



# Post-Issuance Verification Report

<b>Issuer:</b>	<b>Louisville and Jefferson County Metropolitan Sewer District</b>
<b>Framework:</b>	Louisville and Jefferson County Metropolitan Sewer District Green Bond Framework (December 2021)
<b>Green Standard:</b>	Climate Bonds Standard (Version 3.0)
<b>Sector Criteria:</b>	Water Infrastructure
<b>Engagement Type:</b>	Post-Issuance Verification
<b>Engagement Period:</b>	September - October 2023
<b>Bonds Issued Under Framework:</b>	Sewer and Drainage System Revenue Bonds, Series 2022A (Green Bonds - Climate Bond Certified)
<b>Pre-Issuance Evaluation Date:</b>	December 27, 2021

## SCOPE AND OBJECTIVES

In January 2022, the Louisville and Jefferson County Metropolitan Sewer District (the “District”) issued one series of Certified Climate Bonds: the Sewer and Drainage System Revenue Bonds, Series 2022A (Green Bonds - Climate Bond Certified) (“Series 2022A Bonds”). The Series 2022A Bonds received Pre-Issuance Certification by the Climate Bonds Initiative Standard Board in 2021 under the *Water Infrastructure* Sector Criteria. The Climate Bonds Standard (Version 3.0) requires a Post-Issuance Verification Report within 24 months of issuance. The District engaged Kestrel in September 2023 to review the Nominated Projects and Assets financed by the designated bonds and provide an assessment as to whether the projects conform with Climate Bonds Standard Post-Issuance Requirements.

This Post-Issuance Verification Report reflects Kestrel’s view of the District’s projects and financing, allocation and oversight, and conformance of the Series 2022A Bonds with the Climate Bonds Standard (Version 3.0) and *Water Infrastructure* Sector Criteria. In our opinion, the Series 2022A Bonds continue to be aligned with the internationally accepted Climate Bonds Standard and the *Water Infrastructure* Sector Criteria.

## CONFORMANCE WITH CLIMATE BONDS STANDARD AND SECTOR CRITERIA

In December 2021, the District engaged Kestrel to provide an independent verification on the alignment of the Series 2022A Bonds with the Climate Bonds Standard (Version 3.0) and Certification Scheme, and the *Water Infrastructure* Sector Criteria. The Climate Bonds Initiative administers the Standard and Sector Criteria.

Kestrel is a Climate Bonds Initiative Approved Verifier. The Kestrel Verification Team included environmental scientists and financial professionals. We performed a Reasonable Assurance engagement to independently verify that the bonds met, in all material respects, relevant criteria.

Prior to bond issuance, Kestrel reviewed the District's bond disclosure documentation, Green Bond Framework, and other documentation on the allocation and uses of bond proceeds, as well as alignment with the District's overarching plans and climate objectives. We examined public and non-public information and interviewed key staff at the District. Our goal was to understand the actual use of proceeds, execution of procedures for managing proceeds, ongoing reporting practices, and plans for future reporting on the Series 2022A Bonds.

### **Assurance Approach**

Post-issuance, Kestrel's responsibility was to conduct a Reasonable Assurance engagement to determine whether the Series 2022A Bonds met requirements of the Climate Bonds Standard and were used as intended. Our Reasonable Assurance engagement was conducted in accordance with the Climate Bonds Standard (Version 3.0) and the *International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. Information relating to this engagement and the Verifier's and Issuer's Responsibilities, and Independence and Quality Control are available in Appendix B.

Kestrel has relied on information provided by the District. Kestrel reviewed audited Annual Comprehensive Financial Reports, the adopted 20-year Comprehensive Facility Plan, spending documentation, and Climate Action and Resilience Plans, among other documentation. There are inherent limitations in performing our assurance; fraud, error or non-compliance may occur and not be detected. Kestrel is not responsible or liable for any opinions, findings or conclusions within the information provided by the District that are incorrect. Our assurance is limited to the District's policies and procedures in place as of September 2023. The distribution and use of this verification report are at the sole discretion of the District. Kestrel does not accept or assume any responsibility for distribution to any other person or organization.

### **Use of Proceeds and Conformance with Sector Criteria**

Proceeds of the Series 2022A Bonds were used to pay at maturity, redeem, and refund Commercial Paper Notes and Direct Purchase Notes (collectively, "Program Notes") previously issued by the District to finance capital improvements to the wastewater, stormwater, and flood protection systems (collectively, "Projects").

A portion of proceeds refinanced Program Notes which financed capital improvements to fulfill federal Consent Degree obligations related to combined sewer overflows ("CSO") and sanitary sewer overflows ("SSO"). Financed activities directly advance the target outlined in the District Long-Term Control Plan to capture approximately 98% of wet-weather combined flows and significantly reduce overflows. Projects also support elimination of all sanitary sewer overflows.

Proceeds also refinanced Program Notes which financed wastewater, stormwater, and flood protection projects such as expansion of the supervisory control and data acquisition system, emergency preparedness planning and tree planting. Projects also include floodplain management, drainage projects for flood mitigation, and Ohio River flood protection system projects which include levees, floodwalls, gates, modernized pumping systems to improve resilience, and expanded capacity of pumping stations.

Proceeds of the Series 2022A Bonds have been tracked separately from other District funds and only spent on eligible activities. A portion of proceeds were temporarily invested in short-term conservative investments such as commercial paper and treasuries prior to spending.

**Table 1. Significant Consent Decree (“CD”) and Non-Consent Decree (“Non-CD”) projects financed by the Series 2022A Bonds**

Project Description (CD / Non-CD)	Project Category	Environmental Impact	Approximate 2022A Bond Proceeds Allocated to Project	Project Status
Ohio River Tunnel (CD)	IOAP - Long Term Control Plan	The Ohio River Tunnel, or the Waterway Protection Tunnel, is expected to capture water from 25 CSO locations and prevent release of 439 million gallons of wastewater and rainwater from entering waterways. The project expands greenspace and restoration at the Beargrass Creek Trailhead and includes a rain garden and wetland. The tunnel itself is 20 feet in diameter and four miles long, and is intended to capture and hold overflows until the Morris Forman Water Quality Treatment Center has treatment capacity available.	\$52,803,846	Completed
Morris Forman Water Quality Treatment Center LG Dryer Replacements FY21 (Non-CD)	Regulatory	Dryer replacements at the Morris Forman Water Quality Treatment Center will improve the efficiency of biosolids processing and replace older inefficient infrastructure. The project meets short-term needs and increases long-term resiliency for biosolids management process. The District will pursue a thermal hydrolysis pretreatment process to create usable biogas to ultimately produce approximately 4 MW of power.	\$29,764,632	In Progress
Broadway INT Infrastructure Rehabilitation (CD)	Critical Sewer	Rehabilitation of the Broadway Interceptor is critical to maintaining reliability and sustainability of the system. Prevention of catastrophic failures significantly reduces the likelihood of resource-intensive and unnecessary comprehensive infrastructure replacements, and reduces public health and ecological risks.	\$24,849,336	Completed
Derek Guthrie Water Quality Treatment Center Dewatering Emergency Contract (Non-CD)	Regulatory	Dewatering system replacement at the Derek Guthrie Water Quality Treatment Center will increase efficiency of biosolids processing and allow for production of Grade A fertilizer for beneficial reuse. The upgrades are part of the long-term solution for biosolids management.	\$28,674,052	Completed

### Environmental Benefits and Resilience

The Louisville and Jefferson County Metropolitan Sewer District uses comprehensive planning tools to ensure that Projects have significant environmental benefits. The District has incorporated green infrastructure in multiple projects to harness natural processes to protect habitat and improve water quality and flood protection. The Design Manual for project design specifications includes projections of potential impacts of climate change. By reducing combined sewer overflows and sanitary sewer overflows to meet its obligations under the Consent Decree, and also incorporating green infrastructure in its flood control, stormwater, and wastewater systems, the District is demonstrating leadership in resilient design and integrated water resource management.

### Sector Criteria for Water Infrastructure (Version 3.1)

The Series 2022A Bonds align with the Climate Bonds Standard (Version 3.0) and *Water Infrastructure* Criteria (Version 3.1).

### **Reporting Status**

The District has posted regular Audited Annual Comprehensive Financial Reports on the Electronic Municipal Market Access system. In addition, the District has provided information on the impacts of the Nominated Projects and Assets in the Fiscal Year 2022 Green Bonds Report available on the District's BondLink website: [louisvillemsdbonds.com/louisville-metro-sewer-district-investor-relations-ky](https://louisvillemsdbonds.com/louisville-metro-sewer-district-investor-relations-ky).

### **BASIS FOR QUALIFICATION AND CONCLUSIONS**

Based on the Reasonable Assurance procedures we have conducted, in our opinion, the Series 2022A Bonds are impactful, net zero aligned, and conform, in all material respects, with the post-issuance requirements of the Climate Bonds Standard, and bond-financed activities remain aligned with the *Water Infrastructure* Sector Criteria.

Sincerely,

*April Strid*

**April Strid**, Lead Verifier

Kestrel

Hood River, Oregon, United States

October 17, 2023

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## About

Kestrel Sustainability Intelligence™ for municipal markets helps set the market standard for sustainable finance. We do this through verification and our comprehensive Analysis and Scores.

Kestrel is a leading provider of external reviews for green, social and sustainability bond transactions. We are qualified to evaluate corporate and municipal bonds in all asset classes worldwide for conformance with international green and social bond standards.

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### Verification Team

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## Disclaimer

This Post-Issuance Verification Report (“Opinion”) aims to explain how and why the discussed financing meets the Climate Bonds Standard based on the information that was provided by the District or made publicly available by the District and relied upon by Kestrel only during the time of this engagement (September - October 2023), and only for purposes of providing this Opinion.

We have relied on information obtained from sources believed to be reliable, and assumed the information to be accurate and complete. However, Kestrel can make no warranty, express or implied, nor can we guarantee the accuracy, comprehensive nature, merchantability, or fitness for a particular purpose of the information we were provided or obtained.

By providing this Opinion, Kestrel is neither addressing nor certifying the credit risk, liquidity risk, market value risk or price volatility of the projects financed by the Climate Bonds. It was beyond Kestrel’s scope of work to review for regulatory compliance, and no surveys or site visits were conducted by us. Furthermore, we are not responsible for surveillance, monitoring, or implementation of the project, or use of proceeds.

The Opinion delivered by Kestrel is for informational purposes only, is current as of the date of issuance, and does not address financial performance of the Climate Bonds or the effectiveness of allocation of its proceeds. This Opinion does not make any assessment of the creditworthiness of the District, nor its ability to pay principal and interest when due. This Opinion does not address the suitability of a Bond as an investment, and contains no offer, solicitation, endorsement of the Bonds nor any recommendation to buy, sell or hold the Bonds. Kestrel accepts no liability for direct, indirect, special, punitive, consequential or any other damages (including lost profits), for any consequences when third parties use this Opinion either to make investment decisions or to undertake any other business transactions.

This Opinion may not be altered without the written consent of Kestrel. Kestrel reserves the right to revoke or withdraw this Opinion at any time. Kestrel certifies that there is no affiliation, involvement, financial or non-financial interest in the District or the projects discussed. We are 100% independent. Language in the offering disclosure supersedes any language included in this Opinion.

# Appendix A.

## ASSURANCE PROCEDURES (CLIMATE BONDS STANDARD V3.0)

REQUIREMENT	ASSURANCE PROCEDURES
<b>5. Use of Proceeds</b>	
<b>5.1 Proceed Allocation</b>	Confirm allocation of the Net Proceeds of the bond to Nominated Projects.
<b>5.2 Eligibility Criteria</b>	Confirm alignment of Nominated Projects with Sector Criteria and overarching climate objective of the bond.
<b>5.3 Allocation Timeline</b>	Confirm allocation within 24 months of issuance or disclose timeline for allocation to Nominated Projects.
<b>5.4 Multiple Nominations for Certified Debt Instruments (5.4.1-5.4.2)</b>	Review Nominated Projects for previous nominations to other Certified Climate Debt Instruments, green bonds, or other designated instruments, including whether certain portions are being financed by separately designated Certified Debt Instruments and/or whether Nominated Projects have been refinanced by other Certified Debt Instruments or bonds under assessment have refinanced existing Certified Debt Instruments.
<b>5.5 Refinancing</b>	If applicable, confirm appropriate tracking of Net Proceeds for refinancing or refunding.
<b>5.6 Proceed Management</b>	Confirm procedures for appropriate tracking of allocation of proceeds and tracking unallocated funds.
<b>5.7 Valuation</b>	Review Net Proceeds of the bond to ensure they are not greater than the value of the Nominated Projects.
<b>5.8 Nominated Project Modifications (5.8.1)</b>	Confirm modifications or alterations to the Nominated Projects and determine requirement to engage a Verifier to perform a Pre-Issuance or Post-Issuance Verification as a result of the change.
<b>6. Process for Project Evaluation and Selection</b>	
<b>6.1 Decision-making Process for Determining Eligibility (6.1.1-6.1.5)</b>	Review continued documentation of decision-making process used to determine eligibility, including conformance with climate-related objectives, and review of alignment of the Nominated Projects with Sector Criteria.
<b>7. Management of Proceeds</b>	
<b>7.1 Proceeds Held in Subaccount</b>	Confirm the allocation of proceeds to a subaccount, sub-portfolio, or alternative accounting to appropriately track allocation of proceeds to Nominated Projects.
<b>7.2 Earmarking of Proceeds</b>	Review and confirm the earmarking process to track flow of funds and uses of proceeds.
<b>7.3 Temporary Investment Instruments (7.3.1-7.3.3)</b>	Review management of unallocated proceeds, including temporary investments, and confirm non-contamination of proceeds.
<b>8. Reporting</b>	
<b>8.1 Reporting Approach (8.1.2-8.1.3)</b>	Confirm disclosure and execution of procedures to provide Update Reports and/or procedures to undertake periodic Assurance Engagements during term of the bond to reaffirm conformance with the Climate Bonds Standard. Confirm availability of the Update Reports for investors and reporting in case of material developments.

# Appendix B.

## RESPONSIBILITIES AND QUALITY CONTROL

### Verifier's Responsibilities

Kestrel's responsibilities for confirming alignment of the Series 2022A Bonds with the Climate Bonds Standard and *Water Infrastructure* Criteria include:

- Assess the uses of proceeds for conformance with relevant Criteria and Standards;
- Assess and certify the District's internal processes and controls, including selection process for projects and assets, internal tracking of proceeds, and the allocation system for funds;
- Assess policies and procedures established by the District for reporting;
- Assess the readiness of the District to meet the Climate Bonds Standard (Version 3.0) and *Water Infrastructure* Sector Criteria; and
- Express a Reasonable Assurance conclusion.

### Issuer's Responsibilities

Issuer was responsible for providing detailed information and documents relating to:

- The details of the Nominated Projects and Assets and the project selection process;
- Maintaining adequate records and internal controls designed to support the Climate Bond Pre-Issuance Certification process; and
- The collection, preparation, and presentation of the subject matter in accordance with the Climate Bonds Standard and Criteria.

### Independence and Quality Control

Kestrel provides green, social and sustainability bonds services for corporate and municipal issuers. The Kestrel Verification Team is committed to providing robust, transparent, and accurate verifications. For over 20 years Kestrel has been a trusted advisor to state and local governments, nonprofits, and corporations. Kestrel certifies that there is no affiliation, involvement, financial or non-financial interest in the issuer or the projects discussed. We have no affiliation with any bond counsel, bond insurer, credit rating agency, financial advisor firm, municipal advisory firm, or other intermediary. Accredited as an Approved Verifier by the Climate Bonds Initiative, Kestrel is qualified to evaluate bonds against the Climate Bonds Initiative Standards and Criteria.