

Second Party Opinion

Issuer: City of Tacoma, Washington

Issue Description: Water System Revenue Refunding Bonds, Series 2024 (Green Bonds)

Project: Water System Capital Improvements

Green Standard: ICMA Green Bond Principles

Green Category: Sustainable Water Management

Keywords: Drinking water, advanced metering infrastructure, leak detection, water

transmission and distribution system, resiliency, Washington

Par: \$63,800,000

Evaluation Date: December 26, 2023

GREEN BONDS DESIGNATION

Kestrel, an Approved Verifier accredited by the Climate Bonds Initiative, conducted an independent external review of the City of Tacoma, Washington, Water System Revenue Refunding Bonds, Series 2024 (Green Bonds) ("Bonds") to evaluate conformance with the Green Bond Principles (June 2021 with June 2022 Appendix 1) established by the International Capital Market Association. Our team for this engagement included analysts with backgrounds in environmental science and social science.

This Second Party Opinion reflects our review of the uses and allocation of proceeds, oversight, and conformance of the Bonds with the Green Bond Principles. In our opinion, the Bonds are impactful and conform with the four core components of the Green Bond Principles, and qualify for Green Bonds designation.

ABOUT THE ISSUER

Tacoma, Washington, is located 32 miles south of Seattle and has a population of nearly 221,000. The City of Tacoma (the "City") provides drinking water services through the Water Division of the Department of Public Utilities ("Tacoma Water"), which serves approximately 375,000 people in the city and nearby communities of Pierce and King Counties. Tacoma Water provides potable drinking water to residential, commercial, and industrial accounts, and serves 15 wholesale customers in the Puget Sound region. The City has also established a separate utility system known as the Regional Water Supply System ("Regional System") in partnership with the City of Kent, Lakehaven Water and Sewer District, and Covington Water District. The Regional System was formed to construct and operate the Second Supply Project, an additional supply pipeline from the Green River. The City has water rights on the Green River, including for the Second Supply Project. Under the terms of the 2002 Second Supply Project Agreement, each

participant in the Regional System has a right to project capacity share. Water is primarily sourced from the Green River, with a watershed that consists of approximately 230 square miles of forested and mountainous terrain located northeast of Tacoma in the Cascade Range. Drinking water from the watershed is treated at the Green River Filtration Facility, which has a treatment capacity of up to 150 million gallons per day. Tacoma Water also owns and operates groundwater wells that provide approximately 8% of the supply, used primarily in the summer or fall when demand increases.¹

Tacoma Water plans for drought and climate change resiliency through data modeling and has an Integrated Resource Plan to guide decisions related to physical supply security. Tacoma Water proactively plans for declines in water supply due to climate change and explores alternative options, such as enhancing groundwater production, implementing demand management strategies, and developing a water storage project at Eagle Gorge Reservoir. Additionally, the City published the 2030 Tacoma Climate Action Plan which describes a pathway for Tacoma to reach net zero greenhouse gas emissions by 2050.

Tacoma Water ensures high water quality for customers through watershed stewardship. Tacoma Water owns a portion of the upper Green River watershed and implements watershed monitoring and protection programs upstream of the diversion.² Green River diversions are managed under a Habitat Conservation Plan and an agreement with the Muckleshoot Indian Tribe. Key strategies of this plan include fish and wildlife habitat conservation, including upland forest and riparian management.

In 2020, Tacoma Water began upgrading and replacing water meters with Advanced Metering Infrastructure ("AMI") to capture water data remotely, improve billing, and better manage outages and leak detection. To implement AMI projects, Tacoma Water utilizes the City of Tacoma Equity Index³ to identify underserved communities and areas with historically low investments in drinking water infrastructure. Tacoma Water offers grants and deferred loans to help customers finance water line repairs.

ALIGNMENT TO GREEN STANDARDS⁴

Use of Proceeds

The Bonds refund the Water System Revenue and Refunding Bonds, 2013, that financed improvements to the Tacoma drinking water system (collectively, "Projects"). Refinanced upgrades and improvements promote water conservation, encourage environmental protection and restoration, and improve aging infrastructure. The Projects are substantially complete and are eligible projects as defined by the Green Bond Principles in the Sustainable Water Management project category.



¹ Groundwater and surface water supplies are treated separately for drinking water.

² A diversion is a structure designed to divert river water for drinking water treatment and distribution.

³ The Equity Index is a data-driven tool used to identify locations, projects, and policies where there are opportunities to address disparities in community conditions.

⁴ Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or refinance eligible Green Projects which are aligned with the four core components of ICMA Green Bond Principles.

⁵ Tacoma Water received a state loan for construction of the Green River Filtration Facility and therefore bond proceeds were primarily allocated to transmission, distribution, and supply projects rather than treatment systems.

Improvements to water use efficiency and investment in critical infrastructure projects are integral to the long-term sustainability of a water system. In Kestrel's view, the Projects have supported water conservation goals, improved resiliency of Tacoma's water supply, and provided critical maintenance to aging drinking water infrastructure. The improvements support a holistic approach to sustainable water system management that also includes watershed stewardship. Major bond-financed project categories are described below.

- Water Transmission and Distribution System: Projects include distribution system upgrades such as replacement of meters and valves, replacement of a transmission main, and improvements to water infrastructure that were done in conjunction with public road projects. These infrastructure improvements are essential for efficient operations, maintaining a state of good repair and system resilience, and providing a reliable water supply to customers and regional partners.
- Advanced Metering Infrastructure & Leak Prevention: Proceeds also financed infrastructure that
 supports Tacoma Water's proactive water savings and conservation initiatives. The primary focus
 was to minimize unaccounted-for water by replacing outdated water service lines and failing
 meters. Proceeds financed advanced metering infrastructure and expansion of supervisory control
 and data acquisition systems ("SCADA"). These systems enable granular monitoring and metering,
 which allows operators to detect leaks quickly, identify efficiencies, maximize water conservation
 efforts, and reduce energy and chemical use.
- Lead Pipe (Gooseneck) Removal: The Bonds partially financed Tacoma Water's program to remove and replace all lead goosenecks in the system. Goosenecks are relatively small, curved pipes that connect a service line to a water main. The program was a proactive effort to protect against potential public health concerns. These replacements are substantially complete.

Advancing the Just Transition

The Bonds also finance activities which align with the *just transition*, characterized by the equitable inclusion and accommodation of all individuals, with a special focus on disadvantaged groups who may be directly or indirectly affected by the structural changes necessary for the transition to a low-carbon economy. By refinancing proactive projects that ensure a long-term, reliable source of drinking water for all residents, the Bonds support the just transition. The Projects address climate transition risks by planning for variability in water supply and adding redundancy in a region experiencing unique water resource challenges amidst rapid population growth.

Process for Project Evaluation and Selection

Tacoma Water uses several key planning documents to identify and prioritize projects that support a resilient, reliable, and sustainable water system. The Integrated Resource Plan (2018) also provides a framework for prioritizing projects that support and advance the Comprehensive Water System Plan (2018).⁶

⁶ The Washington State Department of Health requires Tacoma Water to update this water system plan every ten years. This plan includes a capital program needs assessment based on various analyses of the system and regional water supply. Other key documents which inform Tacoma Water's activities include the Water Conservation Plan and the Water Shortage Response Plan.

Tacoma Water leadership ensures that all bond-financed projects are aligned with and advance the goals of the Tacoma Water Habitat Conservation Plan, the 2020-2025 Tacoma Water Strategic Plan, and regional water infrastructure goals laid out in the Tacoma Climate Change Resilience Study (2016).

Management of Proceeds

Bond proceeds will solely be used to refund all or a portion of the Water System Revenue and Refunding Bonds, 2013, and to pay costs of issuance. Proceeds will not be held in temporary investments prior to refunding the outstanding bonds. The Finance Department is responsible for disbursement of funds and the City Treasurer will oversee the refunding.

Reporting

Tacoma Water provides multiple forms of ongoing reporting. A long-range financial plan is produced annually and includes updates on the water system and ongoing capital projects. The most recent long-range financial plan is available here: mytpu.org/about-tpu/investors/water-investor-information. Tacoma Water reports quarterly on Strategic Directives, which are made publicly available. The Tacoma Public Utilities annual report includes a dedicated Tacoma Water section with information about environmental stewardship. These Tacoma Public Utilities annual reports are available at mytpu.org/about-tpu/tpu-publications.

In addition to these reporting efforts, Kestrel will provide one update report on the Bonds within 12 months of issuance. This report is expected to be produced after all proceeds have been spent and will include confirmation of continued alignment with the Green Bond Principles and relevant updates on financed projects including allocation of proceeds.

Tacoma Water will also submit continuing financial disclosures to the Municipal Securities Rulemaking Board ("MSRB") as long as the Bonds are outstanding, as well as reports in the event of material developments. This reporting will be done annually on the Electronic Municipal Market Access ("EMMA") system operated by the MSRB.

ALIGNMENT WITH UN SDGs



The Bonds support and advance the vision of the United Nations Sustainable Development Goals ("UN SDGs"), including:



Clean Water and Sanitation (Targets 6.1, 6.5)

Provide access to clean and reliable drinking water and use integrated water resource planning



Industry, Innovation and Infrastructure (Target 9.4)

Implement capital improvements to improve resilience and resource-use efficiency



Responsible Consumption and Production (Target 12.2)

Sustainable management of the Green River watershed and regional water supplies

Full text of the Targets for Goals 6, 9, and 12 is available in Appendix A, with additional information available on the United Nations website: un.org/sustainabledevelopment

CONCLUSION

Based on our independent external review, the City of Tacoma, Washington, Water System Revenue Refunding Bonds, Series 2024 (Green Bonds) are impactful and conform, in all material respects, with the Green Bond Principles (2021) and are in complete alignment with the *Sustainable Water Management* project category. Refinanced upgrades and improvements illustrate Tacoma Water's commitment to sustainability, and will promote water conservation, encourage environmental protection and restoration, and improve aging infrastructure.

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About

Kestrel provides Sustainability Intelligence and verification services designed to bring greater transparency and insight to fixed income, helping to set the market standard for sustainable finance.

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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Disclaimer

This Opinion aims to explain how and why the discussed financing meets the ICMA Green Bond Principles based on the information that was provided by Tacoma Water or made publicly available by Tacoma Water and relied upon by Kestrel only during the time of this engagement (July – August 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 Green 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 Green Bonds or the effectiveness of allocation of its proceeds. This Opinion does not make any assessment of the creditworthiness of Tacoma Water, 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 Tacoma Water or the projects discussed. We are 100% independent. Language in the offering disclosure supersedes any language included in this Second Party Opinion.

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Appendix A.

UN SDG TARGET DEFINITIONS

Target 6.1

By 2030, achieve universal and equitable access to safe and affordable drinking water for all

Target 6.5

By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

Target 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resourceuse efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Target 12.2

By 2030, achieve the sustainable management and efficient use of natural resources