



Stage 1 Business Analysis

California Department of Technology, SIMM 19A.3 (Ver. 3.0.8, 02/01/2022)

1.1 General Information

1. **Agency or State entity Name:** **3940 - Water Resources Control Board, State**

If Agency/State entity is not in the list, enter here with the [organization code](#).

[Click or tap here to enter text.](#)

2. **Proposal Name and Acronym:** **Data Modernization to Support the Directives in the Water Supply Strategy (WSS)**

3. **Proposal Description: (Provide a brief description of your proposal in 500 characters or less.)**

The proposal supports implementation of the Governor's [California's Water Supply Strategy, Adapting to a Hotter, Drier Future](#) (WSS). This includes resources to modernize data infrastructure to integrate forecasting, data, and information management to give water managers readily available data to manage water quality threats and progress towards 2030 and 2040 supply goals. This will consist of improvements in electronic reporting of volumetric data, laboratory analyses, field data collection, and associated data checkers to confirm accuracy of data submittals.

4. **Proposed Project Execution Start Date:** **1/31/2025**

5. **S1BA Version Number:** **Version 1**

1.2 Submittal Information

1. **Contact Information**

Contact Name: [Cheryl Holden](#)

Contact Email: Cheryl.Holden@waterboards.ca.gov

Contact Phone: [916-327-0003](#)

2. **Submission Type:** **New Submission**

If Withdraw, select Reason: [Choose an item.](#)

If Other, specify reason here: [Click or tap here to enter text.](#)

Sections Changed, if this is a Submission Update: (List all sections changed.)

Not applicable.

Summary of Changes: (Summarize updates made.)

Not applicable.

3. Attach [Project Approval Executive Transmittal](#) to your email submission.
4. Attach [Stage 1 Project Reportability Assessment](#) to your email submission.

1.3 Business Sponsorship

1. Executive Champion (Sponsor)

Title: [Deputy Director](#)

Name: [Karen Mogus](#)

Business Program Area: [Division of Water Quality](#)

2. Business Owner

Title: [Chief Deputy Director](#)

Name: [Jonathan Bishop](#)

Business Program Area: [Executive Management](#)

3. Product Owner

Title: [Assistant Deputy Director](#)

Name: [Annalisa Kihara](#)

Business Program Area: [Division of Water Quality](#)

TIP: Copy and paste or click the + button in the lower right corner on any section to add additional Executive Champions, Business Owners, or Product Owners with their related Business Program Areas as needed.

1.4 Stakeholder Assessment

The Stakeholder Assessment is designed to give the project team an overview of communication channels that the state entity needs to manage throughout the project. More stakeholders may result in increased complexity to a project.

1. Indicate which of the following are interested in this proposal and/or the outcome of the project. (Select 'Yes' or 'No' for each.)

State Entity Only: No

Other Departments/State Entities: Yes

Public: No

Federal Entities: No

Governor's Office: No

Legislature: No

Media: No

Local Entities: No

Special Interest Groups: Yes

Other: No

2. Describe how each group marked 'Yes' will be involved in the planning process.

Coordination with WaterReuse California and the California Association of Sanitation Agencies (CASA) will ensure system enhancements for enhanced pretreatment programs are developed in consultation with their member agencies. Outreach will occur through targeted meetings as well as at the WaterReuse California Annual Conference and other industry conferences. Coordination with California Stormwater Quality Association (CASQA) and regional and local stormwater management agencies will ensure system enhancements for stormwater capture and use volumetric reporting options are developed in consultation with them and their member agencies. Outreach will occur through targeted meetings and industry conferences. Coordination with Regional Water Quality Control Boards will occur through targeted meetings and regularly scheduled roundtables to ensure reporting options are developed in a manner that will fit the needs of the local regional municipal stormwater permit program.

1.5 Business Program

1. **Business Program Name:** Division of Water Quality and Regional Water Quality Control Boards

2. **Program Background and Context:** (Provide a brief overview of the entity's business program(s) current operations.)

The Division of Water Quality (Division) is one of five divisions that serve the State Water Resources Control Board (the State Water Board). The State Water Board has authority over water quality from several sources: the Porter-Cologne Water Quality Control Act (1969), the federal Clean Water Act (1972), Federal Resource Conservation Recovery Act (1976), and the State Health and Safety Code. Porter-Cologne defined and provided the State Water Board with broad authority over waters of the state. It also created structure around how the State Water Board issues permits and gave the State Water Board authority over regulating both surface water and groundwater. The Division works in coordination with the nine Regional Water Quality Control Boards (Regional Water Boards) to fulfill the State Water Board's mission "to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

3. How will this proposed project impact the product or services supported by the state entity?

The proposed data modernization project will enable the Division and Regional Water Board staff to meet the unprecedented climate challenge to assess, permit, fund, and implement new water supply projects at the pace this climate emergency warrants and ensure these vital new potable water supplies are in compliance with state and federal regulations and remain protected from water quality threats.

TIP: Copy and paste or click the + button in the lower right corner to add Business Programs, with background and context and impact descriptions as needed.

1.6 Project Justification

1. Strategic Business Alignment

Enterprise Architect

Title: Information Technology Specialist III

Name: To be determined

Strategic Plan Last Updated? 7/1/2022

Strategic Business Goal: The Water Board's 2022 Strategic Work Plan sets forth a high priority action to help increase statewide water resiliency in the face of climate change and other threats by expanding and integrating California's water supply portfolio. Within that overarching action are specific goals including: Goal 3.1 - Prepare for, respond to, and learn from drought.

Alignment: This proposal serves a critical function in meeting this goal because integration of forecasting, data, and information management through data modernization gives water managers the tools to take timely actions to manage water quantity through reporting of reliable volumetric data for stormwater and recycled water, and to manage associated water quality threats from these new water resources.

Strategic Business Goal: Goal 3.2 – Increase resilience of local and regional water supplies

Alignment: This proposal includes implementation of high-quality volumetric reporting requirements for recycled water and stormwater capture, which will provide Division and regional water board staff with necessary data to support local and regional water supply managers in their efforts to identify opportunities and funding to move from planning to new water project implementation.

Strategic Business Goal: Goal 3.3 – Support sustainable management of California's groundwater resources.

Alignment: Modernization of data reporting for the Enhanced Pretreatment Program, as well as for recycled water and stormwater capture and use will result in a robust and high-quality data resource for managing recycled water and stormwater projects and will streamline water quality data analyses by Division and regional water board staff. This will result in improved

protection for groundwater recharge by ensuring that new and novel water supplies that are providing water to viable groundwater storage facilities are safe from emerging contaminants and industrial pollutants.

Strategic Business Goal: Goal 3.4 – Manage natural and working lands and soils so they provide water-related benefits.

Alignment: Modernization of volumetric data reporting for recycled water and stormwater capture and use data will support implementation steps associated with the goal of managing lands for water-related benefits and improve the strategy to expand water storage capacity above and below ground by four million acre-feet.

Strategic Business Goal: Goal 3.5 – Use stormwater more fully and effectively to provide multiple benefits.

Alignment: Volumetric reporting for stormwater capture and use projects will enable staff to effectively implement plans and policies to support the growth of new water supplies, storage, and protection from pollution while also ensuring that aridification and the state's response to aridification are equitable and do not disproportionately harm disadvantaged communities and communities that have experienced environmental injustices.

TIP: Copy and paste or click the + button in the lower right corner to add Strategic Business Goals and Alignments as needed.

Mandate(s): State

Bill Number/Code, if applicable: Assembly Bill 574 (Quirk, 2017)

Add the Bill language that includes system-relevant requirements:

SEC. 5. Section 13561.2 is added to the Water Code, to read: 13561.2. (a) On or before December 31, 2023, the state board shall adopt uniform water recycling criteria for direct potable reuse through raw water augmentation.

The proposed uniform water recycling criteria for direct potable reuse include the following:

§ 64669.95 Compliance Reporting.

(a) For each calendar month, a Direct Potable Reuse Responsible Agency (DiPRRA) shall submit a report to the State Board by the tenth day of the following month that includes a summary and results of the month's treatment plant compliance monitoring conducted pursuant to section 64669.90. The report shall be signed by the chief water treatment plant operator, plant superintendent, or other person directly responsible for the operation of the water treatment plant. The report shall include:

- (1) Record of treatment performance;
- (2) Summary of overall treatment plant LRV performance;
- (3) Excursions of operational parameters outside approved operating conditions;

(4) Violation of performance standards;

(5) Number of instrument readings that did not meet the surrogate and/or operational parameter critical limits established to assure proper on-going performance of the treatment processes set forth in section 64669.45(a);

(6) Calibration records for instruments monitoring pathogen or chemical control points;

(7) Dates and descriptions of failures to comply with a critical limit, including the duration of failure, a description of the response, and corrective actions taken;

(8) Dates and description of major equipment and process failures and corrective actions taken;

(9) Dates and summary of testing of the treatment control and alarm system consistent with the protocols in the Operations Plan; and

(10) Other records or information as specified by the State Board on a project-specific basis.

(b) Each month, a DiPRRA shall include the following in the monthly compliance report:

(1) Investigation or incident reports required to be prepared pursuant to sections 64669.45, 64669.50, 64669.60, and 64669.65;

(2) A summary of an investigation of a potential chemical peak conducted pursuant to section 64669.50(l)(2);

(3) A summary of activities of the enhanced source control program

(4) A summary of chemicals detected as a result of monitoring conducted pursuant to sections 64669.60 and 64669.65;

(5) Investigation or incident report of a cross-connection;

(6) A summary of water quality complaints and reports of gastrointestinal illness received from customers; and

(7) Other information as specified by the State Board on a project-specific basis.

(c) Analytical results of water quality monitoring conducted pursuant to sections 64669.60 and 64669.65 shall be reported to the State Board electronically by the 10th day of the month following the end of the monitoring period pursuant to sections 64469.

TIP: Copy and paste or click the + button in the lower right corner to add Bill Numbers/Codes and relevant language as needed.

2. Business Driver(s)

Financial Benefit: Yes

Increased Revenue: No

Cost Savings: Yes

Cost Avoidance: No

Cost Recovery: [No](#)

Will the state incur a financial penalty or sanction if this proposal is not implemented? [No](#)

If the answer to the above question is “Yes,” please explain:

[Click or tap here to enter text.](#)

Improvement

Better Services to the People of California: [Yes](#)

Efficiencies to Program Operations: [Yes](#)

Improved Equity, Diversity, and/or Inclusivity: [Yes](#)

Improved Health and/or Human Safety: [Yes](#)

Improved Information Security: [No](#)

Improved Business Continuity: [No](#)

Improved Technology Recovery: [No](#)

Technology Refresh: [No](#)

Technology End of Life: [No](#)

1.7 Business Outcomes Desired

Executive Summary of the Business Problem or Opportunity:

Objective 1) Develop statewide database tools and supporting training materials to manage electronic reporting of indirect and direct potable reuse project data in accordance the Enhanced Source Control Recommendations for direct potable reuse in California prepared for the State Water Board by the National Water Research Institute. The incorporation of this data into the California Integrated Water Quality System (CIWQS) will provide all permittee enrollment, reports, and compliance data in one publicly accessible system to meet immediate permitting mandates affiliated with permitting programs. The project will go through the following development phases:

- (1) Existing data infrastructure and data needs assessment to identify opportunities and constraints for updating infrastructure to meet the data submittal needs of the Enhanced Pretreatment Program,
- (2) Data infrastructure updates to incorporate electronic reporting of laboratory analyses, field data collection, and real-time data collected through supervisory control and data acquisition systems, and associated data checkers to confirm accuracy of data submittals and notification of compliance concerns and exceedances,
- (3) Data infrastructure updates to incorporate geographic information system mapping of industrial users in enhanced pretreatment sewersheds, and

(4) Ongoing maintenance and enhancements and internal and external training to effectively and efficiently manage Enhanced Pretreatment Program data and information.

Objective 2) Enhancement, development, and implementation of reporting modules in GeoTracker to track progress towards goals for recycled water volumetric targets. Requested resources will analyze and re-evaluate the state's recycled water goals considering multiple years of volumetric data, funded recycled water project information, anticipated decreases in wastewater influent due to successful conservation practices, and ongoing drought conditions to develop new accurate and achievable targets to increase resilience. The data reporting elements will provide necessary information for staff to analyze the relationship between recycled water and communities that have experienced environmental injustices to evaluate equity in access to recycled water.

Objective 3) Enhancements to stormwater permit databases to track stormwater capture and use for better analysis of water quality data as new stormwater capture systems are installed. Data integration across water programs is needed to support forecasting and water supply/quality management. The requested stormwater resources will track the reduction in impervious surfaces, as well as the implementation of new green infrastructure projects in neighborhoods with excess heat and impervious surface area, to ensure equitable implementation of stormwater capture incentives.

Objective ID: 1.1

Objective: By 2024, provide facilities with indirect and direct potable reuse the ability to electronically report and review enhanced pretreatment data

Metric: Facilities required to report pretreatment data with indirect and direct potable reuse data

Baseline: 0

Target Result: 255, potable and non-potable reuse facilities

Objective ID: 1.2

Objective: By 2024, provide public access to all enhanced pretreatment reports and compliance data in CIWQS

Metric: Data accessible to the public

Baseline: 0

Target Result: 3 enhanced pretreatment reporting files for water quality data, compliance, and enforcement

Objective ID: 2.1

Objective: By 2024, require facilities with volumetric reporting requirements to electronically report projected and anticipated increases in recycled water production and use to track progress towards statewide goals in GeoTracker

Metric: Facilities required to report projected and anticipated increases in recycled water production and use

Baseline: 0

Target Result: 750, facilities submitting volumetric annual report

Objective ID: 3.1

Objective: By 2024, provide municipal stormwater permittees the ability to electronically report annual volume of stormwater capture in SMARTS to track progress towards goals

Metric: Stormwater permittees reporting stormwater capture and use

Baseline: 0

Target Result: Twenty (20) large municipal stormwater permittees tracking stormwater capture volume and comparing to goals identified in the WSS

TIP: Copy and paste or click the + button in the lower right corner to add Objectives as needed. Please number for reference.

TIP: Objectives should identify WHAT needs to be achieved or solved. Each objective should identify HOW the problem statement can be solved and must have a target result that is specific, measurable, attainable, realistic, and time-bound. Objective must cover the specific. Metric and Baseline must detail how the objective is measurable. Target Result needs to support the attainable, realistic, and time-bound requirements.

1.8 Project Management

1. Project Management Risk Score: 0.8

(Attach a completed [Statewide Information Management Manual \(SIMM\) Section 45 Appendix A Project Management Risk Assessment Template](#) to the email submission.)

2. Project Approval Lifecycle Completion and Project Execution Capacity Assessment

Does the proposal development or project execution anticipate sharing resources (state staff, vendors, consultants, or financial) with other priorities within the Agency/state entity (projects, PALs, or programmatic/technology workload)?

Answer: No

Does the Agency/state entity anticipate this proposal will result in the creation of new business processes or changes to existing business processes?

Answer (No, New, Existing, or Both): Both New and Existing Processes

1.9 Initial Complexity Assessment

1. Business Complexity Score: 2.2

(Attach a completed [SIMM Section 45 Appendix C](#) to the email submission.)

2. **Noncompliance Issues:** (Indicate if your current operations include noncompliance issues and provide a narrative explaining how the business process is noncompliant.)

Programmatic regulations: [No](#)

HIPAA/CIIS/FTI/PII/PCI: [No](#)

Security: [No](#)

ADA: [No](#)

Other: [No](#)

Not Applicable: [Choose Yes or No.](#)

Noncompliance Description:

[Click or tap here to enter text.](#)

3. Additional Assessment Criteria

If there is an existing Privacy Threshold Assessment/Privacy Information Assessment, include it as an attachment to your email submission.

How many locations and total users is the project anticipated to affect?

Number of locations: [Statewide](#)

Estimated Number of Transactions/Business Events (per cycle): [4500 per year](#)

Approximate number of internal end-users: [105 staff](#)

Approximate number of external end-users: [At least 2500 external \(e.g., dischargers, stakeholders, and public\)](#)

1.10 Funding

Planning

1. Does the Agency/state entity anticipate requesting additional resources through a budget action to **complete planning** through the project approval lifecycle framework? [Yes](#)

If Yes, when will a budget action be submitted to your Agency/DOF for planning dollars?

[7/17/2023](#)

2. Please provide the Funding Source(s) and dates funds for planning will be made available:

[Waste Discharge Permit Fund - TBD](#)

Project Implementation Funding

1. Has the funding source(s) been identified for **project implementation**? [No](#)

If known, please provide the Funding Source(s) and dates funds for implementation will be made available:

[Click or tap here to enter text.](#)

Will a budget action be submitted to your Agency/DOF? [Yes](#)

If “Yes” is selected, specify when this BCP will be submitted: [Fall 2024-25](#)

2. Please provide a rough order of magnitude (ROM) estimate as to the total cost of the project: [Less than \\$10 Million](#)

End of agency/state entity document.

Please ensure ADA compliance before submitting this document to CDT.

When ready, submit Stage 1 and all attachments in an email to ProjectOversight@state.ca.gov.

Department of Technology Use Only

Original "New Submission" Date: [7/20/2023](#)

Form Received Date: [7/20/2023](#)

Form Accepted Date: [7/20/2023](#)

Form Status: [Completed](#)

Form Status Date: [7/20/2023](#)

Form Disposition: [Approved](#)

If Other, specify: [Click or tap here to enter text.](#)

Form Disposition Date: [7/20/2023](#)

Department of Technology Project Number (0000-000): [3940-108](#)