

ATTACHMENT 19: PHASE 2: NARRATIVE RESPONSE REQUIREMENTS

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Qualified Bidders invited to Phase 2 will be required to respond to the Phase 2 Narrative Response Requirements. The Phase 2 narrative responses must be in the format described in [SECTION 5. PROPOSAL FORMAT AND SUBMISSION REQUIREMENTS](#) and [SECTION 5.4. PROPOSAL CONTENT AND STRUCTURE](#). The combined number of pages for the Phase 2 narrative response shall not exceed one hundred (100) pages. Pages must include page numbers. If the Bidder's submission exceeds the page limit, only the first 100 pages will be reviewed and evaluated.

See [SECTION 3.4.3. NARRATIVE REQUIREMENTS \(MS\) \(DUE IN PHASE 1 AND PHASE 2\)](#) for complete instructions and [SECTION 6.3.3.1. PHASE 1 AND PHASE 2 NARRATIVE RESPONSES EVALUATION](#) for evaluation criteria.

The Bidder's Phase 2 narrative responses must address the following:

1. Product – Solution Requirements (500 Points Maximum)

Describe your approach to addressing expectations and interactions with existing database applications through solutioning WaterTAP. This includes, but is not limited to, the push/pull of data between applications, ensuring a single database of record and data uniformity, and a cohesive single point of access to all related applications via WaterTAP.

Please refer to EXHIBIT C: FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS and EXHIBIT H: DATA CONNECTIONS.

2. Product – Solution Architecture (500 Points Maximum)

Provide the detailed logical and physical architectural drawings for the proposed solution.

- a. Logical Diagram – Indicate the context of the proposed WaterTAP architecture in relation to needed connectivity to support the logical operation of the system. For SaaS offerings, indicate the cloud software provider.
- b. Physical Diagram – Indicate actual system components required to provide the full solution, including all cloud and on-premises components. For cloud-based components, describe the nature of the component(s) and indicate ongoing data exchanges with directional arrows and labels.
- c. Flow Diagram — Indicate the data exchange between WaterTAP and SWRCB systems, including hosting environments:
 - i. Relative to the Flow Diagram, describe the proposed:
 1. Approach,
 2. Types of information flows,
 3. Validation and exceptions (and what happens to the data that is not valid),

4. Solution model entities, relationships and common entities.

- d. Describe your approach to system integration and/or sunsetting of existing applications.
- e. Describe all proposed products and/or services. This includes all hardware and software required for the complete solution.
- f. Describe architectural abilities including:
 - i. Accessibility – Platform accessibility utilizing multiple clients (browser and devices).
 - ii. Scalability – Horizontal (adding capacity through additional components) and vertical (adding capacity through larger components) scaling options to include data volume, analytical and user scalability options.
 - iii. Modular Design – Ability to add and integrate future modules to build on core architecture.
 - iv. Interchangeability – Utilize multiple components to provide functionality, including support for third party products.
 - v. Flexibility – Configurable to meet changing business needs, e.g., ease of business rules engine in-house modification.
 - vi. Availability – Resilience options to ensure long-term system usability.
 - vii. Reliability – High availability that meets or exceeds service levels in [SECTION 12. SERVICE LEVEL AGREEMENTS \(SLAS\)](#).
 - viii. Maintainability – Knowledge, skills, and abilities required to maintain the system, including ongoing activities such as adding/modifying components.
 - ix. Interoperability – Receive and provide information common to business system technologies such as relational databases, service-oriented architectures, and similar contemporary business system components.
- g. Describe your approach to process business rules on large amounts of water quality data.

Note: Diagrams and drawings count toward the page limit.

3. User Experience (500 Points Maximum)

Utilizing diagrams, screenshots, and narrative text, describe the anticipated user experience in order to demonstrate the following:

- a. Ease of use with a user-friendly basic interface layout where all major areas can be found.
- b. Intuitiveness of system for unfamiliar users with minimal to no training.
- c. Speed of system responsiveness to queries or functionalities used or selected.
- d. Integration of user support such as automated prompts or help functions.
- e. Minimization of duplicate data entry.
- f. Minimization of clicks within a workflow for efficient utilization of the solution.
- g. Integration of all functions within the solution.

4. Data Management (200 Points Maximum)

Describe your approach to data management, including but not limited to the following:

- a. Ability to ingest large volumes of data from external applications and simultaneously run the ingested data through multiple business rules in a business rules engine.
- b. Ability to interface with other external applications and platforms to push and pull large volumes of data in a secure and efficient manner in terms of cost, data integrity, and schedules.
- c. Ability for the solution to merge data based on user-configured rules when dealing with master data conflicts to ensure data integrity.
- d. Ability for the solution to cache data within selected fields, applications, petitions, etc.
- e. Ability for data cataloging such as data lineage, structural/descriptive/administrative metadata, data curation, data governance, search capabilities, data quality monitoring, and customization.
- f. Ability for the solution to filter data fields / data elements for reporting and extraction.
- g. Ability to consolidate data from multiple sources and load it into the data warehouse.
- h. Ability for the solution to back up/restore and archive/restore the data at specified schedules.

The descriptions of the above items should include specifically how each item is achieved with Out-of-the-Box functionality or with new functionality. Clearly identify what is Out of the Box and requires Customization and Third-Party Software Integration.

Please refer to **Deliverables Group #4: Data Management and Conversion** of [SECTION 11. CONTRACTOR DELIVERABLES, SECTION 10.4.3. DATA MANAGEMENT AND CONVERSION](#), and EXHIBIT H: DATA CONNECTIONS.

5. Testing Approach (100 Points Maximum)

Based on your Phase 1 Narrative Response to your proposed testing approach, provide the overall and individual testing approaches to address the following:

- a. Integration Testing
- b. Load and Performance Testing
- c. Regression Testing
- d. Accessibility Testing
- e. Security Testing
- f. User Acceptance Testing
- g. Penetration Testing

Please refer to **Deliverable Group #5: Testing** of [SECTION 11. CONTRACTOR DELIVERABLES, SECTION 10.4.4. TESTING TASKS](#) and [SECTION 10.5.1. SYSTEM TESTING AND ACCEPTANCE PROCEDURES](#).

6. Development Framework (200 Points Maximum)

Provide your proposed development framework for WaterTAP, including but not limited to, configuration deployment, sprint planning, training, testing, data conversion, interfaces, project management, etc.

Please refer to [SECTION 10.3. STATE DEVELOPMENT FRAMEWORK](#).