

Scope of Services for the AWIA 2025 Update

Freese and Nichols, Inc. (FNI) is pleased to submit this proposal for assistance with the review and recertification of the City of San Marcos (City) drinking water system's Risk and Resiliency Assessment (RRA) and Emergency Response Plan (ERP) in compliance with the Section 2013 of the American Water Infrastructure Act (AWIA).

PROJECT UNDERSTANDING

In 2020 and 2021, FNI supported the City in completing and certifying an RRA and ERP in compliance with AWIA, Section 2013. AWIA, Section 2013 requires public water systems to routinely update the RRA and ERP and recertify these items every 5 years. For medium public water systems such as City, which serve between 50,000 and 99,999 people, the first re-certification deadlines under AWIA are December 31, 2025 for the RRA, and June 30, 2026 for the ERP.

FNI is providing this proposal to offer engineering services to review, update, and recertify the water system's RRA to comply with the first requirement of AWIA, Section 2013, and in support of the City's continued commitment to the resilience of its water system.

This scope of work includes the major components below:

Basic Services:

Task A – Project Management and Meetings

Task B – RRA Update & Recertification Support

1. Review and Revision of RRA
2. Updated Cybersecurity Assessment
3. Final Documentation and Recertification Support

Task C – ERP Update & Recertification Support

- ERP Update
- Final ERP Review & Recertification Support

ARTICLE I - SCOPE OF SERVICES

This project includes a review and update of the existing RRA and ERP and a hosted workshop to gain the City's input on the updated data inputs for the RRA. Deliverables will include a brief 10-page Technical Memorandum (Technical Memo) describing the updated RRA and an updated ERP. Due to the sensitive nature of the content, the Technical Memo and updated ERP are recommended to be protected from public access within applicable law. Electronic document transfer for this project will be provided to the City through a secure file-sharing platform. Confidential documents will not be emailed.

BASIC SERVICES

Task A – Project Management and Meetings

1. Project Meetings
 - a) Kickoff Meeting—FNI will conduct a 1-hour virtual kickoff meeting with City staff to introduce the FNI project team, and City's team participants, review the scope of services, project schedule, and communication approaches.
 - b) Additional topic-specific project meetings and workshops are described in the remaining sections of the scope. For each project meeting and workshop conducted in this project, FNI will be responsible for:
 - i) Developing and distributing the agenda in advance of the meeting
 - ii) Moderating the discussion
 - iii) Distributing meeting minutes and action items
 - c) For each project meeting and workshop conducted in this project the City will be responsible for:
 - i) Reviewing the agenda and securing the participation of relevant staff for each meeting
 - ii) Reviewing meeting minutes and providing timely feedback to FNI
 - iii) Addressing action items in a timely manner

2. Project Administration

FNI will perform general administrative duties associated with the project, including planning, progress monitoring and monthly progress reporting, scheduling, quality control/quality assurance, and invoicing for the project. These duties include maintaining

regular contact with the City to help meet the needs of the City promptly and executing work according to the work plan, budget, and schedule.

Task A Deliverables:

1. FNI will provide meeting agendas and minutes within 7 days to summarize the discussion items, decisions, and action items.
2. Project invoices and monthly one-page reports summarizing project progress and next steps.

Task A Assumptions and Expectations:

1. The City will invite the required staff to project meetings.

Task B – RRA Update & Recertification Support

This task includes updating the Risk and RRA through a review of City data, research on current industry and threat trends, and a workshop to incorporate real-world input from City staff. It also includes a separate cybersecurity assessment, which consists of a document review and a workshop using EPA's current cyber assessment tool.

Deliverables will include:

- An updated RRA spreadsheet outlining assessment inputs and results.
- A cybersecurity summary with recommended actions.
- A brief technical memorandum summarizing the assessment activities, updated findings, and recommendations.

If, during this process, additional services beyond the defined scope are needed to complete the assessment, the City may request them under Task D – Owner-Directed Services.

1. Review and Revision of RRA
 - a) Data Review and Updated Risk Scoring
 - i) Data Review

FNI will develop an initial data request and list of questions based on the City's most current RRA and ERP documents. The data request will also include any updates to the following:

- a) Utility Risk Index (URI) parameters
- b) All categories of utility assets and associated threats
- c) Protective countermeasures, detection strategies, and mitigation

- d) Water System GIS Data (shapefiles, geodatabase)
- e) Emergency contacts and roles (internal and external) for the ERP
- f) Response actions for the ERP

FNI will review received information from the data request and may ask follow-up questions to City staff by email. Follow-up questions will be conducted in accordance with the communication approach set in the kickoff meeting.

ii) Updated Risk Scoring

FNI will create a 2025 RRA spreadsheet to record updated inputs using the information gathered from the City and calculate updated URI and risk & resiliency scores for the utility. To update the inputs, FNI will:

- a) Add up to five new threat-asset pairs identified by the City in the data request
- b) Update consequence costs with inflation rates
- c) Update vulnerability scores per changed prevention or mitigation measures reported in the data request
- d) Update threat likelihoods with current national threat information.

For new threat-asset pairs, FNI will use input from the City and the best available industry knowledge to assign threat, vulnerability, and consequence values. Any assumptions made will be highlighted and reviewed with the City during the RRA Workshop.

b) RRA Workshop

FNI will conduct a 2-hour in-person workshop with the City's team to review the existing RRA. FNI will lead the workshop, which will cover the general activities below:

- i) Review of the previous RRA results
- ii) Discussion of the system's performance, observations and follow-up actions to any threats that occurred since the completion of the original RRA
- iii) Review of input values and assumptions, requesting input from the City
- iv) Updates to countermeasures, and additional potential countermeasures and mitigation, including risk reduction and resiliency improvement and rough approximation conceptual cost to the City.
- v) Discussion of updated industry standards and best practices for resiliency.

c) Updated RRA Spreadsheet and Technical Memo

Based on the workshop discussion, FNI will adjust inputs and assumptions in the RRA spreadsheet to generate updated risk scores. FNI will develop a draft Technical Memo of

approximately 10 pages, summarizing the updates since the first RRA. The Technical Memo will review the following topics:

- i) Summary of work performed to update the RRA, including new or changed inputs for assets and threats
- ii) Summary of updated risk and resilience scores
- iii) Updated countermeasures and mitigation recommendations
- iv) Summary of cybersecurity assessment results (Task 2)

2. Updated Cybersecurity Assessment

Separately from the activities in Task B.1., above, FNI will conduct an updated cybersecurity assessment of the City's SCADA network. Summary of the AWWA Cybersecurity Tool results will be provided as a section of the RRA Technical Memo (Task B.1.c).

a) Cybersecurity Data Review

A document request will be submitted to collect information pertaining to the SCADA network. The request will include the following types of documentation:

- i) Number and types of PLCs, OITs, and other networked SCADA equipment
- ii) Number of PCs, printers, and other networked devices
- iii) Number and types of switches, firewalls, and other networking appliances
- iv) IP schemes used on the SCADA network
- v) A description of the endpoint protection, intrusion detection, and other network security applications

If documentation does not exist, it should not be developed for this project. The lack of documentation will be noted in the RRA Technical Memo (Task B.1.c). FNI will analyze the requested documentation prior to the Cybersecurity Evaluation Workshop to gain an understanding of the scope of the network and current policies and procedures and will review the information during the workshop.

b) Cybersecurity Evaluation Workshop

FNI will lead a 2-hour virtual workshop to understand the current use of the SCADA system and remote access and reporting requirements, evaluate recommended cybersecurity controls and their current implementation. The workshop attendees should include a representative from Management, SCADA, and IT. During the workshop, the team will go through the AWWA Cybersecurity Assessment tool. The initial online

questions are answered, which determine the required controls for the SCADA system network. Once the controls are downloaded, each control is discussed and rated based on the current implementation.

c) Cybersecurity Assessment Summary

FNI will provide a summary of the Cybersecurity Assessment results, including a list of recommended projects to address all priority one and two controls that are not fully implemented. A high-level scope of work and fee estimate are developed for each project, and any project dependencies will be noted. A draft summary will be provided for one round of City review and comment. FNI will conduct a review the assessment findings and document additional comments as a part of the Final Review Meeting (Task B.3.a) FNI will incorporate the City's feedback and incorporate the final cybersecurity assessment into the RRA Technical Memo (Task B.1.c).

3. Final Documentation & Recertification Support

a) Final RRA Review Meeting

FNI will share the results of the updated RRA and review the draft Technical Memo with the City during a 90-minute Draft RRA review virtual meeting. The objective of the meeting will be to share updated results and collect City feedback before finalizing the RRA Spreadsheet and Technical Memo. This meeting will include review and discussion of the Cybersecurity Assessment Summary (Task B.2.c).

b) Final Documents

Based on feedback received during the Final RRA Review, FNI will finalize the RRA Spreadsheet and Technical Memo. The Cybersecurity Assessment Summary (Task B.2.c) will be finalized and included as an Appendix of the Technical Memo.

c) RRA Certification Support

FNI will assist the City through a virtual work session to complete and submit the certification of the RRA through the online EPA portal before the RRA certification deadline. A copy of the certification will be maintained in the final RRA report.

Task B Deliverables:

1. Slides, Agenda, and Minutes from the RRA Workshop, Cybersecurity Assessment and Final RRA review meeting – provided electronically
2. Technical Memo summarizing the results of the RRA – provided electronically
3. RRA spreadsheet (excel), provided as an attachment to the Technical Memo
4. Cybersecurity Assessment Summary, provided as an appendix to the Technical Memo

Task B Assumptions and Expectations:

1. The City will provide review and comments on the RRA and cybersecurity assessment inputs and results.
2. The City will recertify the RRA using EPA's portal before December 31, 2025.

Task C – ERP Update & Recertification Support

For this task, FNI will perform an audit and provide recommended updates for the City's ERP. FNI recommends for the City to perform the update of the ERP document because it is beneficial for City staff to be in contact with their critical partner organizations and suppliers to update contact information, and it ensures City staff are familiar with the organization and content of the plan. Following the City's update of the plan FNI will perform a final review and provide certification support to the City to recertify their ERP to the EPA.

1. ERP Update

a) Initial ERP Audit and Markup

FNI will conduct an audit of the City's ERP to verify it complies with the requirements of AWIA Section 2013 and to identify content that should be updated based on the results of the updated RRA. FNI will provide ERP markups with descriptions of recommended updates for the City to incorporate into the ERP.

FNI will host a meeting to review the recommendations resulting from the ERP Audit. The meeting will include discussion of recommended updates and information needed for the City to complete the updates. The meeting may include discussion of the usefulness of the current ERP and overlap of information with other emergency documents.

b) Development of Updated Content

Updated detection measures, protocols, and checklists identified as a result of the Cybersecurity Assessment will be provided for incorporation into the ERP. FNI may include up to ten (10) pages of additional recommended text to assist in any significant recommended updates. Review and discussion of the updated content created by the City or FNI will be reviewed in a 1-hr virtual progress meeting, if needed.

2. Final ERP Review & Recertification Support

a) Final ERP Review

Following update and incorporation of new content into the ERP, FNI will review the final plan and provide one round of comments.

If needed a final ERP meeting will be held to discuss comments on the final ERP, review plans for continued training and exercises on the plan, and the recertification process.

b) Recertification support

FNI will assist the City through a virtual work session to complete and submit the certification of the ERP through the online EPA portal, if needed.

Task C Deliverables

1. FNI will deliver one copy of the audited ERP for the City's update – provided electronically.
2. FNI will provide review comments on the City's Final Updated ERP document – provided electronically.

Task C Assumptions and Expectations:

1. The City will perform the updates of the ERP and provide a final draft for FNI review at least 2 weeks before the ERP certification deadline.
2. The City will finalize and create any electronic or physical copies of the final ERP for their use.
3. The City will complete the ERP Certification using EPA's portal before June 30, 2026.

ARTICLE II – COMPENSATION AND TIME OF COMPLETION

The Basic Services are proposed as a lump sum of seventy-eight thousand, three hundred dollars (\$78,300), as shown in the table, below.

If FNI's services are delayed due to factors outside its control—such as City review periods or delayed information—schedule and compensation may be adjusted per the terms of this Agreement. To comply with AWIA regulations, the RRA certification should be completed by the City no later than December 31, 2025. FNI recommends completing this Scope of Services within 6 months of Notice to Proceed (NTP), with task deadlines outlined in the table, below.

Task	Fee	Service Type	Fee Type	Schedule
Task A – Project Management & Meetings	\$9,200	Basic	Lump Sum	NTP – Jun 2026
Task B – RRA Update & Recertification Support	\$50,800	Basic	Lump Sum	NTP – Dec 2025
Task C – ERP Update & Recertification Support	\$18,300	Basic	Lump Sum	Jan 2026 – Jun 2026
PROPOSAL TOTAL	\$78,300	Lump Sum		

ARTICLE III – RESPONSIBILITIES OF CITY

City shall perform the following in a timely manner so as not to delay the services of FNI:

- A. Designate in writing a person to act as City’s representative with respect to the services to be rendered under this Agreement. Such person shall have contract authority to transmit instructions, receive information, interpret, and define City’s policies and decisions with respect to FNI’s services for the project.
- B. Provide all criteria and full information as to City’s requirements for the project.
- C. Assist FNI by placing at FNI’s disposal all available information pertinent to the project including previous reports and any other data relative to the project.
- D. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this Agreement.
- E. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by FNI, obtain advice of an attorney, insurance counselor and other consultants as City deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay, or cause rework in, the services of FNI.
- F. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the project, such legal services as City may require or FNI may reasonably request with regard to legal issues pertaining to the project.
- G. Give prompt written notice to FNI whenever City observes or otherwise becomes aware of any development that affects the scope or timing of FNI’s services.
- H. Bear all costs incident to compliance with the requirements associated in items A – C, above.