KESTREL VERIFIERS™

# Verifier's Report
## EXECUTIVE SUMMARY

### ISSUER
City of San José Financing Authority

### OPINION ON
Wastewater Revenue Bonds, Series 2022B (Green Bonds - Climate Bond Certified)

### STANDARD AND SECTOR CRITERIA
**Climate Bonds Standard** Version 3.0

- Water Infrastructure

### PAR
$275,570,000 (Preliminary, subject to change)

### KEYWORDS
Wastewater treatment, sustainable management of natural resources, pollution prevention, odor control, energy efficiency, net zero aligned, San Francisco Bay, California

### EVALUATION DATE
November 2, 2022

### SUMMARY OF FINDINGS
Kestrel Verifiers is of the opinion that the City of San José Financing Authority's (the "Authority") Wastewater Revenue Bonds, Series 2022B (Green Bonds - Climate Bond Certified) ("Series 2022B Bonds") are impactful, net zero aligned, conform with the four core components of the Sustainability Bond Guidelines 2021, and conform with the Climate Bonds Standard (Version 3.0) as follows:

- **Use of Proceeds**
  The Series 2022B Bonds refund the Authority's Subordinate Wastewater Revenue Notes, Series A ("Notes") that financed improvements ("Treatment Plant Projects") to the San José-Santa Clara Regional Wastewater Facility (the "Treatment Plant"). The projects incorporate best available technologies to improve treatment processes, reduce emissions from wastewater treatment, and reuse biosolids. The financed activities support climate resilience, sustainability, and environmental stewardship. The Series 2022B Bonds align with the *Water Infrastructure* Sector Criteria under the Climate Bonds Standard.
- **Process for Evaluation and Selection of Projects & Assets**
  The Treatment Plant Projects are part of a comprehensive Master Plan adopted in 2013 to address aging infrastructure, regulations related to effluent quality, projected increase in flows and loads, and sea level rise. Priorities identified in the Plant Master Plan have been incorporated into the City's long-term Capital Improvement Plan.
- **Management of Proceeds**
  The Series 2022B Bond proceeds will refund the Subordinate Wastewater Revenue Notes, Series A and pay costs of issuance. Proceeds will directly refund the Notes in full within 90 days of issuance and will be held in temporary permitted investments prior to spending.
- **Reporting**
  The City will post certain financial and operating information to the Municipal Securities Rulemaking Board ("MSRB") annually through the Electronic Municipal Market Access ("EMMA") system. Voluntary updates on the Series 2022B projects will be available in the City's quarterly Capital Improvement Program reports located on the website: https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/regional-wastewater-facility/capital-improvement-program/cip-document-library. Kestrel Verifiers will provide one post-issuance report.

- **Impact and Alignment with United Nations Sustainable Development Goals**
  By financing improvements to the wastewater system that increase redundancy, prevent negative impacts to the environment and human health, and increase energy efficiency, the Series 2022B Bonds advance UN SDG Goals 6: *Clean Water and Sanitation*, 7: *Affordable and Clean Energy*, 9: *Industry, Innovation, and Infrastructure*, 12: *Responsible Consumption and Production,* and *13: Climate Action*.
- **Assurance Conclusion**
  Based on the Reasonable Assurance procedures we have conducted, in our opinion, the Series 2022B Bonds conform, in all material respects, with the Climate Bonds Standard, and the bond-financed activities are aligned with the *Water Infrastructure* Sector Criteria.

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# Verifier's Report

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|---|---|
| **Legal Name of Issuer:** | **City of San José Financing Authority** |
| **Issue Description:** | Wastewater Revenue Bonds, Series 2022B (Green Bonds - Climate Bond Certified) |
| **Project:** | Wastewater System Capital Improvements |
| **Standard:** | Climate Bonds Standard (Version 3.0) |
| **Sector Criteria:** | Water Infrastructure |
| **Keywords:** | Wastewater treatment, sustainable management of natural resources, pollution prevention, odor control, energy efficiency, net zero aligned, San Francisco Bay, California |
| **Par:** | $275,570,000* |
| **Evaluation Date:** | November 2, 2022 |

*Preliminary, subject to change

## CLIMATE BONDS DESIGNATION

City of San José Financing Authority (the "Authority") will issue Wastewater Revenue Bonds, Series 2022B (Green Bonds - Climate Bond Certified) ("Series 2022B Bonds") to finance improvements to the Wastewater System, including the San José-Santa Clara Regional Wastewater Facility (the "Treatment Plant").

This report reflects Kestrel Verifiers' view of the City's projects and financing, allocation and oversight, and conformance of the Series 2022B Bonds with the Climate Bonds Standard (Version 3.0) and *Water Infrastructure* Sector Criteria. In our opinion, the Wastewater Revenue Bonds, Series 2022B (Green Bonds – Climate Bond Certified) are impactful, net zero aligned, and conform with the internationally accepted Climate Bonds Standard (Version 3.0) and the *Water Infrastructure* Sector Criteria (Version 3.2).

## ABOUT THE ISSUER

The City of San José Financing Authority was created in 1992 to provide financial assistance to construction of public capital improvement projects in the city of San José. Located at the southern end of the San Francisco Bay, San José is the third most populated city in California with a population of approximately 976,482. The City of San José (the "City") owns and operates a sanitary sewer collection system which provides wastewater collection, treatment, and disposal service for the city. The sewer collection system includes 2,030 miles of wastewater collection pipeline, 39,500 manholes, 17 sanitary lift stations, two soil beds, one injection station, and a 2,600 acre treatment plant site with buffer land lagoons and saltwater ponds. Collected wastewater is transported to the San José Water Pollution Control Plant (commonly known as the San José-Santa Clara Regional Wastewater Facility) (the "Treatment Plant"), the largest advanced wastewater treatment plant in the western United States. The facility serves 1.4 million residents, more than 17,000 businesses in eight cities, and four sanitation districts in Silicon Valley.

The Treatment Plant was originally constructed in 1956, upgraded in 1964 and 1979, and has capacity to manage up to 167 million gallons of wastewater per day. Jointly owned by the City of San José and the City of Santa Clara, and the Treatment Plant is operated by the City of San José Environmental Services

Department. The primary purpose of the facility is to protect the health, environment, and economy of the South San Francisco Bay by cleaning wastewater to near drinking water standards before it is discharged to the Bay. Approximately 20% of treated water is used by South Bay Water Recycling for beneficial reuse. The regional water recycling program produces recycled water for irrigation and in doing so, reduces the amount of freshwater that is discharged to the native salt marshes surrounding South San Francisco Bay. This helps to protect salt marshes from conversion to brackish and freshwater marshes.

The City of San José has set ambitious goals to address climate change through the *Envision San José 2040 General Plan* which integrates goals from the City's earlier sustainability plans: *Green Vision (2007-2014)* and *Climate Smart San José*. The City aims to reach carbon neutrality by 2030, receive 100% of electrical power from renewable sources, recycle or beneficially reuse 100% of wastewater, and divert solid waste from landfills.[1]

To address targets related to sustainable wastewater management, aging infrastructure, and climate risk, the City developed the Plant Master Plan. The Plant Master Plan outlines a $2 billion effort to update 30-year-old infrastructure at the facility and prioritizes a sustainable approach to wastewater management, including:

- Improving biogas efficiency, with a goal of using biogas to become 100% energy self-sufficient;
- Producing 45,000 tons of biosolids which are applied to adjacent landfills to mitigate windblown debris and meet goals for biosolids diversion;
- Protecting 201 acres of buffer land as habitat for Western Burrowing Owls and restoring wetland habitat for endangered fish species such as steelhead and longfin trout;[2] and
- Planning for sea level rise through regional partnerships.

The Treatment Plant has received many awards for building improvements and design, including the 2022 Organizational Excellence Award and the 2021 Resiliency and Innovation Excellence Award from the California Association of Sanitation Agencies. Additionally, the Treatment Plant was awarded the 2021 National Award of Merit from the Design Build Institute of America in the Water/Wastewater category.

## CONFORMANCE WITH CLIMATE BONDS STANDARD AND SECTOR CRITERIA

The Authority engaged Kestrel Verifiers to provide an independent verification on alignment of the Series 2022B Bonds with the Climate Bonds Standard (Version 3.0) and Certification Scheme, and the *Water Infrastructure* Sector Criteria. The Climate Bonds Initiative ("CBI") administers the Standard and Sector Criteria. Additionally, Kestrel Verifiers examined alignment of the Series 2022B Bonds with the United Nations Sustainable Development Goals ("UN SDGs").

Kestrel Verifiers is a Climate Bonds Initiative Approved Verifier. The Kestrel Verification Team included environmental scientists, social scientists, and financial professionals. We performed a Reasonable Assurance engagement to independently verify that the Series 2022B Bonds meet relevant criteria, in all material respects.

For this engagement, Kestrel Verifiers reviewed the Authority's bond disclosure documentation, Green Bond Framework, documentation on the allocation and uses of bond proceeds, as well as relevant plans and alignment with the Authority's overarching climate objectives. We examined public and non-public information and interviewed key staff from the City. Our goal was to understand the planned use of proceeds, procedures for managing proceeds, and plans and practices for reporting in sufficient detail to verify the bonds.

### Relevant Climate Bonds Sector Criteria and Other Standards

The Series 2022B Bonds align with the Climate Bonds Standard (Version 3.0) and *Water Infrastructure* Criteria (Version 3.2).

[1] "San José Green Vision," City of San José, 2007, https://www.sanjoseca.gov/your-government/environment/climate-smart-san-jos/green-vision.

[2] "Protecting our Environment," City of San José, accessed October 18, 2022, https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility/protecting-our-environment.

## Assurance Approach

Kestrel Verifiers' responsibility was to conduct a Reasonable Assurance engagement to determine whether the Series 2022B Bonds meet, in all material respects, the requirements of the Climate Bonds Standard. Our Reasonable Assurance was conducted in accordance with the Climate Bonds Standard (Version 3.0) and the *International Standard on Assurance Engagements (ISAE) 3000: 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 C.

Kestrel Verifiers has relied on information provided by the City and the Authority. There are inherent limitations in performing assurance, and fraud, error or non-compliance may occur and not be detected. Kestrel Verifiers is not responsible or liable for any opinions, findings or conclusions if based on information provided by the City and the Authority that is incorrect. Our assurance is limited to the review of the City's and the Authority's policies and procedures that are, in Kestrel's view, relevant to the key components of the Climate Bonds Standard (Version 3.0). The distribution and use of this verification report are at the sole discretion of the Authority. Kestrel Verifiers does not accept or assume any responsibility for distribution to any other person or organization.

## Use of Proceeds

The 2022B Bonds refund the Authority's Subordinate Wastewater Revenue Notes, Series A ("Notes") that financed improvements to the San José-Santa Clara Regional Wastewater Facility (the "Treatment Plant"). The improvements (collectively the "Treatment Plant Projects") incorporate best available technologies to improve treatment processes, reduce emissions, provide recycled water, and reuse biosolids. The Treatment Plant Projects are part of the $2 billion Plant Master Plan and support climate resilience, sustainability, and environmental stewardship. Table 1 includes construction status and budgets for the Treatment Plant Projects. The Series 2022B Bonds finance and refund the following Projects:

- Digester and Thickener Facilities Upgrade
  The Notes financed rehabilitation of four digesters and added the capability to produce Class A biosolids and increased biogas production through a Temperature Phased Anerobic Digestion system ("TPAD"). Digesters use anerobic bacteria to digest sludge and produce methane gas which fulfills on-site energy needs. Addition of the TPAD system and digester upgrades is expected to result in a 10% increase in biogas production. The Notes also financed replacement of pipes in digester tunnels to hold higher concentrations of gas and accommodate increased treatment capacity.
- Energy Generation Improvements
  The Notes financed new construction and upgrades related to energy generation and management. Financed projects improve energy efficiency and reduce energy use. Projects include construction of a building for new advanced generation internal combustion engines, heat recovery systems, and control and monitoring systems. Gas pipelines and a treatment system for digester gas were constructed, and storage tanks and emergency generators were added to improve resilience. Heat recovery systems allow the facility to capture and reuse heat energy from treatment processes and reduce energy use.
- New Headworks
  The Notes also financed a new state-of-the-art headworks system, which includes large screens to remove debris and grit chambers to remove heavier sediments such as sand and gravel. The new headworks system[3] is built to accommodate up to 400 million gallons per day (MGD) and includes an odor control mechanism to reduce impacts on the surrounding community. Additionally, the new headworks system is an integral component of a flood management strategy that aims to divert sewer flows during significant storms in order to avoid sewage spills. A new grit removal facility was built to reduce sediment inputs to sensitive coastal ecosystems.

[3] "Environmental Services News," City of San José, accessed October 14, 2022, https://www.sanjoseca.gov/Home/Components/News/News/1552/308.

- Aeration Tank and Blower Rehabilitation
  The Series 2022B Bonds fund modern controls and instrumentation upgrades to aeration tanks and blowers. These projects include installation of new motors, instrumentation and controls for ten existing blowers, and decommissioning of four blowers. Aeration tanks pump air into wastewater to produce aerobic bacteria to remove organic pollutants. The additional instrumentation and installation will result in increased reliability, efficiency, and redundancy in the biological treatment process.
- Nitrification Clarifier Rehabilitation
  Financed improvements also include rehabilitation of 16 nitrification clarifiers. Nitrification clarifiers separate solid particulates from effluent by removing nutrients, allowing heavier materials to sink and form a sludge. The clarified effluent is then sent to the next step of the treatment process without contaminants, improving flow and water quality.
- Digested Sludge Dewatering Facility
  The digested sludge dewatering facility project consists of a new mechanical dewatering facility and support systems to replace outdoor sludge storage lagoons and open-air solar drying beds. Upgrades to the dewatering facility will replace lagoons and drying beds, moving biosolid production indoors into an odor-controlled building, and reducing emissions. Construction of the new facility will allow the treatment plant to reduce odors and the total area needed for biosolids processing. The new facility supports compliance with California's statewide targets to reduce organic waste disposal by 75% by 2025 relative to a 2014 baseline.[4]

Table 1. Treatment Plant Project budgets and completion dates. Dates in the future represent anticipated completion dates

| Project | Financed by Notes | Total Project Budget | Completion Date |
|---|---|---|---|
| Digester and Thickener Facilities Upgrade | $100 million | $219 million | October 2022 |
| Energy Generation Improvements | $61 million | $114 million | December 2020 |
| New Headworks | $44 million | $152 million | December 2023 |
| Aeration Tank and Blower Rehabilitation | $22 million | $50 million | February 2023 |
| Nitrification Clarifier Rehabilitation | $9 million | $52 million | August 2023 |
| Digested Sludge Dewatering Facility | $8 million | $174 million | November 2025 |

Environmental Benefits

The Treatment Plant Projects enhance the resilience and efficiency of operations. Improvements to digesters increase energy efficiency by using the generated gas to power the site and treatment process. Biosolids from the facility are used to cover the Newby Island Landfill to reuse biosolids, reduce odor and windblown debris, and meet California's requirements for reducing disposal of treated biosolids. The City has exemplary wetland restoration practices to protect the local environment and threatened species. The Treatment Plant Projects will improve effluent water quality and reduce impacts on the San Francisco Bay ecosystem, providing protection for local species and enabling wetland restoration.

Net Zero Alignment

Use of proceeds bonds are net zero aligned if bond-financed activities advance goals to reach net zero greenhouse gas emissions by 2050. Financing improvements to the Treatment Plant directly advance goals to reach net zero greenhouse gas emissions by 2050 by incorporating state-of-the-art technology to maximize energy efficiency of blowers and aeration tanks, improve the heat recovery system, increase biogas production, and maintain comprehensive energy management systems. While wastewater facilities

[4] California code of Regulations Title 14, Division 7, Ch 3 (SB 1383).

are large consumers of electricity, the Treatment Plant Projects have incorporated features to minimize energy use and maximize beneficial reuse of wastewater treatment byproducts.[5] Improvements to biogas generation will allow the Treatment Plant to meet 60% of energy needs. The Series 2022B Bonds and the Treatment Plant Projects include features that support the City's climate action goal to reach carbon neutrality by 2030. Certified Climate Bonds are aligned with goals of the *2015 Paris Climate Agreement* and the transition to a low-carbon, climate resilient future.

Sector Criteria for Water Infrastructure (Version 3.2)

The Treatment Plant Projects align with CBI's *Water Infrastructure* Sector Criteria and the associated Mitigation and/or Adaptation and Resilience requirements.

*Mitigation Requirements:* Compliance with the City's *2040 General Plan* and *GHG Reduction Strategy* ensures that the Plant Master Plan and the Series 2022B projects are consistent with statewide greenhouse gas emission reduction targets. The Environmental Impact Reviews associated with the Plant Master Plan confirm alignment with these statewide emissions targets.[6] Bond-financed projects include multiple activities which will significantly increase operational energy efficiency, including replacement of aging or inefficient infrastructure, heat recovery systems, blower rehabilitation, and energy generation and monitoring systems. Stewardship of natural resources, including management of buffer lands and the water recycling program, support preservation and enhancement of ecosystem functions to minimize emissions. Replacement of outdoor biosolid lagoons and open-air drying beds will eliminate methane and other greenhouse gas emissions from these sites.

*Adaptation and Resilience Requirements:* A detailed vulnerability assessment including evaluation of Allocation, Governance, Diagnostics, Nature Based Solutions, and Adaptation Plan Assessment shows that the Authority has sufficient infrastructure and planning processes to meet the requirements of the Adaptation and Resilience component of the *Water Infrastructure* Criteria (Appendix D). In each area, the Authority achieved a score of at least 60%.

**Process for Project Evaluation and Selection**

The Treatment Plant Projects are part of the comprehensive Plant Master Plan developed in 2013 to address aging infrastructure, regulations related to effluent water quality, projected increase in flows and loads, and sea level rise. Priorities identified in the Plant Master Plan were incorporated into the City's long-term Capital Improvement Plan. Projects are prioritized by infrastructure conditions assessments and overall environmental and social benefits.

The Plant Master Plan and the Capital Improvement Program are overseen by the City, and authorized and approved by the Treatment Plant Advisory Committee, an advisory body consisting of representatives from the City, Santa Clara, and three Tributary Agencies.

**Management of Proceeds**

The Series 2022B Bond proceeds will refund the Subordinate Wastewater Revenue Notes, Series A and pay costs of issuance. Proceeds will directly refund the Notes in full within 90 days of issuance and will be held in temporary permitted investments prior to spending. The Trustee maintains the Wastewater Revenue Bonds Series 2022B Refunding Fund and will oversee allocation of proceeds to the Notes.

**Reporting**

The City will submit certain financial and operating information to the Municipal Securities Rulemaking Board ("MSRB") through the Electronic Municipal Market Access ("EMMA") system as long as the Series 2022B Bonds are outstanding. In accordance with the Climate Bonds Standard, Kestrel Verifiers will provide one Post-Issuance Report within 24 months of issuance to confirm continued conformance of the Series 2022B Bonds with the relevant Standards and Criteria. Additionally, the City provides voluntary quarterly Capital

[5] "Energy Efficiency for Water Utilities," EPA, accessed October 18, 2022, https://www.epa.gov/sustainable-water-infrastructure/energy-efficiency-water-utilities.

[6] "Regional Wastewater Facility Master Plan," File No. PP11-043 SCH #201105274 Resolution No. 76858, November 19, 2013, https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/completed-eirs/regional-wastewater-facility-master-plan.

Improvement Plan reports with capital project summaries. It is expected that these reports will be made available on the City's website: https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/water-utilities/regional-wastewater-facility/capital-improvement-program/cip-document-library.

## IMPACT AND ALIGNMENT WITH UN SDGS

Projects financed through the Series 2022B Bonds support and advance the vision of the United Nations Sustainable Development Goals ("UN SDGs") 6, 7, 9, 12 and 13. By funding Treatment Plant improvements that increase efficiency and resource recovery, the Series 2022B Bonds advance Targets 6.5, 9.4 and 12.2. Improvements to digesters and incorporated features to reduce climate-related risks support Target 13.1. Projects that improve wastewater treatment processes and support a system with water recycling advance Target 6.3. Reduction in greenhouse gas emissions and focus on increasing renewable generation capacity support Targets 7.2 and 7.3.

Full text of the Targets for Goals 6, 7, 9, 12 and 13, is available in Appendix A, with additional information available on the United Nations website: un.org/sustainabledevelopment



Clean Water and Sanitation (Targets 6.3, 6.5)

Possible Indicators
- Amount of treated wastewater
- Documentation of integrated water resource management
- Optimized operation of sustainably managed wastewater systems


Affordable and Clean Energy (Targets 7.2, 7.3)

Possible Indicators
- Renewable generation capacity
- Reduction in greenhouse gas emissions as a result of on-site power generation or energy efficiency improvements


Industry, Innovation and Infrastructure (Target 9.4)

Possible Indicators
- Increased resource-use efficiency (energy or other)


Responsible Consumption and Production (Target 12.2)

Possible Indicators
- Increased energy use efficiency
- Reduction in grid energy demand due to digesters
- Improved water quality as a result of financed activities


Climate Action (Target 13.1)

Possible Indicators
- Features incorporated to add resiliency and reduce climate risk

## ASSURANCE STATEMENT AND CONCLUSIONS

Based on the Reasonable Assurance procedures we have conducted, in our opinion, the Wastewater Revenue Bonds, Series 2022B (Green Bonds – Climate Bond Certified) conform, in all material respects, with the current Climate Bonds Standard, and the bond-financed activities are completely aligned with the *Water Infrastructure* Sector Criteria. The projects incorporate best available technologies to improve treatment processes and support climate resiliency, sustainability, and environmental stewardship.

Sincerely,

April Strid, Lead Verifier
Kestrel Verifiers
Hood River, Oregon, United States
November 2, 2022



## ABOUT KESTREL VERIFIERS

KESTREL VERIFIERS™

For over 20 years Kestrel has been a trusted consultant in sustainable finance. Kestrel Verifiers, a division of Kestrel 360, Inc. is a Climate Bonds Initiative Approved Verifier qualified to verify transactions in all asset classes worldwide. Kestrel is a US-based certified Women's Business Enterprise. For more information, visit kestrelverifiers.com.

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CLIMATE BONDS STANDARD APPROVED VERIFIER

Verification Team

- Monica Reid, CEO
- April Strid, Lead ESG Analyst
- Melissa Sherwood, Senior ESG Analyst
- Jordynn Paz, ESG Analyst
- Madison Alcalay, ESG Analyst

## DISCLAIMER

This Opinion aims to explain how and why the discussed financing meets the CBI Climate Bonds Standard based on the information that was provided by the Authority or made publicly available by the Authority and relied upon by Kestrel only during the time of this engagement (October-November 2022), 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 Verifiers 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 Verifiers 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 Verifiers' 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 Verifiers 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 Authority, 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 Verifiers 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 Verifiers. Kestrel Verifiers reserves the right to revoke or withdraw this Opinion at any time. Kestrel Verifiers certifies that there is no affiliation, involvement, financial or non-financial interest in the Authority or the projects discussed. We are 100% independent. Language in the offering disclosure supersedes any language included in this Opinion.

Use of the United Nations Sustainable Development Goal (SDG) logo and icons does not imply United Nations endorsement of the products, services, or bond-financed activities. The logo and icons are not being used for promotion or financial gain. Rather, use of the logo and icons is primarily illustrative, to communicate SDG-related activities.

# Appendix A.
## UN SDG TARGET DEFINITIONS

**Target 6.3**
By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

**Target 6.5**
By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

**Target 7.2**
By 2030, increase substantially the share of renewable energy in the global energy mix

**Target 7.3**
By 2030, double the global rate of improvement in energy efficiency

**Target 9.4**
By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use 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

**Target 13.1**
Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

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# Appendix B.
## ASSURANCE PROCEDURES

| REQUIREMENT | | ASSURANCE PROCEDURES |
|---|---|---|
| 1. Use of Proceeds | | |
| 1.1 | Project Documentation | Review documentation of the Nominated Projects assessed as likely to be Eligible Projects, and list of Nominated Projects that Issuer will keep up to date during the term of the bond. |
| 1.2 | Valuation | Review net proceeds of the bond to ensure they are not greater than the value of the project. |
| 1.3 | Multiple Nominations for Certified Debt Instruments | Review Nominated Projects for previous nominations to other Certified Climate Debt Instruments, green bonds, or other designated instruments. |
| 1.3.1 | Nominations to Other Debt Instruments | Review Nominated Projects to determine whether certain portions are being financed by separately designated Certified Debt Instruments. |
| 1.3.2 | Refunding Existing Certified Climate Debt | Review and confirm whether Nominated Projects have been refinanced by other Certified Debt Instruments or bonds under assessment will refinance existing Certified Debt Instruments. |
| 2. Process for Project Evaluation and Selection | | |
| 2.1 | Environmental Statement & Process (2.1.1-2.1.4) | Review statement of the climate-related objectives of the bond. Review documentation of the process that the Issuer followed to identify projects and confirm eligibility requirements for inclusion of Nominated Projects in the bond. Review planning documents which establish goals, priorities and potential impact. |
| 2.2 | Eligibility (2.2.1-2.2.2) | Review additional documentation Issuer provided on further aspects of identification process including strategic directions and standards. Review the Issuer's environmental and social integrity policy, and/or Green Bond Framework, and confirm its coverage of the Nominated Projects. |
| 2.3 | Taxonomy & Technical Criteria | Test Nominated Projects to determine whether they meet the minimum technical requirements of the Climate Bonds Standard and relevant Sector Criteria (Part C: Eligibility of Projects and Assets). |
| 3. Management of Proceeds | | |
| 3.1 | Documentation of Processes & Procedures | Confirm that the policies, processes and procedures for tracking financial flows of the bond proceeds to the Nominated Projects are in place. |
| 3.1.1 | Tracking of Proceeds | Review the allocation of funds to ensure they can be tracked against Nominated Projects. |
| 3.1.2 | Managing of Unallocated Proceeds | Review documentation for the management of bond proceeds for funds that are not allocated to a Nominated Project and review eligible temporary investments for unallocated proceeds. |
| 3.1.3 | Earmarking Funds | Confirm that the policies, processes and procedures to identify flows of proceeds related to the Bond have been established. |
| 4. Reporting | | |
| 4.1 | Bond Disclosure Documentation | Review the Issuer's Green Bond Framework and confirm plans to make the document publicly available. Confirm inclusion of necessary information within the Green Bond Framework. |
| 4.1.1 | Confirmation of Alignment | In the Green Bond Framework, confirm documentation and review areas of investment align with the Climate Bonds Standard and review statements of alignment with other relevant standards. |
| 4.1.2 | Uses of Proceeds | In the Green Bond Framework, confirm documentation and review expected uses of proceeds and the amounts allocated to activities in relevant sectors and subsectors. |

| REQUIREMENT | | ASSURANCE PROCEDURES |
|---|---|---|
| 4.1.3 | Decision-making Process | In the Green Bond Framework, confirm documentation of decision-making processes and positioning in the context of the Issuer's overarching objectives. |
| 4.1.4 | Sector Criteria Assumptions and Methodologies | In the Green Bond Framework, confirm documentation of assumptions and methodologies to evaluate conformance with Sector Criteria. |
| 4.1.5 | Temporary Investment Instruments | In the Green Bond Framework, confirm documentation of allowable temporary investment instruments. |
| 4.1.6 | Reporting Approach | In the Green Bond Framework, confirm disclosure of intended approach to providing Update Reports and/or undertaking periodic Assurance Engagements during term of bond to reaffirm conformance with the Climate Bonds Standard. |
| 4.1.7 | List of Nominated Projects | In the Green Bond Framework, confirm disclosure of list of Nominated Projects likely to be eligible. |
| 4.1.8 | Refinancing | In the Green Bond Framework, confirm disclosure of proportion of proceeds for refinancing, if applicable. |
| 4.2 | Disclosure Documentation | Confirm incorporation of key information in Disclosure Documentation. |
| 4.2.1 | Sector Criteria Disclosure | Confirm "investment areas," or alignment with the Climate Bonds Taxonomy and relevant Sector Criteria for Nominated Projects. |
| 4.2.2 | Temporary Investments | Confirm disclosure of eligible temporary investments for unallocated proceeds. |
| 4.2.3 | Verifier | Confirm disclosure of Verifier selected for Pre-Issuance and Post-Issuance Engagements. |
| 4.2.4 | Ongoing Reporting | Confirm disclosure of intended ongoing reporting on the Nominated Projects and allocation of proceeds. |
| 4.2.5 | CBI Disclaimer | Confirm incorporation of the CBI Disclaimer as provided in the Certification Agreement. |

# Appendix C.
## RESPONSIBILITIES AND QUALITY CONTROL

### Verifier's Responsibilities

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

- Assess and certify the Authority'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 Authority for reporting;
- Assess the readiness of the Authority 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 Verifiers provides green, social and sustainability bonds advisory services for corporate and public finance 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. Accredited as an Approved Verifier by the Climate Bonds Initiative, Kestrel is qualified to evaluate bonds against the Climate Bonds Initiative Standards and Criteria.

KESTREL VERIFIERS™

# Appendix D.

## CLIMATE BONDS STANDARD WATER INFRASTRUCTURE ADAPTATION & RESILIENCE SCORECARD

**CONTENTS**



CRITERIA: The project must score at least 60% of the maximum potential score in all parts of the Scorecard. Section 4 only needs to be completed for "Nature Based and Hybrid Infrastructure" only (see Criteria for detail)

| **Vulnerability Assessment - Section 1: Allocation**<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 1.1 | Are there accountability mechanisms in place for the management of water allocation that are effective at a sub-basin and/or basin scale? | 1 | 1 | Evidence | Several Plans outline management of water allocation both locally in San José and at basin scales.<br><br>The City of San José Municipal Water System (SJMWS) prepared a 2020 Urban Water Management Plan (UMWP) to comply with legislative requirements of the UWMP Act and California Water Code Requirements. It is required by the Department of Water Resources to evaluate the agency's water supply reliability in five-year increments over a 25-year planning horizon. It assesses the projected water demands and water supplies. SJMWS supplies water to north San José/Alviso, Evergreen, Edenvale, and Coyote Valley and in 2020, provided water to approximately 12% of the city. The supply sources are from San Francisco Public Utilities Commission (SFPUC), Valley Water with water from the Sacramento-San Joaquin Delta, and groundwater and recycled water (https://www.sanjoseca.gov/home/showpublisheddocument/422/637602045327100000).<br><br>Valley Water (originally Santa Clara Valley Water) supply comes from local groundwater recharge and surface water supplies and from rivers that flow into the Sacramento-San Joaquin River Delta. It is brought into the county through infrastructure of the State Water Project, federal Central Valley Project, and San Francisco's Hetch Hetchy system (https://www.valleywater.org/your-water/where-your-water-comes). The State Water Project is a collection of canals, pipelines, reservoirs, and hydroelectric power facilities that delivers clean water throughout the state. The Central Valley Project (CVP) is a network of dams, reservoirs, canals, and hydroelectric facilities. The project improves Sacramento River navigation, supplies domestic and industrial water, |

| Vulnerability Assessment - Section 1: Allocation<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| | | | | | generate electric power and conserves fish and wildlife. The CVP include federal statues here: https://www.usbr.gov/mp/cvpia/index.html. The San Francisco Hetch Hetchy system is a reservoir with voluntary plans on river management from the state (Bay-Delta Plan) and Modesto and Turlock Irrigation Districts (http://www.tuolumnerivermanagementplan.com/). The Bay-Delta plan establishes water quality objectives to maintain the health of the Bay-Delta ecosystem.<br><br>Bay area water supply and conservation agency provides regional water reliability planning and conservation programming for member agencies, including the City of San José (https://bawsca.org/)<br><br>State Water Regency Control Board ("SWRCB") establishes water quality objectives to maintain the health of the Bay-Delta ecosystem which SWRCB is required by law to review the plan.<br><br>Bay Area Water Supply and Conservation Agency (BAWSCA) provides regional water reliability planning and conservation programming to member agencies. There is a Long-Term Reliable Water Supply Strategy which identifies the water supply reliability and needs through 2040. |
| 1.2 | Are the following factors taken into account in the definition of the available resource pool? | 7 | | | |
| | a. Non-consumptive uses (e.g., navigation, hydroelectricity) | 1 | 1 | Evidence | Yes, navigation systems are considered in planning for the Treatment Plant and SFPUC |
| | b. Environmental flow requirements | 1 | 1 | Evidence | Yes, the "Ensure Sustainability" strategy in Valley Water's Water Supply Master Plan can help improve water reliability. These include securing and optimizing the use of current supplies and infrastructure as well as expanding water recycling and long-term conservation. |
| | c. Dry season minimum flow requirements | 1 | 1 | Evidence | Yes, the Drought Risk Assessment determines ability of current supplies to meet demand and will implement responses to reduce water demands with the Water Shortage Contingency Plan. |
| | d. Return flows (how much water should be returned to the resource pool, after use) | 1 | 1 | Evidence | The Wastewater Treatment Plant returns flows to the San Francisco Bay. |
| | e. Inter-annual and inter-seasonal variability | 1 | 1 | Evidence | Yes for SFPUC Hetch Hetchy Reservoir, a report was conducted in 2012 to assess the sensitivity of runoff into Hetch Hetchy Reservoir due to climate change. There is a vulnerability-based planning approach to develop adaptation plans (p. 85, https://www.sanjoseca.gov/home/showpublisheddocument/422/637602045327100000 )<br><br>The Urban Water Management Plan also addresses inter-annual and inter-seasonal variability of the resource pool. |
| | f. Connectivity with other water bodies | 1 | 1 | Evidence | The resource pool is connected to different river and groundwater sources leading out to San Francisco Bay. |

| Vulnerability Assessment - Section 1: Allocation<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| | g. Climate change impacts | 1 | 1 | Evidence | Discussed and considered in San José Water Shortage Contingency Plan and the Urban Water Management Plan. |
| 1.3 | Is there a distinction between the allocation regimes used in "normal" times and in times<br>of "extreme/severe" water shortage? | 1 | 1 | Evidence | SFPUC address allocation in both normal times and extreme water shortages. SFPUC depends on reservoir storage for reliability but during dry periods, SFPUC allocates water using a water shortage allocation plan. The program is early in planning stages but is intended to meet future water supply changes and vulnerabilities from climate change.<br>Valley Water addresses allocation in both baseline conditions and extreme water shortages with plans for normal years as well as a five-year drought.<br>The San José Plant Master Plan measured the wastewater flow to the plant over the past 15 years to determine flow during the dry season and the wet season (p. 21, https://www.sanjoseca.gov/home/showpublisheddocument/206/636611441889800000). |
| 1.4 | Are arrangements in place to accommodate the potentially adverse impacts of climate change on the resource pool? (E.g., using best available science to plan for future changes in availability, undertaking periodic monitoring and updating of available pool.) | 1 | 1 | Evidence | The San Jos Urban Water Management Plan and the San José Water Shortage Contingency Plan addresses and accommodates projections of potential adverse impacts from climate change in areas related to wastewater, drought conditions, and flood protection. The city continues to review and update new strategies to mitigate climate change on water resources. The California Water Code requires climate change considerations to be included as part of drought risk assessments as stated in the urban water management plan.<br>The city continues to review and update strategies, regulations and facilities, and mitigation and adaptation techniques such as: Promoting recycled water use.<br>*"• Developing long-term plans that utilize climate change adaptation elements.*<br>*• Making use of groundwater resources.*<br>*• Promoting water use efficiency for urban, agricultural, commercial, and industrial water users.*<br>*• Increasing investments in infrastructure that promote adaptation strategies and mitigate the loss of existing supplies that are susceptible to climate change impacts."*<br>The Bay Area integrated Regional Water Management Plan includes an assessment of the potential climate change vulnerabilities of the region's water resources, including SFPUC. SFPUC has a 2012 report which assesses the sensitivity of the Hetch Hetchy Reservoir to a range of changes in temperature and precipitation and continue reporting climate projections from 2020-2070.<br>https://drought.ca.gov/state-drought-response/statewide-emergency-water-conservation-regulations/ |

| Vulnerability Assessment - Section 1: Allocation<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 1.5 | Are there plans to define "exceptional" circumstances, such as an extended drought, that influence the allocation regime? (E.g., triggers water use restrictions, reduction in allocations according to pre-defined priority uses, suspension of the regime plan, etc.) | 1 | 1 | Evidence | The San José Water Shortage Contingency plan provides a plan of action during various stages of water shortage in compliance with the California Water Code. In drought years, it may be necessary to reduce water demands up to 12% to offset a water supply shortfall. The plan also includes plans for water shortage levels up to 10 percent, up to 20 percent, up to 30 percent, 40 percent, 50 percent, and greater than 50 percent. The plan describes a contingency plan with a multiple dry year allocation reduction( https://www.sanjoseca.gov/home/showpublisheddocument/74987/637602046315870000) |
| 1.6 | For international / trans boundary basins, is there a legal mechanism in place to define and enforce water basin allocation agreements? | 1 | 0 | Evidence | Not identified |
| 1.7 | Are water delivery agreements defined on the basis of actual in situ seasonal / annual availability instead of volumetric or otherwise inflexible mechanisms? | 1 | 0 | Evidence | Not applicable. |
| 1.8 | Has a formal environmental flows (e- flows)/sustainable diversion limits or other environmental allocation been defined for the relevant sub-basin or basin? (If there is a pre-existing plan, then has the environmental flows program been updated to account for the new project?) | 1 | 1 | Evidence | The Bay-Delta watershed management plan provides a regulatory framework for environmental flow allocation which will be adopted by SFPUC in 2022. The Modesto and Turlock Irrigation Districts plan also includes framework for environmental flow management, which is also used by SFPUC (http://www.tuolumnerivermanagementplan.com/). |
| 1.9 | Have designated environmental flows / allocation programs been assured / implemented? | 1 | 1 | Evidence | In stream flow criteria is mandated under the Bay-Delta Plan which is monitored by the State Water Resources Control Board which will be implemented in 2022 (https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/) |
| 1.10 | Has a mechanism been defined to update the environmental flows plan periodically (e.g., every 5 to 10 years) in order to account for changes in allocation, water timing, and water availability? | 1 | 1 | Evidence | The San José Urban Water Management Plan requires an update every 5 years to ensure current conditions and includes an assessment of water availability and allocation changes. |

| Vulnerability Assessment - Section 1: Allocation<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 1.11 | Is the amount of water available for consumptive use in the resource pool linked to a public planning document? (E.g., a river basin management plan or another planning document – please indicate) | 1 | 1 | Evidence | The State Water Board implements the Basin Plan with all consumptive uses tied to the plan, describing the beneficial uses and water quality objectives for the region (https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html).<br><br>The SWRCB adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. |
| 1.12 | If present, is the river basin plan a statutory instrument that must be followed rather than a guiding document? | 1 | 1 | Evidence | The Bay Delta plan provides a regulatory framework but may not be adopted or incorporated until after 2022 (p. 86, https://www.sanjoseca.gov/home/showpublisheddocument/422/637602045327100000) |
| Total Allocation Score | | 18 | 16/18 | | |
| Eligibility Criterion 1 passed/not passed | | | 89% | | Passed |

| Vulnerability Assessment - Section 2: Governance<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 2.1 | Have water entitlements been defined according to one of the following?<br><br>▪ Purpose that water may be used for<br>▪ Maximum area that may be irrigated<br>▪ Maximum volume that may be taken in a nominated period<br>▪ Proportion of any water allocated to a defined resource pool | 1 | 1 | Evidence | The California State Water Board defines water entitlements as authorizing water to be diverted from a specified source and put to beneficial, non-wasteful use. The exercise of some water rights requires a permit or license with the objective to ensure that the state's waters are put to the best possible use and public interest is served. The beneficial uses include navigation, human consumption, irrigation, industrial use, and ecosystem services (https://www.waterboards.ca.gov/drought/drought_tools_methods/delta_method.html).<br><br>California allocates water proportionally based on maximum volume available, primarily used during droughts. The State Water Resource Control Board can curtail water rights based on availability and priority. This is under the Water Unavailability Methodology to identify when water is unavailable for diversion by water right holders (https://www.waterboards.ca.gov/drought/drought_tools_methods/delta_method.html). |

| Vulnerability Assessment - Section 2: Governance<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 2.2 | Is the surface water system currently considered to be neither over allocated nor over-used?<br>N.B. Over-allocated would be if e.g. current use is within sustainable limits but there would be a problem if all legally approved entitlements to abstract water were used.<br>Over-used would be if existing abstractions exceed the estimated proportion of the resource that can be taken on a sustainable basis. | 1 | 1 | Evidence | The City of San José blends surface water from a variety of sources and groundwater to form the local water supply. The 2019 Urban Water Management plan shows that surface water is not over-allocated, and that the City is able to meet water demands through 2045. https://www.sanjoseca.gov/home/showpublisheddocument/422/637602045327100000 |
| 2.3 | If monitored and the investment uses groundwater, is the groundwater water system currently considered to be neither over- allocated nor over-used?<br>N.B. Over-allocated would be if e.g. current use is within sustainable limits but there would be a problem if all legally approved entitlements to abstract water were used.<br>Over-used would be if existing abstractions exceed the estimated proportion of the resource that can be taken on a sustainable basis. | 1 | 1 | Evidence | The groundwater system is not considered to be over-allocated or over-used according to an Annual Groundwater Report from Valley Water (https://www.valleywater.org/sites/default/files/2018-08/2017%20Annual%20GW%20Report_Web.pdf) |
| 2.4 | Is there a limit to the proportion (e.g. percentage) of water that can be abstracted? How might this need to change if water supplies become more variable due to climate change? (e.g. will having sufficient amounts to meet basic human needs take precedence over others?) | 1 | 1 | Evidence | Permitted extraction must be followed in accordance with the Urban Water Management Plan and Water Shortage Contingency Plan. The Water Shortage Contingency Plan has six different levels of potential drought plans which focus on restricting landscape and recreational irrigation to prioritize water for human basic needs. |
| 2.5 | Are governance arrangements in place for dealing with exceptional circumstances (such as drought, floods, or severe pollution events), especially around coordinated infrastructure operations? | 1 | 1 | Evidence | California state water control board has emergency water rights curtailments which mandates that the State Water Resources Control Board must curtail water diversions when sufficient flows are not available ( https://www.waterboards.ca.gov/drought/resources-for-water-rights-holders/docs/curtailments-2022.pdf).<br>Urban Water Management Plan have adaptation and mitigation strategies such as increasing investments in infrastructure the mitigate the loss of existing supplies susceptible to climate change. Additionally, the Integrated Water Infrastructure Program addresses water supply challenges and plans to provide access to local water supplies with cost effective solutions. |
| 2.6 | Is there a process for re-evaluating recent decadal trends in seasonal precipitation and flow OR recharge regime, in order to evaluate “normal” baseline conditions? | 1 | 1 | Evidence | The Urban Water Management Plan is a periodic review document, based on recent trends in water usage and flows and must be updated every 5 years. |

| Vulnerability Assessment - Section 2: Governance<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 2.7 | Is there a formal process for dealing with new entrants? | 1 | 1 | Evidence | The California State Water Resource Control Board regulates and defines the water rights permitting application process as detailed on the website: https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/. There is a permit application process that oversees the amount of water used, environmental conditions and effects, and permit issuance for new entrants. |
| 2.8 | For existing entitlements, is there a formal process for increasing, varying, or adjusted use(s)? | 1 | 1 | Evidence | The California State Water Resource Control Board must approve all changes in increasing or varying water use (https://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.html#process). Substantially adjusting operations, including withdrawal or discharges, requires permit adjustments. Adjustments or changes to drinking water supply sources or allocations requires notification and assessment through the California State Water Resource Control Board permitting process. |
| 2.9 | Is there policy coherence across sectors (agriculture, energy, environment, urban) that affect water resources allocation, such as a regional, national, or basin-wide Integrated Water Resources Management (IWRM) plan? | 1 | 1 | Evidence | The Integrated Water Resources Management Plan is supported by federal, state, and local agencies and Tribes which have established 48 regional water management groups. (https://water.ca.gov/Programs/Integrated-Regional-Water-Management) |
| 2.10 | Are obligations for return flows and discharges specified and enforced? | 1 | 1 | Evidence | The San José Regional Wastewater Facility mist meet requirements of more than 30 federal, state, and regional regulations for treated water discharge, use of recycled water, and disposal of biosolids. This is regulated by the National Pollutant Discharge Elimination System which is administered by the EPA. The facility produces an annual self-monitoring report to maintain and satisfy regulations. (https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility/regulations-reports) |
| 2.11 | Is there a mechanism to address impacts from users who are not required to hold a water entitlement but can still take water from the resource pool? | 1 | 1 | Evidence | The State Water Resource Control Board has explicit rules regarding water rights. The Water Commission Act of 1914 established the current permit code giving the Water Board authority to apply permits and licenses for California surface water. Riparian rights entitles the landowner to use a correlative share of the water flowing past their property(naturally in stream) and do not require permits or licenses but they cannot entitle a water use to divert water to storage in a reservoir for use in the dry season (https://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.html). |

| Vulnerability Assessment - Section 2: Governance<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 2.12 | Is there a pre-defined set of priority uses within the resource pool? (E.g., according to or in addition to an allocation regime) | 1 | 1 | Evidence | The California State Water Code defines priority uses in the resource pool:<br><br>Municipal and domestic water supply: *Uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply.*<br><br>Groundwater extraction*: Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting saltwater intrusion into freshwater aquifers.*<br><br>*Existing and potential beneficial uses applicable to groundwater in the Region include municipal and domestic water supply (MUN), industrial water supply (IND), industrial process supply (PRO), agricultural water supply (AGR), groundwater recharge (GWR), and freshwater replenishment to surface waters (FRESH).*<br><br>https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/bp_ch2.html |
| 2.13 | If there are new entrants and/if entitlement holders want to increase the volume of water they use in the resource pool and the catchment is open, are these entitlements conditional on either assessment of third party impacts, an Environmental Impact Assessment (EIA) or an existing user(s) forgoing use? | 1 | 1 | Evidence | Permits are managed by the State Water Resource Control Board where changes and issuances of new permits are allowed but have restrictions. The permit process follows an environmental review as required by California Environmental Quality Act before issuing a permit (https://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.html). |
| 2.14 | Are withdrawals monitored, with clear and legally robust sanctions? | 1 | 1 | Evidence | The State Water Board monitors withdrawal with clear and legally robust sanctions:<br><br>*"The State Board also is responsible for investigating possible illegal, wasteful or unreasonable uses of water, either in response to a complaint or on the State Board's own initiative. If the State Board's staff investigation determines that a misuse of water is occurring, the Board generally notifies the affected persons and allows a reasonable period of time to terminate the misuse. The State Board may also hold a hearing to determine if a misuse of water has occurred or is occurring. Water users who do not terminate a misuse of water are subject to various administrative enforcement measures including possible fines and revocation of a permit or license. In appropriate cases, the State Board may also seek judicial relief in the courts."*<br><br>https://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.html |
| 2.15 | Are there conflict resolution mechanisms in place? | 1 | 1 | Evidence | The California State Water Board has conflict resolution mechanisms in place as described in additional duties here: https://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.html#additional |
| Total Governance Score | | 15 | 15/15 | | |

| Vulnerability Assessment - Section 2: Governance<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| Eligibility Criterion 2 passed / not passed | | | 100% | | Passed |

| Vulnerability Assessment - Section 3: Technical Diagnostics<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 3.1 | Does a water resources model of the proposed investment and ecosystem (or proposed modifications to existing investment and ecosystem) exist? Specify model types, such as WEAP, SWAT, RIBASIM, USACE applications). Scale should be at least sub-basin. | 1 | 1 | Evidence | Bentley's WaterGEMS platform calibrates the hydraulic models and physical system attributes. The software improves knowledge of how infrastructure behaves as a system and reacts to operational strategies and population increases and demands. More information about the model is available here: https://www.bentley.com/software/openflows-watergems/, https://www.bentley.com/wp-content/uploads/PDS-WaterGEMS-LTR-EN-HR.pdf<br><br>Additionally, InfoWorks was used to look at the piping and inner systems of the facility to model treatment process.<br><br>The Climate Hydrology Assessment Tool (CHAT) was developed by the US Army Corps of Engineers and provides access to climate model data and analytical results of hydrology around the San Francisco Bay area. The data provides climate model information for changes in hydrological trends. (https://climate.sec.usace.army.mil/chat/ ) |
| 3.2 | Can the system model the response of the managed water system to varied hydrologic inputs and varied climate conditions? | 1 | 1 | Evidence | Yes, the Bentley WaterGems system can model the response of managed water to varied hydrologic inputs and the Climate Hydrology Assessment Tool models the varied climate conditions in hydrological inputs using global climate models and data. |
| 3.3 | Are environmental performance limits (ecosystem, species, ecological community) and/or ecosystem services specified? | 1 | 1 | Evidence | Ecosystem Performance limits are considered in the WaterGEMS platform and InfoWorks with unlimited scenarios and global attributes. |
| 3.4 | Can these performance limits be defined and quantified using the water resources model? | 1 | 1 | Evidence | Yes, the system can incorporate relevant environmental performance limits using climate data when using the CHAT tool to understand trends in precipitation, streamflow, and temperature. |
| 3.5 | Have these limits been defined based on expert knowledge and/or scientific analysis? | 1 | 1 | Evidence | The limits are defined by WaterGems, InfoWorks, and CHAT data, and the CHAT tool incorporates scientific analysis of various ranges and trends in climate modeling. |
| 3.6 | Are these performance limits linked to infrastructure operating parameters? | 1 | 1 | Evidence | The WaterGEMS and InfoWorks model can specify infrastructure operating models looking at water loss and flow capacity of pipes. |
| 3.7 | Are these limits linked to an environmental flows regime? | 1 | 1 | Evidence | The CHAT tool is linked to climate data and trends regarding environmental flows regimes, instream flows, precipitation, and temperature. |

| Vulnerability Assessment - Section 3: Technical Diagnostics<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 3.8 | For new projects, is there an ecological baseline evaluation describing the pre-impact state? | 1 | 1 | Evidence | The Water Conservation Act of 2009 set a goal to reduce urban water use by 2020 and the Urban Water Management Plan requires compliance with the act. The goal is to establish an analysis of historical water use to establish the baseline and conditions. |
| 3.9 | For rehabilitation / reoperation projects, is there an ecological baseline evaluation available before the projects was developed? | 1 | 1 | Evidence | The Environmental Impact Report from CEQA provides full evaluation of the projects and potential impacts to the environment before the project was constructed in 2013. https://www.sanjoseca.gov/home/showpublisheddocument/22339/636688403210100000 |
| 3.10 | Has there been an analysis that details impacts related to infrastructure construction and operation that has been provided? | 1 | 1 | Evidence | The 2013 Master Plan describes the impacts related to infrastructure construction on the land around the treatment plant and how the infrastructure has changed from the initial plant in 1959 to current day. The Master Plan identifies practices to mitigate construction on surrounding area. |
| 3.11 | Are lost species and/or lost or modified ecosystem functions specified for restoration in the environmental evaluation? | 1 | 1 | Evidence | The facility restores and protects habitat for western burrowing owls by restoring marshland habitat and setting aside 200 acres of facility land for habitat space.<br>https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility/protecting-our-environment |
| 3.12 | Have regional protected areas / nature reserves been included in the analysis for impacts from the investment asset and future climate impacts? | 1 | 1 | Evidence | Land use principles were established to guide decisions associated with future land uses and facilities to support eh Master Plant Plan. The principles involve restoring ecological systems, wetland habitats, riparian habitat, and building levees to combat sea level rise (pp. 55-58 https://www.sanjoseca.gov/home/showpublisheddocument/206/636611441889800000) |
| 3.13 | Does the model include analysis of regression relationships between climate parameters and flow conditions using time series of historical climate and stream flow data? | 1 | 1 | Evidence | The San Jose Plant Master Plan includes some analysis of climate parameters and flow of wats water to influence the wastewater flows during the dry and wet season with climate change impact (p. 21, https://www.sanjoseca.gov/home/showpublisheddocument/206/636611441889800000) |
| 3.14 | Does the model include climate information from a multi modal ensemble of climate projections (eg from the Climate Wizard or the World Bank's Climate Portal) to assess the likelihood of climate risks for the specified investment horizons (s)? | 1 | 1 | Evidence | The CHAT model includes climate data from global climate models, CMIP-5 suite models, historical period of water from 1951-2005 and future periods of water from 2006-2099. The modeled time series explorer in the tool describes current and simulated trends for representative concentration pathways (RCP) 4.5 and 8.5. |
| 3.15 | Are changes in the frequency and severity of rare weather events such as droughts and floods included? | 1 | 0 | Evidence | n/a |
| 3.16 | Are sub-annual changes in precipitation seasonality included? | 1 | 1 | Evidence | Yes, the CHAT tool measures the changes in precipitation seasonally by using historic and future climate trend data. |

| Vulnerability Assessment - Section 3: Technical Diagnostics<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 3.17 | Is GCM climate data complemented with an analysis of glacial melt water and sea level rise risks, where appropriate (e.g., high or coastal elevation sites)? | 1 | 1 | Evidence | The Master Plan discusses the effects of sea level rise on the treatment plant and the potential impact as the plant is located in southern most part of San Francisco Bay by the ocean. (https://www.sanjoseca.gov/home/showpublisheddocument/206/636611441889800000) |
| 3.18 | Is paleo-climatic data (e.g., between 10,000 and >1000 years before present) included? | 1 | 0 | n/a | n/a |
| 3.19 | Is the number of model runs and duration of model runs disclosed? | 1 | 0 | Evidence | n/a |
| 3.20 | Has a sensitivity analysis been performed to understand how the asset performance and environmental impacts may evolve under shifting future flow conditions? | 1 | 1 | Evidence | The Wastewater Treatment Facility must meet strict requirements for treated water discharge and use of recycled water, regulated by the National Pollutant Discharge Elimination System. The Facility prepares a detailed Annual Self-Monitoring Report to permit and satisfy regulations while also detailing information on flows, effluent, water quality, and sensitivity analysis.<br>https://www.sanjoseca.gov/your-government/environment/regulatory-reports |
| 3.21 | Is directly measured climate data available for more than 30 years and incorporated into the water resources model? | 1 | 1 | Evidence | Yes, the CHAT tool measures historical and future water data from 1950-2005 and 2006-2099. |
| 3.22 | Has evidence demonstrated that climate change has already had an impact on operations and environmental targets? Are these impacts specified and, to the extent possible, quantified? These impacts should be responded to directly in the Adaptation Plan. | 1 | 1 | Evidence | The San José Plant Master Plan addresses strategies for potential effects from sea level rise with options to build flood control structures, design facilities that tolerate occasional flooding, and allow new shoreline to be created. |
| 3.23 | Does the evidence suggest that climate change will have an impact on operations and environmental targets over the operational lifespan? Are these impacts specified and, to the extent possible, quantified? These impacts should be responded to directly in the Adaptation Plan. | 1 | 1 | Evidence | The San José/Santa Clara Water Pollution Control Plant Master Plan addresses sea level rise and the city's adaptation master plan. The Plan summarizes the potential effects of projected sea level rise by 2050 and 2100. The plant will be inundated with water unless levees are improved, and projections are adapted into a land use plan. (https://www.sanjoseca.gov/home/showpublisheddocument/474/636612853380170000) |
| 3.24 | Is there a discussion of the uncertainties associated with projected climate impacts on both operations and environmental impacts? | 1 | 1 | Evidence | California Water Resources Department's Climate Change handbook for Regional Water Planning: https://www.epa.gov/sites/default/files/2021-03/documents/climate_change_handbook_regional_water_planning.pdf |
| Total Governance Score | | 16 | 14/16 | | |
| Eligibility Criterion passed / not passed | | | 87.5% | | Passed |

## Vulnerability Assessment - Section 4: Nature Based Solutions

(to be completed for nature-based solutions and hybrid water infrastructure only)

I.e. this section only needs to be completed if:

A. As a nature based solution, the asset reflects the intentional use of natural and / or nature based features, processes, and functions, as an integral part of addressing a human need and doing so in a manner that protects, manages, restores, and / or enhances natural features, processes, and systems in a functioning and sustainable manner.

B. Where feasible, the asset prioritizes natural features over nature – based features. Such features include the protection, restoration, expansion, and / or creation of natural systems and processes as an explicit component of the desired project outcomes.

## Section 4.1: Site Inventory

How well do we understand the systems and processes at the project site?

| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
|---|---|---|---|---|---|
| 4.1.1 | Is this a "greenfield site" (i.e., undeveloped land used for agriculture, landscape design, or left to evolve naturally)? If so, will existing ecosystem services be expanded / supported / maintained? | 2 | 2 | Evidence | The Water Treatment Plant flows to South Bay Sloughs which is protected habitat by the facility. Approximately 200 acres of the facility land are set aside to be restored as marsh habitats and habitat for western burrowing owls.<br><br>https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility/protecting-our-environment |
| 4.1.2 | Has an eco-hydrological model been developed?<br><br>Specify model type, such as WEAP, SWAT, RIBASIM,<br><br>USACE.<br><br>Is this a quantitative model?<br><br>Has it been calibrated against site data?<br><br>Does the model include water quantity? | 2 | 2 | Evidence | The City of San José uses InfoWorks Integrated Catchment Modeling which incorporates population data, land use development, water use and flow monitoring data. The model can assess system performance for 5–10-year horizons under wet and dry weather flow scenarios.<br><br>The Santa Clara Valley Water uses HEC-RAS riverine models which are hydraulic models developed by the US Army Corps of Engineers to calculate water surface elevations in creeks for previous flood insurance studies. (https://www.valleywater.org/flooding-safety/hec-2-and-hec-ras-data-library)<br><br>The Climate Hydrology Assessment Tool developed by USACE tracks climate projections of streamflow with historical and future climate data from 1951-2099. The model includes streamflow, precipitation, and temperature measurements and variations. (https://climate.sec.usace.army.mil/chat/)<br><br>(p. 17, https://www.sanjoseca.gov/home/showpublisheddocument/71843/637551329081130000) |
| 4.1.3 | Has the calibrated eco-hydrological model been<br><br>reviewed by an independent expert? | 2 | 2 | Evidence | The eco-hydrological models are reviewed by the USACE. |
| 4.1.4 | Have sources of pollution been analyzed for the following (even if none have been found)?<br><br>▪ Point source<br>▪ Nonpoint source | 2 | 2 | Evidence | Yes, the Environmental Impact Report required that sources of pollution are analyzed at the point source and non-point source (https://www.sanjoseca.gov/home/showpublisheddocument/22339/636688403210100000) |
| Total Site Inventory Score | | 8 | 8/8 | | |
| Eligibility Criterion passed / not passed | | | 100% | | Passed |

| Section 4.2: Ecological Baselines For Management<br>Do we understand how the ecological characteristics of the site will evolve over time? | | | | | |
|---|---|---|---|---|---|
| | | *Max Score* | *Actual Score* | *Requirement: Evidence and/or Evidence* | *Comments* |
| 4.2.1 | Is there an inventory of species that can be used as a baseline for vegetation and animal species? | 1 | 1 | Evidence | Yes, there is a section in the Environmental Impact Report of special status wildlife species that can be used as a baseline for animal species. |
| 4.2.2 | If there is an inventory of species that can be used as a baseline for vegetation and animal species, does it specify or identify endangered / threatened species, ecological communities, or categories of species? | 1 | 1 | Evidence | Yes, the Environmental Impact Report specifies species associated with habitats in the region such as harvest mice, burrowing owls, California clapper rail, and western snowy plover. These animals may be affected by the project. |
| 4.2.3 | Have studies on current or potential climate impacts on key species (e.g., endangered or threatened species) been included? | 1 | 1 | Evidence | Yes, climate impacts on key species have been included in the Environmental Impact Report including sea level rise and changes in salinity levels. |
| 4.2.4 | Is the flow regime used as a basis for ecological management? | 1 | 1 | Evidence | Flow regime is used as a basis to determine the Plant's influent wastewater flows during the dry and wet season as discussed in the Master Plan. |
| 4.2.5 | Is there a climate trends analysis for the site or region based on at least 30 years of climate data? | 1 | 1 | Evidence | Yes, there is a climate trends analysis based on 30 years of climate data with the Climate Hydrology Assessment Tool. |
| 4.2.6 | Is there an assessment of exotic invasive species? | 1 | 1 | Evidence | Yes, there is an assessment on exotic invasive species in the Environmental Impact Report |
| 4.2.7 | If there is an assessment of exotic invasive species, has a plan been developed to cope with exotic invasive species? | 1 | 1 | Evidence | Yes, there is an assessment on exotic invasive species in the Environmental Impact Report with mitigation measures to cope with exotic invasive species. |
| 4.2.8 | Has there been an assessment of trade-offs between reliability vs environmental benefits to support decision making processes? | 1 | 1 | Evidence | Yes, the Environmental Impact Report discusses the reliability of the wastewater treatment and the environmental benefits of wetland restoration provided form the improvements. There are few tradeoffs, with goals to mitigate tradeoffs by protecting endangered species and providing habitat area for species. |
| Total Ecological Management Score | | 8 | 8/8 | | |
| Eligibility Criterion passed / not passed | | | 100% | | Passed |

| Section 4.3: Data Inventories of Localized & Indigenous Assets<br>Do we have access to adequate, credible data about the project site? | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| 4.3.1 | Is there an inventory of existing water-related ecosystem services based on 30 or more years of data? | 1 | 1 | Evidence | The Climate change Vulnerability Assessment for the North-Central California Coast and Ocean has an inventory of existing ecosystem services based on environmental data since the 1950s and 1990s (https://nmssanctuaries.blob.core.windows.net/sanctuaries-prod/media/archive/science/conservation/pdfs/vulnerability-assessment-gfnms.pdf). |
| 4.3.2 | Does any existing inventory of water-related ecosystem services related to runoff / land-use include the following data?<br>▪ Fire regime<br>▪ Sediment / erosion load<br>▪ Nutrient load<br>▪ Land-use change | 3 | 3 | Evidence | The Structured-Decision Making for Climate Change Adaptation to Conserve San Francisco Bay Tidal Marsh Ecosystems project addresses ecosystem services related to sediment load and management and nutrient load and water quality. The project also addresses managing human disturbances and land-use change. (http://climate.calcommons.org/sites/default/files/basic/SFCADS_Phase_1_Report_2015.pdf). |
| 4.3.3 | Do inventories of water-related ecosystem services related to water *quality* include the following data:<br>▪ Water quality for environmental services (e.g., habitat, ecological communities, erosion)<br>▪ Water quality for human needs / services (e.g., drinking water, agriculture) | 2 | 1 | Evidence | The Structured-Decision Making for Climate Change Adaptation to Conserve San Francisco Bay Tidal Marsh Ecosystems project addresses management of water quantity for environmental services, focusing on reducing contaminant inputs and regulating salinity (http://climate.calcommons.org/sites/default/files/basic/SFCADS_Phase_1_Report_2015.pdf). |
| 4.3.4 | Is there an existing inventory of water-related ecosystem services related to water *quantity*?<br>▪ Water quantity for environmental services (e.g., habitat, flow regime)<br>▪ Water quality for human needs / services (e.g., service reliability) | 2 | 2 | Evidence | The Climate change Vulnerability Assessment for the North-Central California Coast and Ocean addresses management of water quantity for environmental services, focusing on water management for both environmental and human needs. (http://climate.calcommons.org/sites/default/files/basic/SFCADS_Phase_1_Report_2015.pdf). |
| Total Existing Inventories Score | | 8 | 7/8 | | |
| Eligibility Criterion passed / not passed | | | 87.5% | | Passed |

## Section 4.4: Broader Ecosystem Impacts

Do we understand how the project's impacts may extend beyond the site?

| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
|---|---|---|---|---|---|
| 4.4.1 | Has there been a determination of proposed / estimated impacts from project construction and operations regarding local, upstream, and downstream species / ecological communities? | 1 | 1 | Evidence | Yes, the Environmental Impacts Report discusses estimated impacts and mitigation techniques from project construction on local and upstream ecological communities. There is a list of impacts on biological resources in the report. |
| 4.4.2 | Has there been a determination of proposed / estimated impacts on existing local, upstream, and downstream eco-hydrological systems from modification regarding:<br>▪ Pollution<br>▪ Downstream flow regime<br>▪ Groundwater impacts<br>▪ Land tenure (e.g., public vs private) | 4 | 3 | Evidence | Yes, the Environmental Impact Report discusses impacts on upstream and downstream systems with pollution and flow and groundwater impacts. There is a section in the EIR that discusses impact on geology and soils, hazards and hazardous material. |
| 4.4.3 | Has there been a determination of proposed / estimated impacts and benefits on eco-hydrological systems from changes in allocation via the following?<br>▪ Relevant environmental flows management plans<br>▪ Groundwater management plans | 2 | 2 | Evidence | The Santa Clara Valley Water District groundwater plan and the San José Urban Water Management plan cover impacts and benefits on the ecohydrological systems from changes in allocation on a short term and long term basis.<br>https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2021_GWMP_web_version.pdf |
| 4.4.4 | Has the monitoring system contributed to the development and goals of the basin management plan? | 1 | 1 | Evidence | The San Francisco Bay Basin Water Quality Control Plan oversees San José water so the plans must abide by the Basin plans. |
| Total Broader Impacts Systems Score | | 8 | 7/8 | | |
| Eligibility Criterion passed / not passed | | | 87.5% | | Passed |

## Section 4.5: Monitoring & Management Systems

Do we have effective management processes and tools to maintain ecological integrity over time?

| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
|---|---|---|---|---|---|
| 4.5.1 | Have target performance indicators been explicitly defined for:<br>▪ Infrastructure services<br>▪ Ecosystem services | 1 | 1 | Evidence | The Plant completed an infrastructure Condition Assessment on plant facilities to identify how the Plant can continue to operate with current technology. |

| | | | | | |
|---|---|---|---|---|---|
| 4.5.2 | Is there a monitoring plan in place for infrastructure performance indicators? | 2 | 2 | Evidence | The Infrastructure Condition Assessment reevaluates infrastructure performance to ensure it is meeting the goals. |
| 4.5.3 | Is there a monitoring plan in place for ecosystem performance indicators? | 1 | 1 | Evidence | The San José Urban Management Plan has ecosystem performance objectives, including changes in climate. |
| 4.5.4 | Are monitoring outcomes connected to the decision making and management / operations process? | 1 | 1 | Evidence | The monitoring outcomes are connected to the Urban Water Management Plan in making decisions about future water use and operations process. The Bay Delta Ecosystem plan also take the monitoring into account. |
| 4.5.5 | Is there a multi-stakeholder basin management plan? | 1 | 1 | Evidence | The San Francisco Bay Basin Water Quality Control Plan is a multi-stakeholder basin management plan for San José. |
| Total Monitoring and Management Systems Score | | 6 | 6/6 | | |
| Eligibility Criterion passed / not passed | | | 100 % | | Passed |

| **Section 5: Adaptation Plan**<br>(To be completed for all Water Infrastructure assets) | | | | | |
|---|---|---|---|---|---|
| | | Max Score | Actual Score | Requirement: Evidence and/or Evidence | Comments |
| AP.1 | Is there a plan to restore or secure lost/modified ecosystem functions / species? | 1 | 1 | Evidence | The Plant Master Plan will protect and restore ecological systems such as tidal mud flats, salt marshes, upland habitats, and riparian corridors. Restoring the Coyote Creek Riparian Habitat and Artesian Slough Corridor will redistribute the plant's discharge to reduce potential adverse effects on the salt march while regenerating the ecosystem(p. 58 https://www.sanjoseca.gov/home/showpublisheddocument/206/636611441889800000) |
| AP.2 | Is the adaptation plan for environmental targets / infrastructure robust across specified observed / recent climate conditions? | 1 | 1 | Evidence | The Plan has specified goals in response to observed conditions, including improving habitat and providing flood control benefits and building levees in response to sea level rise. |
| AP.3 | Is the adaptation plan for environmental targets / infrastructure robust across specified projected climate conditions? | 1 | 1 | Evidence | The Plan addresses risks of sea level rise and flood mitigation with goals to produce levees conforming to the standards of the Army Corps of Engineers. The Urban Water Management Plan addresses changes in water supply due to projected climate change with measurements in place to reduce water usage in times of drought. |
| AP.4 | Is there a monitoring plan designed to track ongoing progress and impacts to inform future decisions? | 1 | 1 | Evidence | The Urban Water Management Plan for San José is updated every 5 years and complies with the California Urban Water Conservation Council. This plan addresses changes in water levels and efforts to reduce water demand. |
| AP.5 | Is there a plan to reconsider on a periodic basis for operational parameters, governance | 1 | 1 | Evidence | The Urban Water Management Plan for San José is updated every five years. |

| | | | | | |
|---|---|---|---|---|---|
| | and allocation shifts, and environmental performance targets? | | | | |
| Total Adaptation Plan Score: | | 5 | 5/5 | | |
| Eligibility Criterion passed / not passed | | | 100% | | Passed |