



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF WATER

Categorical Exclusion

For the City of North Miami Beach Norwood Water Treatment Plant Upgrade and Transmission Main Improvements and Replacements Project

Pursuant to 40 CFR § 6.204

The U.S. Environmental Protection Agency (EPA) is planning to award a loan under the Water Infrastructure Finance and Innovation Act (WIFIA) to the City of North Miami Beach, Florida. The EPA intends for this loan to fund the Norwood Water Treatment Plant Upgrade and Transmission Main Improvements and Replacements Project.

The EPA's authorization of funding for the proposed project is a federal action requiring compliance with the National Environmental Policy Act (NEPA), 42 USC §§ 4321-4370(f). According to the Council on Environmental Quality's NEPA regulations, 40 CFR § 1508.4, a federal agency may categorically exclude an action from detailed environmental review as long as the action does not individually or cumulatively have a significant effect on the human environment. An action undertaken by the EPA can qualify as a categorical exclusion if it falls under any category within 40 CFR § 6.204(a) and does not exhibit any of the extraordinary circumstances listed in § 6.204(b).

Project Description

The City of North Miami Beach (the City) is conducting upgrades to the water main distribution system across its service area as well as to its existing treatment and auxiliary systems at the Norwood Water Treatment Plant. The WIFIA Project is part of the City's five-year capital improvement program that aims to replace aging infrastructure and improve redundancy in plant operations as well as reduce pressure losses and main breaks throughout the distribution system.

The WIFIA Project includes the following components:

- **Phase IIA – Construction of new Floridan Well and Rehabilitation of Existing Biscayne Well.** This project will provide the necessary volume of raw water at the Norwood Water Treatment Plant's membrane facility to maintain finished water production while the lime softening plant is under construction (Phase IIC). The new Floridan well will have a production capacity of approximately 2,000 gallons per minute and will connect to the existing raw water main. The Biscayne Well #1 will be rehabilitated to restore its original production capacity of approximately 4,000 gallons per minute. The Biscayne Well #1 will serve as backup water supply to two of the City's off-

site production wells, which are not currently equipped with emergency electrical generators. This rehabilitated well will be capable of serving the lime softening plant and membrane treatment plant, which are parallel water treatment processes accounting for the finished water at the Norwood Water Treatment Plant.

- **Phase IIB – Reliability Improvements of Norwood Water Treatment Plant Operations.** This project will improve the reliability of the plant’s treatment processes and auxiliary systems in order to temporarily shut down the lime softening facility for rehabilitation (Phase IIC). The City will rehabilitate and improve operations of several chemical feed systems, the membrane degasification system, the Master Sewage Lift Station, a high service pump station (HSPS No. 1), control room, laboratory facility, maintenance and storage warehouse, among other auxiliary facilities. The City also plans to demolish decommissioned structures, including the Phase I VOC Removal System, and upgrade the plant’s electrical distribution system and the heating, ventilation, and air conditioning system.
- **Phase IIC – Rehabilitation of Norwood’s Lime Softening Plant.** This project will rehabilitate the existing lime softening plant to extend the life and reliability of the plant to treat 15 million gallons per day of raw water. The rehabilitation will involve improvements to the filter beds, clear wells, backwash system, clarifiers, and appurtenances. It will also involve an upgrade to the plant’s electrical system. In combination with the current expansion at the membrane treatment plant to 25.6 million gallons per day, the City will be able to meet its projected 2030 production demand of 35 million gallons per day. The expansion of the membrane treatment plant is currently under construction and outside the scope of the WIFIA project and NEPA review.
- **Phase III – Transmission Main Improvements and Replacements – Improving Pressure.** This project will address sections of the water transmission and distribution system that need to be replaced or expanded in capacity to reduce pressure loss events, meet compliance with firefighting flow, and to replace aged infrastructure. It will also improve operations at the Operations Center pump station to better maintain pressure throughout the distribution system. The City has already identified two areas for water main rehabilitation in the Eastern Shores and Honey Hill neighborhoods, involving 14,000 linear feet and 8,700 linear feet of pipe replacement, respectively. Further, the City has investigated ten out of approximately fourteen aerial pipe bridge crossings, most of them over canals, and has identified three crossings that require replacement of pipes and piers due to severe deterioration. As the City continues evaluating its hydraulic models and condition assessment reports for each segment of pipeline, it will identify priority areas for pipe replacement within the distribution system. The City plans to issue design-bid-build contracts for this project.

Eligibility for Categorical Exclusion

This project is eligible for a categorical exclusion under 40 CFR § 6.204(a)(1)(ii), which requires that projects be:

“Actions relating to existing infrastructure systems (such as sewer systems; drinking water supply systems; and stormwater systems, including combined sewer overflow systems) that involve minor upgrading, or minor expansion of system capacity or rehabilitation (including functional replacement) of the existing system and system components (such as the sewer collection network and treatment system; the system to collect, treat, store and distribute drinking water; and stormwater systems, including

combined sewer overflow systems) or construction of new minor ancillary facilities adjacent to or on the same property as existing facilities.”

The proposed project affects an existing system, and it constitutes minor upgrades to the existing system. The new production well will offer a minor expansion to the raw water supply and is primarily focused on providing redundancy to well production. This minor rehabilitation of an existing system is expressly listed as a permissible categorical exclusion under 40 CFR § 6.204(a)(1)(ii).

Additionally, in order to qualify as a categorical exclusion, a project cannot fall within any of the exceptions listed under 40 CFR § 6.204(a)(1)(ii). Accordingly, projects cannot be designated categorical exclusions if they:

“involve new or relocated discharges to surface or ground water; will likely result in the substantial increase in the volume or the loading of pollutant to the receiving water; will provide capacity to serve a population 30% greater than the existing population; are not supported by the state, or other regional growth plan or strategy; or directly or indirectly involve or relate to upgrading or extending infrastructure systems primarily for the purposes of future development.”

The EPA has determined that these factors do not apply for this project. This project is an upgrade to a water treatment plant and does not involve new or relocated discharge to surface or groundwater and will not result in the substantial increase in volume or loading of pollutant to the receiving water. This project is not increasing water production capacity as a result of a greater than 30 percent increase in the existing population. The service population has been stable for the past seven years. The project’s purpose is not to upgrade infrastructure for future development; instead, its “primary objective” is to replace portions of the existing infrastructure to improve reliability and redundancy in the system.¹

Extraordinary Circumstances

The EPA has determined that none of the following extraordinary circumstances outlined in 40 CFR § 6.204(b) applies to the proposed project:

1. *The proposed action is not known or expected to have potentially significant environmental impacts on the quality of the human environment either individually or cumulatively over time.*

This project is being developed to replace aging infrastructure that has exceeded its useful life and provide redundancy to water treatment operations to improve the reliability of water service to the City’s customer base.

2. *The proposed action is not known or expected to have disproportionately high and adverse human health or environmental effects on any community, including minority communities, low-income communities, or federally recognized Indian tribal communities.*

¹ City of North Miami Beach Application (December 2019).

Phase 2 is located in blockgroup 120860099052 within Miami Gardens. This blockgroup has a minority population that equals or exceeds 50 percent; therefore, minority-based environmental justice communities are considered to be present. The low-income population in this blockgroup is 37 percent, which is not greater than state and county low-income populations; therefore, no low-income based environmental justice communities are considered to be present at the Phase 2 location.²

Phase 3 occurs throughout the North Miami Beach service area, which is comprised of the cities of Aventura, Miami Gardens, North Miami Beach, Sunny Isles Beach, the town of Golden Beach and unincorporated parts of Miami-Dade County (including Ojus CDP and Golden Glades CDP). Miami Gardens, North Miami Beach, Ojus CDP and Golden Glades CDP all have minority populations above 50 percent; therefore, minority-based environmental justice communities are considered to be present in those cities. Aventura, Sunny Isles Beach and Golden Beach do not have minority populations greater than 50 percent or which are meaningfully greater than state and county populations; therefore, no minority-based environmental justice communities are considered to be present in those locations. The Cities of Miami Gardens, North Miami Beach and Golden Glades CDP have low-income populations that are meaningfully greater than state and/or county populations; therefore, income-based environmental justice communities are considered to be present in those cities. Aventura, Ojus CDP, Sunny Isles Beach, and Golden Beach do not have low-income populations that are meaningfully greater than state and/or county populations; therefore, no income-based environmental justice communities are considered to be present.

The operations pump center included in phase 3, is located in blockgroup 12086002061. Minority populations in this blockgroup exceed 50 percent; therefore, minority-based environmental justice populations are considered to be present. As low-income populations in this blockgroup are meaningfully greater than state and/or county low-income populations, income-based environmental justice communities are considered to be present surrounding the operations pump center. No tribal areas were identified at the phase 2 or 3 project locations.³

Minor, short-term impacts on communities during construction may occur such as noise, vibration, and erosion and runoff, which would be reduced by following construction Best Management Practices (BMPs). Construction may temporarily impact traffic and transportation; however, project construction is planned to occur within existing facilities, public rights-of-way, easements and otherwise disturbed areas. The City has required contractors to implement specific measures to mitigate any temporary traffic, noise, dust, and vibration effects during construction.

City and county construction permits will be required for the project to commence, as well as common dust, noise, and construction-related permits and approvals. Appropriate mitigation measures are proposed to reduce construction impacts. No operational impacts

² EPA EJScreen data and report (January 2020).

³ EPA EJScreen data and report (January 2020).

are anticipated. Therefore, implementation of the project would not result in disproportionately high and adverse impacts on minority and low-income populations.⁴

3. *The proposed action is not known or expected to significantly affect federally listed threatened or endangered species or their critical habitat.*

The EPA generated official species lists for the Norwood Water Treatment Plant using the Information for Planning and Consistency (IPaC) tool and received a Consistency letter for the project for specified threatened and endangered species that may occur in the proposed project locations, pursuant to the IPaC determination key titled, 'Clearance to Proceed with Federally-Insured Loan and Grant Project Requests.' Based on the answers provided in the IPaC determination key, the proposed project is unlikely to have any detrimental effects to federally listed species or critical habitats.⁵

4. *The proposed action is not known or expected to significantly affect national landmarks or any property with nationally significant historic, architectural, prehistoric, archaeological, or cultural value, including but not limited to, property listed on or eligible for the National Register of Historic Places.*

The project will be constructed within the existing facilities. Phase 2 improvements will be constructed on previously cleared and disturbed land at the existing plant. The designated area of Dade County, Florida comprises 23 archaeological sites, 79 field surveys, 13 resource groups, 26 historic bridges, and 550 historic structures.⁶ The Florida State Clearinghouse determined the project could proceed without further review under Section 106.⁷

5. *The proposed action is not known or expected to significantly affect environmentally important natural resource areas such as wetlands, floodplains, significant agricultural lands, aquifer recharge zones, coastal zones, barrier islands, wild and scenic rivers, and significant fish or wildlife habitat.*

The project area does not contain any wetlands, floodplains, agricultural lands, aquifer recharge zones, barrier islands, or federally recognized wild and scenic rivers. The project is consistent with the Florida Coastal Management Plan and will not impact coastal zones. It is not expected to impact fish and wildlife habitats.^{7, 8}

No wetlands are expected to be impacted from Phase 2 and Phase 3 projects. The Norwood Water Treatment Plant Phase 2 projects will be constructed on previously cleared and disturbed land within the existing Water Treatment Plant and wellfield. Phase

⁴ City of North Miami Beach Application (December 2019).

⁵ U.S. Fish and Wildlife Service (USFWS) No Effect Consistency Letter (March 2020).

⁶ U.S. Department of Interior National Park Service National Register of Historical Places data accessed through NEPAAssist, (October 2019).

⁷ Florida State Clearinghouse Correspondence (February 2020).

⁸ NEPAAssist (February 2020).

3 transmission main projects take place within existing rights of way, easements, and urbanized lands.

The Norwood Water Treatment Plant is not currently located in the regulated floodplain and no work proposed at the plant will encroach on a regulated floodplain. Some transmission lines are located within the floodplain, such as those in the Eastern Shores community. However, the County Department of Environmental Management will conduct extensive reviews of these crossings during their environmental permitting of potential wetland impacts, which will include potential floodplain impacts. Transmission lines will be buried and not cause impacts to floodplains. Crossings will be designed and constructed by either boring under canals or cross at existing bridges and will not cause any fill into or obstruction of floodplains or floodways. Because the projects involved in Phase 3 are currently in the preconstruction and planning stages, a formal Floodplain Management Plan has not been completed. The permitting packages will address how the projects will avoid any floodplain impact.^{9,10} In summary, the project is anticipated to be in conformance with any applicable floodplain management requirements.

6. *The proposed action is not known or expected to cause significant adverse air quality effects.*

The project area is designated as either in attainment or unclassified for all criteria pollutants.¹¹

7. *The proposed action is not known or expected to have a significant effect on the pattern and type of land use (industrial, commercial, agricultural, recreational, residential) or growth and distribution of population including altering the character of existing residential areas, and is not expected to be inconsistent with state or local government, or federally-recognized Indian tribe approved land use plans or federal land management plans.*

The project will occur at existing facilities owned by the City or on previously disturbed lands. No change in land use is expected as a result of this project. No change in growth or distribution of population is expected.¹⁰

8. *The proposed action is not known or expected to cause significant public controversy about a potential environmental impact of the proposed action.*

The project would result in beneficial outcomes and is not expected to cause significant public controversy.

9. *The proposed action is not known or expected to be associated with providing financial assistance to a federal agency through an interagency agreement for a project that is known or expected to have potentially significant environmental impacts.*

⁹ FEMA National Flood Hazard Layer through NEPA Assist (October 2019).

¹⁰ City of North Miami Beach WIFIA Application (December 2019).

¹¹ NEPA Assist (February 2020).

The proposed action is to provide financial assistance to a municipal entity to rehabilitate and upgrade existing infrastructure.

10. *The proposed action is not known or expected to conflict with federal, state, local government, or federally recognized Indian tribe environmental, resource-protection, or land-use laws or regulations.*

The project will comply with all applicable federal, state and local regulations.

Finding

The EPA finds that the proposed action is eligible for exclusion from detailed environmental review under 40 CFR § 6.204(a)(1)(ii) and will not involve any of the extraordinary circumstances delineated under 40 CFR § 6.204(b). Consequently, the EPA will not prepare an environmental impact statement or an environmental assessment for the proposed project. The EPA may revoke this categorical exclusion if changes in the proposed action render it ineligible for exclusion or if new evidence emerges which indicates that serious local or environmental issues exist or federal, state, or local laws would be violated.

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Date