

**SCOPE OF SERVICES**  
**For**  
**CITY OF NEW PORT RICHEY RISK AND RESILIENCE ASSESSMENT**  
**TASK ORDER #1**

**BACKGROUND AND OBJECTIVES**

The City of New Port Richey (NPR) is required to complete a Risk and Resilience Assessment (RRA) to comply with Section 2013 of America's Water Infrastructure Act of 2018 (AWIA). The AWIA is intended to replace Safe Drinking Water Act (SDWA) Section 1433 related to the 2002 Bioterrorism Act. NPR provides potable water service to the 33,000 people, and therefore, as a utility serving more than 3,300 people and less than 50,000 people, must complete and certify to U.S. EPA completion of its RRA by **June 30, 2021**.

Juturna Consulting LLC (Consultant) is providing this scope of services to work with NPR staff to perform the NPR's RRA including the following components:

- Physical Barriers
- Source Waters (*Already covered by Tampa Bay Water, NPR's wholesale water provider*)
- Treatment Facility
- Storage and Distribution
- Electronic and Computer Systems
- Monitoring Practices
- Financial Infrastructure
- Chemical Storage and Handling
- Operation and Maintenance of the System

**BENEFITS**

This project will assist NPR to evaluate the vulnerabilities, threats and consequences and counter measures for its potable water system to assess risks from potential hazards. Consultant is well suited to lead NPR's emergency preparedness team and to perform this RRA. Consultant is also experienced with the role of emergency power generators, emergency by-pass pumping and piping systems, interconnections, chemical storage and feed systems and development of asset management plans that reduce risks and improve resilience.

**SCOPE OF SERVICES**

This project will provide an RRA of NPR's potable water system to comply with Section 2013 of America's Water Infrastructure Act of 2018 (AWIA) so that NPR can certify completion of its systemwide Risk and Resilience Assessment to U.S. EPA by June 30, 2021. The following potential hazards to NPR's potable water system shall be assessed:

- Natural hazards
- Malevolent acts

U.S. EPA published their *Baseline Information on Malevolent Acts Relative to Community Water Systems* in August 2019. Utilities are encouraged to use that resource to complete their initial RRA certification. U.S. EPA has also provided a *Guidance for Small Community Water Systems on Risk and Resilience Assessments Under America's Water Infrastructure Act* for utilities that are greater than 3,300 but less than 50,000 people.

American Water Works Association (AWWA) has published several standards and manuals that will also be referenced for this project including Standard J100 Risk and Resilience Management of Water and Wastewater Systems, Standard G440 Emergency Preparedness Practices, and Manual M19 Emergency Planning for Water and Wastewater Utilities.

## **TASK 1 - MEETINGS, WORKSHOPS AND DATA COLLECTION**

- 1.1 Kick-off Meeting** – Consultant will prepare for conduct and summarize a kickoff meeting with NPR staff to establish the plan to complete RRA. Consultant will review the purpose of the Project, regulatory timeframe completion, and several case studies to highlight the importance of the assessment and get buy-in from key NPR leadership. Consultant will provide an overview of the workshops described below, and NPR will confirm which of their staff should attend the workshops. Consultant will prepare and submit kickoff-meeting notes to the project team following NPR's guidance on confidentiality of the information.
- 1.2 Data Collection** – Consultant will prepare a list of data items required from NPR to complete the Risk and Resilience Assessment. Consultant shall not copy or retain any documents provided by NPR to assist with development of the RRA that NPR identifies as confidential for purposes of security of the utility.
- 1.3 Project Workshops** – Consultant will conduct three (3) workshops with NPR staff to discuss, collaborate and brainstorm on the following topics:

### Workshop 1 – Assets, Threats and Impacts

- **Asset Characterization:** Consultant and NPR staff will collaboratively identify the critical assets and critical delivery locations in the potable water system for evaluation. Critical government facilities, airports, hospitals, police stations, emergency response centers and shelters are examples of critical delivery locations.
- **Threat Characterization:** Consultant and NPR staff will collaboratively determine what threats and hazards should be considered for each critical asset identified such as natural hazards (hurricanes, severe storms, lightning, fire, floods, sink holes, etc.) infrastructure failure (pipe breaks, pump failure, power outage etc.) contamination (cross connection, over/under feed of chemicals, pathogens), sabotage, theft or attack that have potential to disrupt service. Interdependencies

with the electric power grid for critical water distribution infrastructure will be noted and assessed beyond the fence line of NPR's water treatment facilities.

- Impact Analysis: Consultant and NPR staff will discuss what happens when the critical asset is affected by the threat (service downtime, service area impacted, fire flow deficit, repair/replacement of major assets, public health impacts, etc.), vulnerabilities that would allow the threat to affect the critical assets in NPR's current potable water system, and likelihood that the hazard will strike

#### Workshop 2 - Countermeasure Identification

- Countermeasure Identification: Consultant will review the risk and resilience calculations for the existing system and work with NPR staff to identify options to reduce risks and increase resilience (countermeasures) for each of the identified assets/threats. Countermeasure examples could include redundant water sources, treatment train improvements, redundant/additional pipelines, additional distribution storage, dedicated flushing discharge locations, additional spare parts to be kept on hand, interconnections with adjacent utilities, staffing additions, cross training, etc.

#### Workshop 3 - Draft RRA Report Review

- Consultant will meet with NPR staff to review any comments on the draft RRA prior to finalizing the RRA

#### Task 1 Deliverables:

- Consultant will provide an agenda one week prior to each workshop, and a summary within one week after each workshop.
- Consultant will provide a list of the assets and threats with impacts as identified in Workshop 1.
- Consultant will provide a summarized list of proposed countermeasures identified in Workshop 2.
- Consultant will prepare a draft RRA report for review prior to Workshop 3.

#### **TASK 2 – POTABLE WATER SYSTEM RISK AND RESILIENCE ASSESSMENT REPORT**

Consultant will compile and prepare a report documenting and summarizing results of the AWIA RRA for NPR's potable water system. NPR will need to certify to the U.S. EPA that their RRA has been completed no later than June 30, 2021.

#### Task 2 Deliverables:

- Final RRA Report – Consultant will incorporate any NPR review comments and finalize the RRA report accordingly. Comments will be addressed and tracked for documentation. Consultant will submit three hard copies and one PDF copy of a final RRA.

## **NPR'S RESPONSIBILITY**

The following shall be provided by NPR, if available:

1. Reasonable access to operations, maintenance, and engineering staff
2. Hard copy of previous confidential Vulnerability Assessment documents, and the most recent ERP (to be returned)
3. Electronic copy of the calibrated distribution system hydraulic model
4. Copies of additional available record drawings, if needed
5. Copies of additional available operating reports and maintenance records
6. Submittal of the Certification of completion of the RRA to U.S. EPA for PWS ID FL6511255 when the assessment is complete.

## **SUPPLEMENTAL SERVICES**

Any work requested by NPR that is not included in one of the items listed in this scope of services will be classified as supplemental services requiring additional funding and task authorization in the project budget or negotiation of a separate authorization. Supplemental services could include, but are not limited to:

1. Hydraulic Modeling to determine the extent of the system that would be affected by the threats/hazards.
2. Cyber Security Analysis
3. Emergency Response Plan Review and Update

## **SCHEDULE**

The anticipated project completion schedule described below will be in effect after Notice to Proceed and requires significant coordination with NPR staff for achievement within the AWIA regulatory timeframe. This schedule, as shown below is 12 months. NPR review periods will be 2 weeks on all deliverables.

The following schedule is estimated for the tasks set forth in this scope of services.

<b>Task</b>	<b>Completion Date</b>
Task 1 – Meetings, Workshops and Data Collection	
Kickoff Meeting	October 2020
Workshop 1 – Identification of Asset/Threat and Impacts	November 2020
Workshop 2 – Countermeasure Identification	January 2021
Workshop 3 – Draft Report Review	April 2021
Task 2 – Risk and Resilience Report	May 2021

## **BUDGET**

A budget breakdown is provided by task in the table below. Work performed under this project shall be paid for on a time and materials basis and billed monthly.

<b>Task</b>	<b>Amount</b>
Task 1 – Meetings, Workshops and Data Collection	\$ 21,120
Task 2 – Risk and Resilience Report	\$ 9,955
<b>Total</b>	<b>\$ 31,075</b>

The hourly rates are:

Senior Professional Engineer:	\$125/hour
Senior Water Quality Scientist:	\$110/hour
Staff Engineer:	\$ 90/hour
GIS/Graphics Specialist:	\$ 75/hour
Administrative:	\$ 60/hour

**Accepted By:**

**City of New Port Richey**

**Juturna Consulting, LLC**

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**Rob Marlowe**                      **Date**  
**Mayor**

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**Suzannah Folsom, Owner**      **Date**

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**Judy Meyers**                      **Date**  
**City Clerk**