

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF WATER

Categorical Exclusion

For the DC-02 & DC-03 Sanitary Relief (Brentwood Blvd to Conway Rd) Phase III/IV and the Deer Creek Sanitary Tunnel Pump Station

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 Metropolitan St. Louis Sewer District (MSD or District) in St. Louis, Missouri. EPA intends for this loan to finance the DC-02 & DC-03 Sanitary Relief (Brentwood Blvd to Conway Rd) Phase III/IV and the Deer Creek Sanitary Tunnel Pump Station.

EPA's authorization of financing 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 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 DC-02 & DC-03 Sanitary Relief (Brentwood Blvd. to Conway Rd.) Phase III/IV project will relieve surcharging in the existing 21-inch to 27-inch sanitary sewer trunk lines and eliminate five constructed sanitary sewer overflows (SSOs) within the Deer Creek Watershed. The project is located within the City of Ladue in St. Louis County, MO. The constructed SSOs within the project area are identified in MSD's Consent Decree as requiring elimination by December 31, 2023. The project alignment runs approximately 2.6 miles northwest along Deer Creek, starting from the downstream connection point immediately southwest of the confluence of Two Mile Creek with Deer Creek, and includes construction of approximately 16,900 feet of 8-inch to 54-inch sanitary sewer, slip-lining 1,700 feet of sanitary sewer, and associated appurtenances.

The Deer Creek Sanitary Tunnel Pump Station project will function to drain the Deer Creek Sanitary Tunnel which will provide storage for excessive inflow and infiltration during wet weather events causing surcharging in existing sewers and activating constructed SSOs within the Deer Creek watershed. The Deer Creek Sanitary Tunnel Pump Station will be constructed at the downstream end of the Deer Creek Sanitary Tunnel storage facility. The project is located just east of Shrewsbury Avenue, on the north side of Interstate 44 within the City of Shrewsbury, Missouri. The pump station project construction will include the installation of one (1) wet well and two (2) dry wells constructed in existing shafts excavated as part of the Deer Creek Sanitary Tunnel project. Additionally, one (1) wet

well building, one (1) dry well building, one (1) effluent structure box and site improvements are included in the pump station construction.

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."

MSD provides wastewater and stormwater service to approximately 1.4 million people in a 535-square-mile service area encompassing the independent City of St. Louis and most of St. Louis County. The collection system, owned and operated by MSD, consists of over 9,500 miles of collection and trunk sewers and 278 pumping stations, making it the fourth largest in the United States. Most of MSD's customers are served by separate Sanitary and Storm sewers. The System currently includes approximately 4,700 miles of wastewater sewers and force mains, approximately 3,050 miles of stormwater sewers and force mains, and approximately 1,750 miles of combined sewers that handle both wastewater and stormwater flows. The proposed project affects an existing sewer system, and it constitutes a minor upgrading and expansion, because it will affect less than one-tenth of one percent of the system and will only add one pump station. This minor upgrading of a sewer 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."

First, these projects will not involve new or relocated discharges to surface or ground water and will eliminate flow of sanitary sewage into the Deer Creek watershed. Second, given that the projects are design to remove constructed SSOs in the Deer Creek Watershed, they are not likely to place a substantially higher quantity of pollutants into the receiving water. Third, these projects will not be providing capacity to serve a population 30 percent greater than the existing population, as the population within the Deer Creek Watershed was estimated at 92,915 (in 2000) and 91,450 (in 2010) and is expected to be 89,901 in 2030 with no growth projected from 2030 to 2035 with an overall decline of 11 percent is expected over a 20-year planning period. Fourth, the project does not conflict with any regional growth strategy as the projects locations are fully urbanized and the Deer Creek

¹ MSD DC-02 & DC-03 Sanitary Relief (Brentwood Blvd. to Conway Rd.) Phase III & IV (12472) SRF Facility Plan (11/13/2017); and The Metropolitan St. Louis Sewer District (MSD)-Our Organization https://www.stlmsd.com/our-organization (Accessed 03/26/2018)

² MSD DC-02 & DC-03 Facility Plan§ 4. MSD Deer Creek Pump Station Facility Plan Chapter 4

Watershed is approximately 95 percent developed ³ Fifth and finally, the projects' purpose is not to upgrade infrastructure for future development; instead, their primary objective is to reduce the quantity of untreated sewage that leaves the collection system in the form of SSOs. These conclusions derive further support from MSD's assertions that "it is anticipated that there will be little additional development or change in land use." ⁴

Extraordinary Circumstances

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

- 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. These projects are being developed to reduce environmental impacts by eliminating SSOs and, consequently, the volume of waste materials discharged to surface waters.⁵
- 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, lowincome communities, or federally-recognized Indian tribal communities. The area around the sites of the proposed action has a population that is 13-16 percent comprised of minorities, which is slightly lower than the 20 percent minority population in Missouri as a whole and much lower than the 57 and 32 percent minority population for the city and county of St. Louis respectively. There are less low-income residents within the sites of the proposed projects than there are in the city and county of St. Louis as a whole. ⁶ The environmental justice analysis conducted for this project did not identify any minority or low-income environmental justice populations. No tribal areas were identified at the project location. Any potential impacts on communities would be temporary and short-term, occurring only during construction. At the completion of the projects, the remaining constructed SSOs in the Deer Creek Watershed will be eliminated. This would improve the environmental health conditions of the area and result in long-term, beneficial impacts to Deer Creek and the Mississippi River. Ultimately, the project would result in improved local water quality for the communities. As no minority or low-income environmental justice populations, or tribes are in the project area, and impacts would not be borne disproportionately, this project has met the provisions of Executive Order 12898 as it is supported by Title VI of the Civil Rights Act.
- 3. The proposed action is not known or expected to significantly affect federally listed threatened or endangered species or their critical habitat. On March 27, 2018, the species lists were obtained from the Missouri Ecological Services Field Office. Four listed species were identified, including three bat species and one flowering plant. On February 2, 2018, the U.S. Army Corps of Engineers contacted Fish and Wildlife Services for informal consultation as part of the Clean Water Act Section 404 permitting process. For the Decuttent False Aster and the Gray Bat, the Corps' made a no effects determination. For the Indiana Bat and Northern Long-eared Bat, the Corps' made a may affect, not likely to adversely affect determination. This determination was based, in part, off the November 2017 habitat assessment conducted for federally listed bat species and related tree clearing estimates. On March 13, 2018 FWS concurred with the Corps

³ MSD DC-02 & DC-03 Facility Plan§ 4. MSD Deer Creek Pump Station Facility Plan Chapter 2

⁴ MSD Deer Creek Pump Station Facility Plan Chapter 2

⁵ MSD SSO Control Master Plan (August 29, 2014).

⁶ EJScreen reports for project sites and City and County of St. Louis (March 2018).

- determination that the proposed project may affect, but is not likely to adversely affect the Indiana Bat or Northern Long-eared Bat.⁷
- 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 Missouri State Historic Preservation Office provided a concurrence letter with the relief project's determination that there will be no historic properties affected. The pump station project will be constructed within a previously excavated tunnel shaft with no effects on historic resources.
- 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. MSD undertook a wetland delineation study in support of the Sanitary Relief project to identify and investigate potential wetland areas using desktop evidence and field data. Potential wetland areas were investigated along the entire Project corridor with emphasis placed at stream crossings and sites identified during pre-field planning. Most of the sites investigated did not meet all wetland parameters for Corps wetland classification. One unvegetated wetland was identified during the study. The US Army Corps of Engineers, St. Louis District, verified that the projects meet the Nationwide Permit, Missouri Regional Conditions, and Missouri Water Quality Certification conditions; on April 9, 2018, the St. Louis District provided a verification letter. The pump station project will not affect wetlands. The Deer Creek Sanitary Tunnel Pump Station project is not located within the FEMA floodplain. A majority, nearly 75 percent, of the DC-02 & DC-03 Ph. III & IV alignment is within either the floodway, 100-year flood hazard zone, or 500-year flood hazard zone, with nearly half of the alignment within the floodway. Manhole structures within the flood hazard areas will be constructed with locking covers and frame seals to help prevent floodwaters from inundating the system; these structures will not significantly impact the floodway. Additionally, the projects are not within the boundaries of a sole source aguifer, nor do the project areas contain significant agricultural land, coastal zones, barrier islands, wild and scenic rivers or essential fish habitat. 10
- 6. The proposed action is not known or expected to cause significant adverse air quality effects. The project area is located in an ozone (1997 and 2008 standard) and PM2.5 Annual (1997 standard) non-attainment/maintenance area. The area is in attainment for all other criteria pollutants. No areas in Missouri have been designated nonattainment under the 2012 annual

⁷ SRF Environmental Information Document Appendix G, Bat Habitat Assessment for MSD DC-02 & DC-03 Sanitary Relief Phase III & IV (December 15, 2017), Fish and Wildlife Service Endangered Species List (March 27, 2018)

⁸ Missouri State Historic Preservation Office Letter Re: Log Number 018-SL-18 Project 12472-015.1 - DC-02 & DC-03 Sanitary Relief (Brentwood Blvd to Conway Rd.) Phase III & IV (January 8, 2008), Cultural Resource Survey of the Proposed Metropolitan St. Louis Sewer District Project 12472-015.1 - DC-02 & DC-03 Sanitary Relief (Brentwood Blvd. to Conway Rd.) Phase III & IV Design, St. Louis County, Missouri (December 2017)
⁹ US Army Corps of Engineers Clean Water Act Section 404 Correspondence (October 19, 2017), SRF Environmental Information Document Appendix H

¹⁰ SRF Environmental Information Document, Wetland Report, FEMA RiskMap CDS's National Flood Hazard Layer data accessed through NEPAssist, Data.gov Sole Source Aquifer data accessed through NEPAssist, Cultural Resource Survey, Facility Plans, and EFH Mapper.

PM2.5 NAAQS. Should any areas in Missouri be designated nonattainment for the 2012 annual PM2.5 NAAQS in the future, the emissions limitations and other control measures needed to bring areas designated nonattainment back into attainment of the 2012 annual PM2.5 NAAQS would be developed under a separate SIP submittal with its own schedule and process. Any potential impacts to air quality would be temporary and short-term, occurring only during construction. Potential air impacts may include increased air emissions from construction vehicles. Construction related impacts could be mitigated through the implementation of appropriate mitigation measures, such as the use of a water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during clearing, excavation, demolition, grading and other construction related activities at each site, sweeping paved roads adjacent to construction sites exists, use wind erosion control techniques, etc. Any emissions are expected to be below major source thresholds for all criteria air pollutants (40 CFR 93.153) and are not expected to significantly impact air quality locally or regionally. 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. Land use in the Deer Creek area is mainly suburban residential development with pockets of commercial and industrial development dispersed throughout. It is anticipated that there will be little additional development or change in land use during the planning period ending in 2035. Aerial photographs confirmed a mix of land uses including residential, institutional, commercial, and industrial within a one-half mile radius of the project sites. A majority of the project area has been previously disturbed by residential and commercial development. ¹² Therefore, no land use changes are anticipated from the project.
- 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. At completion of the project, the amount of untreated sewage entering the environment would be reduced. This would improve the environmental health conditions of the area and result in long-term, beneficial impacts to the Deer Creek. The project 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. The proposed action is to provide financial assistance to a municipal entity to construct sewer projects.
- 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 would comply with all applicable federal, state and local regulations.

¹¹U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning and Standards (OAQPS) nonattainment data accessed through NEPAssist, Missouri PM 2.5 State Implementation Plan ¹² Cultural Resource Survey and Facility Plans.

Finding

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, EPA will not prepare an environmental impact statement or an environmental assessment for the proposed project. 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.

Andrew D. Sawyers, Director

Office of Wastewater Management