

# **Risk and Resiliency Assessment, Emergency Response Plan**

Professional Consulting Services  
City of Spring Lake Park



Prepared for:

City of Spring Lake Park  
1301 81st Avenue NE  
Spring Lake Park, MN 55432

Prepared by:

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## Background

In accordance with America's Water Infrastructure Act (AWIA), also known as Senate Bill 3021, the City of Spring Lake Park is required to conduct and certify a Risk and Resilience Assessment (RRA) and an Emergency Response Plan (ERP). The Environmental Protection Agency (EPA) and Department of Homeland Security (DHS) have provided valuable guidance and tools for conducting RRAs and actionable ERPs.

Per Section 2013.a of the Senate Bill the deadline for the RRA for a system of the City's size (between 3,301 and 49,999 people) is no later than June 30, 2021. The ERP is due no later than six months after the RRA has been completed or no later than December 30, 2021.

The EPA has provided supporting documentation for this Bill, including baseline threat information and compliance guidance. This baseline information and guidance will be utilized in preparation of the RRA and ERP.

## Purpose

The purpose of this scope of services is to provide professional services to assist the City with complying with the AWIA by conducting an RRA and developing an ERP. The AWIA legislation provides the City with an opportunity to investigate vulnerabilities, implement solutions, and streamline response protocols to better protect and respond to hazardous events for their area's water assets and services.

## Scope of Services

### Task 1 Meetings and Coordination

Stantec will coordinate with the City through meetings, letters, transmittals, e-mails, memoranda and other forms of formal and informal communication, as appropriate. Stantec will attend and facilitate up to three formal meetings throughout the duration of this work effort. Each meeting will be up to two hours in length. A preliminary list of anticipated meetings is as follows:

- Kick-off meeting and Baseline Utility Risk Resiliency Analysis (subtask 3.1)
- Draft and Final RRA Review
- Draft and Final ERP Review

### Task 2 Asset Review

#### 2.1 Records Request

Data and information required will be identified by the City and Stantec at the project kick-off meeting and throughout the duration of the project. Data should be provided in electronic format that is consistent with the data and information provided (e.g., PDF, Microsoft Word, Excel, GIS/spatial etc.).

A preliminary list of data request items includes:

- Previous hazard impact history/insurance reports,
- City procedures for staffing, operation, and billing.
- City's Local Mitigation Strategy
- City's Record Drawing information (inclusive of updates and expansions)
- City's most recent bond report for the water system (if applicable)
- Interlocal agreements for provision of or sale of raw and finished water
- Existing vulnerability assessment (or related) document
- Existing Emergency Response Plan, Emergency Operations Plan, or related documents

#### 2.2 Field Investigations

Due to Stantec's familiarity with Spring Lake Park's infrastructure, field investigations will be limited to two site visits to investigate vulnerabilities at certain facilities. Additionally, City staff may be able to participate by conducting field investigations and reporting information back to Stantec, identifying areas of concern.

Locations that may require inspection include:

- Storage tanks
- Water well/ Treatment sites
- Interconnects
- Operations building
- Chemical storage area

Considerations for each site may include the following:

- How would the equipment be affected by strong winds, high water, or adverse weather?
- Where are flammable or combustible sources located adjacent to or within the site and how would a wildfire affect equipment and operations?
- Are the grounds fenced and is access controlled?
- Are buildings secure and how are they accessed (code, card, keys)?
- Where are the control panels located (building, rack mount) and are they secure?
- Are security protocols being followed?
- Does the equipment to be in good working order? Are there temporary adjustments that should be remedied and made permanent?

Since City staff already have a good understanding of some of these issues as related these facilities, input from staff will greatly assist the completion of the RRA.

### **Task 3 Risk and Resiliency Assessment**

#### **3.1 Prepare Draft RRA**

Stantec will utilize the EPA's Risk and Resilience Assessment Checklist to complete the RRA. The checklist helps determine the threat likelihood, vulnerability, and consequence of potential risks. Categories of risks included in the Checklist are listed below.

Malevolent Acts & Natural Hazards for:

- Physical Barriers
- Source Water
- Pipes and Constructed Conveyances
- Pretreatment and Treatment
- Storage and Distribution Facilities
- Electronic, Computer, and Automated Systems
- Monitoring Practices
- Financial Infrastructure
- Chemical Handling
- Operations and Maintenance

Stantec will introduce the Checklist to the City at the Project Kick-off Meeting and seek the City's input throughout the assessment. Output from the checklist will help prioritize risks and guide recommendations for resiliency.

Stantec will submit a draft Risk & Resilience Assessment (RRA) by May 15, 2021 to allow the City sufficient time for review before the EPA deadline. The RRA will document the risks and resilience of the City's water system and critical assets. Stantec will incorporate the City's comments into the final RRA report before June 30, 2021.

Due to the sensitivity of the information included in the RRA, the delivery method for the draft and final documents will be as requested by the City.

### **3.2 RRA Certification Letter**

Stantec will prepare the certification letter, as required by the AWIA, for the RRA.

Each certification letter shall contain:

- Information that identifies the City water system submitting the certification
- Date of the certification
- Statement that the City water system has conducted, reviewed, or revised the assessment and plan (as applicable)

*Deliverables: Deliverable will include one (1) certification letter for the RRA by email.*

### **Task 4 Emergency Response Plan**

Stantec will update the City's Emergency Response Plan 45 days prior to the EPA deadline of December 30, 2021. A report will be developed to include a plan for implementation, as required by the AWIA. This plan will provide clear guidance to City staff on how to mitigate, manage, and respond to vulnerabilities identified in the previously prepared RRA.

Incorporating the results from the RRA, the Emergency Response Plan will include:

#### **4.1 Strategies and Resources**

Strategies and resources to improve the resiliency of the system including methods to secure equipment affected by the threats/hazards identified previously. These strategies and resources will be identified within a plan each for the following assets categories:

- SCADA system (1)
- Water well/ Treatment sites (1 typical plan)
- Storage Tanks (1 typical plan)
- Water Distribution System (1)
- Physical and Electronic Security (1)
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system

#### **4.2 Mitigation and Attenuation Measures (Countermeasures)**

Actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on public health and the safety and supply of drinking water provided to communities, including:

- Development of alternative source water options
- Detection of Malevolent Acts
- Detection of Natural Hazards
- Cybersecurity recommendations

This task will also identify potential additional countermeasures, inclusive of both capital cost and operational costs to implement, that may be considered going forward in addressing the asset/threat pair. Because this task involves identifying capital and operational costs, wherever

possible, recent bid information and operating costs will be used. These are conceptual level costs for RRA evaluation purposes only.

The RRA will be revisited to include the countermeasures, and the impact of incorporating those measures on the overall rating will be determined. In this way, the City will be able to determine whether the cost of the measure is appropriate for the reduction in the risk impact.

#### **4.3 Response Measures**

Response measures are defined as plans, protocols, and equipment to be utilized when responding to a malevolent act or natural hazard.

- Identification of chain of command and reporting protocols
- Development of applicable response plans and protocols
- Identification and location of applicable response equipment

These response measures will build upon the existing vulnerability assessments, emergency response plans, local mitigation strategies and enhanced state hazard plan. Recommendations for additional measures will be included in this analysis.

#### **4.4 Report**

The above measures will be summarized and organized into an Implementation Plan. A draft Emergency Response Plan will be sent to City Project Manager, in a format to be determined, by November 15, 2021. A final Emergency Response Plan will be submitted to the City Project manager, in a format to be determined, by December 30, 2021.

The delivery method for the ERP deliverables will require input from City staff due to the sensitivity of the information included.

*Deliverable: Draft and Final ERPs, including implementation plan, via format to be determined. If hardcopies are requested, up to three (3) copies of the draft and final ERPs (six total) will be provided.*

#### **4.5 Certification Letter**

Stantec will prepare the certification letter, as required by the AWIA, for the ERP.

The certification letter shall contain:

- Information that identifies the City water system submitting the certification
- Date of the certification
- Statement that the City water system has conducted, reviewed, or revised the assessment and plan (as applicable)

**Deliverables:** Deliverable will include one (1) certification letter for the ERP by email.

## Project Fee

The estimated fee for the above scope of work is indicated below. The fee is based on Stantec's current 2021 billing rates. Changes in staffing and staff may be necessary depending on actual project needs and staff availability. Adjustments of budget may be required if identified risks require more extensive response planning than anticipated. Any additional work that may be required will be performed as an amendment to this work order. The following summary table shows the fee by task and is based on time and materials in accordance with the anticipated general effort.

Task	Fee	Fee Type
Task 1 Meetings and Coordination	\$2,800.00	Hourly
Task 2 Asset Review	\$2,400.00	Hourly
Task 3 Risk and Resilience Assessment	\$2,800.00	Hourly
Task 4 Emergency Response Plan	\$9,500.00	Hourly
Total Fee	\$17,500.00	

## Schedule

Stantec will provide services throughout the duration of the project as directed by the City in accordance with the scope of services listed above.

Stantec will complete the tasks no later than the dates outlined below:

- Risk and Resilience Assessment (Task 3) by June 30, 2021
- Emergency Response Plan (Task 4) by December 30, 2021

Whenever possible, we will try to complete the proposed tasks before the above listed dates to ensure all deadlines are met. We will also schedule work to maximize City staff availability over the winter months.

## Exclusions

The following items are not included in the Scope of Services:

1. Design plans and/or documents
2. Storm surge analysis
3. Flood study
4. Evaluation of software vulnerabilities
5. Implementation of software
6. Site visits to all conveyances
7. Risk associated with equipment use
8. Risk associated with accidents/personal injury
9. Risk associated with litigation
10. Training

## Assumptions

Stantec shall be entitled to rely upon the information and data provided by the City of Spring Lake Park, City representatives, and City contracted entities or obtained from generally acceptable sources within the industry without independent verification except to the extent such verification is expressly included in the Work.

The intent of this project is to identify risk that impact level of service that impacts potential health risk and public safety. Financial risk is not a consideration. Property damage risk is considered to the extent that it relates to health risk and public safety.

It is not practical for emergency response plans to be all inclusive of all risk identified in the RRA. Therefore, the ERP will be specific to selected top ranked risk which has mitigation or response measures within the means of the City. Stantec will coordinate with the City to determine the risk rank which will be include in ERP.



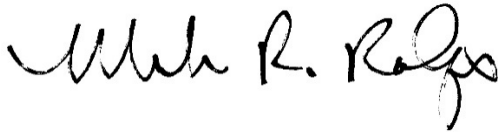
We are available to begin work immediately on this effort. If this proposal is acceptable to you, please sign below to indicate your acceptance. If you have any questions or comments regarding the above work plan, please contact Mark Janovec at (651) 775-6532. We look forward to working with you on this planning effort.

Sincerely,

**STANTEC CONSULTING SERVICES, INC.**



Mark T. Janovec, PG  
Project Manager



Mark R. Rolfs, PE  
Senior Associate

**CITY OF SPRING LAKE PARK**

By \_\_\_\_\_

*(signature)*

\_\_\_\_\_

*(printed name)*

\_\_\_\_\_

*(title)*

Date \_\_\_\_\_