

EXHIBIT A: STATEMENT OF WORK

1. INTRODUCTION

This Statement of Work (SOW) (hereinafter also referred to as “Agreement” or “Contract” is between the State Water Resources Control Board (hereinafter referred to as the “State Water Board,” “SWRCB,” “DDW,” or the “State”) and the Contractor to create the Water Technical Access Portal (WaterTAP) solution. The Contractor agrees to provide fixed-rate deliverable-based services including Development, Design, Implementation (DD&I) of the WaterTAP solution and Maintenance and Operations (M&O) Services as described in this Statement of Work.

This engagement consists of services which must be completed in accordance with this Statement of Work. All services rendered under the Contract are based on fixed-rate deliverables. The Contractor is responsible for completing all deliverables, work products, and all services as detailed in the SOW at the costs provided in EXHIBIT E: COST WORKBOOK.

"Contractor" refers to the firm that shall provide the staffing to perform the services. "Consultant(s)" refers to the Contractor's staff who will perform the services. The terms "Contract" or "Agreement" will be used interchangeably throughout the documents.

2. BACKGROUND AND PURPOSE

The State Water Resources Control Board's mission is 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. To this end, the State Water Resources Control Board develops statewide permits, policies, and regulations to protect water quality, regulates drinking water, administers California's water rights system, and supports Regional Water Quality Control Board efforts. In addition, the State Water Resources Control Board provides financial assistance in the form of grants and loans for projects that clean up and protect water quality and drinking water supplies, and that protect water resources. The State Water Resources Control Board works to advance several foundational values, including climate change resilience, environmental justice, and racial equity.

The Division of Drinking Water (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 solution 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; identify potential compliance issues; 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.

3. TERM OF CONTRACT

Effective upon approval of the California Department of Technology (CDT), Office of Statewide Technology Procurement (OSTP), and SWRCB, the base term of this Contract shall be three (3) years, including the first year (12-month) of Maintenance and Operations (M&O) services, which shall run concurrently with the 12-month Warranty period. Design, Development, and Implementation (DD&I) must be completed within the first 21 months of the base term, followed by three (3) months of system stabilization and full system acceptance period.

The State, at its sole discretion, may exercise its option to execute a one-year (1-year) extension for time-related work, to include implementation and full system acceptance. This time-only extension would be at the originally agreed-upon deliverable rates specified in this Contract and at no additional cost to the total Contract.

The State, at its sole discretion, may exercise its option to execute up to two (2) additional one-year (1-year) optional extensions to perform Maintenance and Operations (M&O) services for a maximum Contract term of six (6) years.

The State is not obligated to use any or all of these options. The Contract is of no effect unless approved by CDT and no work shall begin before full execution of the Contract.

The Contractor shall not be authorized to deliver goods or commence performance of services described in this Contract prior to the Effective Date of the Contract. Any delivery of goods or performance of services by the Contractor that is commenced prior to the Effective Date shall be at no cost to the State.

This Contract may be terminated in accordance with the provisions of the Information Technology General Provisions Cloud Computing Services DGS PD 402-ITGP Cloud (Revised and Effective 02/20/2025) - State of California. Notwithstanding any provision in this Contract, if the Contract is terminated by the State for convenience of the State, the termination can be made at the sole and exclusive discretion of the State for any or no reason.

All services to be performed by the Contractor are at the agreed-upon deliverable rates in EXHIBIT E: COST WORKBOOK specified in this Contract.

4. AMENDMENT

The Contract may be amended, consistent with the terms and conditions of the Contract, and by mutual

consent of both parties, subject to approval by the California Department of Technology (CDT), Office of Statewide Technology Procurement (OSTP) under Public Contract Code (PCC) Section 12100.

No amendment or variation of the terms of this Contract shall be valid unless made in writing, signed by the parties, and approved by oversight agencies, if required. No oral understanding not incorporated in the Contract is binding on any of the parties.

5. LOCATION AND AVAILABILITY

Availability

The Contractor shall provide the services described in the Statement of Work (SOW) during normal State business hours, 7:00AM to 5:30PM PST Monday through Friday, excluding State holidays. However, the Contractor may be required to provide support beyond the normal business hours, as required to successfully provide contracted services. The Contractor will primarily perform work remotely but may be required to provide on-site support as needed based on operational requirements.

Location

All remote work must be performed within the continental United States. Remote access to the Department's network is only authorized for Department-issued or Department-approved computers, while using Department-provided or approved remote access to software and tools. The Contractor may not specify remote access solutions.

The Contractor may be required to travel to site locations at no cost to the State department for meetings or to perform tasks. The State will allow the Contractor to propose remote staff, based only in the continental United States. The State will provide collaboration tools (WebEx, MS Teams, SharePoint, etc.) to facilitate remote work on Department-issued equipment.

Key Staff must be available to be on-site as needed at the state department's Sacramento headquarters, as determined by the State department's Project Manager, during normal state business hours (7:00 AM to 5:30 PM Pacific Time). The state department may consider other options for attendance, such as webinars, phone conferences, and video meetings. Meeting consideration will be at the State department's sole discretion, under circumstances with advance notice of the Department Contract Manager. All Contractor staff shall have legal authority to work in the United States during the term of the entire Contract and consent to a background check.

State holidays are listed on the California Department of Human Resources (Cal HR) website in the link below, and are subject to change:

<https://www.calhr.ca.gov/employees/Pages/state-holidays.aspx>

Permanent offsite work arrangements are allowed under this Contract. The State department may consider accommodating temporary offsite work (e.g., remotely; at the resource's home) for extenuating circumstances (including, but not limited to, COVID-19 Stay at Home Order, illness, system outages, and natural disasters) which must receive prior approval by the State department.

Table 5-1: Work Locations

Location Name	Location Address
State Water Resources Control Board	1001 I Street, Sacramento, CA 95814

6. CONTRACT REPRESENTATIVES

All notices required by, or relating to, this Contract shall be in writing and shall be sent to the contract parties at the email address below unless changed from time to time, in which event each party shall so notify the other in writing within ten (10) days of such change, and all such notices shall be deemed duly given if deposited, postage prepaid, in the United States mail or e-mailed and directed to the addresses then prevailing.

The WaterTAP contract representatives during the term of this contract will be:

Table 6-1: WaterTAP Contract Representatives

WATERTAP CONTRACT REPRESENTATIVES			
State Department: State Water Resources Control Board		Contractor: TBD	
Name:		Name:	
Title:		Title:	
Telephone Number:		Telephone Number:	
E-mail Address:		E-mail Address:	

Direct all contract inquiries to:

Table 6-2: Contract Representatives for Inquiries

CONTRACT REPRESENTATIVES FOR INQUIRIES			
State Department: State Water Resources Control Board		Contractor: TBD	
Name:		Name:	
Title:		Title:	
Telephone Number:		Telephone Number:	
E-mail Address:		E-mail Address:	

All inquiries during the term of this Contract will be directed to the contract contacts listed above; the contract representatives may be changed by written notice without amending this Contract.

7. CONTRACTOR’S ROLES AND RESPONSIBILITIES

The Contractor shall be responsible for providing all design, development, configuration, testing, integration, coordinating, installation and implementation services, as stated in the Contract. The Contractor shall also be responsible for WaterTAP hardware, software, and services, as applicable. In addition, the Contractor shall be responsible for supporting all WaterTAP components through the Base Contract Term, including M&O year 1 and any extensions exercised by SWRCB. Specific tasks and deliverables are described in [SECTION 11. CONTRACTOR DELIVERABLES](#) and key staff responsibilities are described in [SECTION 10.2.2. KEY STAFF ROLES AND RESPONSIBILITIES](#).

The Contractor shall be responsible for the successful performance of all contractor personnel, subcontractors, and support services. The Contractor must provide all staff necessary to meet the EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS as set forth in the Contract. At a minimum, the Contractor must provide the Key Staff identified by the State and the Key Staff must perform the responsibilities described. The Contractor shall audit their staff roster once a month and notify the State Contract Manager of any Contractor staff which are no longer assigned to the Project.

The Contractor shall act as the Prime Contractor under this Contract and provide the following:

1. All meetings shall be scheduled using Microsoft (MS) Outlook and be conducted via MS Teams or in person, as needed. All Contractor staff shall maintain their schedules of availability on their SWRCB MS Outlook calendars.
2. All electronic communication shall be conducted via email and/or MS Teams.
3. All work products and deliverables shall be stored in a State document repository. The most current version of all work products and deliverables shall always be continuously available for

State review.

4. The Contractor shall comply with all applicable SWRCB, Department of General Services (DGS), Department of Finance (DOF), CDT, and other State and federal entities' policies, procedures, and expectations, including but not limited to policies and procedures regarding Sexual Harassment Prevention, HIPAA, Privacy, IT Security, Workplace Violence Prevention, and Emergency Preparedness.
 - a. The Contractor shall comply with its responsibilities under California Government Code section 7405.
5. All Contractor's staff shall complete all standard SWRCB training (e.g. Security and Privacy Training, Harassment Prevention Training, etc.).
 - a. Within two (2) weeks of the commencement of this Contract, the Contractor shall complete said training and sign the State Water Board "Internet Usage Policy" consent form for all staffing resources dedicated to this Project.
 - b. The Contractor shall not bill the State for time spent completing the annual security training.
6. The Contractor (data custodian) shall be responsible for all costs incurred by SWRCB (data owner) due to any and every security incident resulting from the Contractor's failure to perform, negligent, or willful acts of its staff, which results in unauthorized disclosure, release, access, review, destruction, loss, theft, or misuse of an information asset. The Contractor shall notify SWRCB Contract Manager immediately by telephone call and email upon the discovery of a breach of security of personal information, sensitive information, or confidential information (PSCI) in computerized form if the PSCI was, or is reasonably believed to have been, acquired by an unauthorized person; or within two hours by email of the discovery of any suspected security incident, intrusion or unauthorized use or disclosure of PSCI in violation of this Contract, this provision, the law, or potential loss of confidential data affecting this Contract. If the State determines notice to the individual(s) whose data has been lost or breached is appropriate, the Contractor shall bear any and all costs associated with the notice or any mitigation selected by the State. These costs include, but are not limited to, consultant time, material costs, postage, media announcements, and other identifiable costs associated with the breach or loss of data. For the purposes of this Agreement, "Contractor-provided personnel" include the Contractor's Subcontractors, consultants, and agents of each.
7. The Contractor shall comply with all applicable State policies including, but not limited to, State Administrative Manual 5300-5399, State Information Management Manual procedures, and SWRCB security practices including, but not limited to, its Acceptable Use Policy, Confidentiality and Non-Disclosure Policy (i.e., Conflict of Interest Form 700).
 - a. All Contractor Key Staff who will provide services pursuant to this Contract shall complete a Statement of Economic Interests, Form 700, within thirty (30) calendar days of commencing any work for the State Water Board.

- b. All Contractor Key Staff shall thereafter file a Form 700 on an annual basis and shall also file a Leaving Office Form 700 within thirty (30) calendar days of ceasing to perform any work for the State Water Board.
 - c. In addition, upon beginning work for the State Water Board and every two (2) years thereafter, all Contractor Key Staff shall complete the State's online Ethics Training Course, as maintained by the California Office of the Attorney General, and submit the certificate of completion to the State Water Board's Filing Officer. The Contractor shall not bill the State for time spent completing Form 700 or the Ethics Training Course.
8. The Contractor represents that it has or shall secure at its own expense, all staff required to perform the services described in this Agreement. Such personnel shall not be employees of or have any contractual relationship with any California governmental entity.
9. The Contractor shall provide its own equipment necessary to perform the required duties. The Contractor shall adhere to SWRCB policies and procedures, guidelines and templates, including access and security requirements.
10. The Contractor shall design, develop, implement, test, and support a solution within the Contract using an approach that aligns with the State's Implementation Preferences stated in [SECTION 9.6. SOLUTION REQUIREMENTS](#) and that meets all requirements and functionality as defined in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS.
11. The Contractor shall provide all work products in Microsoft Office Suite formats. (For example, documents are in .docx, spreadsheets are in .xlsx, presentations are PowerPoint .pptx, Project plans are in Microsoft Project .mpp, flowcharts and diagrams in Visio .vsdx)
12. The Contractor shall perform the services required under this Agreement in a manner that will not disrupt the operational needs of the State.
13. The Contractor will identify all required software licenses on the Software Licensing Program (SLP) including SLP Contract Number and License SKU for all SaaS licensing and related software and tools needed for development, implementation, data migration, ongoing access, support, and hosting of WaterTAP.
14. The Contractor shall be proficient in using all State-approved tools to perform the work under this Agreement. The Contractor shall not bill the State for time spent training its staff to use State-approved tools.
15. All Contractor-owned or managed laptops, Ultra books, netbooks, tablets, smartphones, and similar devices, if allowed by the State Contract Manager, shall be encrypted using commercial third-party encryption software. The encryption software shall meet the standards of National Institute of Standards and Technology (NIST), Federal Information Processing Standards (FIPS) Publication 140-2, Security Requirements for Cryptographic Modules. Additionally, antivirus and anti-malware software shall be used and kept up to date along with software patches and supported versions. In the event of a security incident, the Contractor shall assist the State Water Board Information Security Office with the forensic analysis of its devices.

16. The Contractor's use of removable media storage devices (i.e., Universal Serial Bus [USB] thumb drives, disk tapes, micro-SD, SD cards, CD/DVD, etc.) is not allowed by the State Contract Manager. Any personally identifiable information, personal health information, or other confidential information shall be encrypted when stored on State network file shares or document repositories. Upon expiration of the Agreement, the Contractor shall stop using any state-provided software.
17. The Contractor shall notify the State Contract Manager, in writing, no later than one (1) calendar day after any of the following events:
 - a. The filing of a petition for relief under the United States Bankruptcy Code or the institution of any other insolvency proceedings by, against, or on behalf of the Contractor;
 - b. The appointment of a receiver or trustee for a Contractor;
 - c. The dissolution or liquidation of a Contractor;
 - d. The transfer to any person or entity of more than twenty-five percent (25%) of the assets or ownership interest of the Contractor. The Contractor became insolvent. A Contractor shall be deemed to be insolvent if it has ceased to pay or has admitted in writing its inability to pay its debts for at least sixty (60) days in the ordinary course of business or cannot pay its debts as they become due, whether a petition has been filed under the United States Bankruptcy Code; and/or;
 - e. The execution by the Contractor of a general assignment for the benefit of creditors.
18. Notwithstanding any other provision of this Contract, the State, by written notice to the Contractor, may immediately terminate this Contract upon the occurrence of the events set forth in [SECTION 9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES](#), EXHIBIT A: STATEMENT OF WORK and EXHIBIT G: SWRCB SPECIAL TERMS AND CONDITIONS.
19. The Contractor shall regularly release new functionality in a structured and scheduled manner to the test environment.
20. The Contractor shall design data architectures and processes in WaterTAP to be compliant with State and federal water data standards, existing and expected as specified by the State (system is part of a new federal water data network). The State will work with the Contractor to define and approve the existing and expected data standards to be included via the creation of User Story acceptance criteria during backlog development.
21. The Contractor shall ensure that documentation and artifacts created during the implementation of the project are as useful as possible to other divisions within the Water Board that want to follow the same path (support enterprise development).
22. The Contractor shall consult with SWRCB staff to improve DevOps processes to support the future of WaterTAP.
23. The Contractor shall be responsible for its own operating and travel expenses, overhead, and clerical support.
24. Two (2) weeks prior to expiration of the Contract, the Contractor shall return all SWRCB property,

including security badges, computing assets, and requested work products, to the SWRCB Contract Manager.

25. The Contractor shall work collaboratively with all other State-hired contractors.

8. STATE'S ROLES AND RESPONSIBILITIES

The State will be responsible for providing systems access and support, software, workspace, and other assets to ensure the smooth and effective operations of the project and project participants. As part of this requirement, the State will provide the following:

1. The State will provide access to State staff, information, resources, and applicable project documentation during normal business hours as approved and needed to facilitate the Contractor's completion of deliverables and tasks described herein.
2. If working onsite, the State will provide the Contractor with access to the work site during normal business hours, with a provision for increased access during critical project periods. Normal business hours are Monday through Friday (7:00 AM - 5:30 PM Pacific Time), excluding state holidays. These hours may be extended with prior State approval.
3. The State will provide the Contractor with physical access to workspace, as needed.
4. The State will provide access to the Microsoft (MS) Office 365 Professional software suite and any other applications as needed.
5. The State will continue to support its existing legacy systems during the Contract.
6. The State will host WaterTAP in a State-hosted environment.
7. The State will be responsible for all server hardware, software, and all network and communication hardware required to connect with either AWS or Azure.
8. The State will be responsible for all server and network patches, upgrades, and configurations.
9. The State will provide access to programming standards that the Contractor must employ during the development of the WaterTAP solution. The State Water Board's Coding Standards document will be provided to the Contractor upon onboarding.
10. The State will perform the responsibilities as described in Table 8-1: State Roles and Responsibilities. The State will administer and maintain the Project Library for the deposit of Project deliverables and other documents. The Project Library will be maintained on Microsoft Teams or SharePoint for storing electronic documents.
11. The State will provide source control software to enable check-in, check-out, and version control of documents and system code.
12. The State will define specific requirements, timeframes, and priorities for Contractor tasks within the Implementation Plan.
13. The State will provide project-based decisions in a timely manner.
14. The State will review and approve scope documents (e.g., Deliverable Expectation Document (DED), Deliverable Acceptance Document (DAD), Work Order Authorization (WOA) and deliverables in compliance with contract timelines.

- 15. The State will assign a SWRCB Project Manager and a SWRCB Technical Lead to oversee the Contractor’s performance, completion of requested services, review of the Work Authorizations, deliverables, invoices, and other reports to SWRCB management on the status of the Contract.
- 16. The State will provide appropriate access to legacy systems, applications, documentation, and related information that WaterTAP is replacing.
- 17. The State will provide approval of all WaterTAP production changes prior to implementation, per SWRCB’s standard change management process. Refer to [SECTION 10.5. CHANGE CONTROL PROCEDURES](#) for additional information.

The SWRCB WaterTAP project team will be inclusive of Executive Sponsors, Project Director(s), Project Manager, Business Lead, Technical Lead(s), and a Contract Manager. This project team will provide participants with a clear understanding of the authority and responsibility necessary for the successful accomplishment of the WaterTAP project activities and enables the project team members to be held accountable for the effective performance of their assignments. A team member may have multiple project responsibilities.

Table 8-1: State Roles and Responsibilities

Project Role	Project Responsibilities
State Water Board Executive Sponsors	• Provide executive sponsorship and support for the Project. • Establish Project goals and priorities. • Support Project funding and resources, manage and address staffing and workload needs. • Assume Project ownership of the WaterTAP solution upon Full System Acceptance and Transition to the State. • Serve as key business decision-

	maker of the Project and provide decision-making authority. • Provide the highest level of project review, policy leadership, and oversight as needed. • Review and approve significant changes to project scope, budget, or schedule. • Remove barriers, resolve and mediate issues, issue resolution, and scope changes that cannot be resolved by the State Water Board's Project Director. • Participate in Data Executive Steering Committee (DESC) Meetings and other meetings as necessary. • Inform/Engage control agencies and other stakeholders, as needed.
State Water Board Project Director	• Ensure overall success of the Project by providing the requisite functionality, business value, and meeting the State Water Board's

	technical needs and environment. • Communicate Project status to State Water Board's Management and State Water Board's Executive Sponsors as needed. • Provide a centralized structure to coordinate and manage the Project, resources, activities, and communication using structured project management methodologies. • Provide leadership to State staff assigned to manage Project teams. • Determine if the WaterTAP solution addresses the Project and associated program objectives. • Monitor Project charter, plan, and performance. • Resolve technical impediments or blockers. • Monitor the planning, execution, and control of activities necessary to support the WaterTAP
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	solution. • Participate in the identification, quantification, and mitigation of Project risks. • Participate in DESC Meetings and other meetings as necessary. • Act as liaison between the State Water Board and external stakeholders.
State Project Management Contractor	• Coordinate and oversee day-to-day Project activities with the Contractor and State Water Board's Business Lead and serve as liaison to the Project teams. • Conduct regular Project meetings to review Project status, performance indicators, changes, issues for resolution, bottlenecks, risk management activities, and assign and review action items for the Project team. • Regularly communicate the Project status, issue

	status, and provide updates from the Contractor and Project team to the State Water Board's Executive Sponsors and the State Water Board's Project Director. • Provide monthly and ad-hoc reporting to the State Water Board's Executive Sponsors and the State Water Board's Project Director regarding the following: deliverable status, Project work items, key performance schedule, bottlenecks, and resolution actions identified by the Project team and the Contractor. • Develop, update, and execute Project management plans and other project management-related deliverables. Facilitate, assign, and monitor actions assigned to the State Water Board's Special Projects Unit.
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	• Monitor the Contractor's performance to ensure compliance with the Agreement. • Collaborate with the Contractor to maintain project management plans, institute governance controls, manage quality assurance to plans, schedules, deliverables, and participate in quality ad-hoc planning assurance and risk control. • Collaborate with the Contractor to determine problems and issues, ensure changes are recorded, maintained, and tracked. • Assist the State Water Board's Project Director and State Water Board's Business Lead in resolving or escalating significant issues related to project management, communication, staffing, and scope. • Assist with
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	coordinating and leading recurring DESC Meetings and other meetings as necessary. • Act as the liaison for communications with the CDT.
State Water Board Business Lead	• Manage the Product Vision and Product Roadmap. • Manage and prioritize the Product Backlog. • Ensure the Development Team understands the items in the Backlog. • Make decisions on Sprint development, including defining the Definition of Done for a Sprint and removing sprint impediments. • Monitor and support the planning, execution, and control of program activities necessary to support the WaterTAP solution. • Determine and facilitate active and timely participation of business resources, including SME's (Subject-Matter Experts) and staff to

	participate in User Acceptance Testing. • Manage scheduling, accountability, and transparency. • Assist in resolving or escalating issues related to project management, communication, staffing, and scope. • Provide guidance to the State Water Board's Project Manager and the State Water Board's Contract Manager. • Identify and monitor the changes and impacts on existing and potentially new policies, standards, and procedures related to business needs. • Manage stakeholder expectations and work with stakeholders through proper channels. • Act as liaison between the State Water Board and its external stakeholders, manage the relationship with Advisory Groups.
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	• Participate in DESC Meetings and other meetings as necessary.
State Water Board Technical Lead(s)	• Manage the technical direction and vision for the WaterTAP solution. • Coordinate the State Water Board's Infrastructure Team activities to determine whether Project infrastructure and infrastructure services are planned, acquired, and made available as needed in collaboration with the Contractor. • Report to the State Water Board's Project Manager the status of the State Water Board's Infrastructure Team deliverables, performance indicators, bottlenecks, and bottleneck resolution actions. • Coordinate the configuration of technical environments. • Ensure compliance with development

	and engineering standards. • Resolve technical impediments or blockers. • Coordinate resolution of policy, standards, and procedural issues related to business needs. • Manage the release process. • Participate in meetings as necessary.
State Water Board Training Lead(s)	• Translates DDW needs and staff capabilities. • Advises all training and knowledge transfer planning, training materials and delivery for both internal and external users. • Reviews the master training plan and the overall training approach and verifies methodology for end user and technical training. • Confirms the training schedule prior to each release. • Coordinates with the State OCM Team.

	• Finalizes all training supporting material generation, including training guides, Frequently Asked Questions (FAQs), training surveys, etc. and supports the methods of distribution of said materials. • Reviews analytics from training surveys and collaborates on any course corrections needed. • Works in collaboration with the OCM team.
State Water Board Contract Manager	• Provide oversight and tracking of the Contract and other project-related contracts. • Participate in procurement activities and processes related to the Contract. • Monitor the Agreement to confirm compliance with the provisions, including SLA's. • Maintain and manage contract documentation,

	change requests, and amendments. • Determine whether products and services are in accordance with the contract, State Water Board standards, and the Project Schedule. • Escalate issues and concerns to the State Water Board's Project Manager. • Track, review, and approve WOAs, DEDs, DADs, detailed specifications and design, and Project deliverables created by the Contractor. • Process WOAs, purchase orders, invoices, and payments. • Confirm invoices reflect costs incurred to-date in the performance of the Contract and that costs are within applicable restrictions. • Maintain information on contracted costs versus actual costs. • Responsible for all interactions with the
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	Contractors in the event of a contract or invoice dispute. • Act as the liaison with CDT.
State Water Board Organizational Change Management Team	• Work with stakeholders to determine communication between end-users, stakeholders, and Project teams. • Identify and monitor the changes and impacts on existing and potentially new policies, standards, and procedures related to business needs. • Support the creation of an organizational change management deployment plan. • Provide input and validate documentation related to business needs, assessments, and evaluations. • Provide input into the design and development of the WaterTAP solution. • Facilitate the definition of current and future data elements, data

	relationships, and data definitions. • Participate in integration, system, and UAT. • Facilitate data cleansing and data conversion activities between the Contractor and State Water Board's data owners of legacy systems to be converted. • Provide input to Project risk and issue efforts, and resolve the issues as assigned. • Coordinate resolution of policy, standards, and procedural issues related to business needs. • Participate in Organizational Change Management-related discussions and working sessions with the Project team, the OCM team, and the Contractor. • Work with the Contractor and the OCM team to implement an organizational
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	change management program. • Participate in user training as an integrated component of OCM and post-implementation activities, including knowledge transfer. • Report on the status of team deliverables, team performance indicators, bottlenecks, and bottleneck resolution actions. • Provide governance of initiatives above.
State Water Board Infrastructure Team	• Assist the Project team as needed, including during planning, analysis, and development activities. • Participate in technical architecture design with the Contractor. • Coordinate implementation of technical architecture required for the WaterTAP solution. • Coordinate and oversee the setup and operation of the technical

	environment for the WaterTAP solution. • Oversee the configuration of the technical environments. • Report to the State Water Board's Technical Lead regarding the status of team deliverables, team performance indicators, bottlenecks, and bottleneck resolution actions, including the following: • Unit, system, and integration tested network layer, • Support operational Project environment infrastructures (servers, networks, software, etc.), • Confirm technical architecture meets State and State Water Board's standards,
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	where applicable, and • Participate in meetings as necessary.
California Department of Technology (CDT)	• Approve agreements and agreement amendments for reportable information technology projects that exceed the Water Board's delegated authority. • Provide support and advice regarding project management activities and system development lifecycle best practices. • Provide monthly project assessment to DESC and other executive stakeholders. • Identify project risks and mitigation strategies. • Procure the Independent Verification and Validation (IV&V) ancillary procurement that is related to this Agreement.

Independent Verification &Validation (IV&V) Contractor	• Develop IV&V monthly activity reports; • Conduct risk and issue list reviews; • Perform traceability matrix analysis; • Perform system requirements evaluation; • Develop IV&V task reports.
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9. DESCRIPTION OF NEW SYSTEM OR SERVICES

9.1. DESCRIPTION OF PROPOSED SOLUTION

SWRCB is seeking Salesforce as a cloud-based SaaS solution (WaterTAP) that will be an enterprise-level data system, developed to address current and future information and business needs. It will include an overarching architecture to connect existing foundational data systems as well as integrate new data systems from disparate spreadsheets to databases currently used, into a single, cohesive system to streamline information access for internal staff and external stakeholders. It will also include data and document submission, workflow routing, and compliance decision support.

The SWRCB applications currently within the proposed WaterTAP scope are listed below and detailed in EXHIBIT H: DATA CONNECTIONS:

- SDWIS – Safe Drinking Water Information System
- CLIP - California Laboratory Intake Portal
- LSLI – Lead Service Line Inventory
- SABL – System Area Boundary Layer
- OnBase ECM – Enterprise Content Management
- eAR – electronic Annual Report
- OPCERT – Operator Certification (DWOCIS)
- SLD - School Lead Data
- SAFER – Clearinghouse
- WQM – Water Quality Management
- WQIR - Water Quality Information Report
- CDSS – Child Care Lead

- ELAP - Environmental Laboratory Accreditation Program
- RTCR - Electric Coliform Reporting

The WaterTAP Project is detailed in [SECTION 10. SCOPE OF SERVICES](#) .

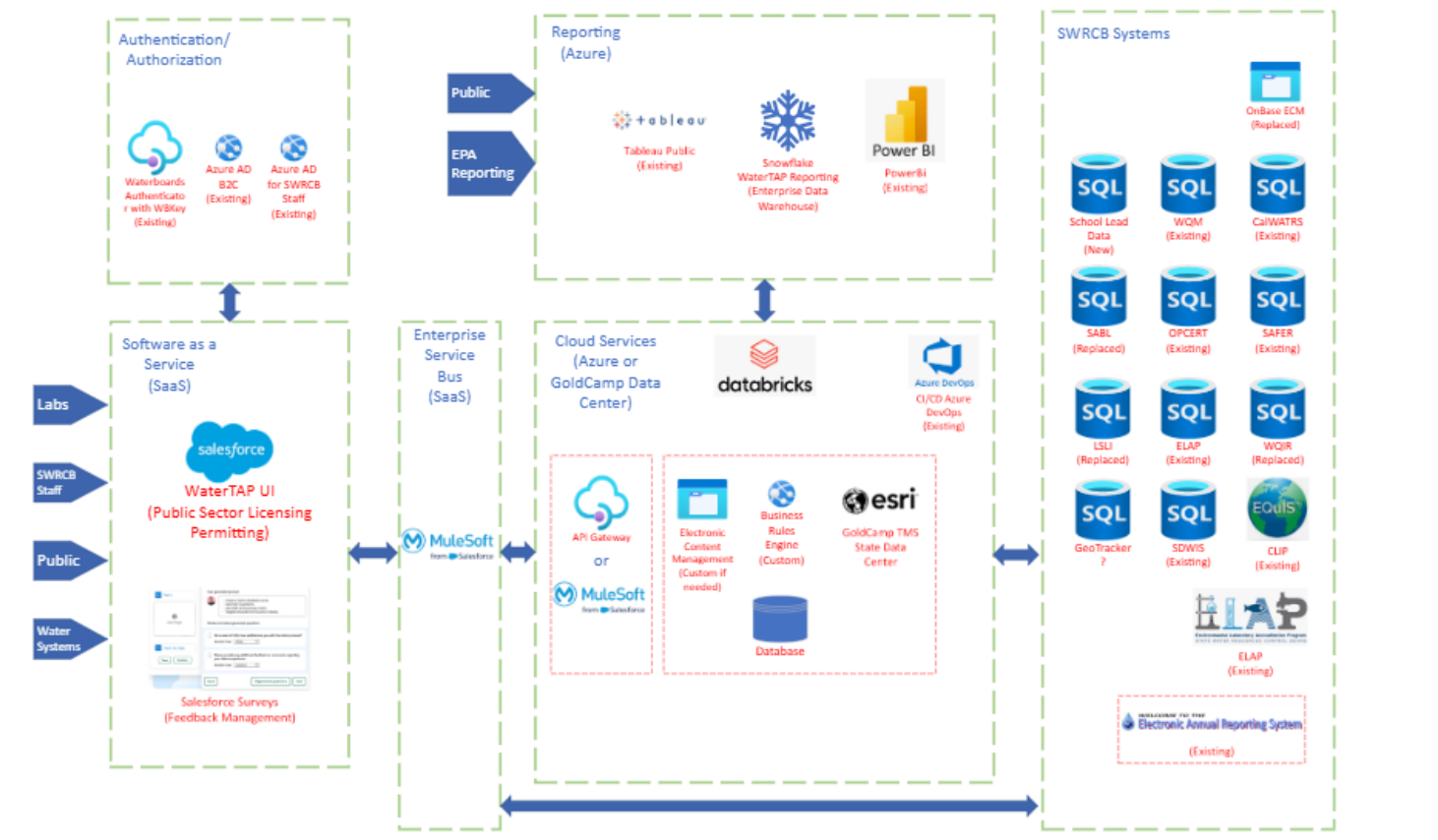
WaterTAP shall replace the legacy systems with a configurable, cloud-based SaaS aiming to minimize customization.

The Contractor shall meet the EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS to support the following users of WaterTAP:

- SWRCB estimates a total of ~65,000 total active users who will need to be able to log in and report.
- SWRCB estimates a total of ~7,200* Water System Administrators will need to be able to log in at the launch of WaterTAP, associate other users' accounts with their Public Water System (PWS)(s), submit/modify documents and data, and attest to submissions that are created either by them or other users associated with their PWS(s).
- SWRCB estimates a total of ~35,000* external user accounts that will need to be able to log in within the first eighteen (18) months of the launch of WaterTAP, associate their profile with one or multiple PWS's, and prepare submissions.
- SWRCB estimates a total of ~550* internal users that need to be able to log in and save progress at the launch of WaterTAP to the staff part of WaterTAP.
- SWRCB estimates a total of ~300* internal users who need to be able to log in with read-only permissions within 12 months of the launch of WaterTAP.
- SWRCB estimates a total of ~20* System Administrators who will need to be able to manage and administer WaterTAP and its associated functionality (e.g., configurations, workflows, etc.).
- SWRCB estimates a total of ~400* users (Labs) to submit requests via WaterTAP for routing and response.

NOTE: All user counts denoted with an asterisk (*) are included in the "total active users" described above.

Figure 9-1: WaterTAP Conceptual Architecture



In summary, WaterTAP will be a cloud-based SaaS solution that will replace legacy systems and create new functionalities. This includes meeting system requirements defined in the remainder of EXHIBIT A: STATEMENT OF WORK.

9.2. HARDWARE AND SOFTWARE NEEDS

Hardware/Equipment

If applicable, all initial equipment must be new at the time of installation. After initial installation, all replacement parts and equipment shall be new unless new parts are unavailable, at which point refurbished parts may be used upon written approval of the SWRCB Contract Manager or designee.

Software Licensing and Maintenance

WaterTAP will be a cloud-based, SaaS solution.

Refer to EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS for WaterTAP requirements.

The Contractor will identify all required software licenses on Software Licensing Program (SLP) including

SLP Contract Number and License SKU for all software licensing and related software and tools needed for development, implementation, data migration, ongoing access, support and hosting of WaterTAP throughout the term of the contract. While hosting products and associated costs must be identified, this will serve only as informational.

The Contractor must supply all descriptions, part numbers and quantities for all necessary software licenses to support the number of registered and active user counts defined in [SECTION 9.1](#).

[DESCRIPTION OF PROPOSED SOLUTION](#) and EXHIBIT E: COST WORKBOOK.

The Contractor shall not propose any unsupported software component or tool, per SIMM 5300. Refer to [SECTION 10.1. SOFTWARE AS A SERVICE \(SAAS\) LICENSING AND MAINTENANCE](#) for WaterTAP software solution requirements. The Contractor shall adhere to the National Institute of Standards and Technology (NIST) 800-53, Software Bill of Materials (SBOM), and be compliant with SIMM 22 COTS/ SaaS Acquisition, SIMM 5315-B, Cloud Security Standards and EXHIBIT F: SWRCB IT SECURITY POLICIES.

The Contractor shall confirm the use of all software components for WaterTAP as identified in EXHIBIT E: COST WORKBOOK.

The Contractor shall provide, install, and configure all Contractor-supplied software, excluding workstations, peripherals, and State-managed network devices, consistent with the State-approved System Architecture Description.

The Contractor shall be responsible for all Contractor-supplied software until transition to the State is completed.

The Contractor shall upgrade all third-party software used in WaterTAP following written approval by the State. All third-party COTS software in WaterTAP shall be the current major general release or current major general release minus

9.3. ESCROW SOURCE CODE

For the purposes of this section and for clarification, “source code, configurations, and customizations developed by the Contractor as part of this Agreement shall be treated as “Software and other materials” as specified in Section 9, Rights in Work Product, of the Information Technology - General Provisions - Cloud - Computing Services, DGS PD 402-ITGP Cloud (Revised and Effective 2/20/2025).

The Contractor agrees to use a unified source code, configuration, and customization repository for all development of WaterTAP and during deployment into other WaterTAP environments, as determined by the State, and to keep the repository up to date with the latest WaterTAP source code, configurations, and customizations.

The Contractor agrees to save all source code (which is Pre-Existing Material) into the repository, configurations, and customizations, including but not limited to infrastructure as code.

The State shall be entitled to receive a copy of such software source code, any and all configurations, any and all customizations saved into the repository, in the event the Contractor has ceased all business activities or has filed for bankruptcy protection, or if there is a material breach of the Agreement. The State has the right to audit the products kept in the repository during regular business hours upon sufficient notice to the Contractor.

Escrow Code

The State requires the ability to configure any non-proprietary code used as a function of the system and proprietary code developed or modified for this Agreement. The Contractor shall provide to the State the Contractor's software development assets created specifically for this Agreement. Such assets and components include source code for the following:

- All Contractor-developed applications for this Agreement
- Contractor-modified public domain software
- The Contractor's application proprietary source code is modified to meet the requirements of this Agreement:
 - These assets and components, including non-proprietary source code, shall be provided at each release and full solution acceptance.

SWRCB shall be entitled to receive a copy of such software source code, all configurations, any and all customizations saved into the repository in the event the Contractor has ceased all business activities or has filed for bankruptcy protection or if there is a material breach of the Contract. The State has the right to audit the products kept in the repository during regular business hours upon sufficient notice to the Contractor.

If this Contract is canceled, in whole or in part, pursuant to the State's General Provisions – Information Technology, Cloud, the Contractor shall provide SWRCB with all work completed to that point, including all the non-proprietary source code and proprietary source code developed or modified for this Agreement.

Escrow Account

The Contractor shall maintain for the life of the Contract, at Contractor's expense, a software escrow account with an agreed upon third-party escrow company providing software escrow services in the State of California in accordance with the provisions of this Contract.

The Contractor's third-party escrow company shall be located within the continental United States.

The software in the escrow account shall be in a format agreed to by SWRCB, such that SWRCB will be able to run and maintain the software should the need arise to obtain the code from the account.

The Contractor agrees to save any and all source code, any and all configurations, any and all customizations, including but not limited to infrastructure as code of the WaterTAP software product(s) developed and/or used in the implementation, operation, and maintenance support, with documentation of WaterTAP into the repository.

9.4. COMPATIBILITY AND INTERFACE

The WaterTAP solution must integrate and support data exchange via endpoints for internal and external-to-SWRCB systems. WaterTAP must also be compatible with Microsoft Office Suite, such as Microsoft Word, Excel, and data visualization/business intelligence Tools (e.g., Tableau, Power BI), as listed within EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS. In addition, the Contractor shall implement industry best-practice data exchange approach to support all data exchange requirements for WaterTAP. Refer to [SECTION 9.8.1. DATA HANDLING AND OWNERSHIP](#) for data conversion information. The Contractor shall provide documentation and integration support as defined in Deliverable Group 4 in EXHIBIT D: DELIVERABLES AND MILESTONES TABLE.

SWRCB interfaces can be found in [SECTION 9.1. DESCRIPTION OF PROPOSED SOLUTION](#). The EXHIBIT A: STATEMENT OF WORK does not include other web services or integrations that the Contractor deems necessary to meet the requirements.

The WaterTAP solution will leverage REST API's to ensure the various SWRCB software components can interact in a simple, standardized way over HTTPS protocols.

WaterTAP should support the system interfaces defined in EXHIBIT H: DATA CONNECTIONS as it is intended to connect to multiple DDW applications, databases and external APIs in a decoupled architectural way. Accurate water quality data must be shared with state/federal agencies per the secured data sharing requirements. The system and data architecture must be designed to accommodate future changes in policy and/or regulation of water quality assessments.

Interfaces

WaterTAP is intended to connect multiple services (such as client applications, databases, and external APIs) in a decoupled architecture. WaterTAP shall support the system interface defined in EXHIBIT H: DATA CONNECTIONS.

Interface Control Document

The Contractor will clearly define all interfaces required for the integration of WaterTAP. This includes but

is not limited to:

- **Application Programming Interfaces (APIs):** The Contractor must design and document all RESTful APIs, ensuring they comply with modern standards for security (e.g., OAuth, JWT), error handling, and data formats (e.g., JSON, XML).
- **User Interfaces (UIs):** The Contractor will specify the user interfaces (web, mobile, or desktop applications) that will interact with the backend system, including how the frontend systems will communicate with the APIs.
- **Database Interfaces:** Any interface between WaterTAP and legacy or third-party databases must be clearly defined. This includes schemas, data mapping, and access protocols.
- **Hardware Interfaces:** The Contractor must define how WaterTAP will interface with any hardware devices (e.g., printers, barcode scanners, IoT devices) or external systems, including necessary protocols and communication standards.
- **File Import/Export Interfaces:** If WaterTAP requires importing or exporting data in bulk, the Contractor must define interfaces for handling file-based data exchange (e.g., CSV, Excel, XML, etc.).

The Contractor shall collaborate with SWRCB and SWRCB Third-Party Vendors to analyze interface requirements and determine the best approach for interfacing between the WaterTAP solution and Third-Party systems.

The Contractor shall have system integration responsibility for WaterTAP, and in this role shall analyze and determine the resolution of any problems involving all system interfaces.

The Contractor is responsible for the design, integration, system modification, and delivery to make certain that integration requirements are met.

The interface specifications must include the minimum requirements listed below:

- Third-party vendor name
- Contact information
- Release history/status
- Support availability
- Interface name (technical and business name)
- Description
- Associated business process
- Business purpose
- Incoming/outgoing or real-time Application Programming Interface (API) (data flow)
- Target audience and security roles
- Detailed functional description
- Assumptions

- File layout with data elements including type, lengths, and valid values (if applicable)
- Frequency/timing
- Transfer method/process
- Dependencies/prerequisites
- Required configuration
- Troubleshooting/error handling
- Data reconciliation process
- External system considerations
- Future/retro transactions allowed
- Resource names
- Estimated data volume

9.5. SYSTEM INSTALLATION

The Contractor must work with the State to install and configure the necessary system components and environments, ensuring all infrastructure elements are in place and operational for the upcoming testing and integration activities, including, but not limited to:

Provision SaaS cloud licenses for five (5) environments which will be hosted by the State: Development, System Integration Testing (SIT), User Acceptance Testing (UAT), Staging, and Production to support WaterTAP deployment and operations.

Set up and configure the Development, Testing, UAT, Production, and Training environments in accordance with EXHIBIT F: SWRCB IT SECURITY POLICIES, assisting the State to ensure that all the required software, services, and configurations are aligned with the project's requirements, including system access controls, security protocols, and software dependencies.

Install and configure private cloud components of WaterTAP in the Development, System Integration Testing (SIT), User Acceptance Testing (UAT), Staging, and Production environments, ensuring proper integration with the cloud environments, SaaS solutions and SWRCB network. The production and staging environments shall mirror each other so that environmental issues will be captured in the training environment prior to promotion to production. Integration Testing. The Contractor shall update each environment using SWRCB's standard change control process when updates become available from the software manufacturer. During the term of the contract, the Contractor shall update WaterTAP with the latest available software version, consistent with the solution provider's updated policy and product roadmap.

Although the development of system functionality may be delivered in phases/releases to align with the Contractor's proposed implementation approach, the functionality provided by legacy systems and other applications must be replaced as stated in the SOW.

Any iterative development phase(s) completed by the vendor shall include Design, Development, Testing and approval from the State; however, functionality will not move to production until Full System Acceptance of the complete solution has been achieved. In alignment with [SECTION 11. CONTRACTOR DELIVERABLES](#), the completed functionality, as described in [SECTION 10.4.7. PRODUCT STABILIZATION AND FINAL SYSTEM ACCEPTANCE](#), delivered during each phase, must be regression tested against previously released functionality and released to the staging environment mutually agreed upon by the Contractor and SWRCB.

9.6. SOLUTION REQUIREMENTS

EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS lists the detailed Functional and Non-Functional Requirements for the WaterTAP solution.

EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS include mandatory requirements. The Contractor shall meet each mandatory requirement and indicate whether the requirement will be met through: Out of the Box functionality, Customization (0–40 hrs), Customization (41+ hours), or through Third-Party Software Integration.

WaterTAP Requirements Response descriptions are included in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS.

9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES

The Contract awarded as a result of this solicitation shall automatically incorporate by reference the following:

1. Information Technology General Provisions - **Cloud** (Revised 2/20/2025)
 - <https://www.dgs.ca.gov/%7E/media/Divisions/PD/Acquisitions/Solicitation-Documents/Attachments/IT-General-Provisions-Cloud-DGS-PD-402ITGP-Revised-02202025.pdf>

9.8. DATA SECURITY

The Contractor shall be responsible for maintaining a secure computing environment supporting the hosted application. The Contractor must manage the applications, WaterTAP data, and infrastructure according to the security requirements described in the Cloud Computing Services General Provisions, including but not limited to [SECTION 9.8.2. SECURITY](#), Data Protection.

Throughout the term of the agreement, the Contractor shall comply with the State's special provisions for data security, data handling, and data ownership. Refer to applicable provisions within [SECTION 9.8.2. SECURITY](#).

The Contractor certifies to SWRCB that it has complied with all applicable industry standards and guidelines, including, but not limited to those referenced in this Contract and relevant security provisions of the California State Administrative Manual (SAM), California Statewide Information Management Manual (SIMM), the National Institute of Standards and Technology (NIST) 800-53 v5 and Federal Information Processing Standard (FIPS) Publication 199 which protect and minimize risk to the State.

The Contractor shall accept responsibility for Data Breaches as provided in the Information Technology - General Provisions - Cloud - Computing Services, DGS PD 402-ITGP Cloud (Revised and Effective 2/20/2025), Section 21: Data Protection Provisions, Section 21.11 Data Breach, is responsible for the confidentiality, integrity, and availability of the data under its control. The Contractor shall implement and maintain all appropriate administrative, physical, technical, and procedural safeguards at all times during the term of the Contract to secure such data from data breach or loss, protect the data and information assets from breaches, introduction of viruses, disabling of devices, malware and other forms of malicious or inadvertent acts that can disrupt the State's access to its data or affects the integrity of that data. Please refer to Information Security and Privacy Provisions in [SECTION 9.8.2. SECURITY](#).

The Contractor shall maintain all data containing personal information in compliance with Chapter 1 of Title 1.8 of Part 4 of Division 3 of the California Civil Code (Information Practices Act of 1977).

The Contractor shall comply with statewide policies and laws regarding the use and protection of information assets and data. Unauthorized use of data by the contractor or third parties is prohibited.

The Contractor shall have all Contractor personnel: Key Staff, Non-Key Staff, and Subcontractors sign a SWRCB-provided Confidentiality Statement for the term of this Contract.

The Contractor shall help coordinate, with SWRCB and applicable third parties, the necessary security patches, updates, and upgrades that will enable SWRCB to keep its virus protection software up to date on applicable information assets (including but not limited to software, code, servers, and other storage devices, as well as data in transit) on which data may be stored, processed, or transmitted.

The Contractor shall notify the SWRCB Information Security Office via email (iso@waterboards.ca.gov) immediately, if a security incident involving the information asset occurs.

The State shall have the right to participate in the investigation of a security incident involving its data or conduct its own independent investigation. The Contractor shall allow the State complete access to security logs, latency statistics, and other related security data that affects this Contract and the State's data, at no cost to the State.

Additional security and data protection requirements:

1. The Contractor shall be responsible for the implementation, assessment, and monitoring

processes that shall be put in place prior to releases.

2. The Contractor shall develop system security controls using the NIST 800-37 Risk Management Framework.
3. The Contractor shall assist the Water Board Information Security Office in the completion of a System Security Plan that includes moderate level NIST 800-53, and is compliant with SIMM 22 COTS/SaaS Acquisition, SIMM 5315-B Cloud Security Standard, and EXHIBIT F: SWRCB IT SECURITY POLICIES.
4. The Contractor shall update the System Security Plan during each Product Increment and Release, and as needed.
5. The Contractor shall work with the State to establish a specific timetable for conducting risk analysis when the State determines a significant change to the System's physical security, hardware or operating system software occurs as described in the System Security Plan and in accordance with the Project Schedule.
6. The Contractor shall conduct security and access management activities across all environments that are related to requesting access, verification, providing rights (user provisioning), monitoring identity status, logging, tracking access, and removing and restricting rights identified in the System Security Plan.
7. The Contractor shall develop and deliver a Security Incident Report (SIR) whenever the conditions for reporting a security incident are met as described in the System Security Plan.
8. The Contractor shall actively monitor WaterTAP using comprehensive third-party malicious code protection mechanisms at information asset entry and exit points, including but not limited to: Intrusion Prevention System (IPS), endpoint defense, Security Event Information Management, and log correlation services per the State Administrative Manual (SAM) 5355 and 5355.1.
9. The Contractor shall develop the Security Acceptance Test Description (SATD) which documents the approach for security testing. Security testing shall include verification that security infrastructure requirements have been met, external and internal vulnerability assessment, penetration testing, and web services vulnerability testing.
10. The Contractor shall develop the Security Acceptance Test Report (SATR) which documents the expected and actual results of the security testing and is used in the determination of operational readiness.
11. The Contractor shall plan and conduct all WaterTAP access management activities consistent with the State Water Board's Information Security and Privacy Policies.
12. The Contractor shall hire an independent third-party specialist security firm to conduct application security assessments prior to Full System Acceptance of WaterTAP. The assessment shall be provided by the third-party specialist security firm directly to the State.
13. The Contractor shall practice secure coding standards such as the Open Web Application Security Project (OWASP) top 10 (<https://owasp.org/www-project-top-ten/>) and comply with EXHIBIT F: SWRCB IT SECURITY POLICIES.
14. The Contractor will partner with the DIT Information Security Office and the DIT Application

Development Unit to complete a risk assessment prior to Full System Acceptance, of the Software Development Life Cycle (SDLC) using the OWASP Testing Guide (<https://owasp.org/www-project-web-security-testing-guide/>) to ensure WaterTAP is secure and fully tested.

9.8.1. DATA HANDLING AND OWNERSHIP

Data Ownership and Usage

All rights, including all intellectual property rights, including business rules and data, shall remain the exclusive property of SWRCB. The Contractor has a limited, non-exclusive license to access and use the business rules and data as provided to the Contractor solely for performing its obligations under the Contract. The state will extract the as-is legacy data (or, in other words, the legacy data structure will not be altered before extraction) into the secured staging environment created by the contractor. The Contractor shall be responsible for the defined scope and timing of data conversion, data migration, and data handling as outlined below. The Contractor's roles and responsibilities related to data conversion, data cleansing, and data migration are detailed in +SECTION 10.5. PROJECT (CONTRACTOR) DELIVERABLES.

SWRCB data and documents may be collected by the Contractor for the purpose of performance under this Contract.

As provided in [SECTION 9.8.2. SECURITY](#), SWRCB shall have exclusive ownership of the SWRCB Source Data and documents.

No data shall be copied, modified, destroyed, or deleted by the Contractor, other than for normal operation or maintenance during the Contract period, without prior written notice and written approval by SWRCB.

Definitions of Data

1. SWRCB Data means all data submitted to, processed by, or stored by the Contractor obtained from the State, and includes, but is not limited to, all data that originated with, all data provided by, and data generated, manipulated, produced, reported, or otherwise emanating from or by WaterTAP components – including metadata.
2. Personal Identifiable Information (PII): as defined in California Civil Code section 1798.3(a).
3. SWRCB documents means all the document attachments from software applications of SWRCB, hard copy documents, and metadata of documents.

Data Access

The State will extract the as-is legacy data with a legacy data structure into the secured staging environment created by the contractor. The Contractor shall have access to the staging environment for

data analysis and clean-up activities. Depending on the data classification, the State will decide whether the data needs to be obfuscated. Contractors must work with masked data for analysis in the lower environment.

Remote access to data from outside the continental United States, including remote access to data by authorized support staff in identified support centers, is prohibited.

The physical location where the data is stored and/or the location of servers supporting cloud-based solution components shall be within the continental United States.

Contractors handling government data and documents have a responsibility to protect sensitive information, comply with records management regulations, and ensure the integrity of data. This includes safeguarding personal information, classified data, and proprietary information. Failure to do so can lead to civil and criminal penalties.

Size

Refer to EXHIBIT H: DATA CONNECTIONS for the impacted application list and the associated volumes of each database.

Data Compatibility and Interface

WaterTAP is designed to provide seamless, scalable, and efficient data communication between various components. At its core, WaterTAP will leverage a RESTful API to ensure that different software components can interact in a simple, standardized way over HTTPS protocols.

The system is intended to connect multiple services (such as client applications, databases, and external APIs) in a decoupled architecture. By using REST API principles, we aim to provide clear guidelines for resource management, improve scalability, and enhance flexibility in how services are consumed and exposed. WaterTAP should support the following system interface volumes defined in EXHIBIT H: DATA CONNECTIONS.

The contractor will clearly define all interfaces required for the integration of WaterTAP. This includes but is not limited to:

- **Application Programming Interfaces (APIs):** The contractor must design and document all RESTful APIs, ensuring they comply with modern standards for security (e.g., OAuth, JWT), error handling, and data formats (e.g., JSON, XML).
- **User Interfaces (UIs):** The contractor will specify the user interfaces (web, mobile, or desktop applications) that will interact with the backend system, including how the front end systems will communicate with the APIs.
- **Database Interfaces:** Any interface between WaterTAP and legacy or third-party databases must

be clearly defined. This includes schemas, data mapping, and access protocols.

- **Hardware Interfaces:** The contractor must define how WaterTAP will interface with any hardware devices (e.g., printers, barcode scanners, IoT devices) or external systems, including necessary protocols and communication standards.
- **File Import/Export Interfaces:** If WaterTAP requires importing or exporting data in bulk, the contractor must define interfaces for handling file-based data exchange (e.g., CSV, Excel, XML, etc.).

The Contractor shall collaborate with SWRCB and its Third-Party Vendors to analyze interface requirements and determine the best approach for interfacing between WaterTAP and Third-Party systems. The Interface specifications must include the minimum requirements listed below:

- Third-Party Vendor Name
- Contact information
- Release history/status
- Support availability
- Interface name (technical and business name)
- Description
- Associated business process
- Business purpose
- Incoming/outgoing or real-time Application Programming Interface (API) (data flow)
- Target audience and security roles
- Detailed functional description
- Assumptions
- File layout with data elements including type, lengths, and valid values (if applicable)
- Frequency/timing
- Transfer method/process
- Dependencies/prerequisites
- Required configuration
- Troubleshooting/error handling
- Data reconciliation process
- External system considerations
- Future/retro transactions allowed
- Resource names
- Estimated data volume

Data Exchange

Data exchange is the process of transferring structured/semi-structured/unstructured information between systems, applications, or organizations in a standardized format to ensure that the data is understood and

usable by all parties involved. The goal of data exchange is to enable interoperability, allowing different systems to share and use data seamlessly without requiring significant customization or reformatting. The Contractor will be responsible for implementing robust and secure mechanisms to transfer, process, and synchronize data across these systems, ensuring data integrity, security, and compliance with industry standards.

The Contractor will define and implement all necessary interfaces for exchanging data between WaterTAP and the following:

- **Internal Systems:** These may include legacy databases, custom applications, or other software components that must interface with WaterTAP.
- **External Systems and Services:** WaterTAP will need to interact with third-party services such as cloud platforms, external data providers, payment processors, or other APIs. Data must be exchanged reliably and securely between these services and WaterTAP.

This section outlines the essential requirements and responsibilities for data exchange, including interfaces, protocols, data formats, validation processes, and overall management of data throughout WaterTAP's lifecycle.

Data Exchange Protocols

The contractor must define the protocols for data exchange, ensuring efficient and secure transmission of data. It is likely there will be multiple integration approaches. The following protocols are considered for implementation:

- **RESTful APIs (Representational State Transfer):** APIs will serve as the primary method for data exchange between WaterTAP and other software components. The Contractor will design RESTful APIs that support secure and efficient communication.
- **SOAP (Simple Object Access Protocol):** If the existing systems or third-party services require SOAP-based communication, the Contractor will implement appropriate SOAP interfaces and ensure they comply with necessary standards.
- **File Transfer Protocols (FTP/SFTP):** For exchanging large files, such as reports or data dumps, the Contractor may need to implement FTP or SFTP to ensure secure transfer. All file transfers will be encrypted as necessary.
- **Direct Database Connections:** In some cases, WaterTAP may interact directly with legacy databases or third-party databases. The Contractor will define the necessary database connection interfaces (e.g., ODBC, JDBC) to facilitate data transfer between systems.
- **Message Queues:** In scenarios where real-time or asynchronous processing is required, message queuing systems like AWS Simple Queue Service (SQS) may be used to manage the reliable delivery of data across systems.

Data Validation and Error Handling

The contractor will implement robust data validation mechanisms to ensure that only clean, accurate data is exchanged between systems. This includes:

- **Schema Validation:** Ensuring that incoming data follows the expected schema (e.g., correct data types, field lengths, and mandatory fields). The Contractor will define validation rules and use tools to check data against these rules during data imports or API interactions.
- **Data Integrity Checks:** To prevent data corruption during exchange, the Contractor will ensure that integrity checks (such as checksums or hash values) are performed on data before and after it is transmitted across systems.
- The Contractor will define how errors in data exchange are handled. This includes defining error codes, messages, and recovery procedures for each type of failure (e.g., network failure, data format mismatch, missing fields). A centralized logging mechanism must be implemented to capture and report any issues that occur during data exchange.
- **Transaction Management:** For systems that involve transactional data (e.g., financial systems), the contractor will define mechanisms to ensure that transactions are either fully committed or fully rolled back in case of failure to maintain data consistency across systems.
- **Retries and Notifications:** In case of temporary failures (e.g., network issues), the Contractor will implement automatic retry logic and notify the relevant stakeholders of the failure for manual intervention if necessary.

Documentation

The Contractor is required to provide comprehensive documentation to ensure that all interfaces are clearly defined, understandable, and easily implementable. The documentation must include:

- **Interface Specifications:** A detailed description of each interface, including API endpoint definitions, data formats (e.g., JSON, XML), protocols (e.g., HTTP/HTTPS), security measures (e.g., OAuth, API keys), and authentication methods.
- **Data Mapping Documentation:** The Contractor must document how data will be mapped from legacy systems' as-is data structure to WaterTAP, including field-to-field mapping, data transformations, and any validation rules.
- **Error Handling:** Clear documentation on how errors will be handled across interfaces, including common error codes, messages, and troubleshooting steps.
- The Contractor must outline the protocols and methods used for communication between systems (e.g., REST, SOAP, FTP).
- **Version Control and Compatibility:** The Contractor must specify how different versions of interfaces or components will be managed to ensure backward compatibility.

Data Conversion Planning and Scheduling:

The Contractor must define the data conversion timeline and strategy to ensure the source legacy system data points are moved to WaterTAP. The following tasks are suggested but not limited to:

- **Analysis of Existing Data:** Review the current data sources, formats, and structures to assess the complexity of the conversion process.
- **Development of Conversion Strategy:** Define a clear data conversion strategy that specifies how the data will be extracted, transformed, and loaded (ETL) into WaterTAP.
- **Timeline Development:** Collaborate with stakeholders to establish a timeline that includes milestones for each phase of the data conversion process. Ensure that the allocated time for conversion is realistic based on the volume and complexity of the data.
- **Resource Allocation:** Assign the necessary resources, tools, and technologies to support the data conversion efforts. Ensure that the timeline accounts for adequate resource availability.

Data Cleaning Plan and Execution:

The Contractor must perform an audit of the legacy data and define a strategy for data cleansing to ensure:

- **Data Quality Assessment:** Perform an initial audit of the data quality, identifying issues such as inconsistencies, duplicates, missing values, or incorrect formats.
- **Data Cleaning Strategy:** Develop a data cleaning strategy that outlines the necessary steps, tools, and techniques to address data quality issues and fix them in the transformation stage (ETL) of data conversion tasks. This may include standardization, de-duplication, and normalization of data.
- **Timeline and Task Allocation:** Establish a detailed schedule for data cleaning activities, ensuring that sufficient time is allocated to address the identified issues. Assign responsibilities and define deliverables for each cleaning task.
- **Progress Monitoring:** Regularly monitor progress against the timeline and take corrective actions when necessary to ensure timely completion of the data cleaning tasks.

The condition and completeness of the legacy system data vary. State staff will assist the contractor in data cleansing and remediation based on the data model developed and prior to conversion.

Data Verification and Validation:

The Contractor must ensure all data conversion, cleaning, and verification tasks are executed efficiently, with proper validation to maintain data integrity.

- **Verification Criteria:** Develop clear verification criteria and validation rules that ensure the accuracy and integrity of the data after conversion and cleaning.
- **Testing and Quality Assurance:** Implement a testing phase where the converted and cleaned

data is validated against the original dataset to ensure correctness, completeness, and consistency.

- **Verification Timeline:** Define the timeline for data verification, allowing enough time for thorough testing and validation, with an emphasis on critical data sets that are essential to the success of the project.
- **Corrective Measures:** If any discrepancies or issues are found during verification, create a plan to address them, which may include rework, additional cleaning, or further conversion adjustments.

9.8.2. SECURITY

In addition to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#), EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS, the Contractor (and the services and work product(s) produced) shall also comply with [SECTION 9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES](#) to ensure the confidentiality, security, privacy, integrity, and availability of asset information, data, and systems.

The Contractor agrees to protect all SWRCB's information by implementing all controls and procedures necessary to comply with the provisions of this Statement of Work and all State-mandated data security and privacy requirements specified in the SWRCB's Information Security Policies, California State Administrative Manual (SAM), the State Information Management Manual (SIMM), the California State Contract Manual (SCM), all data security and privacy standards of the National Institute of Standards and Technology (NIST), all Federal Information Processing Standards (FIPS), all California State law (including, but not limited to, Government Code §11015.5 and §11019.9, the California Information Practices Act (IPA), the California Consumer Privacy Act (CCPA) and Civil Code §1978 et seq.), and all promulgated or published State of California and SWRCB regulations and policies relating to data security and privacy.

The Contractor further agrees to implement and continuously monitor the minimum administrative, physical, and technical safeguards described in this Contract to ensure ongoing compliance. The Contractor also further agrees to respond to SWRCB surveys and inquiries regarding compliance with the terms and conditions of this Contract. The Contractor shall protect SWRCB's data in accordance with this Statement of Work for as long as the Contractor is in possession of, maintaining, or accessing SWRCB's data. The Contractor shall ensure that all subcontractors and third parties with whom the Contractor works comply with this Contract and agree in writing to adhere to the provisions of this Contract.

Additionally, the Contractor shall comply with the following security requirements:

Privacy and Security Awareness Training

1. All project resources must complete, at the Contractor's expense, the SWRCB annual privacy and

information security training (remote, online, two (2) hours) and provide proof of completion within two (2) weeks of assignment to the project and on an annual basis as long as they are working on the SWRCB project in this Contract.

2. The Contractor shall retain Privacy and Security Awareness training records for three (3) years following agreement termination.
3. All Contractor resources shall acknowledge and comply with the State of California and EXHIBIT F: SWRCB IT SECURITY POLICIES.

Data Protection

1. Prior to any SWRCB data being stored in the WaterTAP solution environment, the Contractor shall provide a report demonstrating that the appropriate security controls are in place and receive approval from the SWRCB Information Security Officer and Privacy Officer.
2. Direct access or connection to SWRCB's data or network may only be initiated from a SWRCB-approved endpoint located within the continental United States.
3. If, at any point during this contract, the Contractor stores SWRCB's data outside of SWRCB's environment (including the WaterTAP solution environment), then the following requirements apply:
 - a. The Contractor shall receive prior written approval from the SWRCB ISO and Privacy Officer.
4. The Contractor shall meet at a minimum, quarterly, with SWRCB's ISO to review and ensure the appropriate security controls are in place to protect SWRCB's data. This includes, but is not limited to:
 - Review recent security incidents that may have impacted SWRCB during the period.
 - Review the data access logs and identify any anomalies.
 - Review the list of vulnerabilities identified and their resolution, malware found and removed.
 - Review of the status of malware protection, intrusion detection software installed on the endpoint, and security patches applied.
 - Review to ensure the appropriate physical controls are in place.
 - Review of Contractor's Security Incident Response Plan.
5. If the Contractor is storing data in a cloud solution (such as Amazon Web Services), the Contractor shall demonstrate through periodic reporting that WaterTAP meets the applicable State Cloud Provisions.
6. The Contractor shall immediately, and in any event no later than the next business day, transmit to the State Contract Manager and the SWRCB's ISO all requests made to the Contractor for disclosure of any personal information in the State's possession, in the Contractor's possession and control as part of its performance of the services under this SOW unless notice of such disclosure is prohibited by law.

7. The Contractor shall not disclose, except as necessary to perform the services under this SOW or otherwise specifically permitted by this Contract and only to those individuals on a need-to-know basis, any personal information in the State's possession to anyone, other than the SWRCB, without prior written authorization from the State Contract Manager and the SWRCB Privacy Officer.
8. The Contractor shall work cooperatively with the State to respond timely and accurately to public records and other legal requests.
9. The Contractor shall designate a security officer to work with the Key Staff Senior Data Architect to oversee its data security program, who will be responsible for carrying out its privacy and security programs, and a security liaison to communicate on security matters with the SWRCB. The Contractor's security officer shall review all exception and exemption requests prior to submission to the SWRCB ISO.
10. WaterTAP must comply with data type definitions for sensitive, confidential, public, and personal information types as outlined in SIMM 5305-A Information Security Program Management Standard's Information Classification section, California Public Records Act Government Code Sections 7920.000-7931.000, and Information Practices Act of 1977 Civil Code Section 1798, et seq. See SAM 5305.5 Information Asset Management.
11. Data in any non-production environment must be masked for sensitive data. Comply with CROMERR established standards for electronic reporting under EPA-authorized programs. (<https://www.epa.gov/cromerr>)
 - a. **Encryption:** CROMERR mandates encryption practices to protect electronic submissions, including the use of secure transmission protocols and the safeguarding of user credentials and digital signatures.
 - b. **Data Masking:** Although not explicitly required by CROMERR, data masking is a recommended best practice for protecting sensitive information in scenarios like software testing or data analysis, complementing the security measures outlined in CROMERR.

Encryption Variance

In instances where FIPS 140-3 encryption cannot be implemented, the Contractor shall submit their proposed compensating control(s) or variance requests to the SWRCB ISO for review and approval prior to transmitting, accessing, or storing data without encryption on an ad hoc basis. SWRCB may rescind the approval at any point and require the Contractor to renew it every thirty (30) days.

System Security Management and Planning

1. The Contractor is responsible for maintaining data security, preserving its confidentiality, integrity, and availability, as per its classification and FIPS Publication 199 standards.
2. The security controls in place must align with the system's categorization, following NIST Low, Moderate, or High baselines as detailed in NIST SP 800-53, Rev. 5, or the latest version.

3. The Contractor shall continuously monitor and adjust the security measures to accommodate changes in potential threats or data classification.
4. The Contractor shall develop a System Security Plan (SSP) and Technology Recovery Plan (TRP), per State SIMM.

Security Patches and Virus Protection

The Contractor shall keep all systems on which data is used up-to-date with the latest security patches, upgrades, and virus protection software and patches based on the SWRCB Information Security Policies.

Liability for Security Incidents

The Contractor shall be responsible for all costs incurred by SWRCB or its stakeholders due to a security incident that results from the Contractor's failure to perform or negligent acts of its personnel. This includes unauthorized disclosure, release, access, review, destruction, or loss, theft, or misuse of an information asset. Please see [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

Disposition of Records Agreement

The Contractor and SWRCB should have an agreement that addresses the appropriate disposition of records held by the Contractor during the term of its agreement. The Contractor shall dispose of records of SWRCB's data per SWRCB Records Retention Policy during the term of this agreement. No data shall be copied, modified, destroyed, or deleted by the Contractor other than for normal operation or maintenance during the Agreement period without prior written notice to and written approval by the SWRCB ISO. The Contractor shall follow the State of California's record retention policies and destruction of confidential information policies.

Endpoint Protection

The Contractor shall employ SWRCB's endpoint protection tools during the system's development and operation. The developed system shall exhibit full compatibility with these tools, ensuring seamless installation, conflict-free operation, and efficient communication for security monitoring and incident response. Any compatibility issues shall be rectified within twenty-four (24) hours of discovery in order to uphold SWRCB's stringent security protocols.

The Contractor must, at their own expense, install third-party Endpoint Detection and Response (EDR) solutions with a minimum daily automatic update, and which meet the State Endpoint Protection Standard, SIMM 5355-A, on any endpoint used for the project. This includes mobile devices, laptops, desktops, and any other endpoint device.

If the Contractor-provided equipment is authorized by the ISO, then it must meet the requirements outlined in the Telework and Remote Access Security Standard SIMM 5360-A.

Information Asset Management

The Contractor shall adhere to SWRCB's Information Security Policies (refer to EXHIBIT F: SWRCB IT SECURITY POLICIES) and NIST 800-53 R5 for proper use and protection of information assets. For each information asset owned by SWRCB, the Contractor shall provide a detailed inventory that includes:

- a. Description and value of the information asset.
- b. Identity of the asset owner.
- c. Designated custodians of the asset.
- d. Users of the asset.
- e. Classification of information within the asset pursuant to the California State Administrative Manual (SAM) 5305.5.
- f. FIPS Publication 199 categorization and level of protection (Low, Moderate, or High). If uncertain, the asset should be protected at a "Moderate" level as per FIPS Publication 199.
- g. The asset's importance to SWRCB's mission and function.
- h. Potential impacts if the asset's confidentiality, integrity, or availability were compromised.

9.9. STATE DATA CENTER OR CONTRACTOR HOSTED FACILITY ENVIRONMENT

State Hosting

The State will be responsible for the procurement and hosting of all SaaS software required to implement the WaterTAP solution. The hosting environment shall meet the technical requirements of the WaterTAP solution.

The WaterTAP solution will be hosted in the Salesforce Cloud and will be paid by the State and on their State's Azure subscription. The Salesforce Cloud shall be the primary software solution for WaterTAP.

SWRCB envisions that various components of Salesforce CRM and Salesforce Marketing Cloud will be needed. The State requires the WaterTAP solution to be in the Azure environment to its maximum extent.

SWRCB has existing Azure and Private cloud environments deployed in which they require WaterTAP be hosted in and use existing resources already deployed to support WaterTAP. It is mandatory to use SWRCB-owned subscriptions for any cloud computing services (Azure, AWS). The SWRCB private cloud environment at the State Data Center hosts GIS services, Active Directory, and next-generation firewalls that can be leveraged for WaterTAP.

Refer to EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS for the WaterTAP solution requirements.

Please refer to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) pertaining to hosting the WaterTAP solution.

The hosted environment shall be a single instance of the application that is available to access for multiple WaterTAP customers. All customers must access and use the same instance of the application, creating an efficient means of implementing patches, upgrades, fixes and maintenance. The WaterTAP solution includes all SaaS tools for management, backup, disaster recovery or technical support.

The Contractor shall confirm the use of hosting any additional software components for the WaterTAP solution as identified in EXHIBIT E: COST WORKBOOK.

10. SCOPE OF SERVICES

10.1. SOFTWARE AS A SERVICE (SAAS) LICENSING AND MAINTENANCE

The proposed WaterTAP solution shall be hosted by the State in a cloud environment as directed by:

- The State's Cloud Computing policy, Technology Letter (TL) 14-04 and TL 17-06,
- All required hosting environments must be in the Continental United States,
- The Contractor shall develop the SaaS solution in compliance with the provisions listed in the Standard Agreement 213 TECH,
- The State Administrative Manual (SAM) 4983, and
- SAM 4983.1 as part of the Cloud Computing Policy.

The Contractor shall protect all SWRCB's information by implementing every control and procedure necessary to comply with the provisions of this Statement of Work and all State-mandated data security and privacy requirements specified in:

- The California State Administrative Manual (SAM),
- The California State Contract Manual (SCM),
- All data security and privacy standards of the National Institute of Standards and Technology (NIST),
- All Federal Information Processing Standards (FIPS),
- All California State law (including, but not limited to, Government Code §11015.5 and §11019.9, the California Information Practices Act (IPA), the California Consumer Privacy Act (CCPA), and Civil Code §1978 et seq.), and all promulgated or published by the State of California.

SWRCB acknowledges that customization may be needed in the Business Rules Engine configurability for reporting requirements and compliance decision support/enforcement based on water system (reporter) characteristics and historical reported data.

Refer to EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS for WaterTAP requirements.

Contractor shall confirm the use of all software components identified in EXHIBIT E: COST

WORKBOOK.

The Contractor shall provide the State access to all tools used to develop, enhance, and operate WaterTAP, and shall transfer all licensing to the State in accordance with the System Support Transition Plan.

10.1.1. SAAS LICENSING

The Contractor will identify all required software licenses on the Software Licensing Program (SLP) including SLP Contract Number and License SKU for all SaaS licensing and related software and tools needed for development, implementation, data migration, ongoing access, support and hosting of WaterTAP throughout the term of the contract as identified in EXHIBIT E: COST WORKBOOK. While hosting products and associated costs must be identified, this will serve only as informational.

The Contractor must not use third-party software or code that would place licensing responsibility on SWRCB without prior review and approval by SWRCB Contract Manager. The Contractor must ensure all licensing and tools have an active maintenance and support license agreement throughout the term of the contract that extends for at least six (6) months past the expiration of the Contract.

The Contractor shall ensure that all software licenses that the Contractor or its subcontractors propose and use during the Contract term, and that are required to successfully and efficiently operate WaterTAP, are transferred to SWRCB at the end of the Contract. The Contractor warrants that it possesses all necessary licensing rights to transfer all required licenses to SWRCB.

The Contractor shall not knowingly propose a software component or tool when no commercially available maintenance support exists for the component for the term of the contract.

The Contractor shall coordinate with SWRCB to certify software upgrades and security patches for any software component or tool to support and maintain WaterTAP.

10.1.2. SAAS MAINTENANCE SERVICES

The SaaS Maintenance will include the services specified in the following subsections.

10.1.2.1. SYSTEM AVAILABILITY

The Contractor represents and warrants that the SaaS will be performed in a professional manner with industry standards reasonably applicable to such SaaS.

System Availability includes both application or module availability and data availability. System Availability does not include general Internet unavailability beyond the control of the Contractors, including State network unavailability, excluding scheduled downtime (preventative maintenance windows).

WaterTAP will be available at least ninety-nine and five hundredths percent (99.5%) of the time in any given month. This means the outage or downtime percentage will not be more than one-tenth of five percent (0.5%), not including previously agreed-upon maintenance, or downtime out of the Contractor's control.

The Contractor represents and warrants that WaterTAP availability will be available according to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

If WaterTAP availability falls below ninety-nine-point five percent (99.5%) in any month, not including previously agreed-upon maintenance or downtime, the Contractor shall provide SWRCB with a credit according to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

If the monthly System Availability averages less than ninety-nine and five hundredths' percent (99.5%) for three (3) or more months in a fiscal year, twelve-month (12-month) period, the State may terminate the Contract for material breach in accordance with Section 16.3 Termination for Default provision in the [SECTION 9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES](#).

10.1.2.2. SOFTWARE MAINTENANCE AND UPGRADES

The Contractor shall coordinate with SWRCB to install software maintenance updates, upgrades, and enhancements to ensure the software can be tested and operates accurately and efficiently by SWRCB prior to being released to WaterTAP users. Any proposed maintenance or upgrades must be pre-approved by the State to ensure alignment with project timelines and objectives. The Contractor must also make available application modifications and enhancements that are available to other SaaS users as described in [SECTION 9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES](#).

The Contractor shall provide SWRCB with three (3) days prior notice to the WaterTAP system being unavailable due to non-emergency maintenance or enhancements. The Contractor shall schedule any such times WaterTAP will be unavailable outside normal usage hours (Monday through Sunday, 6:00 a.m. to 7:00 p.m., Pacific Time). In the event of unscheduled and unforeseen times, WaterTAP becomes unavailable for any reason, except as otherwise prohibited by law, the Contractor must immediately notify SWRCB and cooperate with SWRCB's requests for information regarding WaterTAP being unavailable (including causes, effect on WaterTAP, and estimated duration).

Refer to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) and [SECTION 9.8.1. DATA HANDLING AND OWNERSHIP](#) for system availability, data backup, and system recovery.

10.1.3. USER MANAGEMENT

SWRCB may suspend or terminate (or direct the Contractor to suspend or terminate) an end user's access to SaaS in accordance with SWRCB's policies.

Contractor may suspend an end user's access to SaaS immediately in response to an act or omission that reasonably appears to jeopardize the security or integrity of Contractor's SaaS, or the network(s) or facilities used to operate the SaaS. Suspension will be to the minimum extent, and of the minimum duration, required to prevent or end the security issue. The suspension will be lifted immediately once the breach is cured. The Contractor may suspend an end user's access to SaaS in response to a material breach by the end user of any terms of use s/he/they have agreed in connection with receiving SaaS. The Contractor will notify SWRCB within one (1) hour of any suspension of end-user access to SaaS.

10.2. KEY STAFF

The Contractor shall ensure that a State-approved number of appropriately qualified and trained personnel are always employed and available to provide timely services required under the Contract.

The Contractor shall ensure staff continuity and retention throughout the implementation of WaterTAP. For planned absences, the Contractor shall provide back-up coverage for any Key Staff absent for more than two (2) business days in a week. For unplanned absences, the Contractor shall provide back-up coverage for any Key Staff absent for more than two (2) consecutive business days. In either case, the back-up coverage shall have experience that is comparable to or exceeds the experience of the absent individual.

10.2.1. KEY STAFF QUALIFICATIONS AND SKILLS

The Contractor shall provide a minimum of ten (10) Key Staff as described below in Table 10-1. The Contractor staff providing services under the Agreement must meet minimum mandatory requirements and maintain those requirements throughout the term of the Agreement. For purposes of this Contract, the term "Key Staff" refers to Contractor staff roles deemed by SWRCB to be essential to the Contractor's satisfactory performance of the requirements contained in this Contract. All listed Key Staff are expected to be available as stated in [SECTION 7. CONTRACTOR'S ROLES AND RESPONSIBILITIES](#) throughout the project.

Because of the complexity and focus required to meet the provisions of this Contract, sharing of roles is NOT permitted for any Key Staff roles listed in Table 10-1. However, adding additional Key or Non-Key staff to support the activities and responsibilities of the Key Staff roles is highly recommended.

At a minimum, the Contractor shall provide staff that meet the mandatory qualifications for the State-identified Key Staff Roles listed below in Table 10-1. Any proposed Key Staff replacement must possess

experience which meets the corresponding Key Staff mandatory requirements of this Agreement and the desirable requirements met by the Key Staff being replaced.

The Contractor shall staff all resources required to successfully complete the deliverables as outlined in EXHIBIT A: STATEMENT OF WORK.

Key Staff mandatory and desirable experience must have occurred within the past ten (10) years. For each experience requirement that is met or partially met on the cited project, specify the number of full-time month equivalents (FTEs) of experience that the Staff person accrued on the cited project. For each period in which the Staff person performs work applicable to the claimed experience for a minimum of twenty (20) workdays of a minimum total of 160 hours (the minimum required to represent working full-time), the Staff accrues one (1) FTE experience. To calculate and report the full-time equivalent experience for Staff who worked part-time (partial) on a referenced project, use the following calculation:

If the Staff worked half ($\frac{1}{2}$) time on a referenced project, experience should be prorated to one-half ($\frac{1}{2}$) full-time month equivalent experience for each period in which the staff person worked a minimum of seventy (80) hours over twenty (20) workdays in a month. For each experience requirement that the Staff's work on a cited project addresses, report the total number of full-time equivalent experience the Staff's work represents using the calculations as previously described in this section, which depend upon the calendar period during which the Staff worked on the referenced project and whether he/she worked on a full-time or some other basis.

The Contractor shall ensure that additional, appropriately qualified and trained non-key staff are always employed and available to provide timely services required under the Contract. Non-key staff shall be people that have relevant domain knowledge as appropriate for such job title classifications.

Experience used to meet the minimum and desired qualifications must be related to services provided to a customer or client external to the Contractor's (or subcontractor's) organization or company.

For any staff member who requires a certification per the MQs, a renewal certificate must be provided to the State Contract Manager within fifteen (15) State business days after the certificate expires.

Table 10-1 : Key Staff Mandatory and Desirable Qualifications

Mandatory and Desirable Qualifications	
Engagement Director/ Executive	
Mandatory Qualifications	Desired Qualifications

1. The Engagement Director/ Executive shall have at least five (5) years of direct project oversight and authority over ongoing relationships with clients where the firm has implemented enterprise solutions in excess of \$10M.	1. One (1) or more additional years in direct project oversight and authority over ongoing relationships with clients where the firm has implemented enterprise solutions in excess of \$10M. Only include years beyond the 'Total Experience Required' under MQ #1.
2. The Engagement Director/ Executive shall have at least fifteen (15) years of experience in professional services, development, client support or project management.	
Project Manager	
Mandatory Qualifications	Desired Qualifications
1. The Project Manager shall possess and maintain a valid Project Management Institute (PMI) Project Management Professional (PMP) certification throughout the term of this Agreement.	1. The Project Manager shall have experience in project management for at least one (1) year that includes: i. regulatory contact management, ii. information submission, iii. data management, iv. business rule configuration, or, v. GIS components.
2. The Project Manager shall have at least two (2) years of Full-Time Equivalent (FTE) experience as the Project Manager on at least one (1) system integration Project with a minimum value of \$10M.	2. The Project Manager shall have at least one (1) year of experience in a Project Manager role on an Information Technology State of California Project.
3. The Project Manager shall have at least five (5) years of FTE experience as the Project manager for software implementation projects with a minimum value of \$10M.	

4. The Project Manager shall have at least five (5) years of FTE experience working with state, local, or federal government entities.	
Senior Data Architect	
Mandatory Qualifications	Desired Qualifications
1. The Senior Data Architect shall have seven (7) years of full-time experience data architecting enterprise solutions in a lead role on complex information technology project(s) with a minimum contract value of at least ten million \$10M and 10,000+ users and with the Salesforce technology to be implemented in the proposed solution.	1. One (1) or more additional years of experience in data architecting enterprise solutions with a minimum value of \$10M+ and 10,000+ (ten thousand) of users and with the technology to be implemented in the WaterTAP Project.
2. The Senior Data Architect shall have at least five (5) years of experience in data modeling, data modeling tool(s), ETL process, data warehousing, and data lake design.	
3. The Senior Data Architect shall have at least five (5) years of experience in cloud platforms and their data services.	
4. The Senior Data Architect shall possess and maintain Enterprise architecture certification in one or more industry-leading architecture framework(s).	
5. The Senior Data Architect shall have at least five (5) years of experience in data governance, data quality, and data/document conversion activities within enterprise solution implementations.	
Senior Software Solutions Architect	

Mandatory Qualifications	Desired Qualifications
1. The Senior Software Solutions Architect shall have seven (7) years of full-time experience data architecting enterprise solutions in a lead role on complex information technology project(s) with a with a minimum contract value of at least ten million \$10M+, implementing, integrating, and managing a cloud-bases SaaS solution with and 10,000+ users and with the Salesforce technology to be implemented in the proposed solution (e.g., providing technical leadership to a team throughout the project lifecycle, reviewing and validating solution designs from other team members, performing design and debug activities for multiple systems, process improvement, solution development, and performance analysis on solutions).	1. One (1) or more additional years of experience architecting and designing enterprise software solutions with a minimum value of \$10M+ and 10,000+ users.
2. The Senior Software Solutions Architect shall have five (5) years of experience in a Solution Architect role on a complex information technology project(s) with a contract value of at least ten million (\$10M) involving stakeholder groups both internal and external to the organization in at least five (5) business programs or functional areas which include: (a) data management, (b) case management, (c) implementing a cloud solution, and (d) at least one of the following additional functions: i. Data Submission ii. Entity Management	2. One (1) or more additional years of experience in a Solution Architect role on a complex information technology project(s) with a contract value of at least ten million (\$10M) involving stakeholder groups both internal and external to the organization in at least five (5) business programs or functional areas which include: (a) data management, (b) case management, (c) implementing a cloud solution, and (d) at least one of the following additional functions: i. Data Submission ii. Entity Management iii. Reporting Management

iii. Reporting Management	
3. The Senior Software Solutions Architect shall possess and maintain Enterprise Architecture Certification in one or more industry-leading architecture framework(s).	3. One (1) or more additional years of experience with cloud technologies in an architecture and/or infrastructure role.
4. The Senior Software Solutions Architect shall have at least five (5) years of implementing and maintaining enterprise-level ECM platforms such as DocuEdge, Documentum, Hyland OnBase or equivalent ECM platforms.	4. One (1) or more years of experience with role-based access management to ECM documents, data/document privacy and security standards.
5. The Senior Software Solutions Architect shall have at least five (5) years of experience in integrating the ECM process with a customized SaaS solution.	
Senior Business Analyst	
Mandatory Qualifications	Desired Qualifications
1. The Senior Business Analyst shall have ten (10) years of experience in the last fifteen (15) years as the functional lead on completed implementations of enterprise technology solutions with a minimum value of \$10M+ including leading and developing as-is/to-be business process analyses & mapping, documenting Business Process Re-engineering (BPR), and performing gap analyses involving business analysis experience leading, coordinating, planning, and communicating all aspects of the Software Development Life Cycle (SDLC) from requirements elicitation through deployment of a cloud-based Software as a Service (SaaS) solution.	1. One (1) or more additional years of experience as a functional lead on enterprise technology solutions with a minimum value of \$10M+ leading and developing as-is/to-be business process analyses & mapping, documenting Business Process Re-engineering (BPR), and performing gap analyses involving business analysis experience leading, coordinating, planning, and communicating all aspects of the Software Development Life Cycle (SDLC) from requirements elicitation through deployment of a cloud-based Software as a Service (SaaS) solution.

2. The Senior Business Analyst shall have at least ten (10) years of Agile or iterative / incremental software development methodology experience in technology solutions with a minimum value of \$10M+.	2. One (1) or more years of experience with the Salesforce technology to be implemented in the proposed solution.
3. The Senior Business Analyst shall have ten (10) years in the last fifteen (15) years of evaluating business processes, workflows, and requirements, and documenting migration activities on technology solutions with a minimum value of \$10M+.	3. One (1) or more years of experience with State of California business processes and workflows.
Training Lead	
Mandatory Qualifications	Desired Qualifications
1. The Training Lead shall have at least five (5) years of experience developing and leading training program(s) for completed technology implementations.	1. One (1) or more additional years of experience developing and leading training program(s) for completed technology implementations.
2. The Training Lead shall have at least five (5) years of experience designing and creating user guides as well as training materials and FAQs needed for a project that has 10,000+ users.	2. One (1) or more additional years of experience designing and creating user guides as well as training materials and FAQs needed for a project that has 10,000+ users.
Senior Test and Validation Lead	
Mandatory Qualifications	Desired Qualifications
1. The Senior Test and Validation Lead shall have three (3) years of experience as a testing lead for projects with a minimum value of \$10M+ and 10,000+ internal and external users (including the public) within the public sector including the following:	1. One (1) or more additional years of experience as a testing lead for projects with a minimum value of \$10M+ and 10,000+ internal and external users (including the public) within the public sector including the following: i. Developing and executing test plans,.

i. Developing and executing test plans, ii. Leading a testing or validation team in a cloud-based SaaS solution, and iii. Configuring automation tools to run test scripts.	ii. Leading a testing or validation team in a cloud-based SaaS solution, and iii. Configuring automation tools to run test scripts.
Technical Lead	
Mandatory Qualifications	Desired Qualifications
1. The Technical Lead shall have ten (10) years in the last fifteen (15) years of experience overseeing daily technical operations; implementing best practices and coding standards; leading development team activities; coordinating with the software development team in addressing technical issues.	1. One (1) or more additional years of experience in the last fifteen (15) years implementing, developing and/or managing enterprise technology solutions
2. The Technical Lead shall have five (5) years of experience as the technical lead for enterprise solution implementations in the primary software solution Salesforce.	2. One (1) or more additional years of experience as the technical lead for enterprise solution implementations.
Organizational Change Management Lead	
Mandatory Qualifications	Desired Qualifications
1. The Organizational Change Management Lead shall have five (5) years of experience implementing organizational change management practices in a lead capacity using an industry-standard change management framework.	1. One (1) or more additional years of experience implementing organizational change management for a city, county, state, or federal government entity.
2. The Organizational Change Management Lead shall have five (5) years of experience creating, managing, and delivering organizational change management products such as roadmaps, risk	2. One (1) or more years of experience delivering organizational change management for IT implementation projects

logs, staff transition plans, training plans, communication plans, execution plans, and readiness assessments.	
3. The Organizational Change Management Lead shall possess an Organizational Change Management (OCM) certification from a recognized certification body or accredited educational institution.	
GIS Solution Expert	
Mandatory Qualifications	Desired Qualifications
1. The GIS Product Expert shall have five (5) years of experience in GIS development and implementation for drinking water infrastructure, or other regulated utilities.	
2. The GIS Product Expert shall have five (5) years of expertise in GIS software (e.g., ArcGIS, ESRI Enterprise), geospatial database management and data exchange, automation workflows, web-based GIS solutions and services, map design, and integration with enterprise IT systems.	

10.2.2. KEY STAFF ROLES AND RESPONSIBILITIES

The Contractor shall ensure that a State-approved number of appropriately qualified and trained personnel are always employed and available to provide timely services required under the Contract.

The Contractor shall provide a minimum of ten (10) Key Staff as described below in Table 10-2. For the purposes of this Contract, the term “Key Staff” refers to Contractor staff roles deemed by SWRCB to be essential to the Contractor’s satisfactory performance of the requirements contained in this Contract. All Key Staff listed below shall be full-time or part-time and all are expected to be available throughout the duration of the design, development and implementation of the project.

NOTE: Not all FTE Key Staff are needed throughout all phases of the project.

Because of the complexity and focus required to meet the provisions of this Contract, sharing of roles is NOT permitted for the Key Staff roles listed in Table 10-2. However, adding additional staff to support the activities and responsibilities of the Key Staff roles is highly recommended.

Maintaining adequate staffing levels and all necessary staffing resources to successfully perform the tasks required in this Agreement within the agreed-upon schedule and to perform to the standards and Service Level Agreements set forth herein. Shortage of Contractor personnel shall not relieve the Contractor from completing agreement deliverables to the satisfaction of the State and within agreement timelines. The Contractor shall not be allowed extra time beyond the timeframe specified [SECTION 10.2.4. KEY STAFF CHANGES](#) or money to replace personnel.

Supervision of all Contractor’s Project personnel and mitigation of any Contractor personnel issues is the Contractor’s responsibility. The Contractor shall be responsible for the quality of service delivered to the Water Board by any temporary backup personnel or permanent replacement personnel on the Project team.

At a minimum, the Contractor shall provide staff with the appropriate experience and qualifications for the State-identified Key Staff Role in Table 10-2.

The table below describes the roles and responsibilities of the Contractor's Key Staff. See [SECTION 10.2.1. KEY STAFF QUALIFICATIONS AND SKILLS](#) for more detail.

Table 10-2: Key Staff Roles and Responsibilities

Key Staff	Roles and Responsibilities
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Engagement Director (Part Time)	Responsible for the day-to-day management of the Contractor's resources, including subcontractors, and activities, including overall performance of Contractor resources and Agreement compliance. Serves as the primary point of contact with the Water Board's leadership, governance bodies and other State Executive Sponsors for activities related to contract administration, overall engagement management and scheduling, correspondence between the Water Board and the Contractor, dispute resolution, and status reporting to the Water Board for the duration of the Agreement. 1. Lead the delivery of the WaterTAP solution in collaboration and coordination with the WaterTAP Product Owner. 2. Facilitate conference calls and webinars on a periodic basis as needed for high-level project decision-making. 3. Prepare the overall project work plan. 4. Schedule meetings, prepare agendas, and disseminate meeting minutes with SWRCB Executive Leadership as appropriate. The meeting agenda will be circulated twenty-four hours prior to the meeting and will include the status of high-priority items, discussion of open questions or issues, and discussion of potential risks. 5. Is authorized to commit the resources of the Contractor to matters pertaining to the performance of the Agreement. 6. They are responsible for addressing any issues that cannot be resolved by the Contractor's Project Manager. 7. Is responsible for all subcontractor relationships.
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Project Manager (Full Time)	Has overall responsibility for the engagement and the Contractor's execution of the project. 1. Oversees the execution of activities in the Contract 2. Serves as the contact and escalation point for contract issues and concerns. 3. Serves as the Contractor's representative for the project Executive Steering Committee. 4. Ensures agreement resource commitments are met. 5. Manages the Contractor's project team, including subcontractors and subcontractor resources. 6. Ensures the requirements of the agreement resulting from this solicitation are fully implemented. 7. Manages the execution of project activities in compliance with all Project Plans 8. Coordinates changes by following project Executive Steering Committee processes as outlined in SECTION 10.5. CHANGE CONTROL PROCEDURES. 9. Ensures quality control processes are implemented and followed in alignment with SECTION 10.4.4. TESTING TASKS. 10. Ensures functionality released to production complies with the terms of the Contract. 11. Accountable for the overall execution of the project products and services with required functionality and quality. 12. Accountable for the timely delivery of all project deliverables. 13. Accountable for the attainment of WaterTAP established goals, objectives, and targets. 14. Responsible for the day-to-day communications between SWRCB and Contractor. 15. Responsible for the day-to-day contact and direction of work with Contractor subcontractors. 16. Responsible for project management activities, work products, and all deliverables. 17. Responsible for effective meeting facilitation and documentation. 18. Accountable for managing risks and issues as identified in the Risk and Issue Management Plans. 19. Accountable for ensuring all contractor staff (including subcontractors) are aware of and follow project management
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	processes as described in PM plans. 20. Accountable for creating and updating the master project schedule and managing execution of tasks utilizing MS Project. 21. Accountable for managing project schedule and developing mitigation strategies when the project falls behind schedule. 22. Accountable for the accuracy of content in contractor status reports. 23. Accountable and responsible for reporting project status at multiple levels, including project, WaterTAP Executive Steering Committee, WaterTAP Project Management, IT Governance, and, as necessary, oversight entities including IV&V, and California State Water Resources Control Board. 24. Accountable for the quality of all deliverables (project management and execution). 25. Accountable for the formal submission of deliverables and status reports and manages the review and approval process for the Contractor. 26. Accountable for coordinating activities with the SWRCB Project Management Team, including SWRCB resource identification, resource scheduling, and resource feedback. 27. Accountable for the formal submission of deliverables and status reports and manages the review and approval process for the Contractor. 28. Accountable for invoice processing coordination between the Contractor and SWRCB. 29. Provide overall project management, oversight, and direction. 30. Provide data migration oversight and ensure sufficient resource capacity to support the data migration effort. 31. Ensure the timely completion of quality Contract Deliverables. 32. Maintain the System Project Schedule. 33. Responsible for performance and contract compliance, and managing the Contractor's project teams, including subcontractors. 34. Ensure the project work plans are adhered to and coordinated with the State's Project Manager when changes to system and/or processes occur based upon change control approvals. 35. Collaborate with the SWRCB Project Manager to define Project and Program Management processes. 36. Schedule meetings, prepare agendas, and disseminate meeting
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	minutes to WaterTAP project staff as appropriate. 37. Facilitate conference calls and Webinars at agreed-upon intervals with the State. 38. Responsible for accurate invoicing. 39. Develop the deliverables by using the appropriate tools as dictated in the Contract. 40. Document, manage, and communicate all project issues and risk management, including monitoring risk levels, defining mitigation strategies, escalation paths, and managing the execution of the resolution. 41. Prepare Project Status Reports, including actual versus planned activities, planned tasks for the upcoming sprint period, task and activity priorities, and workstream tasks and activities. 42. Manage project contracts, including Contractor-related project resources, and availability of appropriate resources throughout the term of the contract. 43. Responsible for problem resolution. 44. Day-to-day primary point of contact for the State, including being the liaison with the State on project Change Orders. 45. Is available and responsive to State requests for consultation and assistance. 46. Provides timely and informed responses to operational and administrative inquiries that arise. 47. Develops and maintains thorough project planning documentation that includes, but is not limited to, a Project Management Plan and a fully resourced Project schedule. 48. Manages staff assigned to all project activities. 49. Plays an active role in the day-to-day management of WaterTAP and is knowledgeable and aware of all issues, concerns, and requirements. 50. Meets with Water Board staff or such other people the Water Board may designate on a regular basis to provide oral and written status reports and other project information as required. 51. Provides ongoing reporting of operations against Service Level Agreements (SLAs).
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Senior Data Architect (Full Time)	1. Ensures the database design of all components has an enterprise view and that each component/module works together to address the functional requirements 2. Manages data warehousing (both traditional and cloud) and data governance. 3. Implements and performs performance tuning. 4. Utilizes data engineering and ETL tools from multiple sources. 5. Implements self-service business intelligence tools. 6. Maintains in-depth knowledge of cloud technologies, platforms, and solutions as they relate to data architecture. 7. Works within an integrated and multi-cloud environment. 8. Provides data architecture expertise in building WaterTAP. 9. Uses data governance tools and develops data migration strategies from legacy to modern technologies. 10. Migrates documents and metadata from legacy applications to future state content management. 11. Collaborates with project stakeholders to ensure WaterTAP addresses all functional and non-functional requirements.
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Senior Software Solutions Architect (Full Time)	Has overall responsibility for managing the solution architecture design, development, implementation, integration, and deployment. 1. Ensures Contractor development team compliance with all project plans. 2. Coordinates design, development, implementation, and integration activities with SWRCB. 3. Responsible for the overall design and configuration of the proposed solution to meet the functions defined by the requirements and elicited business rules. 4. Configure the solution database to include SWRCB data fields. 5. Collaborates with SWRCB to ensure security standards and protocols are enforced in alignment with SECTION 9.8.2. SECURITY. 6. Ensures the solution complies with information security standards, best practices, requirements, and all required applicable state security provisions. 7. Accountable for the WaterTAP system architecture, technical design and technical implementation. 8. Responsible for defining and documenting network, security, and server specifications for off-premise and on-premise WaterTAP components. 9. Responsible to ensure that policies, standards, and procedures related to infrastructure, security, configuration, and code (where applicable) are established, documented, communicated, validated, and enforced. 10. Accountable for the traceability of requirements through the implementation phases/activities with both the positive confirmation of requirements and unit testing (or methodology equivalent activity identified by the Contractor). 11. Responsible for the implementation of functional, data science and data integration requirements. 12. Responsible for the definition and management of all pre-production and production WaterTAP environments. 13. Responsible for the development of transition documentation and training required to conduct production cutover activities. 14. Review SWRCB enterprise policies and standards, ensuring alignment with SWRCB's enterprise architecture
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	adoption requirements. 15. Document business user stories and service models for the solution to align with the SWRCB enterprise architecture and adopt practices accounting for business, application, data, technology and security domains. 16. Design and deliver solutions and interfaces using DevOps methodologies, accounting for logical and operational models addressing application, data, security, and infrastructure. 17. Provide as-is and to-be states with gap assessments and recommendations for addressing gaps. 18. Create and maintain the overall technical vision for the Contractor's solution that aligns with SWRCB's business outcome, mission, vision, strategic direction and architecture. 19. Research, analyze, and recommend available software, platforms, and technologies to meet the State's standards and align to SWRCB services. 20. Provide recommendations and roadmaps for proposed solutions, including all technical documentation on the Contractor's solution. 21. Monitor the development process and keep stakeholders, including SWRCB senior architects and technical operations teams, informed in collaboration with the Lead Developer. 22. Support the data migration team with data migration planning and data conversion and transformation activities. 23. Perform and manage design, debug, and performance analysis on solutions. 24. Regularly communicate new features and benefits to partners and stakeholders. 25. Provide technical leadership to an architecture team throughout the solution development, maintenance and operations services. 26. Review and validate solution design proposals from other teams as necessary. 27. Manage and communicate technical risks and mitigation options during solution development. 28. Develop detailed design documents, interface specifications, and performance and capacity test plans. 29. Conduct knowledge transfer through the solution lifecycle phases. 30. Ensures WaterTAP addresses all the functional and non-functional requirements.
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	31. Architects WaterTAP and design software modules to be implemented. 32. Works with an implementation team, made up of the Contractor and Water Board staff, to ensure modules interoperate. 33. Works with SMEs of the business units to understand WaterTAP and process requirements and articulate the requirements to the Contractor Project team leads. 34. Ensures that WaterTAP aligns with the business requirements of the organization. 35. Utilizes the latest state-of-the-art technologies as much as possible. 36. Acts as the most knowledgeable expert on all technical software components. 37. Integrates and translates complex technical concepts and User Stories into actionable development plans. 38. Applies higher-level business or technical principles and methods to difficult technical problems to arrive at engineering solutions. 39. Designs and participates in the development of the abstraction layer. 40. Works with the State and other technical staff to conceptualize, design, and build interfaces between multiple entities. 41. Directs and participates in all phases of application development with emphasis on planning, analysis, evaluation, integration, testing, and acceptance phases. 42. Prepares technical documentation as required by the State — see project deliverables (SECTION 11. CONTRACTOR DELIVERABLES). 43. Designs, develops, and maintains cloud architecture and infrastructure. 44. Establishes an enterprise-wide process to complete the planning and implementation of ECM software systems. 45. Ensures the seamless interface of the ECM solution with other legacy applications wherever needed. 46. Serves as the point of contact for content management matters to resolve all issues related to documents, including quality standards.
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Senior Business Analyst (Full Time)	Has overall responsibilities for business analysis, requirements documentation, data rules, and ensuring traceability to the functional requirements. 1. Coordinates design and configuration activities with Water Boards resources. 2. Collaborates with SWRCB resources to elicit the information needed to configure the solution to meet business needs. 3. Documents business rules, and acceptance criteria. 4. Manages and refines the requirements backlog in the System Development Lifecycle (SDLC) tool in coordination with SWRCB resources. 5. Collaborates with SWRCB to define user access roles. 6. Collaborates with other project consultant teams to document business rules for data migration. 7. Participates in user story and test script development. 8. Responsible for requirements traceability matrix development and maintenance. 9. Facilitates User Acceptance Testing with program areas. 10. Develops and leads as-is and to-be business process flow documentation. 11. Responsible for requirements traceability from the contract through testing and training completion. 12. As applicable, responsible for translating requirements to implementation methodology (e.g., User Stories). 13. Accountable for business process management. 14. As applicable, responsible for translating business process flows to implementation methodology (e.g., User Stories). 15. Responsible for developing, documenting, and validating business process flows. 16. Responsible for allocation of business process flows to specific phases and releases. 17. Responsible for identify business process flows not in alignment with WaterTAP established goals, objectives, and targets established. 18. Responsible for identifying and communicating business process flow, alignment of requirements to software functionality and configuration capabilities.
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| | <ol style="list-style-type: none">19. Reviews and analyzes functional design of all the components with a solution-wide view and ensures each component/module works together to address the functional requirements.20. Ensures WaterTAP addresses all the functional requirements.21. Works with the State Product Owner and Project team to define and document business needs, technical needs, and objectives.22. Creates conceptual data diagrams and process diagrams.23. Propose modifications to business workflows to solve problems.24. Conducts change impact analysis to assess the potential implications of changes.25. Tracks and fully documents changes to functional and business specifications.26. Responsible for all quality control practices and policies.27. Assists in development and testing tasks as needed.28. Assists in training, knowledge transfer, and OCM activities as needed. |
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Training Lead (Full Time)	1. Develop a WaterTAP Training Plan in collaboration with SWRCB training staff. 2. Develop the WaterTAP IT Administrator Manual, including administration information specific to the WaterTAP solution. 3. Conduct WaterTAP IT Administrator and Solution Developer Training for SWRCB IT staff. 4. Develop the WaterTAP Program Administrator Manual, including administration information specific to the WaterTAP solution. 5. Conduct WaterTAP Program Administrator (Power User) Training for SWRCB staff. 6. Develop an internal End-User Manual for each major functional area. 7. Conduct at least two train-the-trainer sessions for each program area. 8. Develop online video trainings describing self-service functions for internal and external end-users. 9. Develop program-specific training videos to be delivered to internal users through SWRCB's Learning Management System (LMS). 10. Develop training recordings that comply with SWRCB's Learning Management System (LMS) format requirements. 11. Maintain all training manuals and procedures in a central location. 12. Consult with SWRCB training staff and SWRCB OCM staff when developing training materials. See SECTION 10.6. KNOWLEDGE TRANSFER 13. Leads all training and knowledge transfer planning, training material development and delivery for both internal and external users. 14. Creates a training schedule prior to each release. 15. Creates training guides, FAQs, and training satisfaction surveys. 16. Creates training delivery evaluation summary reports to evaluate feedback from all participants. 17. Creates and maintains system user guides for internal and external users in a soft copy format. 18. Prepares for the deployment of the training materials to the entire organization. 19. Works in collaboration with the SWRCB OCM team.
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Senior Test and Validation Lead (Full Time)	1. Has overall responsibility for managing and executing testing activities. 2. Leads the development of the test plan, test scripts, test data, user roles, and related project documents. 3. Manages the Contractor's testing resources in compliance with the project plans. 4. Manages the execution of all test plans, including leading and conducting unit, system, integration, performance, interface, regression, performance, and scalability testing. 5. Supports and facilitates user acceptance testing in alignment with SECTION 10.4.4. TESTING TASKS. 6. Facilitates defect reporting processes in alignment with all project plans. 7. Accountable for the WaterTAP solution meeting, or exceeding, established quality goals and objectives. 8. Responsible for validation and certification of requirements from the Contract through testing completion. 9. Responsible for requirements quality control definition, establishment, and validation throughout the WaterTAP project. 10. Responsible for the planning and execution of all testing, including the facilitation (defect logging and reporting) of user acceptance testing (or methodologically equivalent activity for accepting the system for production go-live). 11. Responsible for the creation of test scripts and scenarios fully traced to the validation of each WaterTAP functional and non-functional requirement. 12. Responsible for the validation of all identified defects no matter the resolution/mitigation, including system training, business process training (OCM/BPM), data quality (integration or data migration), or data science. 13. Responsible for testing in support of, and specific to, multiple WaterTAP roles including, but not limited to, WaterTAP Project Managers, WaterTAP Programs (DDW, etc.), WaterTAP dashboard consumers. 14. Oversee the Contractor team to develop the System Test Plan, Test Scenarios, Test Cases, Test Scripts, Test Procedures, Test Data, and Test Results Reports for each test phase and System release, including but not limited to the development,
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	documentation and tracking of all testing criteria. 15. Lead test script development & management. 16. Lead test approval and defect tracking and management. 17. Document all test results and disseminate all test results communication. 18. Providing testing training through different channels (web-based, in-person etc.). 19. Develop and customize all materials related to system testing. 20. Develop and customize test plans. 21. Responsible for all aspects of Release Management Services including scheduling, planning, implementing, and controlling the software development and delivery process. 22. Develop and maintain a Go-Live and Implementation Plan, and release schedule for SWRCB review. 23. Coordinate and facilitate Release Management meetings with the State at each stage of the software development lifecycle, including SMEs as required. 24. Coordinate and conduct formal Go/No-Go meetings with the State and key stakeholders as necessary. 25. Manage and maintain stakeholder expectations and communications, concerning the release cycle. 26. Ongoing Platform Release Management and Testing Release Management. 27. Protect the integrity of the system environment by overseeing and ensuring that software changes pass all stages of quality checks through comprehensive testing such as unit, system, UAT, smoke, security, including post-implementation verification and validation. 28. Prepares for the deployment of WaterTAP to the full organization. 29. Develops and enforces standardized testing processes within the context of an Agile development methodology. 30. Works with the Project team to define/enhance processes and strategies associated with both manual and automated testing. 31. Manages integrated testing across WaterTAP and system components. 32. Performs complex testing functions, tasks, and activities, including coordination of performance testing, stress testing, parallel testing, and recurring regression tests with maximized use of automation. 33. Performs analysis of requirements, test coverage, and the impact of
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	proposed changes. 34. Performs continuous improvement in the testing process. 35. Collaborates with developers and business analysts in handling and interpreting requirements and defects.
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Technical Lead (Full Time)	Responsible for all technical aspects of WaterTAP. 1. Establishes documentation and coding standards for the Project team and ensures the team adheres to the standards. 2. Is available to WaterTAP Project teams for consultation on future enhancements (e.g., changes to achieve strategic objectives, implement a new program). 3. Oversees the development of all technical documentation. 4. Maintains familiarity with the technical design of all the components, has a solution-wide view and ensures each component/module works together to address the technical requirements. 5. Design, build, and test interfaces and data conversion. 6. Ensures WaterTAP addresses all the functional and non-functional requirements. 7. Works with Software Solutions Architect, Data Architect and Business Analyst to ensure WaterTAP adheres to requirements. 8. Establishes, maintains and documents the Continuous Integration/ Continuous Delivery (CI/CD) Pipeline. 9. Utilize the latest state-of-the-art technologies as much as possible.
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Organizational Change Management Lead (Full Time)	Has overall responsibility for managing and executing organizational change management activities. 1. Support communication efforts, including updating the WaterTAP Communications Plan and guide & assist with the execution of that plan. 2. Apply a structured methodology and lead change management activities, including developing the WaterTAP Project's OCM Plan and guiding and assists plan execution. 3. Integrate and align change management activities into the project plan. 4. Consistently gauge organizational readiness using a variety of methods and tactics and analyze the data to update/revise strategies/mitigation plans to address gaps and leverage strengths. These activities shall include: readiness assessment planning, conducting assessments, preparing assessment reports and presenting findings. 5. Manage & guide communication with internal and external stakeholders, including updating the WaterTAP Stakeholder Management Plan; guide & assist in the execution of that plan (including coaching, training, and adoption management). 6. Work with the SWRCB OCM staff to develop, guide and execute the WaterTAP project OCM Training Plan and approach. 7. Update and maintain OCM trackers and registries (e.g., Stakeholder Registry, Risk and Issue Logs). 8. Conducting Change Impact Assessments and document strategies for addressing the change impacts. 9. Provide knowledge transfer on OCM and training, plans and strategies to the WaterTAP project team on a recurring basis. 10. Support training efforts including providing development support, recommendations, and guidance for execution of the WaterTAP Training Plans (internal and end user training). 11. Provide development, recommendations, and guidance for the execution of user guides, training materials and media as well as ongoing training for the WaterTAP solution. 12. Manage staff & management engagement. 13. Establish a knowledge transfer plan. 14. Support change management at the organizational level.
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	15. Support change management for external stakeholders. 16. Identify, analyze, and prepare risk mitigation tactics. 17. Identify and manage anticipated and persistent resistance. 18. Support and engage senior leaders. 19. Coach managers and supervisors. 20. Support organizational design and definition of roles and responsibilities. 21. Coordinate OCM efforts with other specialists and implementation vendors. 22. Lead and assist in developing as-is/to-be business process analyses & mapping, documenting business process improvement (BPI), business process reengineering (BPR), and developing OCM and gap analyses. 23. Guide and conduct training sessions for internal and external end-users. 24. Develops a change message, including an impact analysis, communication strategies and activities. 25. Supports leadership development to improve internal organizational change management. 26. Serves as the point of contact for organizational change management matters to resolve all issues related to organizational change.
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GIS Solution Expert (Full Time)	1. Supports the development and management of GIS integration and spatial analysis tools. 2. Supports GIS data acquisition and inclusion of internally and externally available GIS data and layers. 3. Oversees the planning and coordination of GIS activities to meet the outlined requirements. 4. Develops, manages, and controls quality standards for GIS components. 5. Performs GIS analysis and generates reports. 6. Develops and migrates existing web maps and maintains web maps. 7. Works closely with the State to develop and implement a GIS solution for managing drinking water system facilities, service area boundaries, emergency response, and related geospatial data. 8. Ensures WaterTAP supports geospatial editing, mapping, geo-encoding, geo-enrichment, and workflow automation. 9. Provides expertise in GIS data governance, interoperability, and integration with state and enterprise IT systems. 10. Ensures compliance with relevant standards and facilitates user adoption.
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10.2.3. NON-KEY STAFF

The Contractor shall ensure that additional, appropriately qualified and trained non-key staff are always employed and available to provide timely services required under the Contract. Non-Key staff, shall be persons that have relevant domain knowledge as appropriate for such job title classifications.

10.2.4. KEY STAFF CHANGES

The Contractor shall obtain prior approval in writing from the SWRCB's Contract Manager before attempting to change key staff. This includes substitutions made between submission of the proposal and the actual start of the project, as well as staffing changes that may occur during the course of the Contract.

1. Planned Key Staff Changes

Positions that are designated as Key Staff shall not remain vacant for more than ten (10) calendar days if the change in staff is planned. The Contractor shall provide SWRCB with written notice within one (1)

business day of knowledge of staff leaving, and include an end date to ensure SWRCB can act promptly to delete staff's access. The Contractor shall also submit an onboarding request for new staff to SWRCB on or before the end of the ten (10) business days of the vacancy. SWRCB reserves the right to interview replacement staff at their discretion. For any key staff replacements, the new key staff must meet the same mandatory and desirable qualifications as the candidate they will replace.

If unanticipated task staffing draws from the Contractor staff already performing project roles, an explanation of who will fill in behind these staff when they are redirected to the unanticipated task is required in the WOA.

NOTE: Provision of services may not suffer if staff are redirected to work simultaneously on project deliverable(s) work, task(s) work and unanticipated task(s) work.

2. Unplanned Key Staff Changes

The Contractor shall make the best efforts to maintain staff continuity throughout the life of the WaterTAP project. If positions designated as Key Staff are vacated because of unplanned events beyond the Contractor's control, the Contractor shall immediately provide the SWRCB Contract Manager with written notification of the vacated position and submit a replacement plan within five (5) business days of the position being vacated. Contractor notification and replacement plan must contain a plan for the continuation of Key Staff activities and responsibilities until the anticipated start date of the replacement. The vacated position shall be filled within ten (10) calendar days of receipt of written notification of the unplanned vacated position. In the event of a project delay resulting from Contractor staff turnover, the Contractor shall pay liquidated damages to the State per the terms outlined in [SECTION 13.](#)

LIQUIDATED DAMAGES.

SWRCB reserves the right, at its sole discretion, to require the Contractor to replace any Key Staff, assigned staff, or additional staff, at any time for reasons that may include, but are not limited to, poor performance, lack of experience, unprofessional behavior, or harassment in the workplace (subject to compliance with applicable law and departmental policies). SWRCB will notify the Contractor in writing when exercising that right. The Contractor shall, within ten (10) calendar days of such notification, provide a replacement candidate that meets or exceeds the requirement as defined in [SECTION 10.2.1. KEY STAFF QUALIFICATIONS AND SKILLS](#) of the SOW.

The Contractor shall complete and submit a Staff Qualifications package to the SWRCB Contract Manager, who will review the proposed staff replacement and may, at their discretion, conduct an interview of the proposed staff member.

The Staff Qualifications package must include:

1. Identification of staff to be replaced

2. Resume, including copies of any required certifications; and
3. References, using the reference form for the applicable role/classification.
4. Confidentiality Statement Form

3. Replacement of Key Staff by Contractor

The Contractor shall submit the EXHIBIT L: KEY STAFF REPLACEMENT FORM, and a resume for any proposed substitute key staff. For any key staff replacements, the new key staff must meet the same mandatory and desirable qualifications as the candidate they replace. The request and the completed documents shall be provided to the SWRCB Contract Manager for review. SWRCB will provide approval or denial of the request and related materials within ten (10) calendar days after receipt of the documents.

The Staff Qualifications package must include:

1. Identification of staff to be replaced
2. Resume, including copies of any required certifications; and
3. References, using the reference form for the applicable role/classification.
4. Confidentiality Statement Form
5. SWRCB's Key Staff Replacement Form.

If the Contractor does not provide the proposed candidate within twenty (20) calendar days of the date the Key Staff member becomes unavailable, the State may assess liquidated damages as provided in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) and [SECTION 13. LIQUIDATED DAMAGES](#). If the State rejects a proposed replacement key staff member and a qualified replacement is not provided to the State for approval within fifteen (15) calendar days of the rejection, the Contractor shall be in material breach of the Agreement unless the State provides an extension in writing before the deadline is exceeded.

4. Replacement of Key Staff by the State

The Contractor shall submit EXHIBIT L: KEY STAFF REPLACEMENT FORM, and a resume for any proposed substitute key staff. For any key staff replacements, the new key staff must meet the same mandatory and desirable qualifications as the candidate they replace. The request and the completed documents shall be provided to the SWRCB Contract Manager for review. SWRCB will provide approval or denial of the request and related materials within ten (10) business days after receipt of the documents.

If the addition, substitution and/or deletion does not increase the total cost of the agreement or modify the scope of work to be completed under the contract, an amendment may not be required to make this change to the Agreement.

The Staff Qualifications package must include:

1. Identification of staff to be replaced
2. Resume, including copies of any required certifications; and
3. References, using the reference form for the applicable role/classification.
4. Confidentiality Statement Form
5. SWRCB's Key Staff Replacement Form; and
6. Staff Resume Table, including copies of any required certification

SWRCB reserves the right to approve or deny any or all added or replacement project team members assigned by the Contractor to this project. SWRCB reserves the right to interview any replacement staff at their discretion. For any key staff replacements, the new key staff must meet the same mandatory and desirable qualifications as the candidate they replace. SWRCB reserves the right to interview replacement staff at their discretion. For any key staff replacements, the new key staff must meet the same mandatory and desirable qualifications as the candidate they replace. If any proposed staff are rejected and a qualified replacement is not provided to SWRCB for approval within ten (10) calendar days of the rejection, the Contractor will be in material breach of the contract, refer to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#), unless the State provides an extension in writing before the deadline is exceeded. SWRCB will review the Staff Qualifications package and provide feedback or approval within five (5) business days. Approval will not be unreasonably withheld.

If any proposed staff is rejected and a qualified replacement is not provided to SWRCB for approval within ten (10) calendar days of the rejection, the Contractor will be in material breach of the contract unless the State provides an extension in writing before the deadline is exceeded.

If any proposed staff member is approved by the State, the new key staff member shall be available to start immediately unless otherwise agreed to by the State.

The State shall not compensate the Contractor for any time or effort required to prepare a new staff member for performing tasks on the project. SWRCB reserves the right to approve or deny any or all added or replacement project team members assigned by the Contractor to this project. The State shall not compensate the Contractor for any time or effort required to prepare a new staff member for performing tasks on the project.

10.2.5. SUBCONTRACTORS

The following applies to any subcontractors used by the Contractor for this Agreement:

- The Contractor will act as Prime Contractor under this Agreement. In addition to identifying all personnel proposed to work under this Agreement, the Contractor shall also identify its subcontractor affiliation, as applicable.
- The Contractor will provide a Bidder Declaration form identifying subcontractors as part of their Staff Qualifications package.

- SWRCB reserves the right to approve all subcontractors prior to the performance of any work by the subcontractor.
- The Contractor acknowledges responsibility and accountability for the actions and performance of any subcontractors retained to assist the Contractor in fulfilling the requirements of this Agreement.
- Nothing contained in this Agreement shall create any contractual relationship between the State and any subcontractors, and no subcontractor shall relieve the Contractor of its responsibilities and obligations hereunder. The Contractor is fully responsible to SWRCB for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by any of them.
- The Contractor agrees to disclose to SWRCB any and all subcontract agreements in use, what services and deliverables are required in the subcontract, and staff assigned.
- The Contractor agrees that all subcontracts entered into, to fulfill the requirements of this Agreement shall include a provision that the Subcontractor shall indemnify and hold harmless the State to the extent described in the Information Technology - General Provisions - Cloud - Computing Services, DGS PD 402-ITGP (Cloud) (Revised and Effective 2/20/2025) (<https://www.dgs.ca.gov/%7E/media/Divisions/PD/Acquisitions/Solicitation-Documents/Attachments/IT-General-Provisions-Cloud-DGS-PD-402ITGP-Revised-02202025.pdf>).
- If a subcontractor whose role is to assist Contractor in fulfilling the obligations of the Agreement must be replaced, the Contractor shall provide to the State advance notice in writing of the subcontractor change and reasons for the change if the Contractor chooses to change subcontractor(s), no less than ten (10) State business days prior to the existing subcontractor's termination.
- The Contractor shall secure State approval for subcontractor changes prior to the termination of the existing subcontractor(s) and retention of the new subcontractor(s). This also includes any changes made between the submission of the Final Proposal (BAFO) and the actual start of the Agreement.
- The Contractor's obligation to pay its subcontractors is an independent obligation from the State's obligation to make payments to the Contractor. As a result, the State shall have no obligation to pay or to enforce the payment of any monies to any subcontractor.
- For Small Business or DVBE subcontractor changes, where such Small Business or Disabled Veteran Business Enterprise (DVBE) subcontractor status was included in the Contractor's proposal, the Contractor shall use another state-qualified Small Business or DVBE Subcontractor.
- The State will not compensate the Contractor for any of the Contractor's time or effort to educate or otherwise make the new subcontractor(s) ready to begin work on the Agreement.
- Should Water Boards determine that the work performed by a Subcontractor is substantially unsatisfactory and is not in substantial accordance with the Contract terms and conditions, or that the Subcontractor is substantially delaying or disrupting the process of work, Water Boards may request a substitution of the Subcontractor.

10.3. STATE DEVELOPMENT FRAMEWORK

Working in partnership with the State, the Contractor will provide SWRCB with a team to implement WaterTAP.

With regard to the project approach, the scope of the Contractor's work shall include:

- Configuring, developing, and implementing an existing SaaS product to meet the State's operational requirements; and
- Developing, implementing, and supporting the WaterTAP solution using an approach that aligns with the State's Development Framework.

The State has created a development framework for development and implementation of the WaterTAP solution.

The State's Development Framework uses an iterative Agile methodology, which is tailored to the State Water Board's needs. The Agile methodology ensures customer engagement, adapts to changing requirements, and focuses on quality assurance.

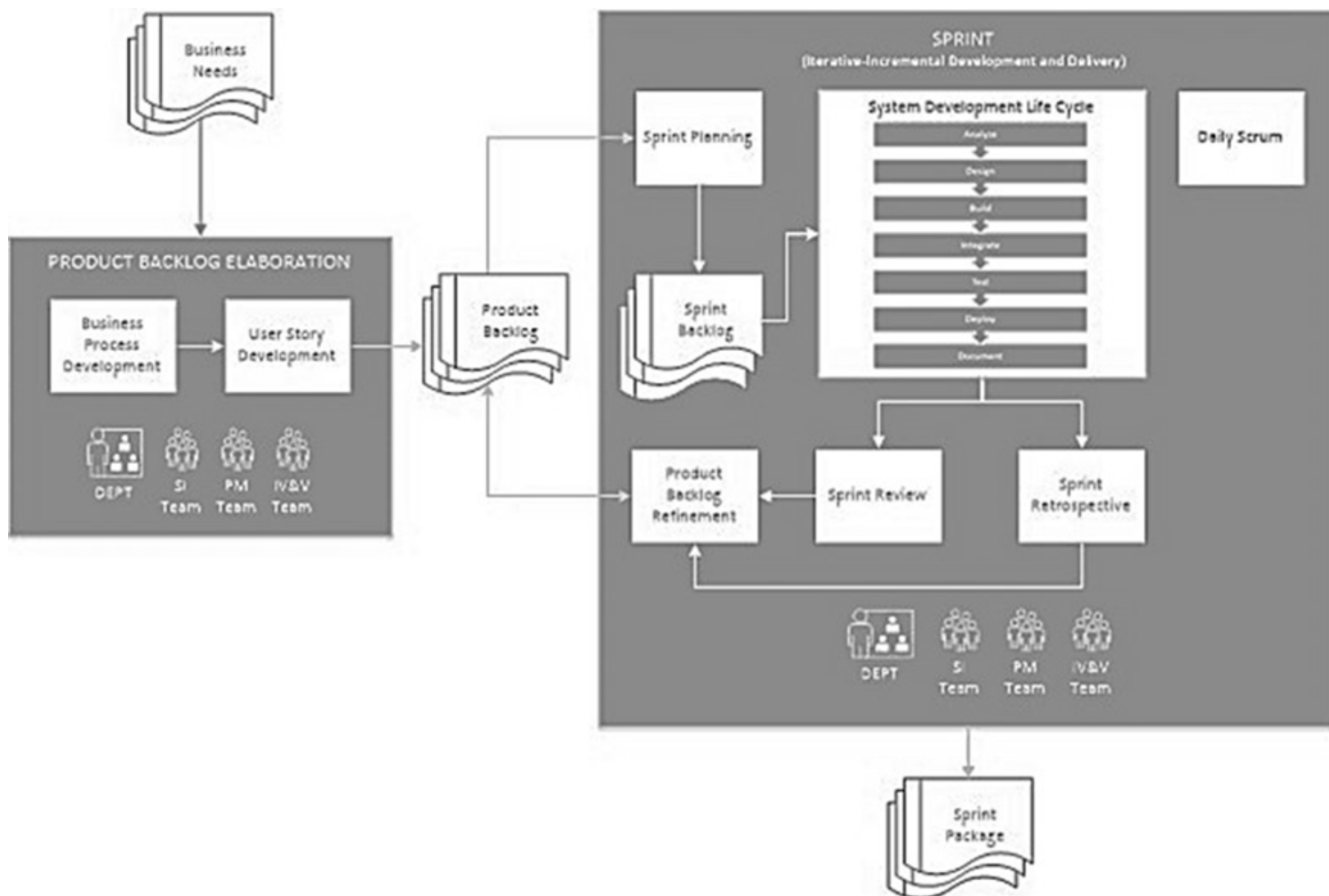
The State's Development Framework includes the Product Backlog Elaboration and Construction (containing the Sprints) phases.

1. During the Product Backlog Elaboration Phase, the State will interact with the Contractor using a combination of collaboration sessions, techniques, and tools to translate business needs into business processes. The Contractor will then translate these business processes into User Stories.
2. Since a User Story is very similar to a requirement, the State expects it to contain enough information to produce a reasonable estimate of the implementation effort. All User Stories shall include at least one written sentence or, more importantly, a series of conversations about the functionality.
3. Under the Construction phase, the Contractor shall plan a Product Increment (PI) that includes multiple Sprints that have a common theme for defined functionality. The Scrum Master shall facilitate the PI Planning session to determine how many sprints of functionality should be included.
4. Each Sprint should result in a Potentially Shippable Increment (PSI) and be released to a stage or sandbox environment which will be hosted by the State, allowing State staff to have hands-on experience with the functionality in a non-production environment.
5. Sprint Execution must include stages such as Analyze, Design, Build, Integrate, Test, Deploy, and Document.

The State Development Framework in Figure 10-1 represents the overall development framework for

WaterTAP.

Figure 10-1: State Developmental Framework



10.3.1. PRODUCT BACKLOG ELABORATION PHASE (SPRINT 0)

During the Product Backlog Elaboration Phase, the State will interact with the Contractor using a combination of collaboration sessions, techniques, and tools to translate business needs into business processes, then finally into user stories. The Contractor will then translate these business processes into User Stories. The State may also refer to the Product Backlog Elaboration Phase as Sprint 0. Product Backlog Elaboration is a continuous interactive process that will allow the State to understand, modify, and eventually approve a working model of the WaterTAP solution that meets their needs. This Product Backlog Elaboration may occur multiple times throughout the duration of the Contract as necessary in response to updated business needs and/or Product Backlog Refinement following each sprint. The State and Contractor may also agree to revise a specific subset of the overall requirements during Product Backlog Elaboration.

The Contractor will utilize EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS to first

develop the business processes for the WaterTAP solution. The Contractor will conduct a Fit-Gap Analysis of the system requirements to identify any gaps where WaterTAP does not meet the requirements. This analysis will show how the requirements are met and what customization or configuration is necessary to meet all the remaining requirements. Following the Fit-Gap Analysis, the Contractor will lead collaboration sessions with the State to refine and expand on the proposed high-level business processes and sub-processes. The purpose is to obtain concurrence from WaterTAP users for each process, sub-process, and associated steps.

The Contractor will then proceed with user story development using an iterative Agile approach (refer to [SECTION 10.3.3. USER STORY DEVELOPMENT](#)). It is critical that the Contractor documents all business processes and sub-processes that require further refinement to ensure accurate implementation throughout the Scrum development, as agreed upon by the State. The Contractor's methodology outlined in the Implementation Plan may expand upon process documentation previously completed by the State.

The Contractor shall work with SWRCB during this phase to refine these estimates, as needed. For example, when the Contractor's estimates do not align with current work, they will need to work with SWRCB to determine how to address these variations as part of our scope of work or future sprints.

10.3.2. BUSINESS PROCESS DEVELOPMENT

The Contractor will utilize EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS to first develop the business processes for the WaterTAP solution. The Contractor will conduct a Fit-Gap Analysis of the system requirements to identify any gaps where WaterTAP does not meet the requirements. This analysis will show how the requirements are met and what customization or configuration is necessary to meet all the remaining requirements. Following the Fit-Gap Analysis, the Contractor will lead collaboration sessions with the State to refine and expand on the proposed high-level business processes and sub-processes. The purpose is to obtain concurrence from WaterTAP users for each process, sub-process, and associated steps.

The Contractor's development methodology in the Implementation Plan shall expand upon an individual process and associated sub-processes.

10.3.3. USER STORY DEVELOPMENT

The Contractor will use User Stories to be the primary artifact for Scrum development. The State has prepared draft User Stories and expects the Contractor to elaborate on these stories as needed during Sprint 0 and continue through Product Backlog Refinement to ensure the Contractor understands the business needs.

The Contractor's development methodology in the Implementation Plan may expand upon a State-developed individual process and associated sub-processes to understand the context of system

requirements before drafting User Stories (refer to EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS). The Contractor will then proceed with developing and/or updating User Stories for the selected process and sub-processes in an iterative-type approach. It is critical that the Contractor validates and reviews all business processes and sub-processes throughout the development with the State.

Since a User Story is very similar to a requirement, the State expects the User Story to contain enough information so that it can produce a reasonable estimate of the implementation effort. All User Stories shall include at least one written sentence or, more importantly, a series of conversations about the functionality.

User Stories shall be short, simple descriptions of a feature told from the perspective of the person who requires system functionality, usually a user or customer of WaterTAP. The Contractor's User Stories shall follow a standard template in the format of:

As a <type of user>, I want <some goal> so that <some reason>.

User Story Development also includes the analysis and negotiation between the Contractor and the State to determine the best approach for implementing WaterTAP and gaining consensus on scope and timing.

The Contractor shall manage the User Stories and traceability to system requirements through development, testing and implementation. The State shall then review and validate that the User Story is complete. Additionally, the Contractor, in collaboration with SWRCB, shall develop Business Process Modeling, mock-up designs, and workflow diagrams as components of the Functional and Technical Design by leveraging existing documents to the extent possible. The Contractor shall adhere to the State Development Framework, the State Information Management Manual (SIMM) and the SWRCB-approved WaterTAP Implementation Plan, including development methodology for identifying, eliciting, documenting, and validating the requirements (User Stories) and deliverables.

10.3.4. CONSTRUCTION PHASE

The Construction Phase is an Iterative-Incremental Development and Delivery process, which focuses on the Sprint cycle and involves Sprint Planning, System Development Life Cycle, Sprint Review, and Sprint Retrospective.

The Contractor shall plan a Product Increment (PI) that includes multiple Sprints that have a common theme for defined functionality. The Scrum Master shall facilitate the PI Planning session to determine how many sprints of functionality should be included. Each Sprint should result in a Potentially Shippable Increment (PSI) and be released to a State-hosted stage or sandbox environment, allowing State staff to have hands-on experience with the functionality in a non-production environment.

The last Sprint in a PI will be a Hardening Sprint, during which the Contractor shall coordinate full regression, performance, and security testing for the functionality to be delivered. The State may also plan for training and User Acceptance Testing to occur in the Hardening Sprint. Each PI should result in a PSI.

10.3.5. SPRINT PLANNING

Once User Stories are in the Product Backlog, Sprint Planning begins. Within Sprint Planning, the Contractor shall determine which User Stories the Contractor can develop in each Sprint. Each Sprint should have a self-contained unit and system testing included. The Contractor shall store these User Stories in the Sprint Backlog.

10.3.6. SPRINT EXECUTION CYCLE

Sprint cycles will be a minimum of three (3) weeks and a maximum of four (4) weeks in duration. If the Contractor proposes Sprint cycles outside this range, it will require State approval (refer to [SECTION 11. CONTRACTOR DELIVERABLES](#)).

Each Sprint Execution Cycle must include the following stages:

- Analyze
- Design
- Build
- Integrate
- Test
- Deploy
- Document

The Contractor shall develop a portion of WaterTAP in well-defined sections within each Sprint. As the process continues, the Contractor shall integrate each section until the full system is in place and operational.

10.3.7. DAILY SCRUM

The Contractor and State Team meet daily (Monday through Friday, excluding State holidays) and continue to provide direction for the current Sprint and to ensure the development is on track. Ideally, the Contractor should hold a daily agile development meeting in the morning, as it helps set the context for the day's work.

10.3.8. SPRINT REVIEW

After each Sprint, the Contractor shall organize a Sprint Review Meeting to demonstrate the User Stories

to the State Project Team. This gives the opportunity for the State Project Team to voice concerns and discuss them during the Sprint Review. The Contractor shall document the Sprint Review as part of the Sprint Status Report in the Sprint Work Package and submit to the State Water Board Project Manager.

10.3.9. SPRINT RETROSPECTIVE

After each Sprint, the Contractor shall organize a Sprint Retrospective Meeting to reflect on lessons learned during the Sprint and apply the process improvements or corrective actions to future Sprint activities. The Contractor will then document the Sprint Retrospective and submit it to the State Water Board Project Manager.

10.3.10. SPRINT WORK PACKAGE

After each Sprint, the Contractor shall prepare and submit a Sprint Work Package that contains work products. A work product is a sprint-specific item that will be reviewed during the Sprint Review Meeting. The Contractor shall develop the work products iteratively throughout the Sprint cycle and will review the work products at the end of each Sprint upon the Contractor's formal submission of the Sprint Work Package.

After each Sprint, the State requires the Contractor to prepare and submit a Sprint Package that contains the following work products:

WP ID	SOW ID	Title
WP1		Sprint Backlog
WP2		Product Increment
WP3		Acceptance Criteria
WP4		Sprint Test Scripts
WP5		Sprint Test Results
WP6		Sprint Status Report
WP7		Sprint Business Processes
WP8		Sprint Training Package
WP9		Pilot Testing Instructions
WP10		Sprint Retrospective Report

The State differentiates a project deliverable and a work product as shown in the table, below.

Item	Description
Deliverable	A <i>project-specific</i> item that will be subjected to the State's formal

Item	Description
	Deliverable Review and Approval Process.
Work Product	A sprint-specific item that will be reviewed and approved during the Sprint Review Meeting.

The Contractor will develop the work products iteratively throughout the development lifecycle. The State will approve the work products, except for the Sprint Status Report, at the end of each Sprint Review Meeting. The Contractor will submit the Sprint Status Report after the Sprint Review Meeting and the Sprint Retrospective Meeting. The Contractor will formally submit the project deliverables, in which the State will review and approve using the steps within [SECTION 11. CONTRACTOR DELIVERABLES](#). For example, Figure 10-2 illustrates how the Sprint Training Package would be iteratively developed throughout all Sprints and then formally submitted as a project deliverable.

Figure 10-2: Deliverable and Work Product Relationship



A further explanation of the State’s expectations for work products and how they will be managed is in [SECTION 10.4.2. DESIGN, DEVELOPMENT, AND IMPLEMENTATION TASKS](#).

10.3.11. PRODUCT BACKLOG REFINEMENT

Product Backlog Refinement (backlog grooming) is coordinated and maintained by the Contractor and completed by the SWRCB Project Team on an ongoing basis to ensure proper prioritization of User Stories within upcoming sprints.

10.4. SERVICES TO BE PROVIDED

Delivery of the WaterTAP solution will include the following services from the Contractor. All services are as identified in EXHIBIT A: STATEMENT OF WORK. However, the State recognizes the Contractor services, based on the execution methodology (Agile), may not follow these services in sequence or name.

The Contractor is responsible for delivering the services to ensure the successful completion of all deliverables and associated tasks and implementation of the WaterTAP solution as outlined in this Contract.

All services will be completed by the Contractor in accordance with an agreed-upon scope, timelines, and project requirements. The implementation services include all the work required to prepare, modify, and configure the WaterTAP solution to meet solution requirements, including the preparation and loading of data, system testing, applicable training, organizational change management, go-live, and post-go-live support. These include all technical expertise and project management services needed to produce and deliver the listed deliverables.

The Contractor must complete design, development, configuration, and implementation of the WaterTAP solution in accordance with EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS and the State-approved Contractor Deliverables. The Contractor must provide all related installation, configuration, data conversion/migration, system integration, implementation, training, and knowledge transfer services for WaterTAP. The Contractor must be the Prime Contractor in performing the services to complete the range of required functionality and related services. This work must be conducted within SWRCB's existing tenants. These services include Final System Acceptance. Refer to +SECTION 10.4. FINAL SYSTEM TESTING AND ACCEPTANCE PROCEDURES.

The State reserves the right to request additional analyses and assessments, as needed.

The Water Board will work closely with the Contractor to ensure each Sprint of this project is completed. The successful completion of any one (1) phase does not constitute final acceptance of the WaterTAP solution.

All deliverables produced by the Contractor must follow the DED EXHIBIT J: DELIVERABLE EXPECTATION DOCUMENT and DAD EXHIBIT K: DELIVERABLE ACCEPTANCE DOCUMENT process to ensure that each deliverable is well-defined, approved, and validated by Water Boards before payment is issued. For additional details, refer to [SECTION 11.4. DELIVERABLE REJECTION & ACCEPTANCE](#).

All deliverable documents are to be prepared and delivered in Microsoft Office and/or PDF formats, or as otherwise specified and agreed to in the DED.

All services required to create the defined deliverables are stated in EXHIBIT D: DELIVERABLES AND MILESTONES TABLE are to be provided by the Contractor. All requirements required to create a WaterTAP solution are stated in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS and are to be provided by the Contractor.

The following sections define the execution methodology and activities associated with the WaterTAP implementation. This execution methodology (e.g., Project Planning, Analysis, Design and Development, System Implementation, Stabilization and Acceptance, and Modification and Support Services) should be seen as occurring one or more times within each WaterTAP Project Phase. The Contractor shall ensure that the Contractor's execution methodology includes the activities identified below.

All deliverables and payments are subject to the provisions set forth in +SECTION 10.5. PROJECT (CONTRACTOR) DELIVERABLES, [SECTION 11.4. DELIVERABLE REJECTION & ACCEPTANCE](#), and +SECTION 19. BUDGET DETAIL AND PAYMENT PROVISIONS.

The Contractor shall comply with the following primary tasks:

1. Project Management;
2. Design, Development, and Implementation;
3. System Interfaces;
4. Data Management and Conversion;
5. Testing;
6. Organizational Change Management and Training;
7. Configuration and Release Management;
8. Security and Data Protection;
9. Product Stabilization;
10. Maintenance and Operations (M&O);
11. Software;
12. System Support Transition.

The State, with the assistance of the Contractor, will determine the scope, sequence, and timing of DEDs and DADs as they relate to the execution of tasks described in this section.

Each iteration for the phase developed by the vendor shall include Design, Development, Testing and approval from the State. All deliverables tied to all these changes should be completed and accepted by the State before the phase is considered done.

10.4.1. PROJECT MANAGEMENT

The Contractor shall follow an Agile, sprint planning approach based on project needs.

The Contractor shall provide all necessary Project Initiation, Planning, Execution, and Controlling (monitoring) project management services to include planning, administration, scheduling, controlling, tracking, and reporting on all Contractor-related activities throughout the term of the Contract.

The Contractor shall develop the project management deliverables identified in the EXHIBIT D: DELIVERABLES AND MILESTONES TABLE and as defined by the approved DEDs.

All approved deliverables must be managed under change control procedures and must be updated as a part of each WaterTAP development phase.

The deliverables described in this Execution Iteration assist in completing the initiation and planning steps in an efficient and effective manner:

1. Confirm project resources and submit onboarding documentation for each Contractor project staff member,
2. Onboard Contractor project staff, including confirmation of completion of SWRCB's security training, and successful login to SWRCB's network,
3. Complete review of SOW and deliverables with SWRCB's WaterTAP Contract Manager and Project Managers,
4. Finalize project management plans,
5. Finalize project Work Breakdown Structure (WBS), tasks, and schedule with loaded resources,
6. Create deliverable templates (e.g., MS Word, PowerPoint),
7. Obtain base solution environment components (e.g., Development, integration and "sandbox" environments),
8. Initiate organizational change management,
9. Create Bill of Materials for all hardware and software (on-premise and/or cloud SaaS) provisioning, and
10. Conduct Project kick-off (generally one for the project team and one for executive level).

The SOW tasks and the deliverables required from the Contractor for Project Management are defined below and within EXHIBIT D: DELIVERABLES AND MILESTONES TABLE. These tasks comprise a set of activities and deliverables for which the Contractor is responsible and will identify the Contractor's approach to developing and/or configuring the WaterTAP solution to meet the State's needs. It is a requirement within this SOW, that the Contractor shall use the Implementation Plan deliverable-defined processes to develop and implement the WaterTAP solution.

The State has created a set of project management plans that the SWRCB will use to manage WaterTAP. The Contractor must adhere to these plans and include the activities from these plans (e.g., attend risk management meetings) in its Project Schedule, as described in the requirements below.

The SWRCB is managing the project; however, the Contractor must proactively manage its

responsibilities. The State is requiring the Contractor to perform, create, and submit specified Project Management artifacts for WaterTAP. The Contractor will provide project management services in accordance with the approved project management plans including, but not limited to:

1. The Contractor shall provide Project management services throughout the Agreement, including during the base contract year of M&O, as well as any optional M&O years, if exercised..
2. The Contractor shall establish and manage the Contractor's project team including hierarchy, reporting relationship, and project performance evaluations.
3. The Contractor shall develop and deliver its proposed Project Schedule within ten (10) calendar days from the start of the Project.
4. The Contractor shall deliver a bi-weekly update to the Project Schedule, known as the Bi-Weekly Schedule Update.
5. The Contractor shall adhere to the Project management plans developed by the State and include the activities from these plans in accordance with the Project Schedule. These plans are subject to updates through the Agreement. The Contractor can provide recommended changes to the Project management plans as needed and submit them through the change management process as described in the Project Management Plan.
6. The Contractor shall lead a planning effort (i.e., Product Backlog Elaboration Phase, Sprint 0) in which the State and Contractor shall mutually agree to the scope of each sprint of the Project. Certain deliverables may be developed or updated as part of this planning effort.
7. By the first working day of the subsequent week, a **Weekly Status Report**, and by the fifth (5th) State business day of each month, the Contractor shall submit a **Monthly Status Report**. Both reports shall identify:
 - Summary of work completed showing actual versus planned;
 - Contractor tasks completed with supporting narrative;
 - Contractor tasks in progress with supporting narrative;
 - Contractor tasks planned for the upcoming period with supporting narrative;
 - Status of issues mutually assigned to the Contractor that are rated high and medium;
 - Status of risks mutually assigned to the Contractor that are rated high and medium;
 - Vacancy of contractor's team members, by position;
 - Plan to fill vacancies more than fifteen (15) business days vacant;
 - Inventory of opened and closed change requests mutually assigned to the Contractor; and
 - Other items as mutually agreed to by the Contractor and the State.
8. The Contractor shall develop and deliver a Product Roadmap that describes a strategy to deliver a complete solution in accordance with the Project Schedule. The details of this strategy shall be included in the Implementation Plan, Release Management Plan, and Project Schedule, as appropriate.
9. The Contractor shall plan, organize, facilitate and document regular project team meetings, including kick-off meetings associated with WaterTAP phases and major work activities (e.g.,

project kick-off, requirements kick-off, OCM kick-off, etc.).

10. The Contractor shall deliver all deliverables and work products to the State Contract Manager in accordance with the Project Schedule and following the deliverable acceptance process outlined in this SOW.
 - The Contractor shall develop and deliver draft versions of the deliverables and work products.
 - The Contractor shall update the draft deliverables based on State-provided comments.
 - The Contractor shall deliver the final versions of the deliverables.
11. The Contractor shall conduct impact assessments for proposed changes that have been mutually agreed upon by the State and assigned to the Contractor as described in the Project Management Plan.
12. The Contractor shall develop and deliver change requests for changes to State-controlled baselines that the Contractor is requesting as described in the Project Management Plan and this SOW.
13. The Contractor shall identify and submit risks and issues as identified by the Contractor as per the Project Management Plan.
14. The Contractor may be assigned relevant risks and issues in accordance with the Project Management Plan. The Contractor shall provide updates, mitigation actions, and status information for risks and issues assigned to them.
15. The Contractor shall provide all requested information in response to the State's quality assurance audits, Project oversight, and Independent Verification and Validation reviews.
16. The Contractor shall participate in Project team meetings and other meetings as deemed necessary.
17. The Contractor shall provide input for presentations and briefings as needed.
18. The Contractor shall perform a walkthrough with designated State personnel prior to the delivery of each deliverable.
19. The Contractor shall provide a system that meets all WaterTAP Requirements, State-approved Contract Deliverables, and all Contract provisions.
20. Any tasks, Contract Deliverables, Software or Hardware not included in the Contractor's proposal, but determined by the State as necessary to satisfy the Contractor's proposed solution to meet the functional and non-functional requirements documented in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS shall be provided at the sole expense of the contractor.
21. The Project management process for the full Project life cycle shall conform to PMI® methodologies and the California Project Management Framework (CA-PMF) (California Statewide Information Management Manual (SIMM)).
22. The Contractor shall adhere to processes and standards related to the management of the State-established project library, and assist with maintenance and process improvement.
23. As part of the project closeout activities, the Contractor shall update previously submitted

documents and participate in the project Lessons Learned Session.

24. The Contractor shall confirm that all deliverables and electronic project documentation are submitted to SWRCB's Microsoft Teams or SharePoint site sixty (60) days prior to full system acceptance by the State.
25. The Contractor shall support SWRCB's Independent Verification & Validation (IV&V) vendor's project closeout reporting requests.

10.4.2. DESIGN, DEVELOPMENT, AND IMPLEMENTATION TASKS

The Contractor is required to perform the following Design, Development, and Implementation (DD&I) tasks:

1. The Contractor shall ensure that their Implementation Plan and processes align with the State's Implementation Preferences.
2. The Contractor shall develop the Functional and Technical Design documents, which will be the Contractor's overarching documents for outlining the approach, methodologies, and practices used by the Contractor in developing WaterTAP. It shall describe the functional design, development / configuration, and technical environments management activities for the WaterTAP solution.
3. The Contractor shall conduct a Fit-Gap Analysis of the WaterTAP requirements to identify any gaps where the solution does not meet the requirements.
 - Following the Fit-Gap Analysis, the Contractor will lead collaboration sessions with the State to refine and expand on the proposed high-level business processes and sub-processes.
4. The Contractor shall develop a Requirements Traceability Matrix (RTM) as a component of the Functional and Technical Design Document deliverable, ensuring it is continuously updated with the requirements and used to track progress. Any proposed revisions or clarifications must be documented in collaboration with the SWRCB Business Analyst. The RTM must be available as a spreadsheet suitable for uploading to SWRCB's Azure DevOps (ADO) to link it to the respective user stories.
5. The Contractor shall use best practices to develop, refine, and manage User Stories and establish requirement traceability.
6. The Contractor shall develop and deliver a Product Backlog that includes functional requirement mapping.
7. The Contractor shall facilitate collaborative Sprint Planning Meetings with the State to determine the User Stories to include in each Sprint from the Product Backlog.
8. The Contractor shall refine the User Story Acceptance Criteria in collaboration with the State.
9. The Contractor shall update the WaterTAP architecture during each Product Increment and Release (as necessary) to include architectural elements related to WaterTAP. This includes the

database structure and design, system, and application architecture (logical and physical data model that includes schematics of the system hardware, software, network elements and configuration associated with each environment), query development, and report development.

- The Contractor shall follow the Federal Plain Language Guidelines when creating and formatting WaterTAP content.

10. The Contractor shall develop and implement methods, processes, and procedures to maintain Contract Deliverables (such as requirement and product specifications, design documents, and test plans and descriptions) that match the “as built” system.
11. The Contractor shall develop and deliver an Implementation Plan, Data Conversion Plan and Interface Management Plan that meet the description provided in the deliverables table.
12. The Contractor shall code, configure, and unit test all features of WaterTAP in alignment with the State Implementation Preferences.
13. The Contractor shall provide a minimum of three (3) licenses for any proposed development tools. Any proposed tools must be approved by the State.
14. The Contractor shall provide a list of all third-party tools they propose in EXHIBIT E: COST WORKBOOK as part of WaterTAP and the related one-time cost and maintenance cost, etc. Any proposed tools must be approved by the State.
15. If a tool is expected to be used by the State, then the Contractor will provide training to the State and the Contractor will transfer ownership of the tool to the State.
16. The Contractor shall implement a multi-instance Development (Dev) environment that supports unit integration testing, and code staging activities.
17. The Contractor shall implement a multi-instance System Integration Test (SIT) environment that supports smoke testing, interface, browser, accessibility, patch, upgrade, installation, data conversion, and regression testing activities.
18. The Contractor shall implement a multi-instance UAT environment that supports user acceptance, usability, time shift and regression testing activities.
19. The Contractor shall implement a multi-instance Pre-Production (Staging) test environment that mirrors the production environment to support performance, load, stress, and security acceptance testing activities, as well as State personnel training, demonstration, OCM, and post-training activities.
20. The Contractor shall plan and conduct all integration activities in accordance with the State-approved WaterTAP System and Existing Systems Integration Plan.
21. The Contractor shall document, develop, and implement all required interfaces to the State Water Board’s systems and external entities listed in the Interfaces Inventory for WaterTAP, in accordance with existing Interface Specifications, internal SLAs, Interagency Agreements and External Agency Agreements where available.
22. The Contractor shall document, develop, and implement all additional interfaces (temporary and permanent) with the SWRCB’s systems and external entities that are required based on the State-

approved Implementation Approach.

23. The Contractor shall work with State personnel to develop Data Sharing Agreements that specify transmission methods, volumes, and schedules, as well as coding and transaction requirements for any new or modified interfaces with external entities.
24. The Contractor shall utilize the current interface specifications and transfer mechanisms to the external interfaces without any changes, unless reviewed and approved in writing by the State.
25. The Contractor shall develop dashboards for State staff to visualize all recent interface activity, including the ability to drill down for detailed information.

The Contractor shall evaluate the interfacing systems and SWRCB's current data conversion and data exchange processes. See EXHIBIT H: DATA CONNECTIONS for information about the interfacing systems. The Contractor must work with SWRCB to identify the interfacing systems to integrate with WaterTAP and the order each will be integrated. Criteria for prioritization may include availability of Candidate System Subject-Matter Experts, complexity of data, or type of data. Analyze SWRCB's existing data exchange processes to identify gaps or improvements that may influence the WaterTAP integration.

The Contractor shall develop WaterTAP and an Existing Systems Integration Plan to provide a framework for the integration of WaterTAP with the SWRCB's systems and infrastructure, including but not limited to:

- input systems,
- call centers,
- IVR,
- networks,
- mainframe,
- telecommunications,
- databases,
- Help Desk (manned by the State),
- Provide the framework for the creation of:
 - Documentation,
 - Implementation,
 - Communication of the technical architecture and integration solution,
 - Activities for integration,
 - Roles and responsibilities,
 - Audits and controls, and
 - Performance requirements.

Design & Development

The Contractor must design the system architecture and develop the detailed technical specifications, ensuring that WaterTAP meets project requirements and is scalable. Tasks include, but are not limited to:

1. Plan, organize, and facilitate conceptual design meetings and discussions with SMEs related to the design of WaterTAP, and document outcomes of these meetings. The results of these meetings will feed into the System Design Specification (SDS) as part of the Solution Architecture deliverable.
2. Develop a detailed solution design in collaboration with SWRCB SMEs, which meets the WaterTAP requirements.
3. Develop a SDS following the most up-to-date WaterTAP SDS Template. The SDS will focus on high-level architecture and design outlining the structure and behavior of WaterTAP. The SDS will include, but not be limited to, the following sections:
 - a. Concept of Operations: Overview of how WaterTAP will operate within its environment, covering key business processes and operational scenarios. Operational states of WaterTAP (online/offline, maintenance mode, and their respective implications). All major system components, including servers, databases, software, and third-party systems, include a high-level diagram of how these components interact with each other. Breakdown of the technologies and platforms used in WaterTAP, including operating systems, databases, middleware, and any SaaS components.
 - b. Data Structures: All necessary data structures, data flow, and schemas, including relationships between entities. Specific configuration or customization rules required for WaterTAP to handle specific data formats or sources (e.g., geospatial data, legacy system data). Data transformation and validation rules are necessary for accurate data migration and synchronization.
 - c. Security: Security architecture, including authentication, authorization, and encryption protocols. Role-based access control (RBAC) mechanisms, including detailed descriptions of user roles, permissions, and access levels within WaterTAP. Security policies (e.g., data privacy, system hardening) to ensure compliance with relevant regulations and SWRCB security standards. Logging, monitoring, and auditing requirements, as well as incident response protocols.
 - d. Integration and Interfaces: System interfaces including APIs, data feeds, and third-party systems. Communication protocols (e.g., REST, SOAP) and data exchange formats (e.g., JSON, XML). API's configurations and integration with other systems to ensure compatibility with existing SWRCB systems and tools. API endpoints, including input/output data formats and security methods.
 - e. Performance Requirements such as response time, transaction throughput, system uptime, and scalability.
 - f. System Configuration and Customization: All configuration items for WaterTAP, including settings for servers, databases, software, and network components. Any system-specific customizations needed to meet SWRCB's requirements, such as unique data handling rules or user interfaces.
 - g. Geospatial Capabilities: Design for any geospatial features or functionalities within

WaterTAP geospatial data storage, processing, and visualization.

Implementation

The Implementation Tasks include all work efforts to define, configure, test, and implement the WaterTAP solution using an Agile methodology.

As identified in the EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS, the State requires the Contractor to configure and implement WaterTAP as a SaaS solution. Therefore, the State is requiring specific deliverables to be developed, submitted, and approved. While Production Stabilization and Acceptance will not begin until production deployment of the complete solution, the State will consider a phased approach towards system development and deliverable submission.

10.4.3. DATA MANAGEMENT AND CONVERSION

This section defines the scope and approach for the conversion and migration of data/documents from the source systems to the designated target environment, WaterTAP, highlighted in EXHIBIT H: DATA CONNECTIONS. The Contractor shall define the framework under which the data migration will occur, establish expectations, and provide a clear understanding of the roles and responsibilities of all parties involved. The project will follow the best practices for data governance, security, and compliance. The data migration process will include extraction, transformation, validation, and loading (ETL) of structured and unstructured data assets, including, but not limited to, customer data, transaction records, metadata, and audit logs. Any data encryption, masking, or anonymization techniques required for in-transit or at-rest data shall be documented and approved by the State. The Contractor will also develop migration error logging that will track data migration and data integrity per each sprint and or scheduled data migration to highlight the progression.

1. The Contractor shall collaborate with the State to determine the most effective data conversion strategies to minimize risk and complexity while preserving business continuity and viability of new functionality. The Contractor should detail out the data conversion activities, including building a data conversion schedule, tracking each data element being converted, validating that all records converted equal the number of records/documents converted to the new database, and reporting progress.
2. The Contractor shall develop and deliver a Data Management and Data Conversion Plan that describes the detailed scope of the data to be converted.
 - a. The Data Management and Conversion Plan will include, but not limited to, data quality management, security, and data lifecycle management. Data quality management during data conversion will outline the new target model, data mapping between legacy and new data elements, and how existing data anomalies will be cleaned, validated, transformed, and converted into WaterTAP.
 - b. The Contractor shall update the Data Management and Data Conversion Plan as needed

during each Sprint, Product Increment, and Release.

- c. The Contractor shall complete all activities identified in the Data Management and Data Conversion Plan in accordance with the Project Schedule.
 - d. The Contractor:
 - i. Shall develop and deliver an ETL process that converts the legacy data into WaterTAP as required by the State.
 - ii. Shall provide the ability to review and access the ETL flow as per the State team's request.
3. The State will extract the as-is legacy data (or, in other words, the legacy data structure will not be altered before extraction) into the secured storage area created by the Contractor from the staging environment. The Contractor shall develop and deliver an ETL process that extracts the as-is raw legacy data from legacy data structures by joining them to achieve the desired structure and transforms them into the future data model of WaterTAP.
4. The Contractor shall use the industry's best practices to support repeatable data conversion based on the Contractor's implementation approach and migration methodology, and processes to ensure data quality. The data/document conversion and migration approach activities (milestone) and plan ([SECTION 11. CONTRACTOR DELIVERABLES](#)) shall include:
- a. Developing a data mapping document that defines how individual fields are mapped, modified, joined, filtered, aggregated, un-mapped, combined, split fields, etc. to produce the final desired output.
 - b. The contractor and State staff will define agreed-upon roles and responsibilities during the duration of the data conversion and migration.
 - c. Outlining the method of identifying and migrating the documents from the legacy as-is application(s) to the future State document management tool (electronic content management system).
 - d. Developing data cleansing rule documentation in collaboration with SWRCB; the documentation must include cross-referencing legacy SWRCB applications' data to WaterTAP. The Contractor shall receive approval from the State prior to running any cleansing process. All the interfaces mentioned in EXHIBIT H: DATA CONNECTIONS are to be considered while building the data conversion, data mapping documentation and data cleansing approach.
 - e. Approach to extracting the data from the staging environment. (SWRCB will provide the as-is legacy data structure from the legacy systems).
 - f. The Contractor shall read the data from the staging area to develop and deliver an ETL process that extracts the as-is raw legacy data from legacy data structure by joining them to get the desired structure and transforms it into the future data model of WaterTAP as required by the State.
5. Transforming the extracted data:

- a. Apply data mapping and quality rules as defined in collaboration with SWRCB. The extraction process shall include data validation to confirm whether the data pulled from the source(s) has the correct/expected values in a given domain (such as a pattern/default or list of values). If the data fails the validation rules, the extraction process should be rejected entirely or in part. The rejected data should be reported back to SWRCB for further analysis. The Contractor shall fix the data during the Transform step of ETL process as per State's data fix requirement to rectify the incorrect records. Incorrect records flagged by the State Staff when data quality issues are identified will be migrated by the contractor, as it is with the intent of developing a process for staff to verify data using existing State documents or by requesting additional information from users using questions or forms submitted through WaterTAP. The Contractor shall provide a mechanism to track these incorrect records that are already flagged by State Staff in WaterTAP.
 - b. Assist with and perform additional data cleansing as necessary.
 - c. Develop an automated solution for migrating data. Create the CI/CD pipeline approach to deploy the code from one environment to the next higher environment.
 - d. Conduct a series of dry runs to improve the accuracy of the transformed data (data validation).
 - e. Add necessary cross-references for data lookup and reference data.
6. Confirmation of data prior to migration (pre-migration testing).
 7. Perform multiple data purification rounds prior to loading the transformed data into WaterTAP database(s) and test on converted data.
 8. Handling of any errors and exceptions encountered during the ETL process.
 9. Load summary of data conversion ETL (% of data loaded, % of data rejected, % of data loaded with error correction messages).
 10. Updated final data model in pictorial representation (lucid or Miro board representation).
 11. Completed data dictionary (in State preferred format).
 12. Runbook with the status of ETL scripts for data conversion.
 13. Post-migration data integrity verification across all phases (data reconciliation).

The Contractor shall coordinate and perform data migration of SWRCB data as a part of the cutover process.

The Contractor shall provide SWRCB with the logs and reports showing:

- a. The progress, accuracy, and completeness of the data migration.
- b. Details of any exceptions encountered during data migration, and steps taken to resolve them.
- c. Statistics, including but not limited to: source and target record counts, data volumes, and migration performance.

The Contractor shall be responsible for performing the data migration multiple times, as necessary to support the legacy system applications mentioned in [EXHIBIT H: DATA CONNECTIONS](#). The Contractor shall develop and implement a repeatable data migration process to synchronize with the SWRCB staging area. A staging area is a temporary and secure storage area in which data is processed during an ETL procedure.

The Contractor's data migration activities must support:

- a. Complete synchronization (full refresh) for each implemented phase across the environment.
- b. Real-time as well as batch synchronization.
- c. Scheduled, on-demand, and event-driven synchronization.
- d. The data security throughout the data conversion activities.

10.4.3.1. DOCUMENTS MIGRATION

The Contractor shall outline the method of identifying and migrating the documents and the associated metadata from the legacy as-is application(s) to the future state document management tool (electronic content management system). The Contractor shall refer to the guidance document, [EXHIBIT H: DATA CONNECTIONS](#), to get additional information.

10.4.4. TESTING TASKS

The objective of the Testing Tasks is to provide testing and remediation support for WaterTAP.

1. Review and validate all EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS with SWRCB SMEs and seek clarification of requirements prior to commencing design work to ensure that all WaterTAP requirements are clearly understood and validated. At the end of requirements validation, the Contractor and SWRCB will understand how each requirement will be tested, and how the test criteria will be defined.
2. The Contractor shall develop and deliver a Master Test Plan (MTP) that describes all phases of Testing that will be conducted during each Sprint, Product Increment, and Release. The MTP shall also describe how the Contractor develops and maintains RTM mapping for each test scenario and test script to WaterTAP requirements.
 - a. The Contractor shall update the MTP as needed during each Product Increment and Release.
 - b. The MTP shall describe the types of testing that shall be executed, how testing concepts shall be applied to the Project, testing prerequisites, the Project's approach to testing with external entities, resources, and schedule constraints, and how the Project will make use of automation during test processes.
 - c. Testing activities shall not begin until the related MTP has been approved by the State.

3. The Contractor shall complete all activities identified in the MTP in accordance with the Project Schedule.
4. The Contractor shall develop, maintain, and execute the Test Scenarios and Test Scripts for all stages of testing, as applicable.
5. Prior to each production release, WaterTAP shall include, but not limited to the following testing:
 - Integration Testing
 - Load and Performance Testing
 - Accessibility Testing
 - Security Testing
 - User Acceptance Testing
 - Penetration Testing
 - Regression Testing
 - Parallel Testing
6. The Contractor shall update the testing materials as needed during each Product Increment and Release.
7. The Contractor shall provide Test Result Reports during each Product Increment and Release.
8. The Contractor shall collaborate with the State to maintain and provide test environments to perform all testing identified in the MTP. The Contractor shall ensure State accessibility to the test environments.
9. The Contractor shall perform configuration updates and refreshes to the test environments in order to keep the test environments consistent with the production environment.
10. The Contractor shall support the State to facilitate execution of User Acceptance Testing (UAT) during each Product Increment and Release.
11. The Contractor shall provide test scenarios and test scripts to execute UAT for both functional and non-functional areas as required by the State.
12. Test scripts and test cases for the lower environments (Development and SIT) shall be developed by the Contractor and approved by the SWRCB project management and designated SWRCB staff. Test scripts and test results shall be linked to requirements established in SWRCB's Azure DevOps. At a minimum, test scripts shall include:
 - Steps necessary to run through the test scenarios
 - Dependencies
 - Data requirements
 - Traceability between the test scenario and WaterTAP requirements (i.e., the script should identify which detailed WaterTAP requirements are being tested)
 - Resource needs from interface or external partners, if any
 - Expected results
13. The Contractor shall provide timely resolution to all defects reported during UAT, as agreed upon by the State.

14. The Contractor shall collaborate with the State's Information Security Office (ISO) as needed to conduct security tests to ensure all system functions are safe from vulnerabilities.
15. The Contractor shall conduct necessary WaterTAP testing during the iterative development cycles to ensure the system aligns with the planned system design and meets the requirements defined in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS prior to delivering completed capabilities for SWRCB Review and acceptance. The Contractor's testing approach shall include but not limited to:
 - a. Execute unit testing during component and interface development to confirm functional compliance with WaterTAP requirements.
 - b. Execute System Integration Testing to test module interactions and end-to-end functionality against the requirements and ensure data exchange accuracy, including integration with required SWRCB's internal and external systems.
 - c. Support and manage WaterTAP capability validation and acceptance with SWRCB, including demonstrating and testing the capability functionality.
 - d. Support and manage the Implementation Stage UAT process, including tracking SWRCB reported defects, triage defects, remediate and redeploy resolved defects for retesting, support and assist in creating test scripts, conduct daily UAT check-in meetings during the UAT cycle, and communicate and coordinate UAT deployment with SWRCB UAT resources.
 - e. The Contractor will be responsible for preparing test data, whether from converted or mock data, in consultation with SWRCB SMEs.
 - f. Support and manage parallel testing, when required, in the pre-production environment to validate reported incidents, validate resolved incidents, performance testing, and verify new processes against the existing solution and processes.
 - g. Test System performance under maximum operational load conditions, anticipating volume of users and reports.
 - h. Test to ensure WaterTAP responds to user input within specified timeframes under expected workloads.
 - i. Test to ensure WaterTAP completes after-hours processing during allotted timeframes under expected workloads as defined in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS.
16. Execute penetration and security testing as defined in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS. Security testing will include, but is not limited to:
 - Perform a software security review and system security scan, as required, to verify WaterTAP compliance with the SWRCB security requirements and standards identified in SWRCB Information Security Policies. Coordinate with the State to test user permissions and access.
 - Correct any security flaws, anomalies, and defects identified during regular security tests

during the Contract term, unless the State provides an explicit written waiver for a given flaw, anomaly, or defect.

- Conduct annual and on-request security tests.

17. Conduct business continuity and technology recovery testing prior to Implementation Stage deployments to production in the pre-production environment and annually after Final System Acceptance. Document the execution procedures and activities and ensure WaterTAP meets the requirements of Disaster Recovery per +SECTION 13.4. DISASTER RECOVERY DURING M&O.
18. Prepare test scenarios and test cases that comply with the System Test Plan for all phases of testing. The Contractor may utilize automated test scripts with prior approval by the SWRCB Project Manager. The Contractor will update test scenarios, cases, and scripts, as appropriate, when changes are made to WaterTAP.
19. Document, manage and resolve all defects identified at any stage of testing.
20. The Contractor shall provide automated, repeatable processes for setting up a new environment or component of an environment.
21. The Contractor shall provide safeguards to ensure that software does not inadvertently update data in another environment due to configuration errors.

10.4.5. ORGANIZATIONAL CHANGE MANAGEMENT AND TRAINING

The Contractor must provide OCM and training services, including the development and delivery of training materials, knowledge transfer sessions, and support for end-users and IT staff, ensuring effective adoption and utilization of WaterTAP across all phases of the project.

Training Tasks

1. The Contractor shall develop an End User Training Plan, including a SWRCB solution-specific curriculum, a detailed list of all training sessions and materials, tasks, schedule, and success criteria. The End User Training Plan must include Super User Training, End-User Training, Business Administrator Training, and IT Staff Training.
 - a. The training plan will follow a "Train-the-Trainer" model.
 - b. The Contractor shall update the End User Training Plan as needed during each Product Increment and Release.
2. The Contractor shall develop computer-based training for End-Users, including Business Data Stewards, Data Custodians, and other users. The End-User Training will be organized according to roles, courses, and modules and will comply with the World Wide Web Consortium's current Web Content Accessibility Guidelines (WCAG).
3. The Contractor shall develop computer-based training for SWRCB IT Staff covering recurring maintenance and operations tasks. IT Staff Training will be organized by roles, courses, and modules and be compliant with WCAG.

4. The Contractor shall complete a training schedule prior to each Release unless otherwise agreed upon by the State.
5. The Contractor shall complete all activities described in the End User Training Plan in accordance with the Project Schedule. The State will supply all equipment required to conduct training. The State will record any training activities as necessary.
6. The Contractor shall develop and deliver the complete set of training materials for both internal and external end-users in coordination with the State. The Contractor shall provide metrics, recommendations to measure success, and suggestions to modify training materials periodically based on training satisfaction survey trends. These training materials will include:
 - a. Presentations in PowerPoint (including presentation recordings)
 - b. Class Exercises
 - c. Handouts
 - d. User Instructions (including job aids)
 - e. Training Guides
 - f. Frequently Asked Questions (FAQs)
 - g. Training Satisfaction Surveys
7. The Contractor shall update training materials as needed during each Product Increment and development phase. The Contractor shall update all training materials after training is completed after Final System Acceptance and Final Go-Live report.
8. The Contractor shall update training materials as needed and conduct additional training with accompanying training satisfaction surveys until end users self-rate as proficient. The State will develop the surveys with proficiency being determined as having a rating of 4 or higher on a 1 to 5 scale.
9. The Contractor shall develop and deliver a Training Completion Report to evaluate feedback from all training participants on the quality and effectiveness of its training delivery.
10. The Contractor shall develop a Software Maintenance Manual that documents the steps, processes, and procedures needed by the State to monitor, operate, and maintain the system on an ongoing basis and use it for training operations staff and update the documents based on lessons learned. The manual shall include documentation on WaterTAP data models (Entity Relationship Diagrams) and application interfaces documented in +SECTION 10.3.3. SYSTEM INTERFACES.
11. The Contractor shall develop the Internal User Training Plan that shall describe the Contractor's plans for training State personnel (Internal Users) who will operate and use WaterTAP and Deliverables to perform their job duties. The plan shall describe in detail the number and identity of the trainers, methodology, media used for training, training curriculum, training materials, schedule for training (dates, locations, classes, number of users), recommended class sizing per course, training logistics (i.e., classrooms, classroom equipment and supplies), and quality management of the training (including incorporation of feedback).

Organizational Change Management Tasks

1. The Contractor shall develop an Organizational Change Management (OCM) Plan, including roles and responsibilities, change impact analysis, communication strategies and activities, implementation activities and desired outcomes, and activity schedule.
2. The Contractor shall support communication efforts, including creating and updating the WaterTAP Organizational Change Management Deployment Plan and assist with the execution of that plan in accordance with the project schedule.
3. The Contractor shall integrate and align change management activities into the project plan.
4. The Contractor shall consistently gauge organizational readiness using a variety of methods, tactics, and analyze data to update/revise strategies/mitigation plans to address gaps and leverage strengths. These activities shall include: readiness assessment planning, conducting assessments, preparing assessment reports, and presenting findings.
5. The Contractor shall manage and guide communication with internal and external stakeholders, guide and assist with the execution of the Organizational Change Management Deployment Plan (including coaching, training, and adoption management). Update and maintain OCM trackers and registries (e.g., Stakeholder Registry, Risk and Issue Logs). Conduct Change Impact Assessments and document strategies for addressing change impacts.
6. The Contractor shall provide knowledge transfer on OCM, training, plans, and strategies to the WaterTAP project team on a recurring basis.
7. The Contractor shall support training efforts, including providing development support, recommendations, and guidance for execution of the WaterTAP Training Plans (internal and end user training).
8. The Contractor shall provide development, recommendations, and guidance for the execution of user guides, training materials, and media as well as ongoing training for WaterTAP.
9. The Contractor shall manage staff and management engagement.
10. The Contractor shall support change management at the organizational level, for external stakeholders, and identify and manage anticipated and persistent resistance.
11. The Contractor shall identify, analyze, and prepare risk mitigation tactics.
12. The Contractor shall support and engage senior leaders, and coach managers and supervisors.
13. The Contractor shall support organizational design and definition of roles and responsibilities.
14. The Contractor shall lead and assist in developing as-is/to-be business process analyses and mapping, documenting business process improvement and business process re-engineering, and developing OCM and gap analyses.

10.4.6. CONFIGURATION AND RELEASE MANAGEMENT

1. The Contractor shall develop and implement a Configuration Management Plan that describes the standardized methods and procedures to be used for efficient and prompt handling of all changes, ensuring that all changes to System Configuration Items are recorded as per the plan, and the

overall business risk is mitigated. The Contractor will adhere to the Water Board's established Change Control procedures as stated in [SECTION 10.5. CHANGE CONTROL PROCEDURES](#).

2. The Contractor shall implement a configuration management tool for WaterTAP. This tool shall be delivered as part of a Configuration Management Plan and shall be transitioned to the State in accordance with the System Support Transition Plan.
3. The Contractor shall perform configuration management consistent with the State-approved Configuration Management Plan.
4. The Contractor shall submit Configuration Management Activity Summary reports that provide the State with configuration management information related to the current version and operational status of all WaterTAP Configuration Items under configuration management.
5. The Contractor shall participate in the State's Release Review Board (RRB) and Technical Review Team (TRT) meetings and shall provide knowledgeable representation by their technical management personnel.
6. The Contractor shall develop and deliver a Release Management Plan that describes the development, integration, testing, data conversion, rollout approach, and methods for production release.
7. The Contractor shall update the Release Management Plan during each Product Increment and Release.
8. The Contractor shall create and utilize release and deployment procedures that outline how release packages are to be built, installed, tested, deployed using automated tools, successfully on schedule, with minimal impact on production services, operations, and support teams, as specified in the State-approved Configuration Management Plan.
9. The Contractor shall complete all activities identified in the Release Management Plan in accordance with the Project Schedule.
10. The Contractor shall complete all necessary go/no-go checklist tasks identified in the Release Management Plan prior to State approval for release to production.
11. The Contractor shall conduct "code walk-throughs" with the State and IV&V Contractor as described in the Release Management Plan to verify quality for each feature of WaterTAP.
12. The Contractor shall develop and deliver a Release Report that documents, at a minimum, lessons learned during the Release and provides suggested action items.
13. The Contractor shall develop the Production Deployment Plan, which shall be a single, comprehensive plan that encompasses all Contractor-owned and State-owned deployment activities and describes the necessary activities, as well as the roles and responsibilities, to deploy the WaterTAP and Deliverables to the production environment after successful completion of all testing, user training, and organizational change management activities. This plan shall address the process to ensure WaterTAP is functional and operational in production in accordance with the Contract Requirements.
14. The Contractor shall produce a performance test results report that shows the expected and actual results of the Performance Test that the State will use in the determination of operational

readiness.

10.4.7. PRODUCT STABILIZATION AND FINAL SYSTEM ACCEPTANCE

The objective of Production Stabilization and Final System Acceptance is to achieve successful acceptance testing and a period of stability for three (3) months following the release of functionality into production. Release of functionality into production will be in accordance with the Implementation Plan. The conclusion of the final feature implementation shall be identified explicitly in the Project Schedule. While Production Stabilization and Final System Acceptance will not begin until production deployment of the completed WaterTAP, the State will consider a phased approach towards system development and deliverable submission.

Stability is defined as having WaterTAP operating in production without any critical or high deficiencies during the Production Stabilization and Final System Acceptance Period. Unless otherwise agreed upon by the State, if a critical or high defect occurs during this Period, the three (3) month clock will restart upon the Contractor's resolution of the deficiency, including the resolution being successfully migrated to production. The Contractor shall be required to research, document, and correct the source of failure. The maintenance and operations period will be initiated upon Final System Acceptance.

Project work and deliverables that involve software programs, as well as any implementation or installation activities, are subject to acceptance testing under the terms of this Contract. The Acceptance period is intended to ensure that the services acquired under this Contract result in successful implementation and continued satisfactory levels of performance. The software and services acquired shall conform to SWRCB's requirements in this Contract, while meeting performance standards and warranties.

Acceptance testing shall be in accordance with the WaterTAP approved Master Test Plan and Implementation Management Plan described in [SECTION 11. CONTRACTOR DELIVERABLES](#), which must include a DAD signed by the State Contract Manager and the Contractor, indicating that each deliverable meets the contract requirements.

Prior to starting the Production Stabilization and Final System Acceptance Period, the Contractor must submit and receive SWRCB approval of the Pilot Deployment and Signoff. Upon SWRCB acceptance of the Pilot Deployment and Signoff, the Production Stabilization and Final System Acceptance Period will commence on an agreed-upon date with the Contractor.

1. The Contractor shall continue to provide production operations support during the WaterTAP Production Stabilization period and complete the activities and requirements to obtain WaterTAP Final System Acceptance.
2. The Contractor shall collaborate with the State to review requirements, test traceability, and respond to any gaps identified.

3. The Contractor shall deliver a Final System Development and Deployment Report that describes the final system architecture and components.
4. The Contractor shall deliver final configured software code, run-books, database scripts, system configurations, and all relevant documentation.
5. The Contractor shall be responsible for detecting and resolving all defects as described in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

Stabilization and System Acceptance Outcomes:

- Completion of all System Acceptance procedures per the Final System Testing section below.
- All WaterTAP functionalities have been deployed to production in accordance with the Implementation Plan.
- Contractor has transitioned its training approach, tools, materials, techniques and any other documentation or information needed to support training to SWRCB to meet SWRCB's ongoing training needs.
- IT Staff received production implementation support to address any outstanding issues, defects, or challenges going into and during the stabilization period.
- End users receive production implementation support.
- Documented lessons learned.
- All system documentation is up-to-date and reflects any significant changes that impact the WaterTAP build, configuration, or functionality.
- Completion and approval of the System Stabilization and System Acceptance deliverables in [SECTION 11. CONTRACTOR DELIVERABLES](#).

Final System Testing

Final System Testing ensures delivery of the highest quality solution for WaterTAP. The Contractor is responsible for establishing structured testing processes and procedures, executing various levels of system testing, and identifying and resolving defects to deliver a high-quality solution. The system testing procedures will support system functionality validation, data quality validation and reporting, and system performance verification. The Contractor will be responsible for conducting and managing WaterTAP system testing, performance testing, security testing, interface testing and user acceptance testings. Refer [SECTION 10.4.4. TESTING TASKS](#).

Project work and deliverables that involve software programs, as well as any implementation or installation activities, are subject to acceptance testing under the terms of this Contract. The Acceptance period is intended to ensure that the services acquired under this Contract result in successful implementation and continued satisfactory levels of performance. The software and services acquired shall conform to SWRCB's requirements in this Contract, while meeting performance standards and warranties.

Acceptance testing shall be in accordance with the WaterTAP approved Master Test Plan and Implementation Management Plan described in [SECTION 11. CONTRACTOR DELIVERABLES](#), which must include a DAD signed by the State Contract Manager and the Contractor, indicating that each deliverable meets the contract requirements.

Prior to final acceptance of WaterTAP, the Contractor shall facilitate final system testing to include solution-wide End-to-End and User Acceptance Testing. Final system end-to-end testing shall include testing all prior phase functionality, integration, load and performance, accessibility, and security. Refer to [SECTION 11. CONTRACTOR DELIVERABLES](#).

Final System Acceptance of WaterTAP will not occur until the successful completion of the Acceptance Period per exit criteria defined in SWRCB's approved Master Test Plan.

The following activities are required **prior** to Final System Acceptance:

- The Contractor shall complete or correct all Contractor responsibilities identified on the Project Closeout List.
- The Contractor shall identify and train all SWRCB staff successfully.
- The Contractor shall ensure WaterTAP knowledge transfer and operations transition have occurred as defined in this SOW.
- The Contractor shall transition their training approach, tools, materials, techniques and any other documentation or information needed to support training to SWRCB to meet SWRCB's ongoing training needs.
- The Contractor shall deliver to SWRCB all specified deliverables and documentation in its final form (e.g., after any changes identified during the State review have been made, verified, and accepted by the State).

If the Contractor's solution does not meet the defined solution requirements in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS, SWRCB may reject the final delivered system. Major discrepancies that will substantially delay receipt and acceptance of WaterTAP will be sufficient cause for rejection of the Contractor solution. Failure to satisfy the requirements of any test is considered a defect, and WaterTAP will be subject to rejection. Any rejected software package may be offered again for a retest provided all noncompliance has been corrected.

At the end of the Acceptance Period, the Contractor shall receive Final System Acceptance from the State upon completion of the following criteria:

- WaterTAP has met all Service Level Agreements defined in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) that apply during the Acceptance Period.
- The Contractor shall enter and track defects found during all phases of testing in DevOps. The Contractor shall categorize defects by severity as described in Table 10-3 below.

- WaterTAP is deemed stable for the full Production Stabilization and Final System Acceptance period. Stability is achieved when WaterTAP operates in accordance with the Acceptance Test Defect Exit Criteria described in Table 10-3 below:

Table 10-3: Acceptance Test Defect Exit Criteria

Severity Level	Descriptions	Acceptance / Testing Exit Criteria
1 - Critical	Defect stops all business processes of the system. (e.g. users cannot log into WaterTAP).	No Severity 1 defects/issues.
2 - High	Defects affect all business processes within a functional area. (e.g. cannot submit facility data).	No Severity 2 defects/issues.
3 - Medium	Defects affect some business processes, but the majority of business processes can be performed within a functional area.	75% of functional Severity 3 (medium) defects must be resolved by the close of UAT. The remaining Severity 3 defects/issue disposition and resolution timeline must be agreed upon by SWRCB.
4 - Low	No impact on business processes, however, may discourage use or present confusing user experience.	Open Severity 4 defects/issues have been prioritized and scheduled for a future release as agreed upon by SWRCB.

10.4.8. TRANSITION OF OPERATION

The Contractor shall develop and adhere to a System Support Transition Plan (SSTP) that covers the transfer of all the WaterTAP functions and activities to the State or its designee and shall contain the approach and documentation necessary to develop the ability of the State (or its designee) to operate WaterTAP and maintain those system components over which the State will have maintenance responsibility.

The Contractor shall provide an updated copy of the System Support Transition Plan in a format

determined by the State at the start of the full system acceptance period, or upon termination prior to the State exercising its option of any optional year(s) of maintenance and operation services as notified by the State.

The Contractor shall develop a System Support Transition Schedule. Within the System Support Transition Plan, it identifies the tactical transition out steps the Contractor will take. The System Support Transition Schedule will include the following minimum requirements:

- Required tasks, associated task owners, task dependencies, schedule and timing
- Tools and processes used to coordinate tasks, track and report issues and communicate status to all stakeholders (e.g. project team, end users, operational support staff, etc.) throughout the System Support Transition period.

The System Support Transition Plan must include, at a minimum, the requirements listed below:

- Renew any Contractor purchased software licenses to extend at least six (6) months beyond the expiration of the Contract to ensure all licenses are valid during the transition period.
- Transition all software licenses from the Contractor to SWRCB, ensuring SWRCB has full ownership and control over the licenses after the contract ends.
- Provide a copy of all State data stored in the service provider's system, in a format determined by the State.
- Update the transition into M&O, finalize all deployment activities, ensure system stability, and hand over all required documentation for system support.
- Provide post-implementation support during the System Support Transition phase:
 - Address any outstanding issues, defects, or challenges during the stabilization period. This includes resolving high-severity defects and monitoring system performance overall during the initial post-go-live period.
 - Conduct lessons learned and document lessons learned.
 - Provide functional and operational support to WaterTAP users. Examples of support include:
 - Create data quality rules by working with the SWRCB team and implementing them in the WaterTAP data quality solution.
- Create their respective data dictionary and metadata entries.
- Knowledge transfer activities, including but not limited to formal training and on-the-job training;
- Final updates and handover to the State of the design and configuration deliverables;
- Entry and Exit criteria for all System Support Transition activities;
- Development of all supporting documentation that accompanies and supports WaterTAP transition activities;
- Contract closeout processes and how the Contractor will securely destroy any digital data or confidential paper data post-contract;

- Final Risk Assessment documenting any known or potential risks associated with the Contractor's System Support Transition approach. The Risk Assessment shall include:
 - An impact and probability assessment and define recommended risk mitigation steps
 - Any risks identified must be tracked in the Risk and Issue Log. All documented risks must follow the established procedures documented in the Project's Risk and Issue Management Plan.

The Contractor shall develop the Software Maintenance Manual and shall include detailed maintenance processes and instructions for all components for which the State will have responsibility, including business rules maintenance, development and configuration tools, test tools and processes, and interface development and maintenance.

The Contractor shall develop the System Administration Guide that includes:

1. System Overview
2. Site Profile(s) – Primary and Technology Recovery sites
3. System Administration Functions User and Group Account Administration
 - User and Group Account Administration
 - Runbook
 - System Backup Procedures
 - Security Procedures
 - Database Maintenance
 - Application Maintenance

Provide System Support Transition Services

The Contractor shall provide transition support as defined in Table 10-4 below:

Table 10-4: System Support Transition

Period	Phase	Deliverable
T - 90 days	Final Go-Live	No less than ninety (90) calendar days prior to the final WaterTAP go-live, the Contractor shall provide SWRCB a System Support Transition Plan describing how WaterTAP operations and support functionalities will be transitioned to the State or another vendor.
T + 45 days	Final Go-Live	No greater than forty-five (45) calendar days after the post-final WaterTAP go-live, the Contractor will start transition activities to hand over State-managed activities through Deliverable Group #12 System

Period	Phase	Deliverable
		Support Transition.
T - 6 months	End of M&O	No less than six (6) months prior to the end of the M&O contracting period, the Contractor will start and provide transition support to hand over WaterTAP maintenance and operation to the State or another vendor. Refer to SECTION 14. MAINTENANCE AND OPERATIONS (M&O) for M&O responsibilities between SWRCB and the Contractor.

The Contractor shall provide transition support services as identified in the System Support Transition Plan. The Contractor shall provide, at a minimum:

- Completion of all tasks identified in the System Support Transition Plan.
- A System Support Transition Report that includes, at a minimum:
 - Documentation that shows all exit criteria are met
 - Outstanding, unresolved transition issues
 - Recommended additional transition activities and tasks confirmation that permissions and access have been granted to the team taking over support from the M&O Contractor.

Post-Implementation Support (Hyper-Care)

Post-Implementation Support (hyper-care) ensures a smooth, effective transition from the Contractor to the State. Hyper-care Support involves Full System Acceptance (FSA) and M&O period(s).

The Contractor shall maintain all configurations, customizations, and interfaces to WaterTAP while also engaging the State in knowledge transfer activities to facilitate the State maintaining the entirety of WaterTAP without Contractor assistance.

Immediately following WaterTAP go-live, the Contractor shall build out its support to transition WaterTAP over to the State's oversight. This includes:

1. Formatting and assembling a library of developer and user documents to guide the State on every aspect of WaterTAP. This library will be prepared to ensure the responsible entity that takes over WaterTAP will be able to resolve technical problems and continuously configure WaterTAP to match the Water Board's needs.
2. Development of materials that explain how WaterTAP can be managed to update business processes, revise configurations, and address any issues that could occur within WaterTAP and make available to the State's technical and business teams.
3. The Contractor will work with the Water Board technical team to finalize knowledge transfer activities as part of the transition.

Failure to comply with any of these terms may be grounds for termination by default.

10.5. CHANGE CONTROL PROCEDURES

The change control procedure is documented in a Change Control Management Plan that standardizes the change control process for efficient and prompt handling of all project change requests. The plan will be reviewed annually and updated as needed. Table 10-5 below outlines the roles and responsibilities associated with the change control process. The Change Control Board includes the Core Project Team, Project Manager, Project Director, Product Owner, and WaterTAP Contract Project Manager. The Project Manager and WaterTAP Contract Project Manager are non-voting members.

Governance

The Change Control Board operationalizes the change management processes and is anticipated to provide operational decision-making and governance for Change Requests within their approval authority. If a Change Request requires escalation to (DESC) or Project Sponsors for a decision, the Change Control Board will provide recommendations and SME for consideration in their decision. The Change Control Board also works closely with various state control agencies and stakeholders. Some of the external stakeholders represent control and decision-making bodies (e.g., CDT, DOF). As the project moves into later lifecycle phases, additional staff will be identified and on-boarded, and the team structure will be more fully defined.

Change Control Board meetings will be held regularly and may also be held ad hoc to expedite critical decisions and avoid delaying the project schedule. The Change Control Board will ask additional project team members and SMEs to attend, as necessary, to provide information regarding specific change requests.

Decision-Making Policy

The Change Control Board uses a majority rules approach to determine whether proposed project changes should be implemented or escalated for decision. Thus, each of the voting members of the Change Control Board participates in voting, submitting to approve, reject, defer, or escalate a Change Request. A voting member may also decide not to submit a vote, in which instance their abstention will neither be counted for or against the Change Request decision. If a voting member is not present during a Change Control Board meeting that calls for a vote, their vote will likewise be considered an abstention that will neither be counted for or against the Change Request decision. If a quorum cannot be met, the decision will be escalated even if it does not meet escalation thresholds. The Core Project Team will vote as individuals, not as a block. For the purposes of Change Control Board voting, a quorum will be defined as a simple majority of the total individual members of the Change Control Board with the stipulation that either the Project Director or the Product Owner (or both) must be present for a vote to be held. The Core

Project Team consists of five (5) members, making the Change Control Board's total individual membership count equal seven (7).

Change requests negatively impacting legal requirements or regulations that govern the Water Board are outside the approval authority of the Change Control Board and must be escalated to DESC and the Office of Chief Council for further direction.

Table 10-5: Change Control Management Roles and Responsibilities

Role	Responsibility
Project Sponsors	- Decides on Change Requests escalated by DESC or that impact the project schedule or budget at the levels defined in the Governance Management Plan. - Decides on Change Requests escalated by the Change Control Board. - Final approval authority for the Change Control Management Plan.
Data Executive Steering Committee (DESC)	- Makes decisions on Change Requests escalated by the Change Control Board or that impact the project schedule or budget at the levels defined in the Governance Management Plan for non-technical decisions. - Escalates Change Requests to Project Sponsors, as necessary.
Change Control Board (CCB)	- For non-technical changes only, escalate Change Requests to DESC when the change exceeds the Change Control Board's decision-making authority or the Change Control Board decides to escalate to DESC. - For technical changes only, escalates Change Requests to the Project Sponsors when the change exceeds the Change Control Board's decision-making authority or the Change Control Board decides to escalate to the Project Sponsors. - Primary decision-making body for Change Requests. - Meets on a regular basis to address outstanding Change Requests. - Act on Change Request decisions by Project Sponsors, DESC, or Project Director.
Project Director (PD)	- Votes as a member of the Change Control Board. - Makes decisions on minor change requests that do not impact the project schedule or budget at the levels defined in the Governance Management Plan. - Escalates Change Requests to the Change Control Board and DESC, as necessary.

Project Manager (PM)	• Creates or assists the Core Project Team in the creation of the Change Control Management Plan. • Manages the Change Control Process. • Reviews the scope, budget and schedule impacts of proposed changes. • Communicates Change Request status/decision back to Stakeholders. • Initiates the escalation process for the Project Director, as needed.
Core Project Team	• Active promoters of approved Change Requests. • Supports the Project Manager to manage the Change Control Process and any resistance to approved changes. • Authorizes Change Requests for analysis. • Assigns the Change Request analysis to a Change Request Owner. • Assigns project resources for Change Request analysis and, if approved, implementation. • Reviews the Change Request implementation after it is deployed. • Vote as members of the Change Control Board.
Change Manager	• Role is filled by Project Manager or designee. • Serves as Single Point-of-Contact for all project change requests. • Collaborates with the Core Project Team, Project Director, and others as needed to ensure all Change Request information is appropriately documented before presenting to the Change Control Board. • Solicits clarifications and/or makes recommendations to help ensure the Change Request is clear, accurate, and complete. • Advises the Project Director on Change Requests as appropriate. • Communicates Change Request decisions to project teams/stakeholders, verbally and via regular project status reports. • Receives and tracks Change Requests in the Change Request Log. • Schedules, facilitates, and transcribes Change Control Board meetings. • Maintains Change Request Log and Change Request documentation. • Monitors, tracks, and reports on Change Request status and progress weekly or as requested. • Guides Change Request and Change Request Owners through the change control process. • If a Change Request is approved, works with the appropriate project lead(s) to validating the Change Request implementation (e.g., configuration release, deliverable update, etc.) prior to closing the Change Request.

	<i>Note: The Change Manager may delegate elements of the responsibilities described above to other team members, if needed (e.g., scheduling, preparing, and publishing meeting materials, etc.).</i>
Product Owner	• Assigns project resources for Change Request analysis and, if approved, implementation. • Reviews and approves the Change Request Form created by the Change Request Originator. • Votes as a member of the Change Control Board.
WaterTAP Contract Project Manager	• Serves as Change Control Board member. • Serves as escalation point for contractor team members for Change Request-related issues. • Oversees contractor team members, who work with the Change Request Owner to provide impact analysis, cost estimates/actuals, and recommendations. • If the Change Request impacts their Contract, advise the Change Control Board as to whether the Change Request, as written, is achievable for the contractor. If not achievable, then works with the Change Control Board and Change Request Owner to make the appropriate revisions to achieve project success. • Serves as an Implementation Owner for Change Requests which are implemented by the Contractor. • Manages the Change Request through the Contractor's Change Management Process and associated Change Control Management Plan. • As needed, works with the Water Board Project Manager to identify an Implementation Owner for each Change Request approved for implementation. • Ensures contractor compliance with this plan.
Change Request Originator	• Identifies the potential change which may originate as a decision item that needs to go through the Change Control Board process. • Change Request Originator is responsible for populating their section of the Change Request form. • Change Request Originator works with the Change Request Owner and Change Manager to enter the proposed change in the Change Request Log. • Discusses the proposed change with the impacted parties.

	Initiates a Change Request and presents it to the Change Control Board for review and requests authorization to conduct impact analysis for all valid proposed Change Requests. <i>Note: The Change Request Originator may also be the Change Request Owner.</i>
Change Request Owner	- Takes ownership of the Change Request. - Populates their section of the Change Request form. - Leads an effort to analyze and evaluate all the impacts of the Change Request including collaboration across all potentially impacted stakeholder groups. - Prepares supporting documentation for the Change Request. - Presents Change Request at Change Control Board meeting. - Confirms Change Request is accurately and completely documented and serves as first line contact for questions about the Change Request. - Verifies the approved and assigned Change Request is implemented correctly. - Works with the Implementation Owner (if a different staff resource) to communicate the implementation status of the approved Change Request to the Change Manager. <i>Note: The Change Request Owner may be a member of the Change Control Board (voting or non-voting member) and/or may also be the Implementation Owner.</i>
Change Request Implementation Owner	- Manages implementation of approved change to completion. - Communicates implementation status of the approved Change Request to the Change Request Owner. - Facilitates and verifies implementation of change with the Change Request Owner. <i>Note: The Implementation Owner is primarily a state resource but can include the WaterTAP Contractor Project Manager. The Implementation Owner may also be the Change Request Owner or Originator, be responsible for multiple Change Requests, and also serve as a Release Manager or other role. In other words, the "Implementation Owner" is a catch-all term used to identify the person responsible for ensuring and validating the Change Request solution has been implemented.</i>

Fiscal/Budget Specialist	- Reviews provide feedback for proposed Change Requests that could or would impact project cost. - Verifies funding is available for all Change Requests prior to voting for approval/rejection/etc. - Makes recommendations on Change Requests to avert cost variances that may adversely affect the project budget.
Contract Manager	- Reviews and provides feedback on proposed Change Requests and identifies any impacts to the Contractor contract or other ancillary contract. - If a Change Request is approved, it ensures impacted contract and/or deliverable(s) are updated accordingly.
Subject Matter Experts (SMEs) (As Needed)	- Maintains and provides in-depth knowledge of a specific change and impacts to policy, infrastructure, processes, and/or end-user and community outcomes. - Supports the Change Request Owner to address any questions from the Change Control Board. - May act as lead to execute change post-approval, such as supporting design, validating testing scripts, executing User Acceptance Testing, and validating functionality post-release into production.
Independent Project Oversight Consultant (IPOC)	Provides administrative oversight of change methods, procedures, tools, and results to ensure compliance with CA-PMF, PMBOK, and other applicable standards.
Independent Verification & Validation (IV&V)	Provides technical oversight of change methods, procedures, tools, and results to ensure compliance with IEEE and other applicable standards.

Change Request Approval Authority

Change Requests will be considered for approval or denial based on criticality and impact to overall project delivery at the level described in Table 10-6 below.

Table 10-6: Change Request Approval Authority

Role	Change Type	Change Threshold
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Project Sponsors	Change Requests escalated by DESC for non-technical items. Change Requests escalated by the Change Control Board for technical items.	Impacts to the project schedule or budget at the levels defined in the Governance Management Plan.
DESC	Major project scope, schedule, or budget changes; Change Requests with highly sensitive or political impacts; or Change Requests which cannot be decided at the Change Control Board level.	Accept or reject all scope, schedule, or budget changes that are 5% or greater in variance of the given contract or area in question.
Change Control Board	Project scope, schedule, or budget changes.	Accept or reject all scope, schedule, or budget changes up to 5% in variance of the given contract or area in question.
Project Director	Minor project scope, schedule, or budget changes	Where appropriate, accept, reject, or escalate: changes with less than 5% in variance of the given contract or area in question, such as Change Requests with a zero-dollar (\$0) impact, and minimal impact to scope or schedule; Change Requests solely impacting the ancillary support contractors; and Change Requests impacting project processes.

Change Control Process

Change Request Communications

Information and status updates on changes in progress, completed, and upcoming will be communicated through numerous communication modes, both verbally and written, to ensure all stakeholders and impacted parties are updated and aware of current events.

Change Request Initiation

Upon identifying the need for a change, the Change Request Originator internally vets the nature, reason, and timing for the requested change with their supervisor/manager and project team members. They will use the Change Request intake form to capture information related to the Change Request (for internal vetting).

If the need for change is validated internally, the Change Request Originator notifies the Change Request Owner and provides an updated Change Request form along with any necessary supporting documentation for the Change Request Owner to propose the change to the Project Manager. The Change Request will be reviewed and discussed with the Project Director for completeness and to be validated as a potential Change Request.

If the Change Control Board authorizes the proposed Change Request to be opened, the Change Request Owner then takes ownership of the Change Request and leads the effort to analyze the impact of the change (impact analysis) and prepares the completed Change Request to be presented to appropriate decision-making authority for a vote.

Submit Change Request

A Change Request is considered submitted after the Change Request is reviewed by the Project Director, validated, and then entered into the Change Request Log.

Analyze Change Request

The Change Request Owner gathers information by working with one or more individuals who are knowledgeable in the impacted areas and knowledgeable of the proposed solution to perform an impact analysis on the Change Request. It is the Change Request Owner's responsibility to solicit feedback from the other impacted stakeholders to ensure they have captured and understand the impact. The Change Manager, Project Manager, Project Director, and, if needed, the Fiscal/Budget Specialist and Contract Manager will review the analysis sections on the Change Request Form and coordinate with the Change Request Owner to provide any additional input for their respective sections as needed.

The Change Manager and supporting staff assess the requested change for project risk and manage any identified risks in accordance with the Risk Management Plan. The Fiscal/Budget Specialist will review the change to identify fiscal impacts. The Project Manager will review the change and identify impacts related to schedule, resourcing, duration, or critical path. The Contract Manager reviews the change and identifies impacts to contractual requirements.

The WaterTAP Contract Project Manager impacted by the Change Request will review and provide analysis on impacts to their respective scope, schedule, and cost. The Contractor shall also work with the Change Request Originator to provide an initial estimate (range) for the expected cost as well as provide their cost calculation for the actual cost prior to the Change Request being approved for implementation.

The Change Request Owner is responsible for ensuring the analysis is fully developed, captured in its entirety on the Change Request Form, and ready for review and approval prior to presentation to the appropriate decision-making authority.

Change Control Board Review

The Change Manager schedules and coordinates Change Control Board meetings to occur initially as needed, moving to monthly once the project begins the Implementation Phase. The Change Manager sends a meeting agenda along with the completed Change Request Form(s) and any supporting documentation to the Change Control Board members forty-eight (48) hours in advance of the Change Control Board meeting. Change Control Board members are expected to review the pending Change Request materials prior to the meeting.

While the Change Control Board may discuss a broad range of changes and change topics, the Change Requests presented at the Change Control Board meeting will primarily consist of proposed, open, and approved items:

- **Proposed:** Newly created by the Change Request Originator and populated by the Change Request Originator or Owner. Proposed Change Requests seek authorization from the Change Control Board to open the Change Request so that the team can conduct further analysis.
- **Opened:** Encompass changes ranging from recently authorized Change Requests to Change Requests with fully detailed impact analysis ready for review by the appropriate decision-making authority.
- **Approved:** Encompass changes ranging from recently approved by the appropriate decision-making authority to changes which have been implemented and are in the process of being verified using the Implementation Checklist. Approved Change Requests seek verification of successful implementation. The output of a successful implementation and verification by the Implementation Owner is a status change to "Closed." If the work to fulfill the change request was completed by a contractor, the status change to Closed authorizes the contractor to submit the associated invoice for the cost identified in the Change Request.

Escalation Process

The Change Control Board has the authority to make decisions on Change Requests to project scope, schedule, or costs within their approval authority (see Table 10-6 above). Any requested changes greater than that approval authority or decisions the Change Control Board is unable to make are escalated to DESC or the Project Sponsors, as appropriate, for final decision. Additional information for escalation and communication of changes is found in the Governance Management Plan.

If a Change Request is escalated, the Change Manager will coordinate with the Project Director to schedule and coordinate the necessary meeting with the appropriate approving body. The Change Manager returns the decision on the escalated Change Request to the Change Control Board for implementation or other disposition action. Refer to [SECTION 17. ESCALATION PROCESS](#) for detailed guidance.

Change Request Implementation and Verification

The Change Request must have followed the Work Order Authorization (WOA) approval process before implementation starts. Once the WOA is approved, the Change Request Owner will manage the process to implement the approved Change Request and is responsible for collecting status updates from the Implementation Owner and providing regular status updates to the Change Manager. The Implementation Owner will implement the change solution as described and approved in the Implementation Checklist included in the Change Request Form.

After the change is implemented, the Change Request Owner will verify with the Implementation Owner that it was implemented correctly. If the change is not implemented correctly, the Change Request Owner will work with the appropriate person to resolve the problem. The Change Request Owner will update the Change Request Form and notify the Change Manager, who will in turn notify interested parties through regular status updates (written and verbal) that the Change Request is fully implemented and verified.

Close Change Request

A Change Request is closed when one of the following conditions is met:

1. The Change Request is rejected or withdrawn.
2. An approved Change Request is implemented aligning them with the planned sprints and verified via post-implementation processes. For example, this may include, but is not limited to, verification of a deliverable update, RTM update, or functionality that has passed User Acceptance Testing and has been released and tested as working in Production.

To close a Change Request, the Change Manager ensures the Change Request Form, and all supporting documentation, are stored in the document repository. These documents are retained as project artifacts. The Change Manager updates the Change Request Status and Change Request Closing Section on the Change Request Form and updates the Change Request Tracking Log.

Change Request Status

As Change Requests progress through the approval/implementation process, they will be assigned one of the following statuses.

Table 10-7: Change Request Status Options

Change Request Status	Definition
Proposed	Newly submitted Change Request is awaiting initial review by the Change Control Board.

Rejected	Change Request is deemed to be invalid by the Change Control Board or decision-making authority upon review.
Withdrawn	Change Request which has been submitted and subsequently withdrawn by the Originator or Change Request Owner.
Opened	Change Request has been authorized by the Change Control Board for analysis and consideration for decision and implementation.
Deferred	Change Request whose impact analysis and decision are being deferred until a later date.
Closed	The implementation of the approved Change Request solution has been implemented and verified.

The status of change requests will be tracked in the change request log, which contains the ‘Type of Change’, such as:

1. Project Change Request (PCR) — Request for work outside the scope of the WaterTAP Project, as defined by the SOW and BAFO response assumptions.
2. Unanticipated tasks — Additional work which was wholly unanticipated and is not specified in the SOW, but which, in the opinion of both parties, is necessary to successfully accomplish the general scope of work outlined in this Agreement.
3. Document Change Request (DCR) — Request to change functional or technical implementation approaches in a way that requires rework and/or additional time or cost over the originally approved functional and technical design.

Change Request Priorities

The Change Request Originator or Owner may populate the Change Request Type and Timeframe at creation; however, once the analysis of the Change Request is complete and the Change Request is approved, the Change Control Board confirms the Change Request Type and Timeframe to calculate the Change Request priority, and assigns the Change Request a priority based on consensus from the voting members. The Change Request priority reflects the importance of the change and how quickly it needs to be addressed. These priorities are shown in the following table.

The Change Request priority is based on two factors – the **type** of change, and the **timeframe** for implementation. This approach would serve both project changes and product changes during the implementation phase and can be applied to DevOps (implementation & production, as applicable).

The ‘timeframe’ values are 0–1 month, 2–3 Months, 4–6 Months, or >6 Months. Emergency is only

applicable to a **product** change, and it means the change is dropped into the current configuration/development cycle. For a **project** change, an emergency implies a 0–1 month timeframe.

Table 10-8: Change Request Priorities

Type / Timeframe		Mandate	Need	Want
	Values	1	2	3
0 - 1 Month	1	1	2	3
2 - 3 Month	2	2	4	6
4 - 6 Month	3	3	6	9
> 6 Month	4	4	8	12

For mandates, the Change Request must include documentation that evidence and details the mandate (legislation, policy, etc.). The Change Request Form should be updated to provide this direction.

Similarly, wants or needs must be documented in such a way that the Change Request incorporates the appropriate justification.

Change Request Tracking and Reporting

The Change Manager will monitor and track Change Requests. The Change Request Log is used to assign the official Change Request number and provide a snapshot of the status of all Change Requests on the Project. This information is used to report on the progression of Change Requests through the Change Control Process. The Change Request Log will be maintained in the project's repository.

After a Change Request is formally submitted, the Change Manager does the following:

1. Review the Change Request Form and supporting documentation for completeness.
2. Updates the Change Request Tracking Log with the weekly status of each Change Request.
3. Communicates dispositions to the Change Control Board.
4. Updates the Change Request Closing Section of the Change Request Form when a Change Request is closed.

The Change Manager regularly generates and sends Change Request reports to the Change Control Board as described in the table below.

Table 10-9: Change Request Reports

Title	Frequency	Content
Change Request Implementation Status	Part of the weekly schedule report (email)	Identifies the activities required to implement the change, the estimated completion date, and the implementation status.
Change Request Metrics Report	Included in Change Control Board meeting materials	- Summary of Change Requests approved for implementation and their respective status. - Summary status of all Change Requests according to Table 10-6 above. - Aging statistics and average durations for each status type.

10.6. KNOWLEDGE TRANSFER

The Contractor shall develop a System Support Transition Plan and a WaterTAP Software Maintenance Manual that documents the steps, processes, and procedures needed by the State to monitor, operate, and maintain WaterTAP on an ongoing basis. These resources will be used for training and operations staff and updated based on lessons learned. The manual shall include documentation on WaterTAP data models (Entity Relationship Diagrams) and application interfaces.

The Contractor shall describe how SWRCB technical staff will gain working knowledge of WaterTAP. SWRCB considers Knowledge Transfer different and distinct from training. Knowledge transfer will occur throughout the design, development, and implementation phases of the project.

The Contractor's developed and approved System Support Transition Plan shall include key roles and responsibilities, communications, timeline, and other details to help guide their Knowledge Transfer activities. The Contractor must complete final solution knowledge transfer activities prior to each production release and full system acceptance.

The Contractor shall be expected to conduct regular Knowledge Transfer meetings with SWRCB technical staff.

11. CONTRACTOR DELIVERABLES

Deliverables are project-specific items that will be subjected to the State's formal Deliverable Review and Approval Process. The Contractor shall formally deliver deliverables iteratively throughout the Sprint cycle and will review related products at the end of each Sprint during the Sprint Review Meeting and upon the Contractor's formal submission of the Sprint Work Package.

Document Format and Submission

1. All documents shall be provided in a format compatible with the State Water Board's standard applications (currently, Microsoft O365 Professional). In all cases, the Contractor shall verify application compatibility with the State Contract Manager prior to creation or delivery of any electronic documentation. All interim diagrams, or other graphics inserted into deliverables shall be provided in the original file format used for their creation. An example might be a Microsoft Visio process flow inserted into a document; the original Visio source file shall also be provided electronically. Any deviations to these standards shall be approved by the State Contract Manager.
2. Hard copy documents shall be on standard 8 ½" x 11" paper. Electronic versions shall be stored in a State-designated central repository and remain the sole property of the State. The delivery media shall be compatible with State storage devices.
3. An electronic copy of the documents shall be stored in the Project Documentation folder (created in Microsoft Teams or SharePoint).

All deliverables shall be subject to the WOA process. The Contractor shall develop, update, and submit deliverables via a WOA in accordance with the Project Schedule (All deliverables, and supporting working materials and documents, including working papers, test scripts, test results, reference materials, training materials, etc.) shall be considered property of the State once accepted.

The Contractor shall work with the State during project planning to evaluate opportunities to combine deliverables where feasible (without impacting overall project goals or outcomes) to reduce the number of review cycles and management of these deliverables. Upon mutual agreement, these combined deliverables will be aligned back to this SOW and incorporated into the project management plan and schedule as the newly adopted deliverables.

The Contractor will ensure the following elements are clearly defined within Table 11–1: Deliverables (see below).

- Resources, roles, and responsibilities (State and Contractor).
- System configuration and development process.
- Mechanisms to iterate the development work based on stakeholder feedback.
- Configuration Management Plan to allow simultaneous work on different versions in different environments.
- Release Types (Major, Minor, Emergency/Maintenance/Hot Fix, etc.) and the criteria for each release type and their associated deployment plans (code freeze, UAT Scope, etc.) that will allow the State to receive batches of functionality as they are available (instead of waiting until all customization and development are complete).
- Guidance to drive decisions between configuration, customization, and new development.
- Approach to ensure that custom components will be incorporated into the product-based solution and maintained as such by the Contractor.

- Product Development and Project Management Methodologies.

Table 11-1: Deliverables

Deliverable Group #1: Project Management		
Deliverables		Description
1.1	Project Management Plan	Captures all the Project Management processes, roles, responsibilities and templates which will be executed throughout the Project to effectively manage and control the Project.
1.2	Project Schedule	Resource loaded Baseline Project Work Plan and Schedule for every release, including a Work Breakdown Structure, and Gantt chart(s).
1.3	Weekly / Monthly Status Report	Weekly / monthly report regarding the Project activities of the previous week / month, anticipated activities for the current week / month, and risks and issues.
1.4	Sprint/Release Report	Release report for every sprint and release activities with details on the tasks and functionality delivered, with a backlog listing the risks and issues.
Deliverable Group #2: Design, Development, and Implementation		
Deliverables		Description
2.1	Solution Architecture	Captures the set of technologies that support WaterTAP, details the software components and design patterns, and technology infrastructure as the conceptual, logical, and physical architectures for WaterTAP.
2.2	Fit Gap Analysis	Conducts a Fit-Gap Analysis using EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS to identify where the proposed WaterTAP solution meets or does not meet system requirements, and documents necessary configurations or customizations. Includes collaboration with the State to confirm and refine.
2.3	Functional and Technical Design Document	Provides the design of the functionality in scope and associated technical design that addresses how the functional design will be implemented.
2.4	Implementation Plan	Details the implementation approach and roll out plan for WaterTAP.

2.5	Solution Implementation (Milestone)	Code, configure, build, and unit test all features of WaterTAP in alignment with the State Implementation Preferences in accordance with the Project Schedule. The State's Implementation Preferences are identified in SECTION 9.6. SOLUTION REQUIREMENTS .
Deliverable Group #3: System Interfaces		
Deliverables		Description
3.1	Interface Management Plan	Captures the integration approach and data design for WaterTAP, focused on the interfaces to external systems.
3.2	Interface Development (Milestone)	Code, configure, build, and unit test all interfaces of WaterTAP in alignment with the State Implementation Preferences in accordance with the Project Schedule. The State's Implementation Preferences are identified in SECTION 9.6. SOLUTION REQUIREMENTS .
Deliverable Group #4: Data Management and Conversion		
Deliverables		Description
4.1	Final Data Management and Conversion Plan	Details out the data management and conversion activities, including building a data conversion schedule, tracking each data element being converted, validating that all records converted equals the number of records/ images written to the new database, developing a data dictionary and associated data models and metadata documents, reporting progress against these stages, existing systems integration strategy, data sharing agreements, migration error logging and ensuring adequate staff is assigned to the effort.
4.2	Data Conversion Activities (Milestone)	Develop and deliver a transformation process that is applied to the extracted data in order to prepare it for loading into WaterTAP in accordance with the Project Schedule. The Contractor shall develop and maintain a data mapping document that defines how individual fields are mapped, modified, joined, filtered, aggregated, cleansed, automated Solution for migrated data, CI/CD pipeline approach to produce the final desired output, as well as data migration validation

		reports confirming the accuracy of data transfer to the target system.
Deliverable Group #5: Testing		
Deliverables		Description
5.1	End-to-End Testing Results	Report about system and integration testing that details the results per release.
5.2	Master Test Plan	Defines the testing plan for each release, including the types of tests to be performed, test database, test cases, documentation of test results, acceptance testing, readiness checklists.
5.3	UAT Testing Results Report	Report at the end of UAT testing that details the results of the testing period.
5.4	Testing (UAT, Performance, Load, Security) (Milestone)	Complete all activities identified in the MTP in accordance with the Project Schedule.
Deliverable Group #6: Organizational Change Management and Training		
Deliverables		Description
6.1	End User Training Plan	Identifies all the activities and defines the curricula the Water Board needs to train the organization and other stakeholders on WaterTAP. Audience-specific training efforts shall include Super User Training, End-User Training, Business Administrator Training, and IT Staff Training. This plan shall include a detailed list of all training sessions and materials, tasks, schedule, and success criteria, as well as the knowledge transfer approach and tools used to transfer all training materials, repositories, source documents/ images, and data, to the Water Board following training delivery.
6.2	Organizational Change Management Deployment Plan	Develop an Organizational Change Management (OCM) Plan that outlines a structured approach to support the Water Boards and DDW through upcoming changes by focusing on training, communication, and leadership development. It includes role-based, WCAG-compliant training (computer-based, live, and documented) for End Users, Business Administrators, and IT Staff, aligned with operational tasks and key change areas. A clear and consistent "Change Message" will be developed and communicated to

		explain the purpose, impact, and benefits of the changes. Additionally, a measurable leadership development strategy will be implemented to build internal OCM capabilities at the executive and management levels, ensuring sustained adoption and organizational readiness.
6.3	Organizational Change Management Schedule	Develop the OCM Plan and Schedule, including roles and responsibilities, change impact analysis, communication strategies and activities, implementation activities and desired outcomes, and activity schedule.
6.4	Organizational Change Management Quarterly Status Report	As part of the routine status reporting to the Water Board, develop and deliver presentations on a quarterly basis around change management.
6.5	Organizational Change Management Performance Measurement Plan	Prepare and execute a performance measurement plan that identifies key performance and progress indicators, metrics, and success indicators to monitor results of the OCM effort. The measurement plan shall also include measurements for processes that can be used for the long-term implementation of change.
6.6	Training (Milestone)	Complete all activities described in the End User Training Plan in accordance with the Project Schedule.
6.7	Training Completion Report	The summary of surveys provided after the training sessions have been completed will confirm attendance and confirm that the audience developed an understanding of WaterTAP required to perform their role. The evaluation will be based on the training curriculum by the SWRCB's user types outlined in the Training Plan.
Deliverable Group #7: Configuration and Release Management		
Deliverables		Description
7.1	Configuration Management Plan	Describes the standardized methods and procedures to be used for efficient and prompt handling of all changes, ensuring that all changes to WaterTAP configuration items are recorded as per the plan, and the overall business risk is mitigated.
7.2	Pilot Deployment Report and Signoff	Ensures that the pilot successfully demonstrated improved usability, end user efficiency and stability to both internal and external end-users prior to going live.

		The pilot will be performed after UAT and will include identifying and resolving any issues identified during the WaterTAP pilot. The deliverable will be considered complete once the Water Board confirms WaterTAP will allow users to perform end-to-end business processes without issues, improving efficiency/usability.
7.3	Release Management Plan	Describes the development, integration, testing, data conversion, rollout approach, and methods for each staging and the production release.
7.4	Formal System Acceptance and Final Go-Live report	Includes a status report of all system components to ensure WaterTAP functions effectively in production. Once WaterTAP has been migrated to production and rolled out to the entire organization, WaterTAP must be stabilized to allow support to be migrated from the cut-over support team to the M&O team.
7.5	Configuration Implementation (Milestone)	Build all WaterTAP environments required to support WaterTAP and provide configuration details for each environment.
Deliverable Group #8: Security and Data Protection		
Deliverables		Description
8.1	System Security Plan	Describes the data and security protection measures, Security Risk Assessment and Plan of Action needed for WaterTAP. It shall include moderate level National Institute of Standards and Technology (NIST) 800-53 and be compliant with SIMM 22 COTS/SaaS Acquisition, SIMM 5315-B, Cloud Security Standards and State Water Board's security standards.
Deliverable Group #9: Product Stabilization		
Deliverables		Description
9.1	Final System Development and Deployment Report	Describes the final WaterTAP architecture and components, including all the configured software code, run-books, database scripts, system configuration, source code version control, and all relevant documentation. Includes product stabilization activities and final changes for deployment.

9.2	Final System Acceptance (Milestone)	Provides a report that WaterTAP is ready for final acceptance and all Severity 1 and Severity 2 issues are either resolved or have an agreed-upon workaround that has been approved by the State.
Deliverable Group #10: Maintenance and Operations		
Deliverables		Description
10.1	Maintenance and Operations Plan	Documents the resources, services, processes, and procedures necessary to operate, administer and maintain WaterTAP at or above the performance requirements defined in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS. The plan shall identify both State and Contractor roles and responsibilities.
10.2	Technology Recovery Plan (TRP)	A recovery plan based on and compliant with SIMM Section 5325-A that clearly identifies all State responsibilities for technology recovery activities.
10.3	System Performance and Capacity Management Plan	Guides the development and operation of WaterTAP from a performance and capacity management perspective. The plan shall describe how WaterTAP can meet performance requirements and meet appropriate Service Levels and produce performance reports to show compliance with the SLAs.
Deliverable Group #11: Software		
Deliverables		Description
11.1	List of Software	At the beginning of the project, provide a preliminary list of all the software components in WaterTAP Contractor to provide a final list before deployment to production.
Deliverable Group #12: System Support Transition		
Deliverables		Description
12.1	System Support Transition Plan (SSTP)	Covers the transfer of M&O functions and activities to the State or its designee and shall contain the Knowledge Transfer (KT) approach and documentation necessary to develop the ability of the State (or its designee) to operate WaterTAP and maintain those system components over which the State will have maintenance responsibility.
12.2	Software Maintenance Manual	Includes detailed maintenance processes and instructions for all components for which the State will

		have responsibility, including business rules maintenance, development and configuration tools, test tools and processes, and interface development and maintenance.
12.3	System Administration Guide	1. System Overview 2. Site Profile(s) – Primary and Technology Recovery sites 3. System Administration Functions a. User and Group Account Administration b. System Backup Procedures c. Security Procedures d. Database Maintenance e. Application Maintenance
12.4	System Transition (Milestone)	Complete all activities described in the System Support Transition Plan in accordance with the Project Schedule.

Upon Contract Award, the deliverables listed above and in EXHIBIT D: DELIVERABLES AND MILESTONES TABLE will become final and incorporated into this Agreement.

All project tasks and deliverables include all work efforts to design, develop, implement, test, and deliver the WaterTAP solution. Detailed tasks can be found in [SECTION 10.4. SERVICES TO BE PROVIDED](#).

The State requires an iterative development approach. The Contractor and the State will agree on a Final Project Plan for the execution of all tasks and deliverables required for the WaterTAP project.

Select deliverable documents will need to be updated throughout the project lifecycle and as needed per the State's discretion.

Where deliverable content is not pre-defined in this SOW, the Contractor shall confirm specific deliverable content with the State as part of the WOA/DED approval process.

All documentation produced in the SOW must be provided to the State in a readable, editable, and reproducible format. The Contractor shall submit all deliverables and electronic project documentation to the State continuously throughout the project through a document submission process as prescribed by the State.

The Contractor shall confirm that all deliverables and electronic project documentation are submitted to the State sixty (60) days prior to full system acceptance by the State.

The Contractor shall support the State's Independent Verification & Validation (IV&V) vendor's project closeout reporting requests.

If the State chooses to exercise the optional year(s) of M&O with the Contractor, all deliverables shall be updated prior to the end of that period.

11.1. WORK ORDER AUTHORIZATION

1. All WOAs shall be in writing using EXHIBIT I: WORK ORDER AUTHORIZATION FORM and signed by the Contractor and State prior to beginning work. Each WOA shall describe the services to be developed, applicable due dates, acceptance criteria, staff resources, total number of hours, and total fixed price cost. This information will be directly integrated from the information provided as part of this SOW and associated solicitation documents in its entirety (including but not limited to the Contractor's proposal, pricing workbook, requirements specified in EXHIBIT E: COST WORKBOOK and EXHIBIT B: BUDGET DETAIL AND PAYMENT PROVISIONS). The Contractor shall demonstrate to the State how the staff hours and costs to complete the work were calculated, including providing, upon State request, documentation supporting those calculations (e.g., hours and costs). This information will be developed in the same format and level of detail included in the pricing workbook provided by the Contractor to the State as part of the solicitation, with information updated to align with the scope for the WOA. Upon request by the State, the Contractor shall submit a completed draft WOA to the State on the template provided by the State within two (2) business days, or as otherwise agreed to by the State. A sample of the WOA template is attached as EXHIBIT I: WORK ORDER AUTHORIZATION FORM. Upon receipt of a completed draft WOA from the Contractor, the State will provide written notice to the Contractor of its acceptance or rejection of the completed draft WOA within five (5) business days. If the WOA is rejected, the State shall notify the Contractor of the reasons why it was rejected, and the Contractor shall correct the deficiencies and resubmit within the timeframe provided by the State.
2. The total cost set forth in a WOA shall be a fixed price for all the services in that WOA.
3. A WOA may be amended only in writing and by mutual consent of both Parties. If at any time the Contractor anticipates the level of effort to complete a WOA will be greater than as described in the executed WOA, the Contractor shall immediately notify the State. If the State agrees that additional effort and time is warranted, the WOA will be amended to reflect the agreement of both Parties.
4. Notwithstanding [SECTION 17.1. CONFLICT RESOLUTION PROCESS](#), the State, in its sole discretion, may unilaterally terminate a WOA at any time by providing three (3) State calendar days' written notice to the Contractor. The Contractor shall be paid the reasonable costs incurred for accepted deliverables and/or services rendered up to termination of the WOA, as determined by the State.
5. Each WOA shall be incorporated into and become a part of this Agreement. In no event shall a WOA be deemed a separate agreement.

6. The State and Contractor will work to plan and execute the WOA to allow for continuation of services as dictated in the overall Project Management Plan and Project Schedule. Any delays in WOA planning or authorization may affect resource availability, pricing, and schedule.
7. Upon conclusion of the term of a WOA, the Contractor shall notify the State in writing whether all deliverables and/or services are ready for State review. The State shall have up to thirty (30) calendar days to complete State review of the deliverables and/or services.
 - a. If the State determines that all acceptance criteria for a WOA are met, the State shall inform the Contractor in writing that the work has been Accepted. Upon the Contractor receiving State Acceptance, the Contractor may submit an invoice for the payment associated with that WOA.
 - b. If the State determines that all acceptance criteria for a WOA are not satisfied, the State shall inform the Contractor in writing that the work has not been Accepted, provide an explanation of the reasons why all acceptance criteria were not satisfied, and provide the Contractor with a period to correct the problems, which shall not be less than five (5) State business days. Additional costs incurred by the Contractor in connection with responding to and/or correcting problems to achieve State Acceptance will not be paid by the State.
8. If the Contractor does not provide the State with revised deliverables and/or services within the period provided by the State to correct the problems, then the State shall assess liquidated damages as provided in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) and [SECTION 13. LIQUIDATED DAMAGES](#).
9. The State shall have a minimum of ten (10) State business Days to review the revisions, unless the State determines, in its sole discretion, that additional time is required. If the acceptance criteria are still not satisfied, as determined by the State in its sole discretion, then the State shall assess liquidated damages as provided in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) and [SECTION 13. LIQUIDATED DAMAGES](#).

11.2. DELIVERABLES EXPECTATION DOCUMENT

The Contractor must obtain Work Order Authorization (WOA) approval prior to drafting any Deliverable Expectation Document (DED). For each deliverable, the Contractor shall complete a DED, as shown in [SECTION 11.2. DELIVERABLES EXPECTATION DOCUMENT](#), for approval by the State Water Resources Control Board (SWRCB). The parties will agree in writing on the deliverable specifications and acceptance criteria, which the Contractor shall document in the DED. The Contractor will provide an estimate of staff hours within each fixed-priced DED, which the State will review and approve. Once approved, payment will be based solely on demonstrated completion and State acceptance of the deliverable. Invoices should not include hours, timesheets, or similar documentation. Any changes to the DED scope or cost must be negotiated and approved in advance through the established change management process.

The Contractor will not begin work on a deliverable until SWRCB and the Contractor have approved the DED. The DED will define the deliverable specifications and acceptance criteria. The deliverable will address all components required by the Contract and any areas agreed upon subsequently through meetings and planning sessions. SWRCB expects all deliverables to be presented sequentially at deliverable project phases. All deliverables connected to WaterTAP development will pass all the necessary acceptance steps in the development process (e.g., peer review, etc.) and in the QA/testing process (unit testing, integration testing, system testing, load testing and acceptance testing). The deliverables will be broken into smaller and specific Project phases and specify what will be delivered in each phase and each iteration. The priority of the deliverables will need to be approved by the State Subject-Matter Experts (SMEs). Also, the development plan for up to three (3) upcoming iterations should be specified and approved by the State SMEs and aligned with the deliverables of each Project phase. The Contractor shall provide deliverables to the SWRCB Contract Official by the due date specified on the approved Project Schedule unless the SWRCB has granted written permission for the deliverable DED to deviate from the schedule. Deliverable documents will be comprehensive in their level of detail and quality, be professional in presentation, and consistent in style and quality. If a document is the composite work of multiple individuals within the Contractor's organization, the Contractor shall ensure consistency in the final document.

Completion of each deliverable listed above is subject to SWRCB approval, as described in [SECTION 11.4. DELIVERABLE REJECTION & ACCEPTANCE](#).

11.3. DELIVERABLE ACCEPTANCE DOCUMENT

For each Contractor work product and/or deliverable, identified on a DED, that the Contractor certifies is ready for the State's approval, the Contractor shall complete and submit EXHIBIT K: DELIVERABLE ACCEPTANCE DOCUMENT. By submitting a DAD, the Contractor represents that, to the best of its knowledge, it has performed the associated tasks in a manner that will, in concert with other tasks, meet the specifications stated or referred to in the Agreement and DED.

A deliverable will not be accepted by the State unless it is consistent with the DED approved by the WaterTAP Project Manager.

Project work and deliverables that involve software programs, as well as any implementation or installation activities, are subject to acceptance testing under the terms of this Contract. Acceptance testing is intended to ensure that the services acquired under this Contract result in successful implementation and continued satisfactory levels of performance. The products and services acquired must conform to SWRCB's business, technical, and performance requirements while meeting the Contractor's specifications, performance standards, and warranties.

Acceptance testing shall include verification by the WaterTAP Project Manager and the Contractor that

each applicable deliverable meets the requirements identified within the DED. It shall be SWRCB's sole determination as to whether acceptance testing has been successfully completed and is acceptable to SWRCB.

For document deliverables, the Contractor's on-going performance will be evaluated by the WaterTAP Project Manager by reviewing the Contractor's DevOps dashboard and weekly status reports and reviewing the quality and completeness of the relevant document(s).

The WaterTAP Project Director will host monthly Steering Committee meetings at which the Contractor will present a comprehensive project progress, status, and upcoming event report.

11.4. DELIVERABLE REJECTION & ACCEPTANCE

The Contractor must be the sole entity submitting deliverables to the State. The State will not accept deliverables from subcontractors. The Contractor must review, verify compliance of, and accept full responsibility for any subcontractor deliverables before submission to the State.

If deemed necessary by the State, a formal walkthrough session will be conducted to review the submitted deliverables. This does not remove the walkthrough requirements already designated in this contract. The State will identify the reviewers that will attend these walkthrough sessions. The walkthrough sessions will be organized and scheduled by the Contractor, with approval from the State.

The State will use the signed DED to assess whether the Contractor has met the criteria for deliverables acceptance. The State will be responsible for reviewing and approving, in writing, each deliverable using the signed DED. It is highly recommended that no contractor work should start on a deliverable until a DED is completed and signed by both parties. The State will be the sole judge of the acceptability of all work performed, and all work products produced by the Contractor as required in this Contract.

Should the work performed, or the deliverables produced by the Contractor fail to meet SWRCB's conditions, requirements, specifications, guidelines, or other applicable standards as identified in this contract, the following resolution process in [SECTION 17. ESCALATION PROCESS](#) will be employed, except as superseded by other binding processes:

1. The State will be responsible for reviewing and approving in writing, within ten (10) business days of receipt of the DAD, each deliverable including but not limited to plans, designs, drawings, and reports. The State will be the sole judge of the acceptability of all work performed, and all work products produced by the Contractor as required in this Contract.
2. The State will notify the Contractor in writing within ten (10) business days after receipt of DAD of any acceptance problems by identifying the specific inadequacies and/or failures in the services performed and/or the products produced by the Contractor, unless the Contractor and the State have mutually agreed in writing to a different review period for the DAD.

3. If the State has identified inadequacies and/or failures, the Contractor must, within five (5) business days after problem notification, respond to the State by submitting a detailed explanation describing precisely how the identified services and/or products adhere to and satisfy all applicable requirements, or submit a proposed corrective action plan to address the specific inadequacies and/or failures in the identified services and/or products. Failure by the Contractor to respond to the State's problem notification within the required time limits may result in immediate termination of the Agreement. The State may, at its discretion and in writing, allow a longer period than the five (5) business days in consideration of the scope of the change.
4. The State will, within five (5) State business days after receipt of the Contractor's detailed explanation or proposed corrective action plan, notify the Contractor in writing whether it accepts or rejects the explanation or corrective action plan. If the State rejects the explanation or the corrective action plan, the Contractor must submit a revised corrective action plan within three (3) business days of notification of the rejection. Failure by the Contractor to respond to the State's notification of the rejection by submitting a revised corrective action plan within the required time limits may result in immediate termination of the Agreement.
5. The State will, within three (3) business days of receipt of the revised corrective action plan, notify the Contractor in writing whether it accepts or rejects the revised corrective action plan proposed by the Contractor. Rejection of the revised corrective action plan may result in immediate termination of the Agreement.
6. Lack of response on the part of the State does not constitute acceptance of any deliverable.
7. Signed acceptance of the DAD will be by the State Contract Official identified in [SECTION 6. CONTRACT REPRESENTATIVES](#).
8. The Contractor may not change a deliverable that has been accepted by the State without the State's written approval.
9. It shall be the State's sole determination whether a deliverable has been successfully completed in accordance with this Statement of Work.
10. All concluded work shall be submitted for review and acceptance or rejection to the State Contract Official through the use of Deliverable Acceptance Documents (DAD), shown in [SECTION 11.3. DELIVERABLE ACCEPTANCE DOCUMENT](#), to be signed by the Contractor.

Should the work performed, or products produced by the Contractor fail to meet the State's minimum conditions, requirements, specifications, or guidelines, the process described within [SECTION 17.2. CORRECTIVE ACTION](#) will be employed.

12. SERVICE LEVEL AGREEMENTS (SLAS)

Service Level Agreements (SLA)

- a. The state and Contractor will decide on a triage process during the project's implementation.
- b. Contractors shall meet the SLAs as defined in [SECTION 12. SERVICE LEVEL AGREEMENTS](#)

(SLAS).

- c. SLAs and liquidated damages will be assessed on a monthly basis.
- d. If imposed, Liquidated Damages will not exceed ten percent (10%) of the total Agreement award price for system delivery.

Table 12-1: Service Level Agreements and Liquidated Damages

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
Key Staff Replacement	Key Staff must be replaced within the time frame and in accordance with the process outlined in SECTION 10.2.4. KEY STAFF CHANGES. The start date of the measurement begins on the date the Contractor provides notification of any proposed changes, or on the date the State requests the Contractor to replace key staff plus the number of days as defined in SECTION 10.2.4. KEY STAFF CHANGES. Key staff positions must not be filled by state employees to fulfill the roles and responsibilities of the position in a temporary capacity and/or maintain responsibility for a Contractor's key staff position.	Daily, for each Key Staff position that has not been filled within the number of days required.	The State may assess liquidated damages in the amount specified below.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	The State shall report delays in the key staff fulfillment to the Contractor's Project Manager.		
Project Management/ Scheduled Deliverable	To avoid costly delays, all deliverables must be approved according to mutually approved dates or according to the project schedule.	100% of all deliverables are approved on schedule or by mutually approved dates.	\$1,000 per working day per schedule or mutually approved dates not to exceed \$120,000 per year
Project Management/ Deliverable Quality	The deliverables submitted to the Water Board by the Contractor will conform to the approved Deliverable Expectations Document (DED). The deliverables should be to a quality standard that allows for one Water Board review, one update and approval, unless there is a change requested by the Water Board.	100% approved within two (2) review cycles of the approved associated DED	\$1,000 per working day of the deliverable that does not conform to the approved associated DED, not to exceed \$120,000 per year
WaterTAP SLA/ Defect Management	Please see SECTION 12. SERVICE LEVEL AGREEMENTS (SLAS) AND SECTION 13. LIQUIDATED DAMAGES	Please see SECTION 12. SERVICE LEVEL AGREEMENTS (SLAS) AND SECTION 13. LIQUIDATED DAMAGES	Please see SECTION 12. SERVICE LEVEL AGREEMENTS (SLAS) AND SECTION 13. LIQUIDATED DAMAGES
WaterTAP SLA/Defect Management - Root	The Contractor shall submit to the Project Director, or	The Contractor shall submit an initial root	\$1000 per each late submission.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
Cause Analysis (RCA) Submission	designee, as defined in the Project Management Plan, an initial Root Cause Analysis (RCA) document for every Severity Level 1 and Severity Level 2 deficiency, WaterTAP Deficiency Identification SLA, within 24 hours of identification. The initial RCA document shall provide, as it is understood at the time of submission, the deficiency identification time and date, an estimate of solution and user impacts, an estimate of the duration, actions taken and planned, and a timeline for submission of a completed RCA.	cause analysis to the State within 24 hours of identification. The Contractor shall submit the complete analysis within ten (10) business days of the identification of the issue.	
WaterTAP SLA/Defect Management — Solution Deficiency Correction	The Contractor shall maintain the Production Warranty Deficiencies by Severity below the thresholds identified in the Minimum and Expected Service Level Agreements. Solely for the purposes of this Section, Solution Deficiency Correction, the term “Production Warranty Deficiencies” means	Expected SLA: Severity Level 1 Production Warranty Deficiencies: Deployed to Production within 24 hours of classification as Severity Level 1. Severity Level 2 Production	For each month the Contractor’s performance falls below the Expected Service Level Agreement, the Contractor’s invoice payment amount shall be reduced to \$2500.00 per Severity Level 1

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	Deficiencies in WaterTAP (identified in either the production environment, solution test or another higher environment) that are identified by the State as an Incident during the applicable Warranty Period under the Agreement. The Contractor and the State shall work to mutually prioritize and schedule Production Warranty Deficiencies. Deficiency Severity Levels are defined as: Severity Level 1 Production Warranty Deficiency: i) Renders WaterTAP is totally inoperable, or there is a critical WaterTAP outage, or ii) degrades performance such that WaterTAP is effectively unavailable. Examples include, but are not limited to: the user cannot log into WaterTAP, or the Tester is unable to access the test	Warranty Deficiencies: Deployed to Production within 48 hours of classification as Severity Level 2. Severity Level 3 Production Warranty Deficiencies: None more than 20 calendar days old. Severity Level 4 Production Warranty Deficiencies: None more than 30 calendar days old. Measurement Process: On the last day of every month, the Contractor shall measure all Production Warranty Deficiencies by Severity that have not reached the Passed Test, Passed User Acceptance Testing (UAT), or	and Severity Level 2 Deficiency and reduced by \$1000.00 per Severity Level 3 and Severity Level 4 Deficiency.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	environment. Severity Level 2 Production Warranty Deficiency: i) Results in critical functions, components, or features being down or unusable or ii) prevents the accomplishment of a critical function where there is no alternate procedure by which the function can be performed. Examples include, but are not limited to: WaterTAP errors preventing users from completing critical functions, and/or causing data corruption. Critical functions are limited to the following, where at least 50% of WaterTAP total users and/or associated transactions are unable to process to successful completion. Severity Level 3 Production Warranty Deficiency: A component, application or	Rejected state. If the Production Warranty Deficiencies in any of the severity categories are above the expected threshold, the SLA as a whole shall be defined as not meeting the Expected Performance Standard. Further, if Production Warranty Deficiencies in any Severity category are above the minimum threshold, the SLA as a whole shall be defined as not meeting the Minimum Performance Standard.	

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	procedure is difficult to use, causing some operational impact, but where an alternate procedure is acceptable to the state in its reasonable judgment, it is available to avoid operational impacts on the users. Examples include, but are not limited to: a page within WaterTAP is not working, but other avenues are available to complete the business process, albeit less conveniently; a functional component or service outage with an alternative workaround where the workaround degrades the operation of WaterTAP from the user perspective; preferred method for completing business process is blocked, but alternate method is available; test script can be executed and completed with workaround. Severity Level 4 Production Warranty Deficiency: Any disruption in service that has a minor business or job		

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	impact affects multiple users or customers where those people affected are still able to perform their functions. A service component or procedure which is not critical is unusable where an alternate procedure acceptable to the State is available. Examples include, but are not limited to: a degradation in WaterTAP performance, data element is mislabeled, or a data element is misplaced on the page, test scripts can be completed without having to alter the page flow.		
WaterTAP SLA/Solution Deficiency Identification	The Contractor shall be required to notify the State upon identification of a Solution Deficiency. The notifications shall be made through the use of e-mail and distribution lists. The State can also make direct inquiries to the Contractor as to the status of an individual incident and associated response actions at any time. The Contractor should respond to such escalated	Expected SLA: 98.0% of deficiencies resolved within Performance Standard The Contractor shall report to the State a Deficiency for WaterTAP, in whole or in part ("Solution Deficiency"). The Contractor shall report and resolve all Solution Deficiencies according to the	For each month the Contractor's performance falls below the Expected Service Level Agreement, the Contractor's invoice payment amount shall be reduced to \$1000.00 per Severity Level 1 and Severity Level 2 Deficiency

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	inquiries within the timeframes specified for each type of incident. The Contractor shall resolve all Solution Deficiencies (Contractor or State identified) within the timeframes shown in the Performance Target column for the level of severity of the deficiency.	following criteria and within the following timeframes: a) Severity Level 1 (Critical Impact) Deficiency reported to the State upon inquiry within fifteen (15) minutes of the State's request or identification and resolved within two (2) hours of identification. Root-cause analysis shall be performed with findings and resulting actions documented in the appropriate M&O reports. b) Severity Level 2 (Major Impact) Deficiency reported to the State upon inquiry within one (1) hour of request and resolved within 24 hours of identification. Root-cause analysis shall be performed with findings and resulting actions documented in the appropriate M&O reports.	identification and reduced to \$500.00 per Severity Level 3 and Level 4 Deficiency identification.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
		c) Severity Level 3 (Significant Impact) Deficiency reported to the State upon inquiry within two (2) State business hours of request and resolved within thirty (30) calendar days of identification. The Contractor shall resolve the problem or implement a workaround accepted by the state. Appropriate documentation shall be included in the M&O reports. d) Severity Level 4 (Minor Impact) Deficiency reported to the State upon inquiry within two (2) State business hours of request and resolved within an agreed-upon schedule between the Contractor and the State, which shall be measured on a schedule defined by the State and	

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
		documented by the Contractor in the M&O Plan Deliverable. The Contractor shall provide the fix in a subsequent release of relevant and appropriate Software or operational processes. Appropriate documentation shall be included in the M&O reports.	
WaterTAP SLA/ Incident Management	Please see SECTION 12. SERVICE LEVEL AGREEMENTS (SLAS) AND SECTION 13. LIQUIDATED DAMAGES	Please see SECTION 12. SERVICE LEVEL AGREEMENTS (SLAS) AND SECTION 13. LIQUIDATED DAMAGES	Please see SECTION 12. SERVICE LEVEL AGREEMENTS (SLAS) AND SECTION 13. LIQUIDATED DAMAGES
WaterTAPSLA/ WaterTAP Application Programming Interface (APIs)	The contractor shall ensure 99.9% uptime for each System APIs (inbound and outbound), measured over a 24-consecutive hour period by a State-approved monitoring tool. Uptime shall mean that all System APIs are up, running, and functioning in accordance with the specifications in the	The contractor achieves the SLA uptime.	\$5,000 per 24-consecutive hour period that the Contractor's performance falls below the minimum SLA.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	Agreement. Unscheduled downtime resulting from infrastructure controlled and managed by the State or third parties or due to failure by the State or third parties to execute on its responsibilities related to maintenance or oversight of WaterTAP or related systems, will not be considered as a measured SLA event. Unscheduled downtime resulting from use that is over and above the expected number of users of WaterTAP will not be considered as a measured SLA event. The contractor will be responsible for coordinating and working with third-party software and tools to help them find a resolution that can be integrated into WaterTAP. Please note that this SLA comes into effect when WaterTAP is in production.		
WaterTAP SLA/ Solution Transaction Time	For any system/solution developed by the Contractor, the Contractor shall ensure a transaction response time of one (1) second or less from user	Expected SLA: 95.00% of the total number of transactions are to complete processing within one (1) second	\$10,000 per month that the Contractor's performance falls below the minimum SLA, not

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	initiation (e.g., lookup, save, etc.) from an application screen on the user device at least 95.00% of the time, unless there are mutually agreed upon exceptions, as measured by a State-approved monitoring tool. Data, document, or processing intensive transactions will not be included in this SLA (i.e., uploading documents or data, processing data, manipulating documents). Transaction response time shall be calculated monthly in minutes rounded to the nearest hundredth of a percent. Average end-to-end response time from the user perspective. Delayed response time resulting from infrastructure controlled and managed by the State or third parties or due to failure by the State or third parties to execute on its responsibilities related to maintenance or oversight of WaterTAP or related systems, will not be considered as a measured SLA event. Delayed response time resulting from	within a given month. Also, 99.5% of transactions are to complete processing within three (3) seconds.	to exceed \$30,000 annually.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	use that is over and above the expected number of users of the system will not be considered as a measured SLA event. The contractor will be responsible for coordinating and working with third-party software and tools to help them find a resolution that can be integrated into WaterTAP. Please note that this SLA comes into effect when WaterTAP is in production.		
WaterTAP SLA/ Release Deployment	To ensure timely creation and release of functionality, releases must be deployed within a committed timeframe as agreed with the State. All customizations/ configurations for WaterTAP shall be checked-in into source control for every release. Continuous Integration and Continuous Deployment may be used to automate processes. Please note that this SLA comes into effect when WaterTAP is in production.	≥ 95.0% within the identified timeframe.	\$500 per workday that the Contractor's performance falls below the minimum SLA, not to exceed \$5,000 per release.
WaterTAP SLA/ Availability	The percentage of actual uptime with planned uptime	99.5% .	\$10,000 per month that the

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	for each application and API. Unscheduled downtime resulting from infrastructure controlled and managed by the State or third parties or due to failure by the State or third parties to execute on its responsibilities related to maintenance or oversight of WaterTAP or related systems, will not be considered as a measured SLA event. Unscheduled downtime resulting from use that is over and above the expected number of users of WaterTAP will not be considered as a measured SLA event. The contractor will be responsible for coordinating and working with third-party software and tools to help them find a resolution that can be integrated into WaterTAP. Please note that this SLA comes into effect when WaterTAP is in production.		Contractor's performance falls below the minimum SLA, not to exceed \$120,000 annually.
WaterTAPSLA/ Stability	The number of unplanned outages for users to access the production environment of WaterTAP. Unscheduled	No unplanned outages per month.	\$10,000 per month that the Contractor's performance falls

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	downtime resulting from infrastructure controlled and managed by the State or third parties or due to failure by the State or third parties to execute on its responsibilities related to maintenance or oversight of WaterTAP or related systems, will not be considered as a measured SLA event. Unscheduled downtime resulting from use that is over and above the expected number of users of the system will not be considered as a measured SLA event. The contractor will be responsible for coordinating and working with third-party software and tools to help them find a resolution that can be integrated into WaterTAP.		below the minimum SLA, not to exceed \$120,000 annually.
WaterTAP SLA/ Reliability	Number of unplanned outages for users to access the production environment of WaterTAP in consecutive months. Unscheduled downtime resulting from infrastructure controlled and managed by the State or third parties or due to failure by the State or third parties to execute on its	No outages in back-to-back months (e.g., an outage occurs in July, no outage can occur in August).	\$10,000 per month that the Contractor's performance falls below the minimum SLA, not to exceed \$120,000 annually.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	responsibilities related to maintenance or oversight of WaterTAP or related systems, will not be considered as a measured SLA event. Unscheduled downtime resulting from use that is over and above the expected number of users of WaterTAP will not be considered as a measured SLA event. The contractor will be responsible for coordinating and working with third-party software and tools to help them find a resolution that can be integrated into WaterTAP.		
WaterTAP SLA/ Average Response Time	Average end-to-end response time from the user perspective. Delayed response time resulting from infrastructure controlled and managed by the State or third parties or due to failure by the State or third parties to execute on its responsibilities related to maintenance or oversight of WaterTAP or related systems, will not be considered as a measured SLA event. Delayed response time resulting from use that is over and above	Average of two (2) seconds over one (1) month.	\$7,500 per month that the Contractor's performance falls below the minimum SLA, not to exceed \$30,000 annually.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	the expected number of users of WaterTAP will not be considered as a measured SLA event. The contractor will be responsible for coordinating and working with third party software and tools to help them find a resolution that can be integrated into WaterTAP.		
Content Management/ Quality Assurance	Ensure converted data meets quality expectations set in the specifications.	Five (5) or fewer tickets verified to be a unique data quality/ completeness issue in the first six (6) months from the go-live date.	\$500 per ticket over five (5), not to exceed \$120,000.
Contract Management/ Key Staff	The Contractor shall provide key staff pursuant to the staffing requirements contained in this Agreement.	In cases where the State is not satisfied with the performance of a Contractor Key Staff person, the Contractor will provide an alternative candidate within twenty (20) calendar days and work iteratively with the State until the State is satisfied with Key Staff's performance.	\$2,500 per State business day, or portion thereof, for each calendar day over twenty (20) that a new candidate has not been provided following a State request for Key Staff change.
Disaster	In the event of a Disaster or an Unplanned Interruption,	Contractor achieves	\$1,200 per hour or

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
Recovery/ Recovery Time Objective	the Contractor shall restore and synchronize with Salesforce all production data, such that no history is lost within two (2) hours of the start of the Disaster or Unplanned Interruption. The Recovery Time Objective (RTO) shall be calculated from the start of a disaster or unplanned interruption until full system restoration. Disaster shall mean a riot, insurrection, civil unrest, terrorist attack, natural disaster (e.g., earthquake, fire, flood, hurricane), or similar event that causes the System to be not Available. Unplanned Interruption means any interruption to WaterTAP outside the State-approved maintenance period. Please note that this SLA comes into effect when WaterTAP is in production.	the SLA.	a portion thereof that the Contractor's performance exceeds the 2 hour limit.
Disaster Recovery/ Recovery Point Objective	In the event of a Disaster or an Unplanned Interruption, the Contractor shall restore and synchronize with Salesforce all production data, such that no history is lost within two (2) hours of the start of the Disaster or	Contractor achieves the SLA.	\$1,200 per hour or a portion thereof that the Contractor's performance falls below the minimum SLA.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	Unplanned Interruption. The Recovery Point Objective (RPO) shall be calculated as the time between the start of the Disaster or Unplanned Interruption and the most recent preceding data backup. Disaster shall mean a riot, insurrection, civil unrest, terrorist attack, natural disaster (e.g., earthquake, fire, flood, hurricane), or similar event that causes WaterTAP to be not Available. Unplanned Interruption means any interruption to WaterTAP outside the State-approved maintenance period. Please note that this SLA comes into effect when WaterTAP is in production.		
General Performance (Customer Satisfaction)/ Customer Satisfaction Survey: Usability	Customer (WaterTAP users) satisfaction surveys developed by the State in collaboration with Contractor staff and to be mutually agreed upon by both parties, provide insight into the usability of WaterTAP.	90% of respondents rate it 7 out of 10.	\$1,000 per response below the 90% threshold.
General Performance (Customer Satisfaction)/ Customer Satisfaction Survey:	The Contractor is responsive to Water Board staff and data partner feedback and concerns collected via	90% of respondents rate it 7 out of 10.	\$250 per customer satisfaction survey with substantive feedback or

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
Internal	surveys. Any enhancements that are outside the scope of work and associated requirements will only be addressed if mutually approved through the State Water Board change process; otherwise, responding to enhancements outside the scope of work will not be considered as a measurable SLA event.		suggestions that have not been properly addressed by the Contractor.
General Performance (Customer Satisfaction)/ Speed to Answer	Elapsed time to answer call/ chat. These services will be provided from 7 AM to 5 PM, Monday–Friday, on all days that are not recognized as State holidays.	≥ 85.0% within 45 seconds.	\$7,500 per month that the Contractor's performance falls below the minimum SLA, not to exceed \$30,000 annually.
Tier 2 Technical / Application Support (Call and Email Responsiveness)	The percentage of calls and emails received, including tickets, on a monthly basis was unanswered.	The Contractor's technical support staff shall respond to a minimum of 99% of the Level 2 calls and emails received, including tickets.	For each month the Contractor's performance falls below the Performance Standard set forth in this SLA, the Contractor's invoice payment amount shall be reduced by the following:

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
			\$5,000 for unanswered call rates between 1% and 25% per month. \$10,000 for an unanswered call rate between 25% and 50% per month; \$20,000 for an unanswered call rate greater than 50% per month.
Tier 2 Technical / Application Support (Call Hold Time)	Call hold time for all calls in a given month of one (1) minute or more.	The Contractor's technical support staff shall maintain an average call hold time of less than one (1) minute for all calls in a given month.	\$5,000 for call hold times exceeding one (1) minute per month against total call hold average.
Tier 2 Technical / Application Support (Knowledge Provision)	Response time for questions or issues is greater than 48 hours.	The Contractor's technical support time between identification of the question or issue and the response with a new or previously identified knowledge article to resolve the issue shall be no greater than two (2)	\$500 per question requiring more than two (2) days (48 hours) to answer.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
		days (48 hours).	
Tier 2 Technical / Application Support (Ticket Resolution)	Percentage of response times greater than the following: For Severity Level 1 incidents, within two (2) hours of ticket receipt. For Severity Level 2 incidents, within three (3) hours of ticket receipt. For Severity Level 3 incidents, within four (4) hours of ticket receipt. For Severity Level 4 incidents, within 48 hours of ticket receipt. Level 3 and 4 services will be provided from 7 AM to 5 PM, Monday–Friday, on all days that are not recognized as State holidays. Please note that this SLA comes into effect when WaterTAP is in production.	The Contractor's technical support response time to respond via email or call providing resolution steps to ninety percent (90%) of tickets escalated to the Contractor's technical support must occur no later than the following: For Severity Level 1 incidents, within two (2) hours of ticket receipt. For Severity Level 2 incidents, within three (3) hours of ticket receipt. For Severity Level 3 incidents, within four (4) hours of ticket receipt. For Severity Level 4 incidents, within 48 hours of ticket receipt.	\$500 per ticket for a given month when response times exceed the time allowed to answer for 10% or more of tickets received in that month.
Security Services/ Severity 1*	Percentage of Severity 1 security incidents responded	At least 95.0% of Severity 1 security	\$2,000 per incident per

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
Incident Response	to within 15 minutes of identification of any suspected security incident (including Water Board's notification).	incidents responded to within 15 minutes.	month.
Security Services/ Severity 1* Incident Containment	Percentage of Severity 1 security incidents contained within identified time from the mitigation and/or corrective actions plans provided to the Water Board's Privacy and Information Security Offices or designee.	At least 95.0% of Severity 1 security incidents contained within two (2) hours of notifying the State of any potential or actual severity incident (containment plan publication) and meeting the mutually agreed-upon containment timeframe in the mitigation and/or corrective action plans (contained).	\$4,000 per incident per month
Security Services/ Severity 2** Incident Containment	Percentage of Severity 2 security incidents contained within identified time from the mitigation and/or corrective actions plans provided to the Water Board's Privacy and Information Security Offices or designee.	At least 95.0% of Severity 2 security incidents contained within four (4) hours (containment plan publication) & eight (8) hours (contained).	\$2,000 per incident per month.
WaterTAP Security SLA/ Data Breach SLA	The Contractor shall report a Data Breach to the State Project Director per the requirements of the M&O	Expected Service Level Agreement: 100%	\$20,000 per incident per month.

SLA Category/ SLA Title	Performance Description (SLA Performance Standard)	Performance Target (Expected SLA)	Liquidated Damages
	Plan within one (1) hour of the Breach and provide a full detailed report to the State Project Director within four (4) hours of the Breach. The State and the Contractor shall jointly determine what constitutes a Data Breach. The agreed-upon criteria and format of reports shall be documented with the WaterTAP Security Management Plan.	The reporting time of the breach shall be measured from the time of the identification by either party of the breach until the delivery of the full detailed report has been delivered and confirmed as received by the State Project Director.	

*Severity 1 is defined as a vulnerability which, if exploited, would allow malicious code to execute, potentially without a user being aware.

**Severity 2 is defined as a vulnerability which, if exploited, would compromise data security, potentially allowing access to confidential data, or could compromise processing resources.

Table 12-2: Service Level Agreements (SLA) and Liquidated Damages for Defect and Incident Response

The following Impact and Urgency table describes the classification and definition of WaterTAP SLA Level 1, Level 2, Level 3, and Level 4.

Urgency	Impact			
	State-Wide	Specific Location	Multiple Users	Single User
A full outage of multiple services or all services and/or noncompliance with regulations.	Level 1	Level 1	Level 2	Level 3
An issue completely affecting a service, no workaround	Level 1	Level 2	Level 2	Level 3

available.				
An issue affecting a service; workaround is available.	Level 2	Level 3	Level 3	Level 3
An issue that has no impact to the availability of the affected service; redundancy is available.	Level 3	Level 4	Level 4	Level 4

13. LIQUIDATED DAMAGES

Liquidated damages are intended to encourage timely delivery of critical project milestones and the provision of reliable and responsive services from the Contractor. The purpose of the liquidated damages provisions is to ensure adherence to the requirements of the Agreement and to set an amount in advance of a breach to compensate the State for damages that are impractical or extremely difficult to estimate but which would be sustained by the State in the event the Contractor fails to perform services as agreed. The liquidated damages are intended to be a reasonable estimate of the damages and costs the State would sustain as a result of a breach. These amounts are not intended to be punitive. The State and Contractor, therefore, agree that in the event the Contractor fails to perform certain agreed-upon services in a timely manner, the State may assess the Contractor for such amounts as liquidated damages, and not a penalty.

The liquidated damages that may be assessed by the State as a result of the Contractor's delay or failure to perform its obligations in accordance with the terms of this Agreement are as described in Table 13-2 and Table 17-1. Contractor shall pay liquidated damages as set forth in the Agreement.

The State shall calculate liquidated damages owed to the State on a monthly basis and shall subtract liquidated damages from the payments made by the State to the Contractor.

The parties agree that any delay or failure by the Contractor to timely perform its obligations under this Agreement will interfere with the proper and timely implementation of the WaterTAP Project for the State Water Board, to loss and damage to the State. The State will incur costs to maintain the functions that would otherwise have been performed by the Contractor. Delays caused by the state will not result in damages charged to the Contractor.

Liquidated Damages Resolution

If liquidated damage is imposed, the Contractor shall correct the conditions for which the liquidated damage was imposed, make all necessary remediations, and provide a written certification of correction to the State Contract Manager that includes sufficient documentation allowing the State to verify the

correction. The State shall reasonably determine, within its sole discretion, whether the documentation provided is accurate and sufficient to verify corrections.

All Contractor corrections are subject to testing or other verification with the approval of the State Contract Manager.

Liquidated damages will cease when the Contractor corrects the conditions for which the liquidated damage was imposed, makes all necessary remediations, and has provided the certification required under subsection III, above, to allow the State to verify the same. Should testing or verification show that the correction has actually not been made, liquidated damages shall continue (including retroactively for the period between the submission of the correction and that finding) until the foregoing requirements are met.

Other Remedies

Nothing in this section shall be construed as relieving the Contractor from performing any other Agreement duty or being subject to any other provisions of this Agreement not listed in these liquidated damages sections, nor is the State's right to enforce any other Agreement duty herein or right to seek other remedies for failure to perform any other section of this Agreement diminished or waived.

13.1. LIQUIDATE DAMAGES CAP

The Contractor shall meet the SLAs as defined in SLA and liquidated damages table(s). SLAs and liquidated damages will be assessed on a monthly basis.

If imposed, Liquidated Damages will not exceed ten percent (10%) of the total Agreement award price for system delivery.

13.2. CALCULATION OF LIQUIDATED DAMAGES

Liquidated Damages shall be calculated in accordance with [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

14. MAINTENANCE AND OPERATIONS (M&O)

The Contractor shall provide WaterTAP's Maintenance and Operations (M&O) support upon receiving Final System Acceptance from SWRCB at the end of the Stabilization period. M&O will include the following elements:

MAINTENANCE AND OPERATIONS TASKS

1. The Contractor shall develop the Maintenance and Operations (M&O) Plan that documents the

resources, services, processes, and procedures necessary to operate, administer and maintain WaterTAP at or above the performance requirements defined in the contract. The M&O plan must be finalized before the M&O begins. The M&O Plan shall identify both State and Contractor roles and responsibilities.

2. The Contractor shall develop a monthly M&O Report and shall describe how M&O objectives are met as set in the M&O Plan. This report shall include SLA metrics reporting (such as WaterTAP availability) and problem resolution compliance/variance reporting.
3. The Contractor shall develop the Technology Recovery Plan (TRP) based on and compliant with SIMM Section 5325-A and shall clearly identify all State responsibilities for technology recovery activities.
4. The Contractor shall develop the System Performance and Capacity Management Plan to guide the development and operation of WaterTAP from a performance and capacity management perspective. The plan shall describe how WaterTAP can meet performance requirements and meet the appropriate Service Level and produce the performance reports to show compliance to the SLAs.

M&O Support

The Contractor is responsible for providing M&O support for the configurations, customizations, and interfaces required to meet the State's requirements. The Contractor will work expeditiously to identify the cause of deficiencies and the necessary remediation, including, but not limited to, working with SWRCB and other state agencies. Should the Contractor need to change any part of WaterTAP after Full System Acceptance, the Contractor must obtain State approval prior to any change being made.

The Contractor's M&O team will work through issues based on resource capacity and the severity of the issues. Additional functionality or minor enhancements may be added over time by SWRCB or the Contractor, as determined by a predefined change management process, or as part of modifications to the scope of M&O work for the Contractor that are made as priorities for new functionality change over time.

Examples of M&O Support duties:

- Resolving software or hardware issues that impact application access.
- Troubleshooting complex server problems.
- Managing network connectivity issues beyond basic user level.
- Assisting with WaterTAP updates and upgrades.
- Providing support for specialized software or hardware.
- Assisting with permissions-level issues.
- Escalating incidents that cannot be resolved to the next level of support in line with SLAs.

The Contractor shall perform the Maintenance and Operations (M&O) activities for a minimum of one (1)

year within the base contract term following the full system acceptance, and up to two (2) one-year (1-year) extensions if SWRCB exercises its optional extensions for M&O services. The M&O period includes maintaining all configurations, customizations, and interfaces to WaterTAP while also engaging the State in knowledge transfer activities to facilitate the State maintaining the entirety of WaterTAP without the Contractor's assistance. SWRCB will maintain licensing throughout M&O. Roles and responsibilities of the Contractor and the State will continue during the M&O period. Refer to [SECTION 7. CONTRACTOR'S ROLES AND RESPONSIBILITIES](#) and [SECTION 8. STATE'S ROLES AND RESPONSIBILITIES](#). The exception to the roles and responsibilities would be the number of key staff. The Contractor shall propose the recommended quantity and key staff roles during the M&O period, which must be approved by the SWRCB Project Manager.

The Contractor shall perform the necessary M&O efforts to maintain the contractually required SLAs. The SLAs include the following objectives:

1. Maximize the resolution of deficiencies.
2. Minimize the time needed to respond to deficiencies.

The scope of activities includes the following:

1. Regular M&O and WaterTAP upkeep, such as monitoring WaterTAP, performing backups, ensuring the availability and security of WaterTAP, and upholding the requirements outlined in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).
2. Updates to transition out documents as defined in Deliverable Group #12 in [SECTION 11. CONTRACTOR DELIVERABLES](#).
3. Updates to project closeout documents as defined in Deliverable Group #12 in [SECTION 11. CONTRACTOR DELIVERABLES](#).
4. Incident management related to WaterTAP in the SWRCB Production Environment. All incidents, resulting communications, and tools shall adhere to [SECTION 18. WARRANTY](#).
5. System patches, including emergency security patches.
6. Pre-approved maintenance windows, which do not have any effect on the SLAs. These windows would be change approvals submitted to the SWRCB Project Management Team.
7. Integrating new systems shall adhere to the same processes as defined in [SECTION 10.4.7. PRODUCT STABILIZATION AND FINAL SYSTEM ACCEPTANCE](#).
8. WaterTAP upgrades should not affect system performance with thirty (30) calendar days of prior notice, and are tested in all applicable SWRCB environments. These upgrades should also include installation notes and be consistent with WaterTAP running optimally. WaterTAP should be kept within six (6) months of the last SaaS version released unless otherwise agreed upon by SWRCB, should follow version control best practices, and have SWRCB Project Manager oversight.
9. WaterTAP changes related to calendar year changes (modified drop-down choice lists, required

UI changes, and data file reporting templates to accommodate a new year).

- a. Change requests created as part of incident/defect resolution to address gaps in WaterTAP functionality, configuration, or environment.
10. Minor enhancements are part of the regular M&O upkeep; minor enhancements are less than forty (<40) hours (e.g. branding changes).
 11. Monthly operations reporting to SWRCB, including the following reports, at a minimum:
 - a. Capacity and Performance Reports that include, at a minimum:
 - i. Reporting on past and current performance and capacity trends.
 - ii. Future projections of capacity needs.
 - b. Maintenance Activities Reports include, at a minimum:
 - i. The maintenance activities performed by the Contractor to maintain their operational environment for the prior month.
 - ii. Maintenance plans for the upcoming month.
 - iii. Unplanned system downtime outside approved maintenance windows.
 - c. System Process Reports include, at a minimum:
 - i. Batch processes.
 - ii. Interfaces and real-time connectivity to other systems.
 - d. Operations Defects Report includes, at a minimum:
 - i. Reporting on defects found during operations by priority, status and aging.
 - e. Monthly Incident Report
 - i. All WaterTAP outages and security violations are in accordance with SLA standards [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

After full system acceptance, Tier 1 and Tier 2 help desk requests or stakeholder feedback may identify post-production defects or a need for additional or revised documentation, such as training materials.

Changes and Enhancements

Business-proposed system refinements based on requirements changes or user feedback, enhancements, improvements, and/or statutory and regulatory changes that may necessitate changes to WaterTAP will be handled as unanticipated tasks. Refer to [SECTION 15. UNANTICIPATED TASKS](#).

Changes and enhancements during M&O will be covered under separate and distinct WOAs in EXHIBIT B: BUDGET DETAIL AND PAYMENT PROVISIONS. Specific tasks and any associated work products will be identified in Maintenance and Operations work authorizations. During M&O, the Contractor shall maintain adequate staffing levels, as approved by the State, to meet the contract requirements and to maintain the SLAs.

Minor enhancements within the general scope to keep WaterTAP in compliance with SLAs are considered included. However, if a proposed change is estimated to take over forty (40) hours to implement, then a WOA is required. SWRCB will respond to WOA requests in three (3) business days.

WaterTAP changes such as defects will be handled as part of M&O. The Contractor shall follow the development, testing, and acceptance processes utilized throughout WaterTAP implementation during the M&O period, as required.

See [SECTION 15. UNANTICIPATED TASKS](#) and EXHIBIT I: WORK ORDER AUTHORIZATION FORM for more information.

14.1. DISASTER RECOVERY DURING M&O

Disaster Recovery focuses on how business operations are restored to normal after events that interrupt business operations. The Contractor is responsible for operating and maintaining WaterTAP and data in a cloud-hosted environment. This includes the responsibility to ensure the availability of WaterTAP to be accessible and usable, the proper backup of data, and the ability to recover from unplanned disruption.

Technology Recovery Plan

The Contractor shall provide a Technology Recovery Plan and procedures that address all essential recovery program elements outlined in SAM sections 5325 through 5325.6, available at <https://www.dgs.ca.gov/resources/sam/toc/5300>, and complies with the provisions identified in [SECTION 9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES](#). In the event of a disaster, as defined in the Technology Recovery Plan, the Contractor shall notify SWRCB as soon as practical but not later than twenty-four (24) hours after declaring an interruption in business operations and must provide a root cause analysis report to SWRCB within twenty (20) business days, or as soon as practical.

Inclusive components of the Technology Recovery Plan are:

- Perform a business impact assessment (BIA) to gather information on the relative criticality of its business functions, its recovery point objectives (RPO), and recovery time objectives (RTO), which will constitute the foundation of contingency planning and business continuity in SWRCB.
- Develop a Technology Recovery Plan (TRP) in support of the SWRCB Business Continuity Plan. The business needs to protect critical information assets to maintain availability following an interruption or disaster.
- Maintain, update, and provide annual documentation of the BIA and TRP to SWRCB ISO.
- Perform regularly scheduled backups of WaterTAP and user-level information and include them in the TRP.
- Provide an alternative storage and processing site. Include the necessary agreements to permit

the storage and recovery of backup information.

Table 14-1: WaterTAP Disaster Recovery Metrics

Disaster Recovery Measure	Metric	Explanation
Recovery Point Objective (RPO)	72 hours	The point in time at which data can be recovered is when service is restored after an interruption. The Recovery Point Objective is expressed as a length of time between the interruption and the most proximate backup of Data immediately preceding the interruption.
Recovery Time Objective (RTO)	72 hours	The duration of time within which information technology services, systems, applications, and functions must be recovered following an unplanned interruption.

Notwithstanding the Force Majeure provisions contained herein, the Contractor shall be responsible for providing disaster recovery for WaterTAP if the Contractor experiences or suffers a disaster. The Contractor shall take all necessary steps to ensure that SWRCB will not be denied access to WaterTAP for more than seventy-two (72) hours in the event there is a disaster impacting any Contractor's infrastructure necessary to provide WaterTAP. The Contractor shall maintain the capability to resume provision of WaterTAP from an alternative location and via an alternative telecommunications route in the event of a disaster that renders the Contractor's primary infrastructure unusable or unavailable. Refer to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) for Disaster Recovery and Business Continuity.

The Contractor shall request approval from SWRCB when a subcontractor or additional staff is required to ensure all security measures are maintained, utilizing the process in [SECTION 10.2.4. KEY STAFF CHANGES](#).

The Contractor's Technology Recovery Plan must account for WaterTAP availability constraints.

If the Contractor fails to restore the data and SaaS/PaaS/IaaS environment within the Recovery Point Objective (RPO) and Recovery Time Objective (RTO), respectively, SWRCB may declare the Contractor to be in default of this Contract.

The Contractor must meet the requirements of Disaster Recovery/Technology Recovery as part of the State's Contingency Plan Policy SAM 5325 and SWRCB's Information Security Policy OPM-41 Technology Recovery Policy.

The requirements for Availability, Recoverability, Fault Tolerance, and Disaster Recovery are included in EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS.

Disaster Recovery During Production Support and M&O

During the M&O period, the Contractor, in collaboration with SWRCB, shall:

- Review the Technology Recovery Plan annually or as needed to ensure compliance with current state requirements.
- Execute a semi-annual system recovery simulation/test and provide a report to SWRCB regarding the outcome. If the outcome of the test is not compliant with the above provisions, the Contractor shall submit a remediation plan to SWRCB to remediate the non-compliance.

The Contractor shall notify SWRCB as soon as practical when a disruption in service is detected or appears imminent. The Contractor shall notify SWRCB no later than the timeframe established within [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) after a disruption has been detected, shall provide recovery status reports to SWRCB as defined in the Technology Recovery Plan. The Contractor shall provide a detailed incident report regarding the disruption and the recovery event no later than five (5) business days after reconstitution.

Refer to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) and [SECTION 17. ESCALATION PROCESS](#) for additional incident details. Refer to EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS for additional incident details.

Business Continuity Activities

The Contractor shall provide WaterTAP architecture that provides fail-over and solution recovery to minimize disruption to WaterTAP-related business operations. The Contractor shall also support business continuity activities and SWRCB's action plan to ensure SWRCB business operations continue when such events occur.

Recovery Activation

The Contractor shall obtain written approval from one (1) of the following SWRCB representatives before launching WaterTAP on a backup/alternative site/service:

- WaterTAP Project Manager
- WaterTAP Enterprise Architect
- SWRCB Chief Information Officer or designee

Recovery Time

Upon SWRCB's activation of the Technology Recovery Plan, the Contractor shall restore system operations within the timeframe outlined in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) or as agreed upon with the State.

System Backups

SWRCB requires all data to reside within the continental United States. System backups shall include applications, application data, and attachment files.

Upon SWRCB's request, the Contractor shall make available a complete system backup in the format determined by the State.

The Contractor shall be responsible for configuring backup processes and performing maintenance on WaterTAP and WaterTAP backups. The Contractor shall be responsible for configuring, running, and performing maintenance on any associated sites.

SWRCB will continue to automatically back up any legacy systems until the cutover. SWRCB anticipates that WaterTAP provider will handle WaterTAP backups.

ESCROW SOURCE CODE

See [SECTION 9.3. ESCROW SOURCE CODE](#).

15. UNANTICIPATED TASKS

During the Contract period, legislative and/or program changes may necessitate changes to WaterTAP and/or software. These changes may result in unanticipated tasks and be structured based on the Contractor's hourly labor rates identified in the cost worksheet. These rates will be used to support change requests for changes and enhancements to the Agreement.

Unanticipated tasks are additional work performed within the scope of the Contract but were not identified in the State's solicitation document or SOW. Both the State and the Contractor must agree upon the work to be performed which will result in unanticipated costs. No work can be performed in advance of the State's approval of unanticipated task work; the Contractor will use the same hourly labor rates per staff classification as identified in the Base Contract Term and pricing portion of the cost worksheet.

The State limits the budget for unanticipated tasks not to exceed ten percent (10%) of the sum of the base Contract for services identified in the EXHIBIT E: COST WORKBOOK.

If additional work must be done, the procedures outlined in this section will be followed.

Unanticipated tasks include, but are not limited to, corrections to errors made by State staff. For each

unanticipated task, the Contractor shall prepare a WOA Form in EXHIBIT I: WORK ORDER AUTHORIZATION FORM.

It is understood and agreed by both parties to this Agreement that all the terms and conditions of this Agreement shall remain in force with the inclusion of any such WOA. Such WOA shall in no way constitute an Agreement other than as provided pursuant to this Agreement nor in any way amend or supersede any of the other provisions of this Agreement.

Each WOA shall consist of a detailed statement of the scope, purpose, objective, and/or goals to be undertaken by the Contractor, including:

1. The job classification(s), or approximate skill level(s), and name of the staff to be assigned as available by the Contractor.
2. An identification of all significant material to be developed by the Contractor and delivered to the State.
3. An identification of State Responsibilities.
4. Schedule of delivery
5. Acceptance criteria for the work to be done.
6. The Contractor's estimated work hours and cost or each staff role required to accomplish the unanticipated task..
7. The Contractor's billing rates as identified in EXHIBIT E: COST WORKBOOK and the Contractor's estimated total cost on the WOA.

All must be in writing and signed by the Contractor and State prior to beginning work. The Contractor shall not begin work on a WOA until the authorized State Contract Manager or State Project Manager has approved the WOA.

The State has the right to require the Contractor to stop or suspend work on any WOA with three (3) State business days' notification.

If, in the performance of the work, the Contractor determines that a WOA to be performed under this Contract cannot be accomplished within estimated work hours, the Contractor shall immediately notify the State in writing of the Contractor's estimate of additional work hours and cost which will be required to complete the WOA in full. Upon receipt of the notification, the State will:

1. Authorize the Contractor to expend the estimated additional work hours or service in excess of the original estimate necessary to accomplish the work.
2. Terminate the WOA; or
3. Alter the scope of the WOA in order to define tasks that can be accomplished within the remaining estimated work hours and cost.
4. Notify the Contractor in writing of its decision within seven (7) State business days after receipt of

the notification.

Upon successful completion of the work to be performed for an approved WOA, the State will provide a WOA acceptance form in EXHIBIT I: WORK ORDER AUTHORIZATION FORM indicating the acceptance criteria of the WOA have been met and signed to indicate approval. The Contractor must receive the acceptance document before invoicing the State.

16. BACKUP AND RECOVERY

The Contractor shall be responsible for data backup and recovery services for cloud, on-site, and off-site data storage.

The Contractor shall be responsible for providing a Technology Recovery Plan for the application and data to SWRCB within the first thirty (30) business days after the SaaS Licensing and Maintenance Services become effective. See [SECTION 14.1. DISASTER RECOVERY DURING M&O](#) for Technology Recovery Plan instructions. The Technology Recovery Plan must be tested by the Contractor at least annually according to the schedule described in the Plan.

17. ESCALATION PROCESS

The parties acknowledge and agree that certain technical and/or project-related issues may arise, and that such matters shall be brought to the State's attention.

Problems or issues shall normally be reported and resolved in regular status reports or meetings. However, there may be instances where the severity of the problem justifies escalated reporting. To this extent, the State Project Manager shall determine the level of severity, and notify the appropriate State staff, as set forth below. The State staff are notified, and the time period taken to report the problem or issue shall be at a level commensurate with the severity of the problem or issue. The details of problem/issue identification, escalation and State personnel in the escalation path will be addressed in the Issue and Action Item Management Plan.

Should the Contractor Project Manager and the State Water Board Project Manager not agree on a resolution to any issue, the Contractor and the State agree to raise the issue with the Contractor Engagement Director and the WaterTAP Project Director(s). If the issue is not resolved, the second point of escalation is the State Water Board's Data Executive Steering Committee, with the final escalation level is the State Water Board's Project Sponsor and the Contractor's leadership counterpart. The State Water Board's Project Sponsor will decide on a resolution within ten (10) State business days of being made aware of the issue. The State may extend this timeline at its sole discretion. The State Water Board's Project Sponsors will use whatever resources it deems necessary to seek a rapid and just resolution. If a resolution cannot be reached at the State Water Board's Project Sponsor level within the timeframe prescribed above, either party may assert its other rights and remedies as provided by the Agreement.

The parties shall use their best, good-faith efforts to cooperatively resolve conflicts and problems informally that arise in connection with this Agreement, pursuant to this Section and as provided in the General Provisions - Information Technology (DGS PD-402 IT, Section 17: Dispute Resolutions). Both parties shall continue without delay to carry out all their respective responsibilities under this Agreement while attempting to resolve the conflict under this Section. When a conflict arises between the State and the Contractor, it cannot be resolved informally:

- a. The Contractor Project Manager and State Water Board representatives shall each provide a written notice to the other party of the conflict. The State Water Board's representatives shall include the Project Manager, Project Director, Contract Manager, Technical Lead, Business Lead, and CDT Project Approval and Oversight representative.
- b. The notice shall specify the issues in conflict and the position of the party submitting the notice.
- c. The Contractor Project Manager and State Water Board representatives (identified in section a.) shall use their best, good-faith efforts to resolve the conflict within five (5) State business days of submission by either party to the other of such notice of the conflict. If the Contractor Project Manager and State Water Board's representatives are unable to resolve the conflict within five (5) days:
 - i. Either party may escalate the conflict for resolution to the State Water Board's Data Executive Steering Committee and the Contractor's leadership counterpart.
 - ii. Such an escalation must specify, in writing, the issues in conflict, the escalating party's position and understanding of the relative positions of the other parties. All parties must be copied on all escalation correspondence.
- d. The State Water Board's Data Executive Steering Committee and the Contractor's leadership counterpart shall use their best, good-faith efforts to resolve the conflict within ten (10) State business days of an escalation to resolve the conflict.
- e. If the State Water Board's Data Executive Steering Committee and the Contractor leadership counterpart are unable to resolve the conflict within ten (10) State business days,
 - i. Either party may escalate the conflict for resolution to the State Water Board's Project Sponsor and the Contractor's leadership counterpart.
 - ii. Such an escalation must specify, in writing, the issues in conflict, the escalating party's position and understanding of the relative positions of the other parties. All parties must be copied on all escalation correspondence.
- f. If the State Water Board's Project Sponsor and the Contractor leadership counterpart are unable to resolve the conflict within ten (10) State business days, the parties will follow instructions within the General Provisions – Information Technology (DGS PD-402 IT, Section 17: Dispute Resolutions) within five (5) State business days thereafter.

17.1. CONFLICT RESOLUTION PROCESS

All conflicts, including disagreements concerning State acceptance of deliverables, will follow a conflict resolution process. SWRCB and the Contractor shall use their best good-faith efforts to cooperatively resolve conflicts and problems that arise in connection with this Contract. SWRCB shall be the sole judge of the acceptability of all work performed, and all work products produced by the Contractor. Should the work performed, or products produced by the Contractor fail to meet the contract requirements, the conflict resolution process will be employed, except as superseded by other binding processes.

When a conflict arises between SWRCB and Contractor, both parties shall attempt to resolve the conflict pursuant to this section if they agree in writing as defined in [SECTION 6. CONTRACT REPRESENTATIVES](#) that use of this process shall be appropriate and likely to resolve the conflict. Both parties shall continue without delay to carry out all their respective responsibilities under this contract while attempting to resolve the conflict under this section. The escalation level of SWRCB personnel escalation includes, but are not limited to, the following:

1. First level, Contract Project Manager and the State Water Board Project Manager
2. Second level, Contractor Engagement Director and the WaterTAP Project Directors(s)
3. Third level, the State Water Board's Executive Sponsors/Steering Committee and the Contractor's leadership counterpart.

The Contractor will advise the State Contract Manager of any intended escalation. If the Contractor is not entirely satisfied that the State is exercising its best efforts to resolve any problem or issue in an appropriate period of time, then the Contractor must escalate the problem or issue to the next appropriate level.

17.2. CORRECTIVE ACTION

SWRCB will be the sole judge of the acceptability of all work performed and all work products produced by the Contractor as a result of this SOW. Should the work performed, or products produced by the Contractor fail to meet the SWRCB's minimum conditions, requirements, specifications, or guidelines, the following process will be employed, except as superseded by other binding processes:

1. SWRCB will notify the Contractor in writing within ten (10) business days after the discovery of any acceptance problems by identifying the specific inadequacies and/or failures in the services performed and/or the products produced by the Contractor.
2. The Contractor will, within five (5) business days after the initial problem notification, respond to the SWRCB by submitting a detailed explanation describing precisely how the identified services and/or products adhere to and satisfy all applicable requirements, and/or a proposed corrective action plan to address the specific inadequacies and/or failures in the identified services and/or products.

3. SWRCB will, within five (5) business days after the receipt of the Contractor's detailed explanation and/or proposed corrective action plan, notify the Contractor in writing whether it accepts or rejects the explanation and/or plan. If SWRCB rejects the explanation and/or plan, the Contractor will submit a revised corrective action plan within three (3) business days of notification of rejection.
4. SWRCB will, within three (3) business days of receipt of the revised corrective action plan, notify the Contractor in writing whether it accepts or rejects the revised corrective action plan proposed by the Contractor.
5. If a Contractor project component or deliverable is rejected three (3) times by the SWRCB, thus both parties are unsuccessful at attaining a resolution, the Cure Notice process shall follow and be executed.

Any work that needs correction shall be at the Contractor's sole cost and expense.

17.3. CURE NOTICE

SWRCB will issue a Cure Notice to inform the Contractor in the event the Contractor fails to meet a project work product, component, requirement, or deliverables. Upon issuance, the Cure Notice will specify how much time the Contractor has wherein the Contractor must remedy the condition. If the condition is not corrected within the period specified, the Cure Notice states that the Contractor may face termination of its Contract by default as stated in Information Technology — General Provisions Cloud-Computer Services, DGS PD 402-ITGP Cloud (2/20/2025), Section 16.3, Termination for Default.

Triggers for a Cure Notice

A cure notice may be triggered by any of the following conditions, or other conditions that arise in the performance of the Contract:

1. The Contractor continues to miss agreed-upon deadlines.
2. Quantifiable evidence is lacking to show that work is being accomplished.
3. The quality of tasks does not meet SWRCB's standards.
4. The Contractor is non-responsive to SWRCB's requests, or
5. The Contractor does not replace key personnel, as outlined in [SECTION 10.2.4. KEY STAFF CHANGES](#).

Any work that needs correction shall be at the Contractor's sole cost and expense.

18. WARRANTY

The Warranty Period shall commence upon final system acceptance of the completed and integrated system and shall run concurrently with the first M&O year which is included in the base contract term. The Warranty Period shall last twelve (12) months from the date of final acceptance. As an additional

provision, the Contractor warrants that the configurations, customizations, and integrations the Contractor performed/developed are free from material defects and will function in accordance with WaterTAP specifications and agreed-upon requirements. Additionally, the Contractor warrants that the overall system performance, including the integrations with third-party software, meets the contractual requirements.

The Contractor does not warrant and will have no responsibility for a claim to the extent that it arises solely from the product provided to the State by a State-engaged software provider. If an issue is determined to be partially related to such third-party software, the Contractor shall work in good faith with the State and the software provider to facilitate resolution.

Unless otherwise agreed, deficiency resolution will be performed at the Contractor's own expense for all deficiencies as specified above. If the Contractor fails to resolve defects within the Warranty Period, the Warranty Period shall be extended for the affected component(s) until a satisfactory resolution is achieved.

RESPONSIVENESS WARRANTY

The Contractor warrants SaaS performance to adhere to the mutually agreed performance identified in the accepted test plan deliverable(s) over the term of this Contract and optional Contract years. The Contractor shall determine the root cause of performance degradation and perform capacity remediation to improve performance in alignment with the accepted test plan load testing exit criteria. The Contractor may present data, processes, or usage outside the accepted or reasonably expected system design to SWRCB for resolution through cessation of said practices or proposed additional services. The Contractor is responsible for contacting the software or hosting support company(ies), as necessary.

Where performance cannot be remedied through additional capacity (e.g., network, storage, or processing), the Contractor must modify the architecture, as needed, to meet performance objectives identified in the test plan deliverable(s) load testing existing criteria.

SYSTEM SUPPORT WARRANTY

The Warranty Period shall commence upon final system acceptance of the completed and integrated system and shall run concurrently with the first M&O year which is included in the base contract term. The Warranty Period is twelve (12) months. As an additional provision, the Contractor warrants that the configurations, customizations, and integrations the Contractor performed/developed are free from material defects. Standardized contractual terms issued by the California Department of General (DGS) are found in [SECTION 9.7. INFORMATION TECHNOLOGY — GENERAL PROVISIONS CLOUD - COMPUTING SERVICES](#).

The Contractor does not warrant and will have no responsibility for a claim to the extent that it arises

solely from the product provided to the State by a State-engaged software provider. Unless otherwise agreed, deficiency resolution will be performed at the Contractor's expense for all deficiencies specified above.

USER SUPPORT WARRANTY

During the implementation and maintenance of the project, WaterTAP Project User Support is to be provided by the Contractor, including:

- Answering software or process questions
- Diagnosis and resolution of system or data errors

Incident Priorities

SWRCB will prioritize requests according to the priority levels outlined in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).

Table 18-1: WaterTAP Incident Request Priorities

Priority Level	Definitions	Service Level
1 - Critical	Mission-critical business processes(es) unable to function — The System is not functioning, and there is no workaround that is acceptable to SWRCB, thereby preventing an agency or user from performing a mission-critical business function(s).	The Contractor must respond within four (4) hours and must resolve the issue or incident within one (1) business day.
2 - High	Significant impact to mission-critical business process(es) — A major problem impedes the ability to perform mission-critical business function(s) due to major functionality not working. A temporary workaround that is acceptable to SWRCB is available.	The Contractor must respond within four (4) hours and must resolve the issue or incident within three (3) business days.
3 - Medium	Not able to accomplish all functions — Minor function(s) not working, causing non-critical work to back up.	The Contractor must respond within two (2) business days and must resolve the issue or incident within two

Priority Level	Definitions	Service Level
		(2) weeks.
4 - Low	Inconvenience—The system is causing a minor disruption in the way tasks are performed but does not stop workflow. It is able to accomplish all functions but not as efficiently as normal. This may include cosmetic issues, especially in constituent-facing applications.	The Contractor must respond within five (5) business days and resolve the issue or incident within four (4) weeks.

Support Level Review

The Contractor shall generate a report from the Contractor's service management tool based on Incident Priority Level, Opened Date, and Acknowledgment Date.

The Contractor shall report all incident events within the Monthly Status Report. Refer to [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#) and EXHIBIT D: DELIVERABLES AND MILESTONES TABLE.

The Contractor will meet with SWRCB, as needed, to review the reports, recognize areas of excellence, and identify areas of improvement. Consistent failure (defined as three or more months in a twelve-month period) to meet the support standards may be considered cause for the State to terminate the contract.

The Contractor or SaaS provided standard SaaS Licensing and Maintenance Services will begin upon successful completion of the first production release, the completion of all Implementation Services in this Contract, or Contract Termination, whichever occurs first.

19. INSURANCE REQUIREMENTS

General Provisions Applying to All Policies

1) Coverage Term – Coverage needs to be in force for the complete term of the Agreement. If insurance expires during the term of the Agreement, a new certificate and required endorsements must be received by the State at least thirty (30) days prior to the expiration of this insurance. Any new insurance must comply with the original Agreement terms.

2) Policy Cancellation or Termination and Notice of Non-Renewal – Contractor shall provide to the Water Board within five (5) business days following receipt by Contractor a copy of any cancellation or non-renewal of insurance required by this Agreement. In the event the Contractor fails to keep in effect at all times, the Water Boards may, in addition to any other remedies it may have, terminate this Agreement

upon the occurrence of such event, subject to the provisions of this Agreement.

3) Premiums, Assessments and Deductibles – The Contractor is responsible for any premiums, policy assessments, deductibles or self-insured retentions contained within their insurance program.

4) Primary Clause – Any required insurance contained in this Agreement shall be primary and not in excess or contributory to any other insurance carried by the Water Boards.

5) Insurance Carrier Required Rating – All insurance companies must carry an AM Best rating of at least “A–” with a financial category rating of no lower than VI. If the Contractor is self-insured for a portion or all of its insurance, review of financial information including a letter of credit may be required.

6) Endorsements – Any required endorsements requested by the Water Boards must be physically attached to all requested certificates of insurance and not substituted by referring to such coverage on the certificate of insurance.

7) Inadequate Insurance – Inadequate or lack of insurance does not negate the Contractor’s obligations under the Agreement.

8) Available Coverages/Limits – All coverage and limits available to the contractor shall also be available and applicable to the State.

9) Satisfying an SIR — All insurance required by this Agreement must allow the State to pay and/or act as the contractor’s agent in satisfying any self-insured retention (SIR). The choice to pay and/or act as the contractor’s agent in satisfying any SIR is at the State’s discretion.

10) Use of Subcontractors — In the case of a Contractor’s utilization of subcontractors to complete the contracted scope of work, the Contractor shall include all Subcontractors as insured under the Contractor’s insurance or supply evidence of the Subcontractor’s insurance to the Water Boards equal to policies, coverages, and limits required of the Contractor.

Insurance Coverage Requirements

The Contractor shall display evidence of the following on an Acord certificate of insurance evidencing the following coverage:

1) Commercial General Liability – The Contractor shall maintain general liability with limits not less than **\$1,000,000** per occurrence for bodily injury and property damage combined with a **\$2,000,000** annual policy aggregate. The policy shall include coverage for liabilities arising out of premises, operations, independent Contractors, products, completed operations, personal and advertising injury, and liability assumed under an insured Agreement. This insurance shall apply separately to each insured against whom a claim is made or suit is brought subject to the Contractor’s limit of liability. The policy shall be

endorsed to include, "The State of California, its officers, agents, employees, and servants as additional insured, but only insofar as the operations under this Agreement are concerned." This endorsement must be supplied under form acceptable to the Office of Risk and Insurance Management.

2) Automobile Liability – Contractor shall maintain motor vehicle liability with limits not less than \$1,000,000 combined single limit per accident. Such insurance shall cover liability arising out of a motor vehicle, including owned, hired, and non-owned motor vehicles. **The policy must name the State of California, its officers, agents, and employees as additional insured, but only with respect to work performed under the contract.** If the Contractor does not have any commercially owned vehicles used during the life of this Agreement, by signing this Agreement, the Contractor certifies that the Contractor and any employees, subcontractors or servants possess valid automobile coverage in accordance with California Vehicle Code Sections 16450 to 16457, inclusive. The State reserves the right to request proof at any time.

3) Worker's Compensation and Employer's Liability – The Contractor shall maintain statutory worker's compensation and employer's liability coverage for all its employees who will be engaged in the performance of the Agreement. Employer's liability limits of **\$1,000,000** are required. When work is performed on State-owned or controlled property, the policy shall contain a waiver of subrogation endorsement in favor of the State. This endorsement must be supplied under a form acceptable to the Office of Risk and Insurance Management.

4) Professional Liability – Contractor shall maintain appropriate coverage to the Contractors' profession and work hereunder, with limits not less than **\$5,000,000** per claim. Coverage shall be sufficiently broad to respond to the duties and obligations as are undertaken by the Contractor in this Agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information, extortion and network security.

Please provide the following if policies provide claims-made coverage:

- a. The Retroactive Date must be shown, and must be before the date of the Contract or the beginning of Contract work.
- b. Insurance must be maintained and evidence of insurance must be provided **for at least five (5) years after completion of the contract of work.**
- c. If coverage is canceled or non-renewed, and not replaced **with another claims-made policy form with a Retroactive Date prior to** the Contract effective date, the Contractor must purchase "extended reporting" coverage for a minimum of **five (5) years** after completion of work.

20. TECHNOLOGY REFRESH

Technology Refresh Timing

The State requires technology to be refreshed either before or after initial delivery, as specified in the contract. The timing of the technology refresh will be based on the evaluation of system performance, vendor recommendations, and evolving state needs. Any proposed refresh prior to initial delivery must be pre-approved by the state to ensure alignment with project timelines and objectives.

Cost Considerations

Technology refreshes shall be executed at the same or lower cost than the initially contracted price unless an increase is justified through additional functionality, performance improvements, or compliance updates. The Contractor must provide a detailed cost analysis for any proposed refresh that results in increased costs, which must be evaluated and approved by the state during the solicitation process.

Minimum Refresh Intervals

The State establishes the following minimum refresh intervals to ensure continued optimal performance of the deployed technology:

- Software updates: Every six (6) months
- Security patches and compliance updates:
 - As required by SWRCB Information Security Policies. The exact intervals will be determined in consultation with the contractor based on industry's best practices and state operational needs.

Cost Increases and Fixed Pricing

The Contractor must specify whether cost increases will be allowed for technology refreshes due to improved functionality. Any cost increases associated with enhanced functionality must be separately proposed, justified, and evaluated as part of the solicitation process. If cost increases are not explicitly approved, all technology refreshes must be executed within the original fixed pricing structure.

State Resources for Technology Refresh

The State will provide the following resources to facilitate technology-refreshing activities:

- Coordination and oversight by designated State IT personnel
- Access to relevant facilities and infrastructure
- Required documentation and compliance guidelines
- Assistance in scheduling and implementing refresh activities to minimize operational disruptions.

- The Contractor must collaborate with state representatives to ensure seamless execution of refreshing initiatives.

21. GENERATIVE ARTIFICIAL INTELLIGENCE (GENAI) TECHNOLOGY DISCLOSURE OBLIGATIONS

The Contractor must notify the State in writing if it: (1) intends to provide GenAI as a deliverable to the State; or (2), intends to utilize GenAI, including GenAI from third parties, to complete all or a portion of any deliverable that materially impacts: (i) functionality of a State system, (ii) risk to the State, or (iii) Contract performance.

For avoidance of doubt, the term “materially impacts” as used in this section shall have the same meaning set forth in the State Administrative Manual (SAM) § 4986.2 Definitions for GenAI.