

Drinking Water Assistance - Scope of Work Categories & TA Providers

The following capabilities are anticipated to be required under the subgrant; however, this is not to be considered a comprehensive description of all required services. Vendors must respond to this scope of work with available personnel, skill, experience, and expertise in each area.

1. Technical Assistance to Water Systems – NvRWA / FW

1.1. PWS Compliance - NvRWA

The awarded vendor(s) may be required to assist water systems with understanding of and compliance with legally enforceable standards and treatment techniques that apply to public water systems to protect public health and provide a safe and reliable drinking water supply. They include assistance to comply with state and federal drinking water regulations, including but not limited to, RTCR, Groundwater Rule, Disinfection Byproducts Rule, Arsenic Rule, LCR, SWTRs, and state enforceable secondary drinking water standards.

1.2. Prioritized PWS and ETT Score - NvRWA

The awarded vendor(s) may be required to assist prioritized water systems, which have accrued ETT scores in the range of 6-10 points from non-compliance with state and federal requirements, to:

- 1.2.1. Address the violations leading to noncompliance;
- 1.2.2. Return the system to compliance in a timely manner.

1.3. Sampling, Water Quality Testing and Troubleshooting - NvRWA

The awarded vendor(s) may be required to help train and/or assist PWSs in:

- 1.3.1. Developing and implementing sampling plans;
- 1.3.2. Conducting field measurement and water parameters;
- 1.3.3. Developing and implementing water sampling procedures for compliance;
- 1.3.4. Testing for chlorine residuals;
- 1.3.5. Measuring well drawdown;
- 1.3.6. Instrumentation;
- 1.3.7. Calculating proper chemical addition and chemical pump;
- 1.3.8. Treatment train operations
- 1.3.9. Water quality and/or equipment troubleshooting; and
- 1.3.10. Identifying a source or vendor to secure parts, equipment, tools, and supplies etc.

1.4. Sanitary Surveys and Deficiency Resolution - NvRWA

The awarded vendor(s) may be required to assist water systems in developing and implementing plans and taking the actions necessary to provide an appropriate response to sanitary surveys and Level 2 Assessment findings conducted by the BSDW. Guidance and instruction may be required to help the water system correct deficiencies and/or address sanitary defects. The goal is to bring the system back into compliance with state and federal regulatory requirements within the required timeframe.

1.5. Revised Total Coliform Rule Level 1 Assessment - NvRWA

The awarded vendor(s) may be required to assist water systems in performing a Level 1 Assessment. The vendor may be expected to assist the water system with:

- 1.5.1. Investigating the water system to identify sanitary defects;
- 1.5.2. Submitting the Level 1 Assessment documentation;
- 1.5.3. Locating resources to fix noted sanitary defects;
- 1.5.4. Developing a timeline that ensures the 30-day corrective action timeline is met; and
- 1.5.5. Submitting an extension request if needed.

1.6. Digital Mapping and GPS Asset Location - FW

The awarded vendor(s) may be required to assist water systems with:

- 1.7. Developing and/or updating their digital maps or GIS system and attribute tables of system components;
- 1.8. Identifying the appropriate GPS tools for field data collection and will provide training in the use of these tools. GIS software and platforms used must be widely available to computer and phone users and must be free of charge to the water system; and
- 1.9. Identifying and integrating their GIS system with other management software that can assist in planning for repair and replacement of assets.

2. Managerial Assistance to Water Systems – RCAC / FW

2.1. PNR and CCR - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 2.1.1. Notices that alert consumers if there is a risk to public health, if the water does not meet drinking water standards, if the water system fails to test its water, or if the system has been granted a variance of exemption to a regulation; and
- 2.1.2. Their annual CCRs to increase consumer awareness of their drinking water quality and potential health risks and increase dialogue between the utilities and their consumers.

2.2. O&M Manuals - RCAC

The awarded vendor(s) may be required to assist water systems in:

- 2.2.1. Creating, updating, and implementing their system O&M manuals for both distribution and treatment facilities to describe operational activities on a daily, monthly and yearly basis;
- 2.2.2. Submitting any updates of water system assets to BSDW in order to maintain an accurate SDWIS database.

2.3. CCCP - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 2.3.1. Development and implementation of a CCCP;
- 2.3.2. Public outreach efforts to improve the public's understanding of the need and importance of such a program;
- 2.3.3. Follow up to assure that all cross-connection control devices are tested annually and that the system is maintaining proper documentation of all devices and test results.

2.4. ERP and Emergency Assistance - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 2.4.1. Preparing new or updating existing system- and site-specific ERPs; and
- 2.4.2. Evaluating system security and necessary upgrades including but not limited to:
 - 2.4.2.1. Fencing;
 - 2.4.2.2. Locks;
 - 2.4.2.3. SCADA;
 - 2.4.2.4. Alarms; and

- 2.4.2.5. Security cameras
- 2.4.3. Provide training and emergency assistance in implementing ERPs when systems face natural disasters, critical system component failures and risks to public health.

2.5. Water and Energy Conservation - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 2.5.1. Completing, updating, and implementing water conservation plans in compliance with the requirements of the DWR;
- 2.5.2. Metrics to be used by the systems to analyze the effectiveness of the plan;
- 2.5.3. Developing and implementing feasible water conservation measures and public awareness campaigns;
- 2.5.4. Water loss audits to assist system personnel in resolving unaccounted-for water;
- 2.5.5. Energy conservation opportunities including but not limited to:
 - 2.5.5.1. Energy efficient equipment;
 - 2.5.5.2. Alternative power generation; and
 - 2.5.5.3. Off-peak power use.

2.6. TMF Capacity Survey - RCAC

The awarded vendor(s) may be required to assist the water system with TMF capacity surveys developed by NDEP to determine the system's TMF capacity, need for assistance and their eligibility for future funding from the DWSRF.

2.7. Labor Management - RCAC

The awarded vendor(s) may be required to assist the water system with;

- 2.7.1. Personnel policies;
- 2.7.2. Job descriptions;
- 2.7.3. Contracts for operations, maintenance and/or administration

2.8. Water Rights Management - FW

The awarded vendor(s) may be required to assist the water system with:

- 2.8.1. Reviewing and understanding water rights and associated documentation;
- 2.8.2. Determining if water quantity and water rights are sufficient for existing and projected future population; and
- 2.8.3. Properly recording and submitting pumpage documentation to DWR.

2.9. Records Management - RCAC

The awarded vendor(s) may be required to assist the water system with developing and implementing a records keeping/tracking program for routine maintenance including but not limited to:

- 2.9.1. Well pumpage;
- 2.9.2. Valve exercising;
- 2.9.3. Hydrant/dead-end flushing; and
- 2.9.4. Backflow prevention assembly testing.

2.10. Contracts Management - RCAC

The awarded vendor(s) may be required to assist the water system with:

- 2.10.1. Technical services solicitations;
- 2.10.2. Review of bid specifications/construction contracts;
- 2.10.3. Project documentation included but not limited to:

- 2.10.3.1. Certified payroll review;
- 2.10.3.2. Funding draws; and
- 2.10.3.3. Reporting as required by federal, state, and/or funding agencies.

3. Financial Assistance to Water Systems - RCAC

3.1. Budgeting and Rate Setting - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 3.1.1. Preparing a balanced budget (note that depreciation is not required to be fully funded in planning a budget under this subgrant scope of work, but the system must be educated on what depreciation means, why it is used, and how it benefits the system to fully fund depreciation);
- 3.1.2. Preparing a budget for 5-, 10-, and/or 20-year CIPs in order for the water system to develop rate strategies and identify potential funding available for necessary system renewal;
- 3.1.3. Establishing sufficient rates to support their unique system. User rates must be sufficient to cover:
 - 3.1.3.1. All operations and maintenance of the specific system of the community. This includes operation and maintenance of any planned construction project being proposed to a funding agency;
 - 3.1.3.2. Debt service requirements on all loans and bonds of the system; and
 - 3.1.3.3. All required reserve accounts of the system, including a short-lived asset reserve and any debt service required by the loan/bond agreements.

3.2. FSP - RCAC

The awarded vendor(s) may be required to assist the water systems with FSPs that include at a minimum:

- 3.2.1. Asset information including;
 - 3.2.1.1. An inventory; and
 - 3.2.1.2. Date of installation.
 - 3.2.1.3. A map showing their location;
 - 3.2.1.4. Original price;
 - 3.2.1.5. Anticipated life span;
 - 3.2.1.6. Replacement costs;
 - 3.2.1.7. An evaluation of their condition and performance; and
 - 3.2.1.8. An analysis of the criticality of each asset.
- 3.2.2. An evaluation of water and energy conservation efforts with existing assets and planned replacement assets; and
- 3.2.3. A plan for maintaining, repairing and replacing assets and for funding such activities.

3.3. Income Surveys - RCAC

The awarded vendor(s) may be required to assist water systems with conducting income surveys for the community in order to qualify for loans and grants from all funding agencies. The income survey must achieve a 98% contact rate and collect the household income of the residents sampled. The awarded vendor(s) will then determine the median household income from the data collected and certify to the data's authenticity.

3.4. Bookkeeping and Public Accounting - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 3.4.1. Understanding bookkeeping entries for transactions the water system must record and process on a day-to-day basis, including but not limited to:

- 3.4.1.1. Payroll and related expenses;
- 3.4.1.2. Contract transactions;
- 3.4.1.3. Purchasing;
- 3.4.1.4. Asset acquisitions, disposals and transfers;
- 3.4.1.5. Operating expenses; and
- 3.4.1.6. Items of income
- 3.4.2. Understanding their requirements to prepare financial statements in conformity to GAAP for local governments as they pertain to their specific structure; and
- 3.4.3. Educate and train water system staff on terminology used in the public sector accounting profession such as but not limited to:
 - 3.4.3.1. Cash versus accrual accounting
 - 3.4.3.2. Asset depreciation
 - 3.4.3.3. Current versus noncurrent assets and liabilities;
 - 3.4.3.4. Net assets;
 - 3.4.3.5. Restricted reserves; and
 - 3.4.3.6. Enterprise funds.

3.5. Understanding Financial Reports - RCAC

The awarded vendor(s) may be required to assist water systems understand how to read a GAAP compliant financial report and notes to the financial statements, including the balance sheet, income statement, and statement of cash flows.

3.6. Internal Controls - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 3.6.1. Understanding the importance of internal controls in their accounting framework;
- 3.6.2. Assessing the separation of duties and educate staff and the board of the water system on the risks involved by not following proper internal control procedures; and
- 3.6.3. Preparing fiscal policies to segregate the duties of the individual responsible for recording the transactions from the individual authorizing payment, and the individual responsible for handling deposits.

3.7. Organization - RCAC

The awarded vendor(s) may be require to:

- 3.7.1. Assist water system staff in understanding the organizational and governing structure and responsibility; and
- 3.7.2. Guide water systems to professionals authorized to prepare documentation and assist with reorganization (e.g., HOA), bylaws, federal non-profit application, ordinances/policies, and insurance etc.

3.8. Grants / Loans Management - RCAC

The awarded vendor(s) may be required to assist the water system with:

- 3.8.1. Identifying potential funding opportunities and applications for grants and loans for capital improvement projects and other activities eligible under specific financial programs; and
- 3.8.2. Identifying opportunities for saving through loan refinancing.

4. Training – RCAC / NvRWA / FW

The awarded vendor(s) may be required to work with PWS and NDEP to develop and prioritize training needs for specific system(s). The vendor will provide all materials necessary for training

and assist with securing a meeting location if necessary. A specific course curriculum for requested training must be submitted to NDEP for approval prior to holding the training session. Technical courses that qualify for CEUs must also be reviewed and approved by the Nevada Certified Drinking Water Operator Program.

4.1. Board Training - RCAC

The awarded vendor(s) may be required to assist water systems with:

- 4.1.1. Training board members on open meeting law rules in the State of Nevada;
- 4.1.2. Board member roles and responsibilities;
- 4.1.3. Public notice requirements;
- 4.1.4. Water system management;
- 4.1.5. Understanding of operational requirements and documents; and
- 4.1.6. Financial reports including annual operating and capital budgets.

4.2. Clerical and Office Staff Training - RCAC

The awarded vendor(s) may be required to assist water systems with training staff on customer service, time management, organizational support, and basic computer programs such as Microsoft Office products or email. In certain situations, based on specific system needs, the vendor may be asked to provide basic technical training on copying, scanning, printing, filing, and records maintenance may also be required to ensure compliance with all required reporting and system management.

4.3. Operator Certification Training - NvRWA

The awarded vendor(s) may be required to provide training to prepare water system staff in obtaining requisite certification within Nevada for distribution or treatment operation. Under certain conditions, training that qualifies for contact hours (CEUs) may be required, if approved through the Nevada Drinking Water Operator Certification Program, to help certified operators to maintain their credentials. The vendor may propose one or more efficient and effective approach(es) to provide training to Nevada operator in order to accomplish this task.

4.4. Security and Health Threat Training - FW

The awarded vendor(s) may be required to assist water systems with training and preparedness to address security and health threats including physical, chemical, biological, or acts of God. The awarded vendor(s) may help provide regular training and refresher courses (scenarios), promote mutual assistance with nearby water systems, and utilize resources including the use of NVWARN and table top exercises to help water system staff develop capacity and maintain preparedness to address emergency response needs.

5. Outreach – NvRWA / RCAC

5.1. Water System – NvRWA / RCAC

The awarded vendor(s) may be required to assist with periodic public water system outreach efforts that provide refresher training to system board members, managers, and operators the responsibilities of owning and operate a public water system. The vendor may propose one or more efficient and effective approach(es) to provide outreach and training in order to accomplish this task.

5.2. Future Water System Operators – NvRWA / RCAC

The awarded vendor(s) may be required to coordinate, work collaboratively with, and/or assist NDEP with outreach activities at schools or community functions to educate, encourage, and engage potential new water system operators on the opportunities, challenges, and benefits of a career in public water system operations and management. The vendor may propose different approaches to introduce and engage potential drinking water professional on the works being described.

5.3. Project and Other Funding Outreach – NvRWA / RCAC

The awarded vendor(s) may be required to assist with outreach to water system boards or other elected officials on the type and availability of funding for capital improvement projects. The vendor may propose one or more effective approach(es) to provide outreach and training in order to accomplish this task.