



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](#).

2. **Proposal Name:** California Wetland and Riparian Area Protection Portal (CalWRAPP)

3. **Department of Technology Project Number (0000-000):** 3940-110

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

5. **CDT Billing Case Number:** 4LX

Don't have a Case Number?

2.2 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:

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

N/A

Summary of Changes: (Summarize updates made.)

New submission

3. Attach [Project Approval Executive Transmittal](#) to your email submission.
4. Attach [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):

N/A

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 SWRCB and nine Regional Water Quality Control Boards (collectively the Water Boards) have authority to regulate waters of the state under the Porter-Cologne Water Quality Control Act (Porter-Cologne), and delegated authority to implement the Federal Clean Water Act (CWA). The Water Boards implement the Dredge or Fill Program (Program) by issuing permits for discharges of dredged or fill material that may affect water quality under section 401 of the CWA for federal waters (water quality certifications), and under Porter-Cologne for non-federal waters (waste discharge requirements) (collectively, permits).

The Water Boards implement the state Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) as a key tool for advancing California's no net loss policy for wetlands. The no net loss policy, originally established by Executive Order W-59-93 and codified in September 2024 through Assembly Bill (AB) 2875, commits the state to ensuring "no overall net loss and long-term net gain in the quantity, quality, and permanence of wetlands acreage and values." The Procedures require that regulation of dredge or fill activities be consistent with this policy, positioning the Water Boards' Program as essential to protecting the state's wetlands, streams, riparian zones, and headwater areas.

To carry out these regulatory responsibilities, the Program manages a permit application process for dredge or fill activities. Applicants submit their materials using fillable forms, either by email or postal mail, to the appropriate Regional Water Board based on project location, or to the SWRCB for projects spanning multiple regions. Once received at the correct office, staff review the applications and manually record data.

The SWRCB proposes building a system (CalWRAPP) for dredge or fill applicants to upload applications, supporting documentation, and compliance forms; to support data exchange with internal and external data systems in a secure portal; to provide staff with the ability to review reported information and query for compliance; and to provide a public performance measure tracking dashboard. The proposed project will include four major elements:

- An electronic intake system for system users to upload applications, supporting documentation, permits, compliance forms, and data;
- Workflow to support staff in reviewing reported information, and in determining, managing, and tracking compliance and enforcement actions;

- A user interface to manage and track required tasks; and
- A reporting system to allow analysis of Program performance.

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:

[CalWRAPP S2AA 2.3.1 Current Business Environment Documentation.vsd](#)

[2.3.1 dredge or fill procedures.pdf](#)

[2.3.1 certification process and timelines.pdf](#)

[2.3.1 California public records act guidelines.pdf](#)

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

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

The proposed system, California Wetland and Riparian Area Protection Portal (CalWRAPP), as an enterprise-level data system, is needed to address current and future information needs. An overarching architecture is critical to connect with existing foundational data systems, including but not limited to Annual Fee Billing System (AFBS), Financial Management System (FMS), Microsoft Outlook, CalEPA Complaints, California Water Resources Control Board GIS Portal, and EcoAtlas, as well as integrate new data systems, replacing existing disparate spreadsheets and ad hoc databases, into a single, cohesive system to streamline information access.

The proposed system will provide the following benefits:

- Increase Program effectiveness and efficiency, and reduce costs by centralizing all application data in one system with a common set of review procedures;
- Allow consistent entry of spatial data for project boundaries, impacts, and mitigation;
- Provide staff the ability to aggregate and review geospatial and other data that will allow staff to analyze and report on statewide trends and program effectiveness;
- Report Dredge or Fill Program actions across the state through one database and create new summaries as new reporting needs are identified;
- Allow for automatic email notifications to assist with workflow and deadlines;
- Leverage existing investments and tools developed for online visualization tools;
- Summarize Program effectiveness in mitigating impacts;
- Track when monitoring reports are due and have been received;
- Exchange information with other systems, such as EcoAtlas, California Open Data Portal, and other applications developed for displaying and visualizing data;
- Provide a central electronic repository for all documents related to an application and assist with paperless office requirements;
- Increase Program consistency across all the Water Boards and improve administrative processes;
- Respond to the State Auditor’s Report recommendations (2012-120);
- Centralize access for data and documents to support Program business operations;
- Efficient control of data elements and data architecture to accommodate changing requirements;
- Flexibility to expand capacity and scale the system as needed;

- Seamless interaction with digitized records including Case Management functions that streamline information reporting, compliance and enforcement actions, as well as improve transparency of data;
- A new data quality assurance and control framework that is sustainable long-term;
- Customizable dashboards and reports for viewing and understanding data collected by the system; and
- Data collected by the system being open and available while ensuring information security by providing different levels of access to Water Board staff, applicants, and the public.

Attach relevant documentation to email submission (i.e., logical system environment diagrams, system interactions, business rules, application flows, stakeholder information, data flow charts). If these types of documents are not available, please indicate “Not Available,” and explain the reason below:

[CalWRAPP S2AA 2.8.1 Architecture vSalesforce SaaS ALT1.pdf](#)

[CalWRAPP S2AA 2.3.1 Current Business Environment Documentation.vsd](#)

Not available reason:

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

Data Owner Name: [Nick Martorano](#)

Data Owner Title: [Assistant Deputy Director](#)

Data Owner Business Program area: [Paul Hann](#)

Data Custodian Name: [Elizabeth Reece](#)

Data Custodian Title: [Environmental Scientist](#)

Data Custodian Technical area: [Lily Ware](#)

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): [No](#)

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

Select data quality rating: [Not Applicable](#)

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.

- 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.

[opm-37-data-retention.pdf](#)

[21-700-007-water-quality-retention-schedule-approval-number2021-079.pdf](#)

[2.3.4c opm-34-data-cat-system-class-final-2022.pdf](#)

[21-700-007-water-quality-retention-schedule-approval-number2021-079.pdf](#)

- 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.

[2.3.4d opm-11-data-sec-download-final-2022.pdf](#)

[OPM T-19-11 - Data Security](#)

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

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

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

[opm-01-acceptable-use-final-2022.pdf](#)

[opm-02-identification-auth-final-2022.pdf](#)

[opm-03-endpoint-sec-final-2022.pdf](#)

[opm-08-sec-awareness-final-2022.pdf](#)

[opm-09-access-control-final-2022.pdf](#)

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.

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: [High](#)

7. Technical Complexity Score: [Click or tap here to enter text.](#)

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

[CalWRAP SIMM-45-Appendix-C-Complexity-Assessment.xlsx](#)

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?)

Tip: If providing requirements, the recommended range of requirements is between 50 and 100.

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

[B 3 Stage 2 Midlevel Solution Requirements CalWRAPP.xlsm](#)

[CALWRAPP NFR.xlsx](#)

2.5 Assumptions and Constraints

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

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.

Assumption: Core Team members will be available throughout the project during standard business hours and project activities will be a top priority.

Description/Potential Impact: It is assumed that the CalWRAPP core team will remain allocated to project activities, with project activities being their highest priority. Consistent and predictable availability is critical to ensuring efficient and timely implementation and overall project success.

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: The System Integrator is experienced with geospatial data input/output.

Description/Potential Impact: The success of this project depends heavily on the effective management of geospatial data. Experience in this area is critical to an efficient implementation that meets business requirements related to geospatial features and functionality.

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

Description/Potential Impact: Potential risks and proposed mitigation 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 roll out of the new system by its users with minimal disruption to business process efficiency.

Description/Potential Impact: Effective Organizational Change Management is necessary to allow for a smooth roll out of the new system and prevent operational issues.

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

Description/Potential Impact: The CalWRAPP system will be developed to address functional and non-functional requirements established by the program and DIT. 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: New system will adhere to SWRCB and CDT security policies.

Description/Potential Impact: The CalWRAPP system and data will be protected from unauthorized access.

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

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

Assumption: The CalWRAPP system will be compatible with and perform acceptably within existing SWRCB's IT infrastructure.

Description/Potential Impact: Existing hardware, hosting, software, and network components must accommodate the features and functionality of the new system, as well as the anticipated resource demands placed upon the new system post-implementation.

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: Stakeholders will be negatively impacted if system functionality is compromised due to budget limitations.

Constraint: Project scope.

Description/Potential Impact: Project scope must account for all necessary system functionality. Changes in scope may negatively impact costs and schedule of the solution design, development, implementation, and transition to maintenance and operations.

Constraint: ADA Compliance

Description/Potential Impact: The project must meet compliance per the Americans with Disabilities Act (ADA) of 1973 as amended (29 U.S.C. § 794(d)), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations.

Constraint: Project budget allocation through August 2028.

Description/Potential Impact: Project implementation costs must be expended within the budget allocation timeframe. Implementation services beyond this date that require vendor involvement will require SWRCB to request additional funding.

TIP: Copy and paste to add Assumptions/Constraints with Descriptions/Impacts as needed.

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 completion is dependent upon adequate funding via approved expenditure authority.

Dependency Description: Without adequate funding, system functionality and overall benefit of the solution will be compromised.

Dependency Element: Utility of the new system will be improved through OCM and end user training.

Dependency Description: Effective organizational change management and training of end users and system support staff will improve the utility and benefits realized through the implementation of the new system.

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

Dependency Description: The CalWRAPP solution 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 protocols.

Dependency Description: Data integrity requirements must be implemented within the new system to prevent data corruption and reporting inaccuracies associated with the storage of corrupt data within the system.

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

Dependency Description: Access to functionality in the new system will be managed by leveraging groups/roles/permissions and using a formal access request process.

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

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

TIP: Copy and paste to add Dependency Elements and Descriptions as needed.

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:** [Hybrid](#)
2. **Procurement approach recommended:** [Standard Procurement](#)
3. **Market Research Approach**

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

The department executed a formal Request for Information (RFI) which was released on 11/03/2025. A total of twelve (12) vendors submitted responses prior to the submission deadline. Of the twelve (12) submissions the recommended technologies included:

1. Commercial Off the Shelf (COTS), modular no-code application
2. COTS deployable as a software as a service (SaaS)
3. SaaS with pre-integrated COTS

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.

[RFI No. 25-280-001 CalWRAPP \(Final\).docx](#)

[\(INTERNAL\) RFI No. 25-280-001- Evaluation Master Scorecard.xlsx](#)

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: [Salesforce SaaS](#)

Description: [SaaS with pre-integrated COTS](#)

Why is this a viable solution? Please explain:

The System Integrator proposes building the CalWRAPP system with GovConnect for Environmental Permitting solution to meet CalWRAPP's specific needs while leveraging the existing technology infrastructure used for the State Water Resources Control Board's (SWRCB) California Water Accounting, Tracking, and Reporting System (CalWATRS) project. GovConnect can be deployed directly to SWRCB's existing Salesforce, AWS, and ArcGIS platforms.

The proposed CalWRAPP solution would be built on the Salesforce Licensing, Permitting, and Inspections (LPI) product, which is part of the Salesforce Public Sector Foundation solution hosted on the Salesforce GovCloud Platform.

Approach

Increase staff – new or existing capabilities: No

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: Yes

Modify Statute/Policy/Regulations: No

Please Specify: The SWRCB proposes developing an electronic intake system for dredge or fill applicants to upload applications, supporting documentation, and compliance forms; support data exchange with internal and external data systems in a secure portal; provide staff with the ability to review reported information and query for compliance; and provide a public performance measure tracking dashboard. The proposed system, the California Wetland and Riparian Area Protection Portal (CalWRAPP) project is essential to address current and future information needs. The Project will streamline the application and review process, provide a tracking and reporting mechanism for projects, and improve water quality by providing a consistent and transparent process for managing and tracking compliance with regulatory timelines for projects to avoid waiver of state authority.

Create a new IT system: No

Other: Yes Specify: The System Integrator proposes building the CalWRAPP system with GovConnect for Environmental Permitting solution to meet CalWRAPP's specific needs while leveraging the existing technology infrastructure used for the State Water Resources Control Board's (SWRCB) California Water Accounting, Tracking, and Reporting System (CalWATRS) project. GovConnect can be deployed directly to SWRCB's existing Salesforce, AWS, and ArcGIS platforms.

The proposed CalWRAPP solution would be built on the Salesforce Licensing, Permitting, and Inspections (LPI) product, which is part of the Salesforce Public Sector Foundation solution hosted on the Salesforce GovCloud Platform.

Architecture Information

Business Function(s)/Process(es):

Provide transparency in assessing and reducing water quality impacts from dredge or fill projects in California;

Provide a centralized, single intake for all application submittals;

Create a legally defensible system of record for dredge or fill permitting;

Provide consistent, error-free project data that allows efficient and effective review of applications;

Improve the Program's ability to compile, report, and analyze system data to generate valuable insights and enable data driven decision making (e.g., quality and timeliness of data);

Provide Program with increased access to Program data in a format that allows cross analysis with data from other sources;

Improve Program customers' ability to interact with staff by enabling effective communication and tracking;

Better equip Program personnel to address current and future operational needs, reduce associated time and costs, and decrease permitting timelines;

Update business practices to identify and enforce water quality regulations by leveraging technology to assist with identifying and enforcing regulatory policies through modernized solutions;

Provide staff the ability to aggregate and review geospatial and other data that will allow staff to analyze and report on statewide trends and program effectiveness; and

Mitigate state's risk by decreasing the reliance on aged technology and paper records.

TIP: Copy and paste or click the + button in the lower right corner to add business processes with the same application, system, or component; COTS/Cloud Technology or custom solution; runtime environment; system interfaces, data center location; and security.

Conceptual Architecture

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

[CalWRAPP S2AA 2.8.1 Architecture vSalesforce SaaS ALT1.pdf](#)

COTS/SaaS/Cloud Technology or Custom: COTS/SaaS/Cloud Technology

Name/Primary Technology: Salesforce SaaS

TIP: Copy and paste or click the + button in the lower right corner to add system software information if the application, system, or component uses additional system software.

Explain Existing System Interfaces: Not applicable. CalWRAPP will be a net new solution.

Explain New System Interfaces: See attachment: CalWRAPP data interfaces.

Data Center Location of the To-be Solution: Agency/state entity operated by agency/state entity

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

Security

Access

Public: [Yes](#)

Internal State Staff: [Yes](#)

External State Staff: [No](#)

Other: [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: [No](#)

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: [Yes](#)

Backup and Recovery: [Yes](#)

Identity Authorization and Authentication: [Yes](#)

Other, specify: [Not applicable](#)

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

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

One-Time (Project) Costs: [Click or tap here to enter text.](#)

Total Future Ops. IT Staff OE&E Costs: [Click or tap here to enter text.](#)

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

Annual Future Ops. Costs (M&O): [Click or tap here to enter text.](#)

2. Viable Alternative Solution #2

Name: COTS deployable as a SaaS

Description: C Brain F2 proprietary COTS deployed as a SaaS

Why is this a viable solution? Please explain:

cBrain's F2 platform is delivered as a fully managed, cloud-hosted solution and requires no special hardware from the agency beyond standard internet-connected workstations. No proprietary or specialized hardware is required.

Approach

Increase staff – new or existing capabilities: No

Modify the existing business process or create a new business process: No

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

Architecture Information

Business Function(s)/Process(es): F2 platform—integrated off-the-shelf government software for permitting, case management, document handling, workflow automation, collaboration, and AI-powered automation for government.

TIP: Copy and paste or click the + button in the lower right corner to add business processes with the same application, system, or component; COTS/Cloud Technology or custom solution; runtime environment; system interfaces, data center location; and security.

Conceptual Architecture

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

[CalWRAPP_S2AA_2.8.1_Architecture vCBrain 1.pdf](#)

COTS/SaaS/Cloud Technology or Custom: COTS/SaaS/Cloud Technology

Name/Primary Technology: cBrain F2 platform

TIP: Copy and paste or click the + button in the lower right corner to add system software information if the application, system, or component uses additional system software.

Explain Existing System Interfaces: Not applicable

Explain New System Interfaces: [See attachment: CalWRAPP data interfaces.](#)

Data Center Location of the To-be Solution: [State data center operated by CDT](#)

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

Security

Access:

Public: [Yes](#)

Internal State Staff: [Yes](#)

External State Staff: [No](#)

Other: [No](#) Specify:

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: [No](#)

Confidential: [Yes](#)

Other: [No](#) Specify:

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

Technical Security: [Yes](#)

Physical Security: [Yes](#)

Backup and Recovery: [Yes](#)

Identity Authorization and Authentication: [Yes](#)

Other, specify: [Not applicable.](#)

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

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

3. Viable Alternative Solution #3

Name: [SaaS.](#)

Description: [The proposed solution is a Software as a Service \(SaaS\) system.](#)

Why is this a viable solution? Please explain:

The proposed system leverages a SaaS platform with annual subscription licensing. The System Integrator will implement the complete CalWRAPP solution utilizing this platform as a one-time implementation cost. This approach provides the SWRCB with an enterprise-grade regulatory system, predictable costs, continuous platform innovation, and full ownership of the configured solution and data.

Approach

Increase staff – new or existing capabilities: No

Modify the existing business process or create a new business process: No

Reduce the services or level of services provided: No

Utilize new or increased contracted services: Yes

Enhance the existing IT system: Yes

Modify Statute/Policy/Regulations: No

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

Create a new IT system: Yes

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

Architecture Information

Business Function(s)/Process(es): The proposed system will be built primarily on a SaaS platform leveraging core capabilities for customer relationship management. It will use the platform's native tools for the external portal and workflow automation, data management, and integration.

TIP: Copy and paste or click the + button in the lower right corner to add business processes with the same application, system, or component; COTS/Cloud Technology or custom solution; runtime environment; system interfaces, data center location; and security.

Conceptual Architecture

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

[CalWRAPP S2AA 2.8.1 Architecture vALT3.pdf](#)

COTS/SaaS/Cloud Technology or Custom: COTS/SaaS/Cloud Technology

Name/Primary Technology: SaaS

platform

TIP: Copy and paste or click the + button in the lower right corner to add system software information if the application, system, or component uses additional system software.

Explain Existing System Interfaces: Not Applicable, the system will be net new.

Explain New System Interfaces: See attachment: CalWRAPP data interfaces.

Data Center Location of the To-be Solution: [Agency/state entity operated by agency/state entity](#)

If Other, specify:

Security

Access:

Public: [Yes](#)

Internal State Staff: [Yes](#)

External State Staff: [No](#)

Other: [No](#) Specify:

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: [No](#)

Confidential: [Yes](#)

Other: [No](#) Specify:

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

Technical Security: [Yes](#)

Physical Security: [Yes](#)

Backup and Recovery: [Yes](#)

Identity Authorization and Authentication: [Yes](#)

Other, specify:

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.

[CalWRAPP Project Org Chart V0.1 20260306a.pdf](#)

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

The required skills and competencies for the CalWRAPP Project Administrative staff are as follows:

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

Communication – Project staff with communication responsibilities should possess the ability to transmit and receive written, verbal, visual, and non-verbal information, and formulate and deliver appropriate responses to another party.

Procurement – Procurement staff should possess 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. Also, 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 should possess 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 Water Quality (DWQ) 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 design, development, and testing 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 system integrator will provide primary system design, development and implementation services, SWRCB has secured three (3) dedicated IT resources to support internal tasks related to project management, business integration, application development, data management, security, and other technical areas. Additional staff will be redirected from existing resources, as needed. Ongoing maintenance and operations will be supported within SWRCB's existing technical areas and organizational structure.

4. Testing

The selected system integrator will lead system testing. User acceptance testing will be led by DWQ 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

The CalWRAPP system is net new from a data perspective. There are no data conversion or migration requirements for the project.

6. Training

The selected OCM contractor will lead end user training. Comprehensive end user training materials will be developed for each category SWRCB and public of end users. The project will utilize a "train the trainer" methodology for the continued support of SWRCB staff and public end users post project completion.

7. Organizational Change Management

An Organizational Change Management (OCM) contractor in consultation with SWRCB program staff will manage all OCM planning for the CalWRAPP project includes establishing a dedicated change team, 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 be established, which will focus on these key areas to ensure a smooth transition. Additional responsibilities of the OCM team 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.

All OCM efforts assumed by SWRCB staff will be absorbed within existing resources with no anticipated disruption to existing services.

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 Office of Statewide Technology Procurement (OSTP) team will be the lead procurement officials. The project is supported by three OSTP staff, including one management level staff. SWRCB has assigned two Contract Unit staff to support procurement activities, including one at the management level. SWRCB has one management level Budget Analyst and one management level Contract Manager assigned to support Stage 3 activities.

2.10 Project Planning

1. Project Management Risk Assessment

Updated Project Management Risk Score: [Click or tap here to enter text.](#)

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

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 \(Approved\):](#) Yes

Status:

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

3. Project Plans

Are the following project management plans 12/03/2027 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: [Click or tap here to enter text.](#)

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

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

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

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

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

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

Status: Click or tap here to enter text.

[Issue and Action Item Management Plan \(Draft + Issue Log\): Yes](#)

Status: Click or tap here to enter text.

[Cost Management Plan \(Approved if planning BCP approved\): Yes](#)

Status: Click or tap here to enter text.

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.

- a) Planning Start Date: [2/3/2025](#)
- b) Estimated Planning End Date: [11/30/2026](#)
- c) Estimated Project Start Date: [12/3/2027](#)
- d) Estimated Project End Date: [8/21/2028](#)

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: Not Applicable

This will be a new system with no associated legacy system data.

2. Data Migration Plan: Not Applicable

This will be a new system with no associated legacy system data.

3. Data Profiling: Not Applicable

This will be a new system with no associated legacy system data.

4. Data Cleansing and Correction: Not Applicable

This will be a new system with no associated legacy system data.

5. Data Quality Assessment: Not Applicable

This will be a new system with no associated legacy system data.

6. Data Quality Business Rules: In Progress

Data quality business rules are in the process of being developed.

7. Data Dictionaries: Not Started

Data dictionaries will be developed once the System Integrator contract is executed.

8. Data Conversion/Migration Requirements: Not Applicable

This will be a new system with no associated legacy system data.

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: 3/30/2026 **Form**

Received Date: 3/30/2026

Form Accepted Date: 3/30/2026

Form Status: Completed

Form Status Date: 6/19/2026

Form Disposition: Approved

Form Disposition Date: 6/19/2026