmouth Beach, New Jersey 07750 (732) 229-8578

2. On June 3, 2021, the New York District of the U.S. Army Corps of Engineers received a request for Department of the Army authorization from Two Rivers Water Reclamation Authority (TRWRA) to construct via tunneling a new eight-foot-diameter tunnel containing an approximately 54-inch diameter sanitary sewer interceptor pipe between the existing pump station in Oceanport and the Main Pump Station in Monmouth Beach which is being relocated to a higher elevation. The pipe is proposed to be approximately 3,293 feet long of which approximately 2,154 linear feet will be located beneath Pleasure Bay with the top of the tunnel at approximately -78.7 feet NAVD88. There will be a minimum of 66.4 feet of coverage as measured from the top of the tunnel to the authorized depth of the Shrewsbury River Federal Navigation Channel and a minimum of 67.5 feet of coverage as measured from the top of the tunnel to the existing grade. The construction reception shafts for the tunnel will be located in the upland. The existing 48-inch diameter interceptor pipe between the existing facilities will be abandoned in place.

3. The specific applicant-provided details are as shown on the attached permit drawings titled "Pleasure Bay Crossing and Main Pump Station Replacement" dated, May 27, 2021, prepared by French & Parello Associates.

4. This determination covers only the work described in the submitted material. Any major changes in the project may require additional authorizations from the New York District of the U.S. Army Corps of Engineers.

5. Based on the information submitted to this office and accomplishment of any required notification in accordance with the applicable federal requirements, our review of the subject work indicates that an individual Department of the Army permit is not required. It appears that the activities within the jurisdiction of this office could be accomplished under Department of the Army Nationwide General Permit Number 58 UTILIY LINE ACTIVITIES FOR WATER AND OTHER SUBSTANCES; in accordance with Section 10 of the Rivers and Harbors Act (33 USC 403). The nationwide permits are prescribed as a Reissuance

REGULATORY BRANCH

SUBJECT: Department of the Army Permit Application File Number NAN-2021-00725-EMI by Two Rivers Water Reclamation Authority for a Sanitary Sewer Interceptor Main Pipe beneath Pleasure Bay between Monmouth Beach and Oceanport, Monmouth County, New Jersey

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of Nationwide Permits in the Federal Register dated January 13, 2021 (86 FR 2744). The subject work may be performed without further authorization from this office provided it complies with Number 58 UTILIY LINE ACTIVITIES FOR WATER AND OTHER SUBSTANCES; New York District regional conditions; the following work-specific Special Conditions listed below; and any applicable regional conditions added by the State of New Jersey.

6. Other than the work-specific Special Conditions listed below, the 2021 nationwide general permits in the State of New Jersey, including their final regional conditions, water quality certifications, and coastal zone concurrence statements are available at:

https://www.nan.usace.army.mil/Missions/Regulatory/Nationwide-Permits/

If you require a specific paper copy, please contact our Regulator-of-the-Day at 917-790-8511 to request one be mailed to you. Please be sure to have the above eighteen-character file number readily available when you call.

7. Work-specific Special Conditions:

(A) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

(B) The permittee shall sign and submit the attached compliance certification form to this office **within 30 days of COMPLETION** of the regulated activity authorized by this permit and any mitigation work required by Special Condition.

(C) The permittee, and their agents, shall take actions to prevent construction materials, including debris, from entering any waterway to become drift or pollution hazards.

8. This verification is valid until <u>March 14, 2026</u>, unless the nationwide permit is modified, reissued, or revoked. This verification will remain valid until <u>March 14, 2026</u>, if the activity complies with the terms of any subsequent modifications of the nationwide permit authorization. If the nationwide permits are suspended, revoked, or modified in such a way that the activity would no longer comply with the terms and conditions of a nationwide permit, and the proposed activity has commenced, or is under contract to commence, the

REGULATORY BRANCH

SUBJECT: Department of the Army Permit Application File Number NAN-2021-00725-EMI by Two Rivers Water Reclamation Authority for a Sanitary Sewer Interceptor Main Pipe beneath Pleasure Bay between Monmouth Beach and Oceanport, Monmouth County, New Jersey

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permittee shall have 12 months from the date of such action to complete the activity.

9. In order for us to better serve you and others, please complete our Customer Service Survey located at:

http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx

10. Any inquiries should be directed to our Regulator-of-the-Day at 917-790-8511. Please be sure to have the above eighteen-character file number readily available when you call.

FOR AND IN BEHALF OF Ronald R. Pinzon

Ronald R. Pinzon Chief, Eastern Section

Enclosures (2)

- 1. Dated Permit Drawings
- 2. Completion Form

USACE FILE: NAN-2021-00725-EMI



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April 19, 2022



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NATIONWIDE GENERAL PERMIT COMPLIANCE CERTIFICATION AND REPORT FORM

Permit File Number: <u>NAN-2021-00725-EMI</u> Permittee: <u>Two Rivers Water Reclamation Authority</u> Location: <u>1 Highland Avenue, Monmouth Beach, Monmouth County, New Jersey</u>

Date Permit Letter Issued: _____

Within 30 days of the completion of the activity authorized by this nationwide general permit and any mitigation required in the verification letter, please sign this certification and return it to the address at the bottom of this form.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the permit's terms and conditions you are subject to permit suspension, modification or revocation.

I hereby certify that the work authorized by the above referenced nationwide general permit has been completed in accordance with the terms and conditions of said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

FOLD THIS FORM INTO THIRDS, WITH THE BOTTOM THIRD FACING OUTWARD. TAPE IT TOGETHER AND MAIL TO THE ADDRESS BELOW OR FAX (212) 264-4260.

> PLACE STAMP HERE

DEPARTMENT OF THE ARMY NEW YORK DISTRICT CORPS OF ENGINEERS JACOB K. JAVITS FEDERAL BUILDING ATTN: CENAN-OP-RE NEW YORK, NEW YORK 10278-0090

Appendix B, Document 3

8-step Wetland and Floodplain Review

EXECUTIVE ORDER 11988 EXECUTIVE ORDER 11990

FLOODPLAIN MANAGEMENT and WETLAND PROTECTION CHECKLIST (44 CFR Part 9)

TITLE: Two Rivers Water Reclamation Authority – Main Pump Station

PROPOSED ACTION: The proposed project areas includes the below grade crossing of Pleasure Bay between Oceanport Borough and Monmouth Beach Borough, Monmouth County, New Jersey. The proposed project action consists of the replacement of the existing 48-IN-diameter PBI constructed of reinforced concrete with a new PBI, 54-IN-diameter and constructed of fiberglass-reinforced plastic expanding 3,250-FT long at depth 87-FT below water surface of Pleasure Bay. In addition, the project includes the construction of a new MPS station at the WWTP within flood zone X at 12-ft above elevation, three feet more than the 500-year flood elevation. The applicant plans to also construct a new MBI that would run from the existing MPS to the new MPS. Lastly, the existing MPS would be decommissioned and demolished.

APPLICABILITY: Actions which have the potential to affect floodplains or their occupants, or which are subject to potential harm by location in floodplains.

The proposed action could potentially adversely affect the floodplain or support floodplain development.
Remarks: The proposed action consist of the replacement of an existing 48-IN PBI crossing beneath Pleasure Bay with a new 54-IN PBI at depths approx. 87-FT below grade and the construction of a new MPS located within Flood Zone X. The existing pump station is located within flood zone AE; Therefore, it is unlikely that it will have any significant effect on the floodplain or increase development.
The proposed action could potentially be adversely affected by the floodplain.
Remarks: The proposed action is to replace the existing PBI with a larger sized-diameter and at depths 87-FT below grade

and to construct a new MPS within flood zone X.

IF ANSWER IS NO, CONTINUE TO STEP 4 THEN REVIEW IS COMPLETED, OTHERWISE CONTINUE WITH Step 1.

STEP NO. 1 Determine whether the proposed action is located in the 100-year floodplain, which includes the Coastal High Hazard Area (500-year floodplain for critical actions);

LOCATION (lat/long):

Site 1: Proposed New Main Pump Station – (40.337540, -73.992559) Site 2: Proposed Inlet Structure – (40.330358, -74.001195)

Action:

□NON-CRITICAL ◯CRITICAL

Review against 100 Year floodplain Review against 500 Year floodplain

Flood Hazard data available (check the box that applies)

FIOOU Hazaru uala avallable (Ci	leck the box that applies	
	The project is located in a 100 Year floodplain as mapped by:	
	FIRM Panel No. 34025C0184H (effective June 15, 2022) - Site 2	
	ABFE Map Zone EL	
	PRELIM Map Zone EL	
	Best Available Data Zone EL	
	The project is located in a 500 Year floodplain, as mapped by:	
	FIRM Panel No. 34025C0203G (effective June 20, 2018) - Site 1	
	ABFE Map ZoneEL	
	PRELIM Map ZoneEL	
⊠N/A □YES □NO	The project is located in a floodplain as mapped by another Agency (State, Corps, USGS, NRCS, local community, etc.) Agency Name Dated ,	
□N/A ⊠YES □NO	The project is outside the floodplain but has potential to affect floodplain, including support of floodplain development.	
Flood Hazard data not avail	able	
⊠N/A □YES □NO	The proposed action is subject to flooding based on evaluation from soil surveys, aerial photos, site visits and other available data. Evaluation material used in determination:	
□ N/A ⊠YES □ NO	FEMA assumes the proposed action is subject to flooding based upon previous flooding of the facility/structure.	
IF ANY OF THE ANSWERS ARE YES,	CONTINUE WITH THE REVIEW.	
FLOODWAY/COASTAL H	IIGH HAZARD ZONE (V / VE Zone)	
YES NO The proposed	action is located in a floodway or coastal high hazard area (full 8	
step pr	ocess is required).	
Source	, other than FIRM:	
☐YES ⊠NO Is the Proje	ct located in a WETLAND?	
Classification code: N/A		
REVIEW CRITERIA: Determine	the applicable review steps required	
☐ 1,4,5,8 (44 CFR Part 9.5 (g)) ☐ 1,2,4,5,8 (44 CFR Part 9.5 (d)) ⊠ All steps		

STEP NO. 2 Notify the public at the earliest possible time of the intent to carry out an action in a floodplain, and involve the affected and interested public in the decision-making process.

Notice was provided as part of a disaster cumulative notice. Project Specific Notice was provided by: FEMA Type of Public Notice:



Date of Public Notice: 04/13/2020 and 04/25/2020

STEP NO. 3 Identify and evaluate practicable alternatives to locating the proposed action in a floodplain (including alternatives sites, actions and the "no action" option). If a practicable alternative exists outside the floodplain, FEMA must locate the action at the alternative site.

Alternative Options

	Is there a practicable alternative site location outside of the 100- Year floodplain or wetland? Site location:
□N/A □YES ⊠NO	For Critical Actions, is there a practicable alternative site location outside of the 500-Year floodplain? Site location:
	Is there a practicable alternative action outside of the 100-Year floodplain or wetland that will not affect the floodplain or wetland?
	Alternative action: The proposed project action to construct a new MPS will be within flood zone X
□YES ⊠NO	Is the practicable alternative action for restoration of the facility, including applicable codes, standards, and conditions with requirements of EO 11988 and the implementing requirements of 44 CFR Part 9?
	Alternative action:
	Is the No Action alternative the most practicable alternative?

Remarks: The proposed project areas are to be constructed outside the 500year flood zone and 87-ft below surface water.

IF ANY ANSWER IS YES, THEN FEMA SHALL TAKE THAT ACTION.

FLOODWAY

iffany Alves, Environmental Specialist	Date:10/05/2022				
□N/A ⊠YES □NO	Is the action new construction (i.e. construction of new structure, demolition/ rebuilding, reconstruction, replacement) or substantial improvement (for structures damaged in equal or excess of 50% of its market value or the total replacement cost of the structure)?				
□N/A ⊠YES □NO	If Yes, is the action a functional dependent use (cannot perform its intended purpose unless it is located or carried out in close proximity to water) or a facility or structure that facilitates open space use?				
If Yes, explain: The proposed project action is to replacement and upgrade to Codes & Standards an existing sewer system line and its components. The components are proposed to be constructed 12-FT above elevations, approximately 3-ft higher than the current 0.2% chance flood elevation of 8 0 ft					
<u>lf No, FEMA cann</u>	ot fund this action.				
⊠N/A □YES □NO	Is the action an alteration of a structure or facility listed on the National Register of Historic Places or a State Inventory of Historic Places?				
	If Yes, then this is not substantial improvement and the action may proceed as long as it does not cause any increase of flood levels within the community during the occurrence of the base flood discharge.				
COASTAL HIGH HAZARD ZONE (V / VE Zone)					
□N/A ⊠YES □NO	Is the action new construction (i.e. construction of new facility or structure, demolition/ rebuilding of facilities or structures, reconstruction of facilities or structures, replacement of facilities or structures)?				
□N/A ⊠YES □NO	If Yes, is the action a functional dependent use (cannot perform its intended purpose unless it is located or carried out in close proximity to water) or a facility or structure that facilitates open space use?				

If Yes, explain: Aspects of the proposed project areas and scope of work consist adjacent to or within a proximity to water, specifically Pleasure Bay and depth below surface water.

If No, FEMA cannot fund this action.

STEP NO. 4 Identify the potential direct and indirect impacts associated with the occupancy or modification of floodplains and the potential direct and indirect support of floodplain development that could result from the proposed action. 44CFR Part 9.10

Is the Proposed Action based on incomplete information?
Is the proposed action in compliance with the NFIP?
Does the proposed action increase the risk of flood loss?
Has the facility been damaged before from a Presidentially declared flooding event?

	Will the proposed action result in an increased base discharge or increase the flood hazard potential to other properties or structures?
	Does the proposed action minimize the impact of floods on human health, safety and welfare?
	Will the proposed action induce future growth and development, which will potentially adversely affect the floodplain?
	Does the proposed action involve dredging and/or filling of a floodplain?
	Will the proposed action result in the discharge of pollutants into the floodplain?
	Does the proposed action avoid long, and short-term adverse impacts associated with the occupancy and modification of floodplains?
	Will the proposed action result in any indirect impacts that will affect the natural values and functions of floodplains?
	Will the proposed action forego an opportunity to restore the natural and beneficial values served by floodplains?
	Does the proposed action restore and/or preserve the natural and beneficial values served by floodplains?
	Will the proposed action result in an increase to the useful life of a structure or facility?
	Will the action encroach on the Floodway in manner that causes any increase of flood levels within the community during the occurrence of the base flood discharge?
Remarks: N/A	

STEP NO. 5 Minimize the potential adverse impacts and support to or within floodplains to be identified under Step 4, restore and preserve the natural and beneficial values served by floodplains.

	• •
	Were avoidance and minimization measures applied to the proposed action in the Scope of Work to minimize the short- and long-term impacts on the floodplain?
	Was Mitigation considered for this project?
YES NO	Were flood hazard reduction techniques (see technical bulletins) applied to the proposed action in the Scope of Work to minimize the flood impacts if site location is in the 100-Year floodplain (500-Year floodplain for critical actions)? If yes, identify Mitigation measures identified: The new MPS station is proposed to be constructed 12-FT above elevations, approximately 3-ft higher than the current 0.2% chance flood elevation
□N/A ⊠YES □ NO	Are new construction or substantial improvement of structures, except for listed Historic Structures, elevated or flood proofed (non-residential) to the level of the base flood (500 year flood for critical actions)?

⊠N/A □YES □NO	If No, has the community granted a variance consistent with 44 CFR 60.6(a)?
⊠N/A ⊠YES ⊡NO	Are elevated structures designed to be elevated on open works
	(walls, columns, piers, etc.) rather than on fill in coastal high hazard areas and elsewhere where practicable?
	Is the proposed action consistent with the criteria of the National Flood Insurance Program or any more restrictive Federal, State, or local floodplain management standards?
	Were measures implemented to minimize flood impacts on human health, safety, and welfare?
	If No, identify measures required as a condition of the grant:
	For actions involving the replacement of building contents, were measures implemented to minimize future losses?
	If No, identify measures required as a condition of the grant:
	Were measures implemented to restore and preserve the natural and beneficial values of the floodplain or wetland.
	If No, identify measures required as a condition of the grant:
FLOODWAY/COASTAL	HIGH HAZARD ZONE 🛛 N/A
	Is there a practicable alternative site location or action outside of the Floodway (but within the floodplain)?
	Site location:
∐YES ∐NO	Can the facility be relocated outside of the floodplain in a manner that will not affect the Floodway or CHHA?
	Alternative action:
⊠N/A ∐YES ∐NO	Has any action in the floodway been designed such that the action will not result in any increase in flood levels within the community during the base flood?
⊠N/A □YES □NO	Are functionally dependent new construction in the CHHA elevated on adequately anchored pilings or columns such that lowest portion of the structural members of the lowest floor are above base flood elevation.
	The use of fill for elevation is prohibited in the CHHA.
Remarks:	

STEP NO. 6 Reevaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain values and second, if alternatives preliminarily rejected at Step 3 are practicable in light of the information gained in Steps 4 and 5. FEMA shall not act in a floodplain unless it is the only practicable location.

The action is still practicable at a floodplain or wetland site in light of the exposure to flood risk and ensuing disruption of natural values;
The floodplain or wetland site is the only practicable alternative.
There is no potential for limiting the action to increase the practicability of previously rejected non-floodplain or wetland sites and alternative actions.
Minimization of harm to or within the floodplain can be achieved using all practicable means.
The action in a floodplain or wetland clearly outweighs the requirement of E.O. 11988.
Note: Careful consideration needs to be applied for facilities repetitively damaged.

Remarks:

IF ANY ANSWER IS NO, THEN FEMA SHALL NOT TAKE THE ACTION AND THE REVIEW IS CONCLUDED.

STEP NO. 7 Prepare and provide the public with a finding and public explanation of any final decision that the floodplain is the only practicable alternative.

Final Notice was provided as part of the floodplain notice. See EO 11988 checklist. Notice was provided as part of a disaster cumulative notice.

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Project Specific Notice was provided by: FEMA

Type of Public Notice:

Newspaper, (name: Name of paper)

Post Site, (location:

Broadcast, (station:)

Direct Mailing, (area:

Public Meeting, (dates:)

Other:

Date of Public Notice: xx/xx/xxxx

Remarks: FEMA anticipates that signature of a finding of no significant impact for this action will serve as the final public, provided that there are no significant comments

After providing the final notice, FEMA shall, without good cause shown, wait at least 15 days before carrying out the proposed action.

STEP NO. 8 Review the implementation and post - implementation phases of the proposed action to ensure that the requirements stated in Section 9.11 are fully implemented. Oversight responsibility shall be integrated into existing processes.



Was Grant conditioned on review of implementation and postimplementation phases to insure compliance of EO 11988?

The following conditions are not reflected in the Scope of Work and are required:

Appendix B, Document 4

NJDEP WFD IP-Commercial/Industrial/Public (Waterward) Permit

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION WATERSHED & LAND MANAGEMENT



Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420 Telephone: (609) 777-0454 or Fax: (609) 777-3656

www.nj.gov/dep/landuse



PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the terms, conditions, and limitations listed below and on the attached			Approval Date August 19, 2021
pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition, or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.			Expiration Date August 18, 2026
Permit Number(s):	Type of Appro	oval(s):	Governing Rule(s):
1300-21-0004.1 LUP210002	WFD IP-Commercial/Industrial/Public(Waterward) Water Quality Certificate		N.J.A.C. 7:7-1.1(a)
Permittee.		Site Location:	
Permittee: Michael Gianforte Two Rivers Water Reclamation Authority 1 Highland Avenue Monmouth Beach, NJ 07750		Block(s) & Lot(s): [40, 12.01] [40, 5 7] [39, 1] Municipality: Monmouth Beach Bord County: Monmouth	57.01] [40, 59] [42.05, 36] [38, ough and Oceanport Borough
Description of Authorized Activities: This document authorizes the installation of a new sewer line at and below the mean high water line of Pleasure Bay, which will be installed via tunneling, in association with the public development, on the parcels referenced above This permit is not valid until such time as you have obtained a Department of the Army authorization.			
Bureau of Tidelands. This permit is authorized under and in compliance with the Rules on Coastal Zone Management, N.J.A.C. 7:7-1.1 et seq., as amended through July 8, 2021. This authorization includes a Water Quality Certificate for the approved activities			
located at or below the mean high v	vater line.		TT
The Department has determined that the herein approved activities meet the requirements of the (FHACA/CZM) rules. This approval does not obviate the local Floodplain Administrator's responsibility to ensure all development occurring within their community's Special Flood Hazard Area is compliant with the local Flood Damage Prevention Ordinance, and minimum NFIP standards, regardless of any state-issued permits. FEMA requires communities to review and permit all proposed construction or other development within their SFHA in order to participate in the NFIP.			
Prepared by:			Received and/or Recorded by
Kara Turner			County Clerk:
If the permittee undertakes any regulated activity, project, or development authorized under this permit, such action shall constitute the permittee's acceptance of the permit in its entirety as well as the permittee's agreement to abide by the requirements of the permit and all conditions therein.			

This permit is not valid unless authorizing signature appears on the last page.

STATEMENT OF AUTHORIZED IMPACTS:

The authorized activities allow for the permittee to undertake impacts to regulated areas as described herein. Additional impacts to regulated areas without prior Department approval shall constitute a violation of the rules under which this document is issued and may subject the permittee and/or property owner to enforcement action, pursuant to N.J.A.C. 7:7-2.1.

PRE-CONSTRUCTION CONDITIONS:

- 1. This permit is not valid until such time as you have obtained a Department of the Army authorization. You are advised to contact the Philadelphia District at 215-656-6728 if your project is located south of the Manasquan River or the New York District at 212-264-3912 if your project is located north of the Manasquan River.
- 2. Prior to site preparation and within 90 days of the date of this permit, the applicant shall apply for a tideland's grant, lease or license from the Bureau of Tidelands.

SPECIAL CONDITIONS:

- 1. To protect sensitive habitat for the State-listed Osprey, the permittee shall adhere to a seasonal restriction on the use of heavy construction equipment/machinery within 300 meters of any active osprey nest along the project limit of disturbance from April 1 through August 31 of each calendar year. The initiation and implementation of work which generates disturbance (e.g., sound levels, visual interruption) that is out of character with what currently exists at or surrounding the anticipated work area during the restricted time period recommended above may result in the permittee being in violation of the "take" clause within State of New Jersey Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1). Please note that adherence to this seasonal restriction shall also be applied if nest building activity is observed at any given osprey nest location prior to April 1 of the given calendar year of work.
- 2. A Frac-Out Contingency Plan must be in place for the prevention, containment and clean-up of fracouts associated with the tunneling project.
- 3. The staging area and construction equipment shall not be placed directly into the tidal water.
- 4. All underground cutting agents/lubricants shall be contained and properly disposed.

STANDARD CONDITIONS:

- 1. The issuance of a permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction or structure(s). Neither the State nor the Department shall, in any way, be liable for any loss of life or property that may occur by virtue of the activity or project conducted as authorized under a permit.
- 2. The issuance of a permit does not convey any property rights or any exclusive privilege.
- 3. The permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit.
- 4. A permittee conducting an activity involving soil disturbance, the creation of drainage structures, or changes in natural contours shall obtain any required approvals from the Soil Conservation District or designee having jurisdiction over the site.

- 5. The permittee shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit.
- 6. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of the permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.
- 7. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (WARN DEP hotline) of any noncompliance that may endanger public health, safety, and welfare, or the environment. The permittee shall inform the Watershed & Land Management by telephone at (609) 777-0454 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:
 - i. A description of the noncompliance and its cause;
 - ii. The period of noncompliance, including exact dates and times;
 - iii. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and
 - iv. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- 8. Any noncompliance with a permit constitutes a violation of this chapter and is grounds for enforcement action, as well as, in the appropriate case, suspension and/or termination of the permit.
- 9. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of the permit.
- 10. The permittee shall employ appropriate measures to minimize noise where necessary during construction, as specified in N.J.S.A. 13:1G-1 et seq. and N.J.A.C. 7:29.
- 11. The issuance of a permit does not relinquish the State's tidelands ownership or claim to any portion of the subject property or adjacent properties.
- 12. The issuance of a permit does not relinquish public rights to access and use tidal waterways and their shores.
- 13. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:
 - i. Enter upon the permittee's premises where a regulated activity, project, or development is located or conducted, or where records must be kept under the conditions of the permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit; and

- iii. Inspect, at reasonable times, any facilities, equipment, practices, or operations regulated or required under the permit. Failure to allow reasonable access under this paragraph shall be considered a violation of this chapter and subject the permittee to enforcement action.
- 14. The permittee shall not cause or allow any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris or structures within or adjacent to the channel while the regulated activity, project, or development is being undertaken. Upon completion of the regulated activity, project, or development, the permittee shall remove and dispose of in a lawful manner all excess materials, debris, equipment, and silt fences and other temporary soil erosion and sediment control devices from all regulated areas.
- 15. The permittee and its contractors and subcontractors shall comply with all conditions, site plans, and supporting documents approved by the permit.
- 16. All conditions, site plans, and supporting documents approved by a permit shall remain in full force and effect, so long as the regulated activity, project, or development, or any portion thereof, is in existence, unless the permit is modified pursuant to the rules governing the herein approved permits.
- 17. The permittee shall perform any mitigation required under the permit in accordance with the rules governing the herein approved permits.
- 18. If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment.
- 19. Any permit condition that does not establish a specific timeframe within which the condition must be satisfied (for example, prior to commencement of construction) shall be satisfied within six months of the effective date of the permit.
- 20. A copy of the permit and all approved site plans and supporting documents shall be maintained at the site at all times and made available to Department representatives or their designated agents immediately upon request.
- 21. The permittee shall provide monitoring results to the Department at the intervals specified in the permit.
- 22. A permit shall be transferred to another person only in accordance with the rules governing the herein approved permits.
- 23. A permit can be modified, suspended, or terminated by the Department for cause.
- 24. The submittal of a request to modify a permit by the permittee, or a notification of planned changes or anticipated noncompliance, does not stay any condition of a permit.
- 25. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information.
- 26. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, PO Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.

- 27. The permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to Watershed & Land Management at the address listed on page one of this permit.
- 28. This permit is issued subject to compliance with N.J.A.C. 7:7-27.2 Conditions that apply to all coastal permits.

APPROVED PLAN(S):

The drawing(s) hereby approved consist of five (5) sheet(s) prepared by French & Parrello Associates, dated June 10, 2020, unrevised and entitled: "WATERFRONT DEVELOPMENT IN-WATER INDIVIDUAL PERMIT PLAN FOR PLEASURE BAY CROSSING AND MAIN PUMP STATION REPLACEMENT BLOCK 38 LOT 7; BLOCK 39 LOT 1 (OCEANPORT) BLOCK 40 LOTS 12.01, 57.01 & 59 (MONMOUTH BEACH) BOROUGH OF OCEANPORT AND MONMOUTH BEACH MONMOUTH COUNTY NEW JERSEY", sheets 1 through 5.

APPEAL OF DECISION:

Any person who is aggrieved by this decision may submit an adjudicatory hearing request within 30 calendar days after public notice of the decision is published in the DEP Bulletin (available at www.nj.gov/dep/bulletin). If a person submits the hearing request after this time, the Department shall deny the request. The hearing request must include a completed copy of the Administrative Hearing Request Checklist (available at www.nj.gov/dep/landuse/forms.html). A person requesting an adjudicatory hearing shall submit the original hearing request to: NJDEP Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, Mail Code 401-04L, P.O. Box 402, 401 East State Street, 7th Floor, Trenton, NJ 08625-0402. Additionally, a copy of the hearing request shall be submitted to the Director of Watershed & Land Management at the address listed on page one of this permit. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see www.nj.gov/dep/odr for more information on this process.

If you need clarification on any section of this permit or conditions, please contact Watershed & Land Management's Technical Support Call Center at (609) 777-0454.

Approved By:

Joanne B. Davis, Supervisor Watershed & Land Management

c: Municipal Clerk, Monmouth Beach Boro Municipal Construction Official, Monmouth Beach Boro Agent (original) – Bahram Farzaneh ACOE, NY District

Appendix B, Document 5

NJDEP Coastal Area Facility Review Act Individual Permit

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION WATERSHED & LAND MANAGEMENT



Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420 Telephone: (609) 777-0454 or Fax: (609) 777-3656 www.nj.gov/dep/landuse



PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the terms, conditions, and limitations listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition, or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.			Approval Date December 1, 2021 Expiration Date November 30, 2026
Permit Number(s):	umber(s): Type of Approval(s):		
1300-21-0004.1 LUP210001	TAW - Special Activity Linear Development FWW GP2 Underground Utility Lines CAFRA Individual Permit- Commercial/Industry/Public Water Quality Certificate		N.J.A.C. 7:7-1.1(a) N.J.A.C. 7:7A-1.1(a)
Permittee:		Site Location:	
Michael GianforteBlock(s) & Lot(s): [40Two Rivers Water Reclamation Authority36] [38, 7] [39, 1]1 Highland AvenueMunicipality: MonmouthMonmouth Beach, NJ 07750BoroughCounty: Monmouth			01] [40, 57.01] [40, 59] [42.05, Beach Borough and Oceanport
Description of Authorized Activities: This document authorizes the removal and reconstruction of the main pump station to higher elevation within the sewerage treatment plant facility, construction of a new sewer interceptor and the extension of the an existing interceptor, in association with a public development on the parcel(s) referenced above.			
This permit is authorized under and in compliance with the Rules on Coastal Zone Management, N.J.A.C. 7:7-1.1 et seq., as amended through July 8, 2021, the Freshwater Wetlands Protection Act Rules, N.J.A.C. 7:7-7A-1.1 et. seq., as amended through October 5, 2020, and includes a Water Quality Certificate for the approved activities.			
The Department has determined that the herein approved activities meet the requirements of the (FHACA/CZM) rules. This approval does not obviate the local Floodplain Administrator's responsibility to ensure all development occurring within their community's Special Flood Hazard Area is compliant with the local Flood Damage Prevention Ordinance, and minimum NFIP standards, regardless of any state-issued permits. FEMA requires communities to review and permit all proposed construction or other development within their SFHA in order to participate in the NFIP.			
Prepared by: Received and/or Recorded by			
Kara Turner County Clerk:			County Clerk:
If the permittee undertakes any regulated activity, project, or development authorized under this permit, such action shall constitute the permittee's acceptance of the permit in its entirety as well as the permittee's agreement to abide by the requirements of the permit and all conditions therein.			
This permit is not valid unless authorizing signature appears on the last page.			

STATEMENT OF AUTHORIZED IMPACTS:

The authorized activities allow for the permittee to undertake impacts to regulated areas as described below. Additional impacts to regulated areas without prior Department approval shall constitute a violation of the rules under which this document is issued and may subject the permittee and/or property owner to enforcement action, pursuant to N.J.A.C. 7:7-2.1; N.J.A.C. 7:7A-19.11.

FWW GP2 Underground	Permanent Disturbance	Temporary Disturbance
Utility Lines	(Acres)	(Acres)
Transition areas	0.040	0.041

TAW - Special Activity	Permanent Disturbance	Temporary Disturbance
Linear Development	(Acres)	(Acres)
Transition areas	0	0.327

Riparian Zone Vegetation	Area of riparian zone (Acres)
Permanent Disturbed	0.339
Temporary Disturbed	1.55

PRE-CONSTRUCTION CONDITIONS:

1. Prior to the commencement of site clearing, grading or construction, the permittee shall have a silt fence or sediment barrier erected at the limits of disturbance authorized herein. The fence shall serve as both a siltation and debris barrier as well as a physical barrier protecting the wetland, water areas and modified transition area from encroachment by construction vehicles or activities. The fence shall be kept in place and maintained throughout the duration of construction, until such time that the site is stabilized. No regulated activities, including grading or clearing may occur in the wetland or modified transition area on site without the prior approval of the Department.

SPECIAL CONDITIONS:

- 1. To protect sensitive habitat for the State-listed Osprey, the permittee shall adhere to a seasonal restriction on the use of heavy construction equipment/machinery within 300 meters of any active osprey nest along the project limit of disturbance from April 1 through August 31 of each calendar year. The initiation and implementation of work which generates disturbance (e.g., sound levels, visual interruption) that is out of character with what currently exists at or surrounding the anticipated work area during the restricted time period recommended above may result in the permittee being in violation of the "take" clause within State of New Jersey Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1). Please note that adherence to this seasonal restriction shall also be applied if nest building activity is observed at any given osprey nest location prior to April 1 of the given calendar year of work.
- 2. All temporary disturbances must be permanently discontinued within six months after they are begun, and all temporary disturbed areas must be restored to their original condition.
- 3. The wetlands/waters affected by this permit authorization are of Intermediate resource value. The standard transition area or buffer required adjacent to these wetlands/waters is 50-ft. This general

permit includes a transition area waiver, which allows encroachment only in that portion of the transition area, which has been determined by the Department to be necessary to accomplish the regulated activities. Any additional regulated activities conducted within the standard transition area on-site shall require a separate transition area waiver from the Division. Regulated activities within a transition area are defined at N.J.A.C. 7:7A-2.3. Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules (N.J.A.C. 7:7A) for additional information.

- 4. These authorizations for General Permits are valid for a term not to exceed five years from the date of this letter. If the permittee wishes to continue an activity covered by the permit after the expiration date of the permit, the permittee must apply for and obtain a permit extension or a new permit, prior to the permit's expiration. If the term of the authorization exceeds the expiration date of the general permit issued by rule, and the permit upon which the authorization is based is modified by rule to include more stringent standards or conditions, or is not reissued, the applicant must comply with the requirements of the new regulations by applying for a new GP authorization or an Individual permit.
- 5. Construction equipment shall not be stored, staged or driven within any channel, freshwater wetland or transition area, unless expressly approved by this permit and/or described on the approved plans.
- 6. Vegetation within 300 feet of the top of the bank, or edge of water shall only be disturbed in the areas specifically shown on the approved drawing(s). No other vegetation within 300 feet of the top of any stream bank, or edge of water, onsite shall be disturbed for any reason. This condition applies to all channels onsite regardless of the contributory drainage area.
- 7. Upon completion of the project, all temporarily disturbed areas within 300 feet of the top of any stream bank, or edge of water, onsite shall be restored to original topography and replanted with indigenous, non-invasive vegetation.
- 8. All excavated material shall be disposed of in a lawful manner. For example, it should be placed outside of any flood hazard area, riparian zone, regulated water, freshwater wetland and adjacent transition area, and in such a way as to not interfere with the positive drainage of the receiving area.
- 9. The Department has determined that this project meets the requirements of the Stormwater Management rules at N.J.A.C. 7:8 without the construction of a Green Infrastructure BMP. Any future expansion or alteration of the approved stormwater management system, which would affect water quality, increase the rate or volume of stormwater leaving the site, affect the infiltration capacity on the site, or alter the approved site design, shall be reviewed and approved by the Department prior to construction. This includes any proposed changes to the discharge characteristics of any basin, the construction of new inlets or pipes that tie into the storm sewer network and/or the replacement of existing inlets or pipes with structures of different capacity.
- 10. The decision to grant this permit did not include a structural review of the proposed activities with regard to the International Building Code; nor did it include a comparative review of any local flood ordinances which may apply. As such, the proposed structure/s may not fully comply with the provisions of the International Building Code or meet the requirements of the appropriate local flood ordinances. Consequently, the construction official for the municipality in which this project is located may reserve the right to modify the design of, or deny the erection of those structures which do not meet the appropriate flood ordinances or construction codes which are within local jurisdiction.
- 11. The floor elevation(s) of 12 feet, as shown on the approved drawing(s) is the elevation of the lowest finished floor of the proposed building(s). The construction of any habitable area below this elevation, such as a basement, is prohibited.

- 12. All foundations, slabs, footings and walls of the proposed structure/s shall be designed to resist uplift, flotation, collapse and displacement due to hydrostatic and hydrodynamic forces resulting from flooding up to an elevation of one foot above the flood hazard area design flood elevation. Furthermore, all structural components shall be designed to resist the same forces.
- 13. If a geodetic control reference marker is found on site and the position of the survey marker or monument cannot be protected, the applicant shall coordinate with the New Jersey Geodetic Control Survey (NJGCS) at least 60 days prior to disturbance to relocate the geodetic control marker to an appropriate location prior to construction. The impacted areas shall be restored to original grade and condition. The applicant shall contact NJGCS with any questions at (609) 530-5654.

STANDARD CONDITIONS:

- 1. The issuance of a permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction or structure(s). Neither the State nor the Department shall, in any way, be liable for any loss of life or property that may occur by virtue of the activity or project conducted as authorized under a permit.
- 2. The issuance of a permit does not convey any property rights or any exclusive privilege.
- 3. The permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit.
- 4. A permittee conducting an activity involving soil disturbance, the creation of drainage structures, or changes in natural contours shall obtain any required approvals from the Soil Conservation District or designee having jurisdiction over the site.
- 5. The permittee shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit.
- 6. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of the permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.
- 7. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (WARN DEP hotline) of any noncompliance that may endanger public health, safety, and welfare, or the environment. The permittee shall inform the Watershed & Land Management by telephone at (609) 777-0454 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:
 - i. A description of the noncompliance and its cause;
 - ii. The period of noncompliance, including exact dates and times;
 - iii. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and

- iv. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- 8. Any noncompliance with a permit constitutes a violation of this chapter and is grounds for enforcement action, as well as, in the appropriate case, suspension and/or termination of the permit.
- 9. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of the permit.
- 10. The permittee shall employ appropriate measures to minimize noise where necessary during construction, as specified in N.J.S.A. 13:1G-1 et seq. and N.J.A.C. 7:29.
- 11. The issuance of a permit does not relinquish the State's tidelands ownership or claim to any portion of the subject property or adjacent properties.
- 12. The issuance of a permit does not relinquish public rights to access and use tidal waterways and their shores.
- 13. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:
 - i. Enter upon the permittee's premises where a regulated activity, project, or development is located or conducted, or where records must be kept under the conditions of the permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - iii. Inspect, at reasonable times, any facilities, equipment, practices, or operations regulated or required under the permit. Failure to allow reasonable access under this paragraph shall be considered a violation of this chapter and subject the permittee to enforcement action; and
 - iv. Sample or monitor at reasonable times, for the purposes of assuring compliance or as otherwise authorized by the Federal Act, by the Freshwater Wetlands Protection Act, or by any rule or order issued pursuant thereto, any substances or parameters at any location.
- 14. The permittee shall not cause or allow any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris or structures within or adjacent to the channel while the regulated activity, project, or development is being undertaken. Upon completion of the regulated activity, project, or development, the permittee shall remove and dispose of in a lawful manner all excess materials, debris, equipment, and silt fences and other temporary soil erosion and sediment control devices from all regulated areas.
- 15. The permittee and its contractors and subcontractors shall comply with all conditions, site plans, and supporting documents approved by the permit.
- 16. All conditions, site plans, and supporting documents approved by a permit shall remain in full force and effect, so long as the regulated activity, project, or development, or any portion thereof, is in existence, unless the permit is modified pursuant to the rules governing the herein approved permits.
- 17. The permittee shall perform any mitigation required under the permit in accordance with the rules governing the herein approved permits.

- 18. If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment.
- 19. Any permit condition that does not establish a specific timeframe within which the condition must be satisfied (for example, prior to commencement of construction) shall be satisfied within six months of the effective date of the permit.
- 20. A copy of the permit and all approved site plans and supporting documents shall be maintained at the site at all times and made available to Department representatives or their designated agents immediately upon request.
- 21. The permittee shall provide monitoring results to the Department at the intervals specified in the permit.
- 22. A permit shall be transferred to another person only in accordance with the rules governing the herein approved permits.
- 23. A permit can be modified, suspended, or terminated by the Department for cause.
- 24. The submittal of a request to modify a permit by the permittee, or a notification of planned changes or anticipated noncompliance, does not stay any condition of a permit.
- 25. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information.
- 26. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, PO Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.

Additionally, the permittee shall notify the Department in writing (at the address listed on page one of this permit) within five working days prior to commencement of operation of a CAFRA individual permit. At this time, the permittee shall certify that all conditions of the permit that must be met prior to operation of the development have been met.

- 27. The permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to Watershed & Land Management at the address listed on page one of this permit.
- 28. This permit is issued subject to compliance with N.J.A.C. 7:7-27.2 <u>Conditions that apply to all coastal permits</u>.

APPROVED PLAN(S):

The drawings hereby approved consist of twelve sheets (12) sheets, four (4) sheets prepared by PS&S, dated April 2021 and unrevised, unless otherwise noted, entitled: "TWO RIVERS WATER

RECLAMATION AUTHORITY, MONMOUTH BEACH, NEW JERSEY, PLEASURE BAY CROSSING AND MAIN PUMP STATION REPLACEMENT",

"GRADING, DRAINAGE & UTILITY PLAN, SECTION A", sheet C27, dated December 2020, last revised October 2021, "GRADING, DRAINAGE & UTILITY PLAN, SECTION F", sheet C32, "GRADING, DRAINAGE & UTILITY PLAN, SECTION G", sheet C33 and "EXISTING VS. PROPOSED IMPERVIOUS AREA MAP, EXISTING PUMP STATION", sheet PDA-03, dated December 2020, revised April 2021.

Eight (8) sheet(s) prepared by French & Parrello Associates, dated June 10, 2020, last revised October 8, 2021, unless otherwise noted and entitled: "FRESHWATER WETLANDS PERMITS FOR PLEASURE BAY CROSSING AND MAIN PUMP STATION REPLACEMENT BLOCK 38 LOT 7; BLOCK 39 LOT 1 (OCEANPORT) BLOCK 40 LOTS 12.01, 57.01 & 59 (MONMOUTH BEACH) BOROUGH OF OCEANPORT AND MONMOUTH BEACH MONMOUTH COUNTY NEW JERSEY", sheets 1 through 4; and. "RIPARIAN ZONE DISTURBANCE PLAN FOR PLEASURE BAY CROSSING AND MAIN PUMP STATION REPLACEMENT BLOCK 38 LOT 7; BLOCK 39 LOT 1 (OCEANPORT) BLOCK 40 LOTS 12.01, 57.01 & 59 (MONMOUTH BEACH) BOROUGH OF OCEANPORT AND MONMOUTH BLOCK 38 LOT 7; BLOCK 39 LOT 1 (OCEANPORT) BLOCK 40 LOTS 12.01, 57.01 & 59 (MONMOUTH BEACH) BOROUGH OF OCEANPORT AND MONMOUTH BEACH MONMOUTH BEACH) BOROUGH OF OCEANPORT AND AND MONMOUTH BEACH MONMOUTH BEACH) BOROUGH OF OCEANPORT AND MONMOUTH BEACH MONMOUTH COUNTY NEW JERSEY", sheets 2, 3 and 4 last revised September 20, 2021.

APPEAL OF DECISION:

Any person who is aggrieved by this decision may submit an adjudicatory hearing request within 30 calendar days after public notice of the decision is published in the DEP Bulletin (available at www.nj.gov/dep/bulletin). If a person submits the hearing request after this time, the Department shall deny the request. The hearing request must include a completed copy of the Administrative Hearing Request Checklist (available at www.nj.gov/dep/landuse/forms.html). A person requesting an adjudicatory hearing shall submit the original hearing request to: NJDEP Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, Mail Code 401-04L, P.O. Box 402, 401 East State Street, 7th Floor, Trenton, NJ 08625-0402. Additionally, a copy of the hearing request shall be submitted to the Director of Watershed & Land Management at the address listed on page one of this permit. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see www.nj.gov/dep/odr for more information on this process.

If you need clarification on any section of this permit or conditions, please contact Watershed & Land Management's Technical Support Call Center at (609) 777-0454.

Approved By:

Joannes Davir

Digitally signed by Joanne B. Davis Date: 2021.12.01 09:47:29 -05'00'

Joanne B. Davis, Supervisor Watershed & Land Management

c: Municipal Clerk, Monmouth Beach Boro Municipal Construction Official, Monmouth Beach Boro Agent (original) – Bahram Farzaneh



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SHAWN M. LATOURETTE Commissioner

PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Governor Watershed & Land Management Mail Code 501-02A P.O. Box 420 Trenton, New Jersey 08625-0420 www.nj.gov/dep/landuse

Michael A Gianforte Two Rivers Water Reclamation Authority 1 Highland Avenue Monmouth Beach, NJ 07750

RE: Revision Letter
File and Activity No.: 1300-21-0004.1 LUP210001 and LUP210002
Applicant: Two Rivers Water Reclamation Authority
Project: Sewer Line Upgrades/Repairs
Block(s) and Lot(s): [40, 12.01] [40, 57.01] [40, 59] [42.05, 36] [38, 7] [39, 1] [40, 86]
Municipality: Oceanport and Monmouth Beach Boroughs; County: Monmouth

Dear Mr. Gianforte:

In was brought to the Division's attention that Block 40, Lot 86 was inadvertently left out of the permits due to a clerical error. The first page of the permits are revised to include Block 40, Lot 86.

A copy of this letter shall be appended to the original permits, File Nos. 1300-21-0004.1 LUP210001 and LUP210002.

Should you have any questions regarding the information addressed in this letter, please feel free to contact Kara Turner of our staff by email at <u>Kara.Turner@dep.nj.gov</u>, by phone at (609) 633-2289, or in writing at the address listed above. Please reference the file number in future communication concerning this application.

Sincerely,

Joanne B. Davis Joanne B. Davis Date: 2022.03.07 13:47:36 -05'00' Joanne B. Davis, Supervisor Bureau of Coastal Permitting

c: Bureau of Coastal and Land Use Compliance and Enforcement, Toms River Twp Construction Official Agent