



Stage 2 Alternatives Analysis

California Department of Technology, SIMM 19B.2 (Ver. 3.0.8, 02/28/2022)

2.1 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:** WaterTAP Project

3. **Department of Technology Project Number (0000-000):** 3940-105

4. **S2AA Version Number:** Version 1

5. **CDT Billing Case Number:** 3N

Don't have a Case Number? [Click here to get one.](#)

2.2 Submittal Information

1. **Contact Information**

Contact Name: Kathy Owen

Contact Email: Kathy.Owen@Waterboards.ca.gov

Contact Phone: (916) 341-5573

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 an update or resubmission: (List all the sections that changed.)

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

Summary of Changes: (Summarize updates made.)

Click or tap here to enter text.

3. Attach 2.2.3 [Project Approval Executive Transmittal](#) to your email submission.
4. Attach 2.2.4 [Procurement Assessment Form](#) to your email submission.
5. **Conditions from Stage 1 Approval** (Enter any conditions from the Stage 1 Business Analysis approval letter issued by CDT or your AIO):

None

2.3 Baseline Processes and Systems

1. **Current Business Environment (Describe the current business environment of which the effort will be understood and assessed in 500 words)**

The State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) proposes a data collection, evaluation, and tracking tool to meet the requirements of the U.S. Environmental Protection Agency (USEPA) Lead and Copper Rule Revision (LCRR). DDW is responsible for implementing the federal and California Safe Drinking Water Acts (SDWAs) and other statutory mandates, as well as State Board, California Environmental Protection Agency (CalEPA), and Administration initiatives.

DDW has historically maintained several disparate tools and databases to help facilitate regulatory oversight. However, these tools are inadequate to streamline data intake, improve data quality, manage workflows, and ensure transparency of information as required. A new data management tool is needed to ensure ongoing, up-to-date compliance evaluations of the large number of public water systems in California.

A secure system is needed to intake documentation, certifications, compliance forms, and data from public water systems; determine compliance; support staff and management through compliance evaluations, document generation, and recordkeeping; facilitate data-driven decision making; and provide automated data publication. DDW does not currently have a system that would allow public water systems to upload the required information for review and approval.

Attach relevant documentation to email submission (i.e., business process, workflow, problem analysis, user/stakeholder list, research findings). If these types of documents are not available, please indicate "Not Available," and explain the reason below:

Not available reason: The Lead and Copper Rule Revisions is a new USEPA requirement; therefore, there are no current business processes or workflow. The WaterTAP project is necessary to implement the new regulation.

2. Technical Context (Describe the technical environment of which the effort will be understood and assessed in 500 words)

DDW currently maintains several disparate tools and databases to help facilitate regulatory oversight. However, these tools are inadequate to ensure ongoing, up-to-date compliance evaluations of all public water systems in California.

DDW has developed or implemented core data systems to meet current needs as follows:

- i. Safe Drinking Water Information System (SDWIS) – Partial Implementation
SDWIS contains information about public water systems, water quality data, compliance status, and enforcement history. It is the database of record for DDW and reporting to USEPA.
- ii. Electronic Annual Report (eAR)
The eAR is an annual survey completed by public water systems to report mandatory and voluntary data that is essential for DDW regulatory oversight.
- iii. SAFER Clearinghouse – Development Ongoing
The SAFER Clearinghouse was initially developed to combine data from multiple sources to allow staff to track the implementation of the Human Right to Water across multiple Divisions. It has since been built out to also include drought monitoring requirements. The SAFER Clearinghouse development is continuing to include additional data points to support Senate Bill 200 and the Human Right to Water (Assembly Bill 685).
- iv. California Laboratory Intake Portal (CLIP) – Partial Implementation
CLIP is the portal for laboratories to report water quality data. It currently only accepts chemical data. Development is continuing to provide additional data validations, accept bacteriological data, and meet Cross-Media Electronic Reporting Rule (CROMERR) requirements.
- v. Service Area Boundary Layer (SABL)
SABL is an interface to collect geographical boundaries of public water systems and display through ArcGIS and Google Earth / Google Maps.
- vi. Disparate Spreadsheets and Databases
DDW is made up of 28 different Districts and 27 Local Primacy Agencies (LPA) county programs, many of which have created individual, standalone data collection efforts to manage regulatory oversight that are incapable of providing transparency and consistency of reporting.

Attach relevant documentation to email submission (i.e., logical system environment diagrams, etc). If these types of documents are not available, please indicate “Not Available,” and explain the reason below:

See attachment: 2.8.1 Current State Conceptual Architecture

Not available reason: [Click or tap here to enter text.](#)

3. Data Management (Enter the information to indicate the data owner and custodian of the current system, if applicable.)

Data Owner Name: [Darrin Polhemus](#)

Data Owner Title: [Program Sponsor](#)

Data Owner Business Program area: [Division of Drinking Water](#)

Data Custodian Name: Division of Information Technology

Data Custodian Title: [Project Technical Director](#)

Data Custodian Technical area: [Division of Information Technology](#)

Security - Data Classification and Categorization [Yes](#)

Security - Privacy Threshold & Impact Assessment. [Yes](#)

4. Existing Data Governance and Data

- a)** Do you have existing data that must be migrated to your new solution?

Answer (Unknown, Yes, No): [Yes](#)

If data migration is required, please rate the quality of the data.

Select data quality rating: [Some issues identified with the existing data.](#)

- b)** Does the Agency/state entity have an established data governance body with well-defined roles and responsibilities to support data governance activities?

Answer (Unknown, Yes, No): [Yes](#)

If Yes, include the data governance organization chart as an attachment to your email submission.

[Attachment: 2.3.4b_DDW_Governance_Flow_Chart_060419_v4](#)

- c)** Does the Agency/state entity have data governance policies (data policies, data standards, etc.) formally defined, documented, and implemented?

Answer (Unknown, Yes, No): [Yes](#)

If Yes, include the data governance policies as an attachment to your email submission.

[Attachment: 2.3.4c_opm-34-data-cat-system-class-final-2022](#)

- d)** Does the Agency/state entity have data security policies, standards, controls, and procedures formally defined, documented, and implemented?

Answer (Unknown, Yes, No): [Yes](#)

If Yes, attach the existing documented security policies, standards, and controls used to your email submission.

Attachment: [2.3.4d_opm-11-data-sec-download-final-2022](#)

- e) Does the Agency/state entity have user accessibility policies, standards, controls, and procedures formally defined, documented, and implemented?

Answer (Unknown, Yes, No): **Yes**

Water Board has adopted as minimum requirements the Web Content Accessibility Guidelines (WCAG 2.1), Level AA developed by the World Wide Web Consortium (W3C). See link for Water Board compliance: [Web Content Accessibility Guidelines \(WCAG\) 2.1 \(w3.org\)](#) and [TL 18-04 Website Standards;TL18-04;Website Standards \(ca.gov\)](#)

If Yes, attach the existing documented policies, accessibility governance plan, and standards used to the email submission.

5. Security Categorization Impact Table

Consult the [SIMM 5305-A Information Security Program Management Standard - Security Categorization Impact Table](#).

Attach a table (in PDF) that categorizes and classifies the agency/state entity's information assets related to this effort (e.g., paper and electronic records, automated files, databases requiring appropriate protection from unauthorized use, access, disclosure, modification, loss, or deletion). Each information asset for which the agency/state entity has ownership responsibility shall be inventoried and identified.

See attachment: 2.3.5 Security Categorization Impact Table- WaterTAP

6. Security Categorization Impact Table Summary

Consult the [SIMM 5305-A Information Security Program Management Standard - Security Categorization Impact Table](#) to provide potential impact levels of the following areas:

Confidentiality: **Medium**

Integrity: **Medium**

Availability: **Medium**

7. Technical Complexity Score: See attachment: 2.3.7_SIMM-45-Appendix-C-Complexity-Assessment

(Attach a [SIMM Section 45 Appendix C](#) with Business and Technical Complexity sections completed to the email submission.)

2.4 Requirements and Outcomes

At this time in the project planning process, requirements and outcomes should be documented and indicative of how the Agency/State Entity envisions the final solution. This shall be accomplished either in the form of mid-level requirements (predictive methodology)/business capabilities or representative epics and user stories (adaptive methodology) that will become part of the product backlog. The requirements or representative epics and user stories must tie back to the Objectives detailed in the Stage 1 Business Analysis. Regardless of which tool/method is used, an understanding of the following, at a minimum, must be clearly articulated:

- Functional requirements
- Expected user experience(s)
- Expected system outcome
- Expected business operations (e.g., How do you envision operations in the future?)
- Alignment to the project's objectives identified in Stage 1
- Product ownership (e.g., Who owns these requirements?); and
- Verification of need(s) fulfillment (e.g., How will success be measured?)

Attach Requirements and/or Outcomes narratives, mid-level requirements, and/or epics/user stories to submission email.

See attachment: 2.4 Mid-Level Functional Requirements

Attach Final MLR's after RFI

2.5 Assumptions and Constraints

Relevant assumptions and constraints help define boundaries and opportunities to shape the scope and complexity of the project.

Assumption: WaterTAP Project Leadership, Product Owner, and Subject Matter Experts are dedicated to project activities and available to address project needs.

Description/Potential Impact: Without daily engagement and response to project needs, the project will be at a high risk of falling behind schedule and over budget.

Assumption: Additional project funding is approved

Description/Potential Impact Without additional funding, reassessment of proposed solutions and reprioritization and phased implementation of product functionality will be required. Additional staff will be requested in a project implementation and on-going maintenance BCP with FY 25/26.

Assumption: SWRCB PAL core team and selected vendor team will remain unchanged throughout the project.

Description/Potential Impact: Changes in team membership will require knowledge transfer and additional training. This may cause delays within affected project areas.

Assumption: Risks and issues will be documented and managed throughout the project.

Description/Potential Impact: Potential risks and proposed alternative solutions should be documented to ensure efficient resolution if risks are encountered. Issues and solutions should be documented to ensure issues that are encountered during the project are resolved

Assumption: Organizational change management will facilitate a smooth transition to the new system by its users with minimal disruption to business process efficiency.

Description/Potential Impact: Proper change management is necessary to allow for a smooth transition to the new system and prevent workflow issues.

Assumption: All necessary system functionality is accounted for within functional and non-functional requirements.

Description/Potential Impact: System will be developed to address functional and non-functional requirements established by the program. Development and implementation costs will be calculated based on these requirements. Additional functionality may not be possible if not accounted for in early stages of project planning, and dependent processes may be compromised.

Assumption: Supporting contracts and procurements will be completed on schedule.

Description/Potential Impact: Contract and procurement delays will create delays in the overall project schedule.

Assumption: New system will integrate and interface with external systems and applications as needed to support business requirements.

Description/Potential Impact: Integration and interfacing is critical for the transmission of data and information across systems. A need to identify unplanned, alternative solutions may delay project implementation.

Constraint: Project Budget

Description/Potential Impact: WaterTAP project current funding is \$34 million over three years. Additional funding for State IT staff is required to support the project implementation and long-term maintenance and operations. Additional staff will be requested in a project implementation and on-going maintenance BCP with FY 25/26. Without additional funding, critical functionality will need to be descoped and current scope re-prioritized.

Constraint: Defined project scope.

Description/Potential Impact: Project scope must account for all necessary system functionality. Changes in scope may negatively impact costs and timing of solution development and implementation.

Constraint: Content accessibility.

Description/Potential Impact: System content must meet accessibility requirements to ensure useability by all stakeholders.

2.6 Dependencies

Dependencies are elements or relationships in a project reliant on something else occurring before the function, service, interface, task, or action can begin or continue.

Dependency Element: Project Planning and Management services are started early in planning phases.

Dependency Description: Project Planning and Management services are required to help State resources adequately plan for upcoming project approval lifecycle states required by CDT. State resources are limited, and current project funding does not allocate a resource dedicated for planning and project planning and management of implementation. Without this service the project would be delayed and at risk of improper planning and implementation management.

Dependency Element: System training of internal and external users.

Dependency Description: Training of both internal and external users will improve the utility and benefits realized through the implementation of the new system

Dependency Element: Data conversion and migration cannot be completed until data baseline data is documented and prepared.

Dependency Description: Before data conversion and migration occur, partial data dictionaries must be extracted and completed, a data quality assessment must be completed, and data must be cleansed.

Dependency Element: Data transmission between stakeholder entities requires established system integration and interface mechanisms.

Dependency Description: New system must be able to communicate with internal and external systems and interfaces to transmit data and information as needed to meet the needs and requirements of various stakeholders.

Dependency Element: Data quality within the new system will depend on data integrity constraints.

Dependency Description: Data integrity constraints must be implemented within the new system to prevent reporting inaccuracies associated with the storage of bad data within the database.

Dependency Element: Role-based access management requires established roles, permissions, and assignments.

Dependency Description: Access to areas within the new system will be managed inside the new system, leveraging groups/roles/permissions, and using a formal request process.

Dependency Element: Successful system recovery in case of failure will depend on a backup and recovery plan.

Dependency Description: In case of failure, the system must be able to leverage scheduled and stored backups.

2.7 Market Research

Market Research ([CDT Market Research Guidelines](#)) determines whether products or services available in the marketplace can meet the business needs identified in this proposal. Market Research can also determine whether commercial practices regarding customizing/modifying products or tailoring services are available, or even necessary, to meet the business needs and objectives of the business.

Before undertaking a Market Research approach. Contact your PAO Manager to schedule a collaborative review to review planning to date and discuss the procurement approach.

1. Project Management Methodology: [Adaptive Approach \(Agile\)](#)

2. Procurement approach recommended: [Request for Offer](#)

3. Market Research Approach

Provide a concise narrative description of the approach used to perform market research.

The WaterTAP primary form of market research used was the release of a formal request for information (RFI) to the vendor community. The RFI was posted on Cal E-procure on February 1, 2024 and key milestones concluded on April 18, 2024. The vendor responses were evaluated in two phases, phase 1 and phase 2.

Phase 1 was administrative in that detailed project needs, scope and background were provided and request from the vendor community to provide responses to, Service and Management Questions (SMQ), ability to meet Functional Requirements (FR) and Rough Order of Magnitude (ROM). The SMQ and FR were evaluated by key DDW Project Sponsor and DIT key resources. Phase 2 consisted of requests for system demonstrations. Detailed demonstration scripts and informational processes flow were provided to each participating vendor. Phase 2 was evaluated by the same group as in phase 1.

4. Market Research Artifacts

Market Research Artifacts can include internet research, collaboration with other governmental entities, or other documentation.

Attach Market Research artifacts to the email submission

See Attachments: 2.7.4 RFI No. 23-280-002 WaterTAP and 2.7.4_RFI 23-280-002 - Worksheet B - RFI Response - SMQ

2.8 Viable Alternative Solutions

The CDT expects Agencies/state entities to conduct a thorough analysis of all feasible alternatives that will meet the proposal's objectives and requirements. Agencies/state entities should provide at minimum the three (3) most viable solutions, one (1) of which could be leveraging and/or enhancing the existing solution (if applicable).

1. Viable Alternative Solution #1

Name: **Software as a Service (SaaS)**

Description: Customizable Low-Code/No Code SaaS solution framework which integrates open-source software.

Why is this a viable solution? Please explain:

Based on responses yielded from the RFI efforts, it is clear that the leading solution available now to meet the WaterTAP project needs is a SaaS. Market research shows, a SaaS can be highly customizable with advantages such as:

- Core code has been deployed with other agencies/departments
- Configurable data validation engine
- Configurable workflow engine
- Custom and ad hoc reporting capabilities
- Potential low-code/no-code spatial validation and geoprocessing option for other applications
- Integration with various other software which are in the WB's IT portfolio

Approach

Increase staff – new or existing capabilities: **Yes**

Modify the existing business process or create a new business process: **Yes**

Reduce the services or level of services provided: **No**

Utilize new or increased contracted services: **Yes**

Enhance the existing IT system: **No**

Modify Statute/Policy/Regulations: **Yes**

Please Specify: The LCRR is a new federal regulation. We currently do not yet have primacy for it. We will need to adopt the LCRR regulation before we can directly issue enforcement for non-compliance but must start implementing LCRR requirements for community water systems and nontransient noncommunity water systems.

Create a new IT system: **Yes**

Other: [Choose Yes or No](#). Specify: [Click or tap here to enter text](#).

Architecture Information

Business Function(s)/Process(es): [See bullets below](#).

- [Contact Management and Credentialing](#)
- [Data and Document Management](#)
- [Workflow Management](#)
- [Water System Record Management](#)
- [Reporting](#)
- [Transparency](#)
- [General System Operations](#)

Conceptual Architecture

Attach a copy of the conceptual architecture to your email submission.

See Attachment: 2.8.1 To-Be Conceptual Process Flows

COTS/SaaS/Cloud Technology or Custom: [COTS/SaaS/Cloud Technology](#)

Name/Primary Technology: [TBD – PAL Stage 4](#)

Explain Existing System Interfaces: [See 2.8.1 Current State Conceptual Architecture](#)

Explain New System Interfaces: [TBD – Stage 4](#)

Data Center Location of the To-be Solution: [Other](#)

If Other, specify: [Cloud Environment](#)

Security

Access

Public: [Yes](#)

Internal State Staff: [Yes](#)

External State Staff: [Yes](#)

Other: [Choose Yes or No](#). Specify: [Click or tap here to enter text](#).

Type of Information (Select Yes or No for each to identify the type of information that requires protection. See the SAM Section 5305.5 for more information.)

Personal: [Yes](#)

Health: [No](#)

Tax: [No](#)

Financial: [Yes](#)

Legal: [Yes](#)

Confidential: [Yes](#)

Other: [No](#) Specify: [Click or tap here to enter text.](#)

Protective Measures (Select Yes or No to identify the protective measures used to protect information.)

Technical Security: [Yes](#)

Physical Security: [No](#)

Backup and Recovery: [Yes](#)

Identity Authorization and Authentication: [Yes](#)

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

Total Viable Alternative #1 Solution Cost (copy from FAW – Executive Cost Summary tab, cells E7 through E11):

Planning Costs: [\\$6,110,631](#)

One-Time (Project) Costs: [\\$38,815,828](#)

Total Future Ops. IT Staff OE&E Costs: [\\$22,314,043](#)

Total Proposed Cost: [\\$67,240,502](#)

Annual Future Ops. Costs (M&O): [\\$9,071,536](#)

2. Viable Alternative Solution #2

Name: [COTS Solution](#)

Description: [COTS Solution to meet WaterTAP business functional and non-functional requirements.](#)

Why is this a viable solution? Please explain:

- [Potentially faster deployment \(less configuration due to COTS platform\)](#)
- [COTS solutions are built based on industry best practices. Implementing a COTS solution will enable DDW refine processes to meet some of these industries wide best practices.](#)
- [Allow for a degree of customization for the public facing components](#)
- [Lower development costs](#)

Approach

Increase staff – new or existing capabilities: [Yes](#)

Modify the existing business process or create a new business process: [Yes](#)

Reduce the services or level of services provided: [No](#)

Utilize new or increased contracted services: [Yes](#)

Enhance the existing IT system: [No](#)

Modify Statute/Policy/Regulations: [No](#)

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

Create a new IT system: [Yes](#)

Other: [Choose Yes or No.](#) Specify: [Click or tap here to enter text.](#)

Architecture Information

Business Function(s)/Process(es):

- [Contact Management and Credentialing](#)
- [Data and Document Management](#)
- [Workflow Management](#)
- [Water System Record Management](#)
- [Reporting](#)
- [Transparency](#)
- [General System Operations](#)

Conceptual Architecture

Attach a copy of the conceptual architecture to your email submission.

See attachment: 2.8.1 To-Be Conceptual Process Flows

COTS/SaaS/Cloud Technology or Custom: [COTS/SaaS/Cloud Technology](#)

Name/Primary Technology: [TBD – Stage 4](#)

Explain Existing System Interfaces: [See 2.8.1 Current State Conceptual Architecture](#)

Explain New System Interfaces: [TBD](#)

Data Center Location of the To-be Solution: [Other](#)

If Other, specify: [Cloud Environment](#)

Security

Access:

Public: [Yes](#)

Internal State Staff: [Yes](#)

External State Staff: [Yes](#)

Other: [Choose Yes or No.](#) Specify: [Click or tap here to enter text.](#)

Type of Information (Select Yes or No for each to identify the type of information that requires protection. See the SAM Section 5305.5 for more information.)

Personal: [Yes](#)

Health: [No](#)

Tax: [No](#)

Financial: [Yes](#)

Legal: [Yes](#)

Confidential: [Yes](#)

Other: [No](#) Specify: [Click or tap here to enter text.](#)

Protective Measures (Select Yes or No to identify the protective measures used to protect information.)

Technical Security: [Yes](#)

Physical Security: [No](#)

Backup and Recovery: [Yes](#)

Identity Authorization and Authentication: [Yes](#)

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

Total Viable Alternative #2 Solution Cost (copy from FAW – Summary tab, cell AL33):

Total Proposed Cost: [\\$56,542,047](#)

3. Viable Alternative Solution #3

Name: [N/A](#)

Description: [Alternative #3 does not apply. SWRCB is considering a SaaS solution and a COTS solution, as described in alternatives 1 and 2.](#)

Why is this a viable solution? Please explain:

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

Approach

Increase staff – new or existing capabilities: [Choose Yes or No.](#)

Modify the existing business process or create a new business process: [Choose Yes or No.](#)

Reduce the services or level of services provided: [Choose Yes or No.](#)

Utilize new or increased contracted services: [Choose Yes or No.](#)

Enhance the existing IT system: [Choose Yes or No.](#)

Modify Statute/Policy/Regulations: [Choose Yes or No.](#)

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

Create a new IT system: [Choose Yes or No.](#)

Other: [Choose Yes or No.](#) Specify: [Click or tap here to enter text.](#)

Architecture Information

Business Function(s)/Process(es): [Click or tap here to enter text.](#)

Conceptual Architecture

Attach a copy of the conceptual architecture to your email submission.

COTS/SaaS/Cloud Technology or Custom: [Choose an item.](#)

Name/Primary Technology: [Click or tap here to enter text.](#)

Explain Existing System Interfaces: [Click or tap here to enter text.](#)

Explain New System Interfaces: [Click or tap here to enter text.](#)

Data Center Location of the To-be Solution: [Choose an item.](#)

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

Security

Access:

Public: [Choose Yes or No.](#)

Internal State Staff: [Choose Yes or No.](#)

External State Staff: [Choose Yes or No.](#)

Other: [Choose Yes or No.](#) Specify: [Click or tap here to enter text.](#)

Type of Information (Select Yes or No for each to identify the type of information that requires protection. See the SAM Section 5305.5 for more information.)

Personal: [Choose Yes or No.](#)

Health: [Choose Yes or No.](#)

Tax: [Choose Yes or No.](#)

Financial: [Choose Yes or No.](#)

Legal: [Choose Yes or No.](#)

Confidential: [Choose Yes or No.](#)

Other: [Choose Yes or No](#). Specify: [Click or tap here to enter text](#).

Protective Measures (Select Yes or No to identify the protective measures used to protect information.)

Technical Security: [Choose Yes or No](#).

Physical Security: [Choose Yes or No](#).

Backup and Recovery: [Choose Yes or No](#).

Identity Authorization and Authentication: [Choose Yes or No](#).

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

Total Viable Alternative #3 Solution Cost (copy from FAW – Summary tab, cell AL50):

Total Proposed Cost: [Click or tap here to enter text](#).

2.9 Project Organization

Project planning includes the process of identifying how and when specific labor skill sets are needed to ensure that the proposed project has sufficient staff with the appropriate knowledge and experience by the time the project moves into execution. All staff identified in the following sections should be included in the Financial Analysis Worksheet to be completed in Section 2.12.

1. Project Organization Chart:

Attach the Project Organization Chart to your email submission.

See: 2.9.1 WaterTAP Project Organization Chart

2. Is the department running this project as a matrixed or projectized organization?

[Matrixed](#)

In each of the following sections, provide a concise description of the approach to staffing the proposed project including contingencies for business/program, IT, or administrative areas to maintain ongoing operations in conjunction with the proposed project.

1. Administrative

[Budgeting](#) – Budget staff provide the ability to estimate and plan resource requirements (funding, personnel, materials and supplies, workspace, etc.) to achieve project or operational goals.

[Procurement](#) – Procurement staff provide the ability to acquire products and services within the constraints and requirements of government code and agency policy, including development and execution of an overall procurement approach. Procurement staff also provide the ability

to advise and monitor the execution of procurement activities to remain in compliance with code and policy.

Vendor/Contract Management – Staff with contract management responsibilities provide the ability to prepare and monitor statements of work and service level agreements with vendors, and the ability to execute notification and remediation of breaches to those agreements. This skill can also refer to the ability to integrate the efforts and goals of various vendors towards a desired single outcome.

2. Business Program

Program staff within the SWRCB Division of Drinking Water provide program subject matter expertise necessary for requirements gathering and overall solution development. Program staff will also interact with internal project management and development teams and the vendor throughout the testing and implementation phases of the project to ensure requirements are met. These individuals will prioritize tasks associated with the project in accordance with the project schedule. Responsibilities associated with solution development and business process re-engineering will be absorbed within existing staff resources with no anticipated disruption to existing services.

3. Information Technology

The selected vendor will provide primary system development and implementation services, SWRCB has secured two (2) dedicated IT resources to support internal tasks related to project data management, security, and other technical areas. Additional staff will be requested in a project implementation and on-going maintenance BCP with FY 25/26.

4. Testing

The selected vendor will lead system testing, while user acceptance testing will be led by program staff. Comprehensive test plans and test scripts will be developed to reflect scenarios that align with business processes and functional requirements. Program staff will execute test scripts, document test results, and work with the prime vendor and other core team members to resolve issues. An IV&V contractor, in consultation with SWRCB program and technical staff, will oversee all testing to ensure functional and non-functional requirements are met. All testing efforts assumed by SWRCB staff will be absorbed within existing resources and those recently allocated to this project with no anticipated disruption to existing services.

5. Data Conversion/Migration

SWRCB program and technical staff are responsible for data preparation prior to conversion and migration. Technical staff provide data extracts and cleansing tools to assist in the identification and correction of problematic data prior to conversion. The selected vendor will perform all data conversion activities after data preparation and cleansing. Then, program staff will review baseline data, make corrections within respective systems, and work with selected vendor to resolve any data conversion issues.

6. Training

WaterTAP project training will be provided by the primary vendor. A comprehensive knowledge transfer plan will be developed by the vendor. Internal user training will be provided and a train-the-trainer approach will be utilized. Videos will be created and added to our training solution, Cornerstone.

7. Organizational Change Management

OCM planning for the WaterTAP project will be established by a contracted services to establish identifying obstacles to change, training preparation, communication plan development, and determining the impact of the change on stakeholder groups, processes, and resources. An OCM team will focus on these key areas to ensure a smooth transition. Additional responsibilities of the OCM team will include determining change capacity and capability within the program, as well as facilitating a long-term commitment to change through metrics and a supportive culture.

8. Resource Capacity/Skills/Knowledge for Stage 3 Solution Development

This narrative should include the experience level and quantity of procurement, contract management, and budget staff who will be responsible for the Stage 3 Solution Development.

CDT's Statewide Technology Procurement (STP) team will be the lead procurement officials. SWRCB has assigned two resources to support procurement activities. SWRCB has one management level Budget Analyst and one management level Contract Manager assigned to support Stage 3 activities. A planning consultant may be brought in to assist as well.

2.10 Project Planning

1. Project Management Risk Assessment

Updated Project Management Risk Score: 0.3

Attach Updated PM Risk Assessment to your email submission. [SIMM Section 45A](#)

See Attachment: [2.10.1_PM Risk Assessment_SIMM_45_Appendix_A](#)

2. Project Charter

Is your project charter approved by the designated Agency/state entity authority and available for the Department of Technology to review? **Choose:** 'Yes,' 'No,' or 'Not Applicable.' If 'No' or 'Not Applicable,' provide the artifact status in the space provided.

[Project Charter \(Approved\):](#) No

Status: Draft version See: [2.10.2_WaterTAP Project Charter Draft](#)

Attach a copy of the Project Charter to your email submission.

3. Project Plans

Are the following project management plans or project artifacts approved by the designated Agency/state entity authority and available for the Department of Technology to review?

Choose: 'Yes,' 'No,' or 'Not Applicable.' If 'No' or 'Not Applicable,' provide the artifact status in the space provided.

Note: For Low to medium complexity and cost projects, discuss with your PAO manager the option of submitting a Master Project Management Plan in place of individual plans.

[Scope Management Plan \(Approved\)](#): Yes

Status: Approved

[Communication Management Plan \(Approved\)](#): Yes

Status: Approved

[Schedule Management Plan \(Approved\)](#) : Yes

Status: Approved

[Procurement Management Plan \(Approved\)](#): Yes

Status: Approved

[Requirements Management Plan \(Approved\)](#): Yes

Status: Approved

[Stakeholder Management Plan \(Draft\)](#): Yes

Status: Draft complete

[Governance Plan \(Draft\)](#): Yes

Status: Approved

[Contract Management Plan \(Draft\)](#): Yes

Status: Draft complete

[Resource Management Plan \(Draft\)](#): Yes

Status: Draft complete

[Change Control Management Plan \(Draft\)](#): Yes

Status: Draft complete

[Risk Management Plan \(Draft + Risk Log\)](#): Yes

Status: Draft complete

Issue and Action Item Management Plan (Draft + Issue Log): Yes

Status: Draft complete

Cost Management Plan (Approved if planning BCP approved): No

Status: Will be drafted and submitted with Stage 4

4. Project Roadmap (High-Level)

Attach a high-level Project Roadmap showing remainder of planning phase and transition into execution phase to the email submission.

Attachment: 2.10.4_WaterTAP Planning Roadmap

- a) Planning Start Date: 6/1/2021
- b) Estimated Planning End Date: 6/30/2025
- c) Estimated Project Start Date: 7/1/2025
- d) Estimated Project End Date: 6/30/2027

2.11 Data Cleansing, Conversion, and Migration

If in Section 2.3 (above) the answer to the question “Do you have existing data that must be migrated to your new solution?” was marked “Yes,” please complete this section.

The California Department of Technology recommends having a Data Consultant start data cleansing, conversion, and migration activities as soon as possible.

Identify the status of each of the following data activities. If “Not Applicable” is chosen, explain why the activity is not applicable or if “Not Started” is chosen, explain when the activity will start and its anticipated duration:

1. Current Environment Analysis: Completed

We have documented entity relationship diagrams for legacy data architecture.

2. Data Migration Plan: Not Started

Will be provided by the Vendor.

3. Data Profiling: Not Started

Will be provided by the Vendor.

4. Data Cleansing and Correction: In Progress

On-going clean-up reports have been developed. We are working with USEPA on an on-going basis to clean-up data errors and work directly with data submitters. Additional work is needed to identify and implement additional data cleansing necessary for migration.

5. Data Quality Assessment: In Progress

Regulation reviews and decision tree creations are identifying and rectifying technical and business data issues.

6. Data Quality Business Rules: In Progress

Refining and documenting business rules.

7. Data Dictionaries: In Progress

We have partial data dictionaries for legacy systems.

8. Data Conversion/Migration Requirements: Not Started

Will be provided by the Vendor.

2.12 Financial Analysis Worksheets

Attach [F.2 Financial Analysis Worksheet\(s\)](#) to the email submission.

End of agency/state entity document.

Please ensure ADA compliance before submitting this document to CDT.

When ready, submit Stage 2 and all attachments in an email to ProjectOversight@state.ca.gov.

Department of Technology Use Only

Original "New Submission" Date: 07/10/2024

Form Received Date: 07/10/2024.

Form Accepted Date: 07/10/2024.

Form Status: Approved

Form Status Date: 01/10/2025

Form Disposition: Completed

Form Disposition Date: t 01/10/2025