

State of Nevada

**2023 Annual Capacity Development Report
To the
US Environmental Protection Agency**

**State Fiscal Year 2023
(July 1, 2022 – June 30, 2023)**



July 2023



Nevada Division of Environmental Protection
Bureau of Safe Drinking Water & Office of Financial Assistance

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Executive Summary

Nevada amended the Capacity Development Strategy in March 2022 to address Congressional requirements for capacity development in drinking water systems. This report is modified to address this updated strategy.

Five major concerns for Nevada were identified by Stakeholders during the development of the strategy. This report will address those concerns through each strategy element as it impacted State Fiscal Year (SFY) 2023.

New System Program

The State's legal authority (statutes/regulations) to implement the New Systems Program were enhanced within the fiscal year. Discussion on these items can be found under the [Use of Authority and Resources for Implementation](#) section of the report. Additionally, the state's control points were not modified.

[Newly permitted systems](#) are monitored to see if any have been added to the enforcement Targeting Tool (ETT) List. Please see table 1 for details.

[Nevada's Found System Program](#) contains information on how water systems are identified and provided technical assistance required for permitting to satisfy the requirements of the Safe Drinking Water Act regulatory requirements enforced by NDEP.

Newly Permitted Systems (3yr):
11 Systems Total

SFY2023 Found System Activity:
19 PWS Supported with TA Assistance
5 PWS Issued Permits
4 PWS Inactivated
0 PWS Activated

Existing System Program

Small System Assistance	Operator Trainings
\$284,870.59 assisted 48 Systems	\$314,854.88 over 37 Trainings (1,674 attendees)
Top five task orders completed were: Manuals and Plans (23) Budget and Rate Setting (7) Asset Management Plans (5) PWS Compliance (3) Project and other funding outreach (3)	Courses included (attendees): Operator Certification Trainings (279) Lead and Copper Inventories (160) Workforce Development (46) Drought and Water Conservation (34) Regulation updates (25)

Nevada leverages many resources to enhance and strengthen capacity in water systems, including, but not limited to, contracted nonprofits to provide direct technical assistance, stakeholder meetings to

focus needs efficiently and effectively, and NDEP staff support and outreach. Efforts to identify, prioritize, and fund technical assistance for water systems is ongoing. Information regarding efforts by NDEP in SFY 2023 can be found throughout the document.

Background

The Nevada Division of Environmental Protection (NDEP) implements the State's Capacity Development Program to assist public water systems (PWS). The following annual capacity development report highlights efforts to further the Capacity Development Program in accordance with the Capacity Development Strategy Objectives approved by EPA on July 10, 2023; the report covers the period of July 1, 2022, through June 30, 2023. NDEP's Office of Financial Assistance (OFA), Bureau of Safe Drinking Water (BSDW), and contracted Technical Assistance (TA) providers – Nevada Rural Water Association (NvRWA) and Rural Community Assistance Corporation (RCAC) – contributed to this report.

The Capacity Development Program is funded primarily with set-aside monies from the Drinking Water State Revolving Fund (DWSRF). Validating Nevada's 'living' document approach to the capacity development strategy and implementation, NDEP accomplished the following:

- A. Improved existing system strategies
- B. Consistent demonstrable results and evolution

Nevada's Capacity Development Strategy

The update of the Capacity Development Strategy for Nevada was submitted to the EPA on March 16, 2022, and approved July 10, 2023. The Capacity Development Strategy Objectives were updated to include the following items:

1- strategy element: stakeholder involvement

The 2000 Capacity Development Strategy was updated through significant input from the community including state, county, and local governments – as well as non-profit entities. Input was provided through a survey, a workshop, and a public notice period to help address drinking water system needs. NDEP will document continued stakeholder outreach efforts in annual reports.

2- strategy element: use of authority and resources for implementation

NDEP's mission is to protect and preserve the waters of the state. To this end, NDEP requires resources and regulatory authority from the State to help PWSs conform with SDWA requirements. Support from state and federal sources have helped NDEP develop programs to assist systems in building capacity. NDEP will document authorities and resources utilized to in these efforts.

Nevada's Major concerns:

1. Personnel and Management
2. Financial Sustainability
3. PWS Characteristics
4. Planning
5. Source Water Quality and Quantity

3- strategy element: enhancements and impairments to capacity development

Through stakeholder input, NDEP identified five core elements of capacity development including personnel and management, fiscal sustainability, Public Water System Characteristics, Planning, and Source Water Quality and Quantity. Stakeholders provided detailed input that incorporated institutional, regulatory, or financial factors on these five elements which were categorized as either enhancements or impairments. NDEP will document efforts made to support enhancements and to address identified impairments.

4- strategy element: asset management plans

Asset Management Plans (AMP) help identify a system's equipment and determine the equipment's criticality, nature of risk, and reliability. Managing these assets helps the system plan for repairs, maintenance, and replacements, and helps avoid unplanned breakdowns that can lead to interruptions in service. Updated guidance for AMP development includes opportunities for technical assistance, connections to DWSRF loan requirements and incorporation into permitting processes. NDEP understands the importance of developing AMPs. Through training and outreach, PWSs can use these concepts to increase their prioritization for loans, better manage the reliability of their systems, and improve customer confidence and satisfaction. NDEP will document efforts to assist systems with the development of asset management plans.

5- strategy element: prioritizing public water systems

Many of Nevada's PWSs have been in operation for decades. The stages of a system's deterioration varies; that is why the State uses a prioritization process for funding capacity development, which takes into account the welfare of the public, the state of the water system, and the urgency to act. This triage approach helps NDEP prioritize systems based on their specific needs. Prioritized actions identified for capacity development will be reported in each annual report.

6- strategy element: measurement of success

The Capacity Development Strategy is a living document. The Strategy must be adaptable to ensure the methods used continue to be beneficial for PWSs. To measure the success of TMF capacity development, NDEP will continue to engage stakeholders and conduct surveys to assess program effectiveness. NDEP will also increase outreach efforts to inform both operators and the public about what it takes to make a system sustainable. NDEP will report on methods and efforts used to assist systems with becoming sustainable in the areas of personnel management, Financial Sustainability, PWS Characteristics, Planning and Source Water Quality and Quantity.

Stakeholder involvement

NDEP- Operator Certification Program Forum

Major concern focus: Personnel and Management

The Operator Certification Program Forum meeting was created by NDEP to allow all operators to meet in person, exchange contacts, and continue to voice their concerns. It allows operators to discuss suggestions and challenges with other operators and regulatory agencies. To enhance the service provided to operators and measure the success of the meeting, a capacity development section was recently incorporated into the forum. Capacity development personnel from NDEP lead a discussion with public water system operators about what program services are working, what trainings are necessary, the challenges public water systems are facing, education opportunities, and technical assistance concerns. The capacity development lead discussion was positively welcomed by operators

who felt they previously didn't have a venue to discuss these issues and the panel discussion will be permanently integrated into future forum meetings. Participants in the Forum will continue to openly identify and constructively discuss issues regarding the education, training and testing of water system operators in Nevada; coordinate project efforts and disseminate information; and enhance public input by providing an open access collaborative forum for the exchange of information.

The Nevada Water and Wastewater Operators Forum (Forum) is now hosted quarterly by the BSDW. BSDW also hosts [a webpage for the Forum](#) and supports the administrative needs of the entities. This Forum provides a regular mechanism for communication between the regulated community of certified operators, NDEP, the American Water Works Association, the Nevada Water Environment Association, TA providers, and others. These discussions provide for an avenue for Nevada operators to remain up to date with current news and regulations, express training needs, and to voice any concerns operators may be facing. As a result of the pandemic, the Forum is now offered as a hybrid option of in-person and web-based meeting options.

During the reporting period, a total of four forum meetings were held on September 14, 2022, December 7, 2022, March 15, 2023 and June 14, 2023. The March 15, 2023 Nevada Water & Wastewater Operator's Forum meeting was held at the NvRWA Conference at the Nugget Resort Hotel in Reno, NV. Nevada provided funding for NVRWA to award 70 scholarships to certified operators to participate in this conference.

Infrastructure for Nevada Communities

Major concern focus: Financial Sustainability, PWS Characteristics, Planning, Source Water Quality and Quantity

Nevada recognizes that addressing the needs associated with infrastructure deficiencies is significant to continue to maintain the State free from waterborne disease and outbreaks attributable to public drinking water systems. Furthermore, large proportion of PWSs in the State are very small systems and often find it hard to identify and avail various federal and State funding resources. To address this challenge, a collaboration meeting, Infrastructure for Nevada Communities, is held on a quarterly basis and includes regulatory agencies, technical assistance providers and funding partners. Through these meetings, individual project needs, including funding needs, are discussed with the intent of not only information sharing but also to assist with continuing efforts to assist communities with either technical assistance needs and/or funding needs. Follow up meetings are scheduled between affected agencies to address these needs. Participating agencies include the NDEP- Bureau of Safe Drinking Water, the NDEP-Bureau of Water Pollution Control, the Public Utilities Commission, the Governor's Office of Economic Development, the USDA- Rural Development, Nevada Rural Water Association, and the Rural Community Assistance Program.

Use of authority and resources for implementation

Statutory and Regulatory Updates

Major concern focus: Personnel and Management, Financial Sustainability, PWS Characteristics, Planning, and Source Water Quality and Quantity

Assembly Bill 20

During the 2023 legislative session, Assembly Bill 20 (AB20) was passed. AB20 was drafted to address deficiencies in current statutes for the Clean Water State Revolving Fund, Drinking Water State Revolving Fund and the State Capital Improvements Grant program. The rule making process for AB20 included significant public outreach and education, workshops and a legislative hearing. The following program improvements were addressed through these efforts:

- Broadened Clean Water State Revolving Fund program eligibility to be consistent with federal law.
- Expanded use of Clean Water set-asides to provide technical assistance currently authorized under the federal Clean Water Act which may expand Cap Dev efforts and involved stakeholder meetings.
- Allow DWSRF set-aside activities to be broadened to allow loans and grants.
- Allow DWSRF set-aside accounts to be used for loans.
- Expand State Capital Improvements Grant Program by:
 - Adding the authority of the Capital Improvements Grant Program to pay for costs associated with a septic to sewer project if the Division approves a program or project for the protection of groundwater quality.
 - Updating the authority of the Capital Improvements Grant Program to pay for costs associated with abandoning a well and connecting the property formerly served by the well to a municipal water system.

On April 12, 2023, OFA held a listening session to update water systems, consultants, and the public on the available State Revolving Fund loans for the next year. Federal grant amounts have been announced for 2023. The listening session informed potential borrowers on what entities were eligible to apply and what project types could qualify for funding. The session also provided information on available funding, including principal forgiveness dollars, updates to the Project Priority Lists, Priority List ranking changes, disadvantaged and affordability criteria, recent changes loan interest rates, security, and incentives. There were forty (40) people in attendance at this listening session.

Assembly Bill 220

During the 2023 Nevada State Legislative Session, the bill was approved and included revisions to Nevada Revised Statutes (NRS) related to the creation of privately owned community water systems. The bill was approved and became law upon passage. Revisions enhance the requirements for the permitting, operation, and fiscal sustainability of new privately owned community public water systems. The amendments included clarity on the following:

- Definition of Local Governing Body.
- Roles and responsibilities of a Local Governing Body when owner/operator of a privately owned water system defaults on their responsibilities.
- How to address issues involving excess surety and assessment funds.

- Provision of an annual financial audit.

DWSRF Regulation updates

EPA encouraged States to broaden their regulatory definitions of a disadvantaged community to provide more access to programs within State Revolving Fund Programs. Nevada revised its definition of a “disadvantaged community” in December of 2022. The Nevada Administrative Code now defines a disadvantaged community as an area, as compared to other communities in this State, where residents disproportionately experience economic, environmental or health issues, including, without limitation, high rates of poverty or unemployment.

Additional changes to the DWSRF regulations included alignment to the Safe Drinking Water Act as it relates to recent changes of the DWSRF programs, adding a service fee to the Nevada DWSRF for financial sustainability, addressing administrative barriers for systems facing an emergency, and general housekeeping items to align with current practices.

BSDW Regulation updates

There were minor revisions to the *Operation of Community Water System or Nontransient Water System* (NAC 445A.591 to NAC 445A.5926) regulations. These revisions updated the authority for the Department of Conservation and Natural Resources (DCNR), the Nevada Division of Environmental Protection (NDEP), and the Bureau of Safe Drinking Water (BSDW) to review and approve water system operating plans. In 2005, the BSDW was moved from the Nevada Department of Health and Human Services to DCNR. In addition, there was an \$800 review fee added to the regulation for the submittal of a Plan to Operate.

Minor revisions were made to the Permit to Operate Privately Owned System (NAC 445A.595 to NAC 445A.614) regulations. This set of regulations concern the permit to operate a privately owned community water system. The revisions updated the Department, Division, and Bureau that have regulatory authority to review and approve such permits. The review fee of such a submittal was increased from \$500 to \$800.

Funding from the state revolving fund

Major concern focus: Financial Sustainability and PWS Characteristics

DWSRF provides low interest loans to both publicly and privately owned water utilities. Federal appropriations for DWSRF require Nevada to use a percentage of its grant to provide additional subsidies to “disadvantaged communities”. These include forgiveness of principal, negative interest loans, grants, or any combination of these. Nevada has a “disadvantaged community” program to address low-income areas that have infrastructure deficiencies that pose a health threat. Nevada revised its definition of a “disadvantaged community” in December of 2022. The Nevada Administrative Code now defines a disadvantaged community as an area, as compared to other communities in this State, where residents disproportionately experience economic, environmental or health issues, including, without limitation, high rates of poverty or unemployment. The following criteria is outlined in the DWSRF Intended Use Plan:

- Median Household Income

- Poverty rates
- Population trends
- Percent of the population not in the workforce
- Unemployment
- Affordability of the project
- Projects addressing acute or chronic health risk issues.
- Projects physically or managerially consolidating to address capacity deficiencies.
- Preliminary engineering and planning documents
- Systems which address an emerging contaminant issue
- Systems or project which remove lead or galvanized service lines

Seventeen projects totaling \$11,424,200 were awarded principal forgiveness funding in SFY 2023. The terms and amount of the additional subsidy are case-by-case basis determinations based on the individual community's needs and financial situation.

Operator Training and Certification

Major concern focus: Personnel and Management, PWS Characteristics, and Source Water Quality and Quantity

Nevada has 593 public water systems. These systems include:

- 193 community water systems (C).
- 158 non-transient, non-community water systems (NTNC); and
- 242 transient, non-community water systems (TNC).

Nevada requires all C and NTNC water systems to have certified operators. In total, there are 351 systems that meet this criterion. TNC water systems that use surface water or groundwater under the direct influence of surface water must also be operated by a certified operator. One TNC system met this additional criterion in SFY 2023. All water systems are also required to designate an operator in "Responsible Charge" a person whose qualification and nature of responsibilities are identical to PWS's regular operators. Currently, water system compliance for operator certification is at 99.7 percent statewide.

Nevada works to keep compliance high by providing outreach and training to operators. The State uses monies from the Public Water System Supervision Program (PWSSP) grant and the 10 percent set-aside from DWSRF. BSDW also provides technical assistance, suggestions, and recommendations to operators through frequent telephone contact and through the sanitary survey process. Staff also coordinates with TA contractors to engage in technical, managerial, and financial assistance services using other NDEP/DWSRF set-asides and EPA TA grants.

BSDW partnered with the U.S. Department of Veterans Affairs (VA) in fiscal year 2023. This program allows BSDW to provide veterans taking the Nevada Drinking Water Operator Certification Exams financial assistance to cover licensing costs. Military occupational specialty experience continues to be an invaluable asset for PWSs throughout Nevada. For fiscal year 2023 the operator certification program had over 50 veteran applications. Information and resources are available on Nevada's Drinking Water Operator Certification Program website.

Integrated Source Water Protection Program

Major concern focus: Personnel and Management, PWS Characteristics, and Source Water Quality and Quantity, and Planning

“Source water” in Nevada means an untreated source of water used to supply drinking water to the public. Source water includes groundwater before it is pumped out by a well, or surface water flowing in a river or tributary before being diverted to a treatment plant. Groundwater aquifers are critical resources in Nevada. Most public water systems in the state rely solely on wells for their water supplies however a few larger communities also rely on springs, creeks, lakes, rivers, and reservoirs. Source water protection areas are also often referred to as wellhead protection areas, drinking water protection areas and sometimes vulnerability assessment areas.

Public water systems and local communities throughout Nevada are working to protect drinking water supplies from contamination. The State assists them through a multi-faceted Integrated Source Water Protection Program (ISWPP). It is Nevada’s belief that effective source water protection must be developed and administered by the community in conjunction with local water suppliers. A local plan is a long-term commitment on the part of the community to protect its drinking water sources from becoming contaminated or polluted by various land use activities.

BSDW administers the ISWPP and provides technical assistance for communities to develop and implement Community Source Water Protection Plans (CSWPPs). Local CSWPPs are developed through a county-wide planning and coordination approach. This encourages PWSs to work together to examine shared water resources, evaluate community development impacts to water sources, and discuss how to collectively manage potential risks from a broader perspective.

The ISWPP’s multi-jurisdictional approach helps PWSs ranging from very small taverns and mobile home parks to larger districts and municipalities, pool resources to implement the plan and promote community-wide awareness. This ultimately increases opportunities for smaller systems with limited resources and/or capacity to be included under a more comprehensive CSWPP and implementation effort. Nevada’s Program encourage cooperation and aligned efforts with other state and federal entities to give the most resources to the communities’ plans. NvRWA Source Water Protection works with NDEP in developing ISWPP and meeting the criteria of both programs in plan development.

BWQP and BSDW staff meet where applicable to determine overlap in the planning efforts for Source Water Protection and Nonpoint Source programs. This can be seen most prominently in Washoe Counties Joint Source Water and 319 Plan. Therefore, through the ISWPP’s contract, tasks were included to develop the stakeholder group and initiate a regional approach towards a comprehensive water quality plan that includes both watershed and source water protection components. In addition, water quality improvement projects in source water protection areas were funded through the 319(h) Non-Point Source Program. Staff support and providing technical assistance to the development of a Spill Communication Plan for source water protection areas in Washoe County. This effort involved multiple stakeholders across the three planning agencies and the Truckee Meadows Water Authority. The results of this effort updated a spill response network that lists which agencies to contact depending on the location and nature of the spill. Meetings were held to update the Spill Coordination Working Group members and information flow during FY23.

Additionally, BSDW assists the Bureau of Water Pollution Control's (BWPC) permitting process to ensure source water protection areas are not impacted by permitted discharges. Every proposed discharge permit is reviewed to determine if the proposed discharge is located in, or near, a source water protection area. The technical review includes looking at available data such as well construction information, discharge water chemistry, water system sampling data/analysis, soil survey information and aquifer characteristics etc. During SFY 2023, BSDW reviewed 27 proposed discharge permits and coordinated with the individual permit writers on potential impacts to source water. Building these bridges across NDEP programs is important for broader drinking water protection and helps to avoid negative impacts to source water from regulated discharge activities.

In November 2022, the Source Water Protection Coordinator position was filled after being vacant for approximately one year. BSDW relied heavily on the technical contractor for Source Water Protection coordination efforts while the position remained vacant and in training new staff.

To date, the following communities have participated in, are developing and/or completed, countywide protection plans under the ISWPP:

County	Source Water Protection Activities
Carson City	General updates to the CSWP Plan of Carson City, including Executive Summary, Table of Contents, planning team members and contact information, description of existing plans, description of water sources, addition of Management Strategy No. 13 to incorporate the Quill Water Treatment Plant Watershed Control Plan, and Action Plan to reflect accomplishments and add new items since 2015 CSWPP. Carson City designation of source water protection watersheds have helped with their response to cryptosporidium contaminants.
Churchill	Churchill County used their plan to encourage homeowner connection to the municipal wastewater systems.
Clark County	Virgin Valley Water District began the process of developing a CSWPP in 2021 that encompasses needs of the water district and other public services. The plan completed and adopted by resolution on April 4th by Virgin Valley Water District and April 25th by Mesquites City Council. NDEP Endorsed the Plan on May 15th. Moapa Valley continues to coordinate with NDEP and NvRWA to maintain and implement their WHPP. Coordination occurs with local entities including SNWA, SNHD, LVVWD, LVWRF, SNHD and other shareholders to plan future Wellhead and Source Water Protection Plans.

Douglas	Implementation of public education and outreach about septic to sewer conversion is underway. GIS mapping of Source Water Protection Areas is being updated. Creation of a public viewer for identifying and education is underway.
Humboldt	Efforts have included public education and outreach, GIS mapping, Integration of Source Water Protection Areas into local planning consideration and continued technical assistance on Grass Valley Nitrate Study area. Humboldt County is utilizing their CSWPP to leverage a septic to sewer conversion. Humboldt County requested assistance in updating their CSWPP in May. The development of a public viewer based around the project is underway.
Lincoln	Lincoln County continues to develop a CSWPP for the county that incorporates local entities and water systems in a combined planning effort.
Lyon	Efforts include local source water protection code development and updates, well abandonment, and instigation of a "source water protection" fee to assist with Source Water Protection projects.
Storey	Storey County reached beginning WHPP updates and forming a planning group.
Washoe County	The plan was completed in August 2020. Continued updates to the Source Water Protection Plan are underway with a planned completion date of December 2023. Updates have been made to current well inventories, models and online mapping tool. Meetings continue to take place between the Spill Coordination Group and updates to the current member list have been made. Washoe is in contact with local entities including the City of Reno, City of Sparks, NNWPC, WRWC, WCHD of the progress, updates, and implementation of the plan.
White Pine	White Pine continues to use their CSWPP to work with local partners to protect Source Water.
Nye	Partnerships are in place with NvRWA to help small PWS maintain up-to-date plans to be consistent with both NDEPs and NvRWA plan criteria. Efforts have included public education and outreach, GIS mapping, technical training, and multi-agency coordination

	to facilitate source water protection activities.
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Vulnerability Assessment and Monitoring Waiver Programs

Major concern focus: Personnel and Management, Financial Sustainability, PWS Characteristics, Planning and Source Water Quality and Quantity

The 2020 Vulnerability Assessment Program, as implemented during SFY 2021, is an update to the 2003 Source Water Assessment Program (SWAP). The 2003 SWAP, in turn, has its roots in the original Vulnerability Assessment Program (approved by the EPA in 1995), which was performed during the initial permitting process of a PWS.

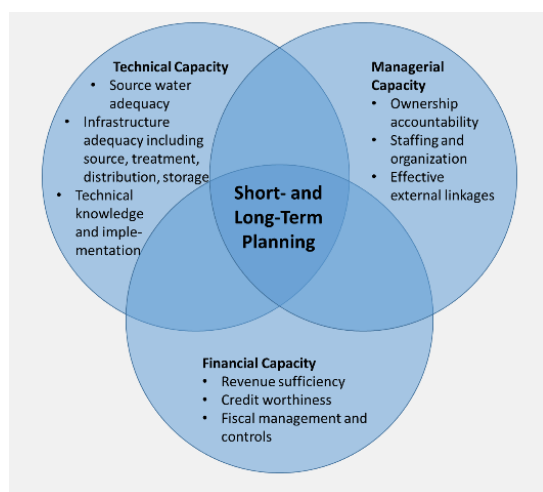
Vulnerability assessments include:

- Locating sources
- Identifying potential sources of contaminants within a 3000-foot radius of wells/springs
- Evaluating source water susceptibility to contamination
- Reviewing prior sampling results

NDEP's Vulnerability Assessment Program requires summaries of the vulnerability assessments to be reported to the public in the annual Consumer Confidence Reports for PWSs. Based on initial assessment of the source water vulnerability determination, a PWS may qualify for chemical monitoring relief (IOC, SOC, Cyanide, Dioxin and Asbestos) as approved by the EPA in 1995. Eligible PWSs are also required to provide updates to the assessment data and apply for waiver renewal every three years. The updated 2020 BSDW Vulnerability Assessment and Monitoring Waiver Programs share information with the ISWPP to document potential contaminant sources (PCS) for PWSs. The Vulnerability Assessment Reports (VARs) note PCSs and rank them based on their potential to adversely affect a water supply source. Project efforts were funded by the American Recovery and Reinvestment Act set-asides and continued with a combination of resources, DWSRF set-aside funding, and leveraging technical assistance from ISWPP/Wellhead Protection staff. BSDW updated VARs for one eligible community water systems (CWSs) and one eligible non-transient non-community (NTNC) water system in SFY 2023.

As of date, 232 PWSs qualified for chemical monitoring waivers based on the vulnerability of the source water as determined in the individual VARs. Additionally, BSDW maintains the waiver status of 538 waivers by having these respective PWSs apply for waiver renewal applications (Attachment 4 - updated Form B) every three years. Once waiver renewals are received and the water system status is reviewed and updated, Monitoring Assessment Plan (MAP), showing the system when to perform chemical monitoring, is completed and sent out to the water system.

Enhancements and impairments to capacity development



Enhancements— Outreach and support to help educate systems on current and future needs. Major concern focus: Personnel and Management, Financial Sustainability, PWS Characteristics, Planning and Source Water Quality and Quantity,

Sanitary Surveys

180 Surveys Completed in SFY23

TA assistance during SFY 2023 helped systems resolve deficiencies noted in the sanitary surveys. Vendors also helped the facility owner better understand the sanitary survey results, write corrective action plans, and work to address deficiencies. Typically, a variety of situations trigger compliance related assistance:

- Immediate coliform-positive result
- Disinfection followed by sampling for coliform
- Lead and copper reporting
- Disinfection byproducts compliance
- Water quality or monitoring issues
- Development of standard operating procedures
- Loss of pressure events (boil water orders)
- CCR
- Public Notification for certain violations (some can be included in the CCR)

During SFY 2023, OFA has reviewed recent sanitary survey reports for 9 PWSs seeking DWSRF funding for their water infrastructure projects. OFA collaborated with PWS staff and BSDW to identify and assist with improving the most critical capacity needs. The results and recommendations of such review were included in the staff reports presented to the Board for Financing Water Projects. This effort reasonably assured the Board that the system was appropriately addressing capacity deficiencies.

Board Training

The success or failure of a water system often depends on the knowledge and experience of its board or any relevant governing body. PWS governing body is ultimately responsible for ensuring that their system(s) distribute water that is safe to drink. RCAC conducted 2 in person board trainings and developed four training modules for boards in FY23. The four training modules includes classes delivered through Moodle as well as marketing to boards through brochures, mailing and email communication. The work reinforced the roles of board members in keeping small drinking water systems financially viable and in compliance. Training ranged from basic governing responsibilities, to

developing sustainable rate structures. The training materials are set to be released during FY24 with a goal of at least 20 board members accessing the materials.

Capacity Assessments

A capacity assessment is a valuable tool used by water systems to measure strengths and identify weaknesses. BSDW and TA providers use a standard TMF survey to identify appropriate assistance needs for water systems. The existing survey is currently being updated and will be utilized as part of additional outreach efforts conducted during on site meetings between our TA providers and systems. NDEP ensures that systems demonstrate TMF prior to moving projects forward to a loan contract stage. Nevada's current TMF Survey form is available online.

Facility Guidance Documents

Public drinking water systems in Nevada are required to have site-specific plans approved by BSDW. These plans include cross-connection control plans (CCCP), operations and maintenance (O&M), and restoration of services in an emergency (ERP). Developing O&M plans and cross-connection control plans provides the PWS staff with an opportunity to systematically examine the needs of their customers and their own facilities. Water systems are also required to have a water conservation plan that must be updated every five years and approved by the Nevada Division of Water Resources.

Emergency response and restoration plans provide a framework for dealing with emergencies. The planning exercise is valuable, as participants gain greater understanding of system vulnerabilities and begin to develop necessary action plans. Another outcome of this planning process is an enhanced understanding of system responsibilities under the Public Notification Rule. Furthermore, TA providers increase water systems' preparedness by conducting tabletop exercises that test the resilience of an emergency response plan.

BSDW staff and staff from NvRWA and RCAC actively work with both community and non-community PWSs to develop or update site sampling plans to comply with the Revised Total Coliform Rule and the related Groundwater Rule. Developing these plans requires working with system personnel to educate them on the nuances of each rule, identify appropriate sample locations, and establish appropriate sampling schedules. Expanded capacities among system personnel include:

- Competency about how the rule applies to their system.
- Actions to take in case of positive coliform or *E. coli* results.
- Proper sample collection techniques.
- Timely interaction with the primacy agency.
- Knowledge of the concepts of representative sampling.
- Effective public notification language and methods when needed.
- Modifying their plans as their system grows.

With the development of these site sampling plans, small systems have an additional tool at their disposal in the event of a water related emergency or the presence of coliform or *E. coli* bacteria in the water system, including effective public notification language and methods. Additionally, DWSRF mandates that all systems that receive funding address or plan to address critical capacity deficiencies in their proposed project plan.

Adapting Templates for PWS TA Deliverables:

While standard operating procedures and plans to better manage respective PWSs remains the goal, NDEP has recently adopted standardized, streamlined templates for the O&M plans, including CCCP and ERP. These standard templates have now begun being implemented as reference for review of deliverables from vendors assisting the PWSs. NDEP believes this consistency will also help to make the PWS experience portable across the PWSs. Such additional value is significant to Nevada PWS ecosystem overall as limited workforce remains a high concern capacity issue. These were completed in SFY23 and are now offered to PWS electronically on the NDEP/BSDW website.

Financial Sustainability

Nevada has recognized that good fiscal management is critical to a well-functioning utility. All systems that seek funding support from DWSRF are required to submit proof of sufficient water rates to adequately support the current and future operations, maintenance, debt service and reserves of the system. The rate study includes analysis of needed revenues for proper operations, analysis on fixed versus variable costs of the system, suggestions on base rate and tiered rate structures, and presentation to the public and governing board for adoption. Attachment 2 shows the list of systems receiving support in the current year for rate studies.

Nevada's Contracted Technical Assistance

Often PWSs do not have accurate and complete maps and asset information. In addition, some systems lack Operation & Maintenance, Emergency Response, Cross Connection Control, and Capital Improvement Plans. Nevada has made special efforts to assist systems with these common deficiencies and other routine TMF capacity development needs. These critical issues continue to be a focus of NDEP and TA service over the next two years. In SFY 2022, OFA put out a new Request for Proposal to find qualified vendors. Two TA vendors were selected to provide technical assistance through SFY 2022 and SFY 2023. These vendors provided comprehensive assistance in technical, managerial, and financial capacity-building, as well as training in one-on-one and group scenarios. Through this program, NDEP was able to help PWSs meet their distinct capacity development needs, at no cost to the systems.

Attachment 2 has lists of TA assistance provided during SFY 2023. Attachment 3 provides a list of training courses and credits awarded by TA providers. Nevada routinely communicates with TA providers to ensure that assistance provided does not duplicate assistance funded through other EPA and USDA funding sources. In SFY 2023, a total of \$692,025 was budgeted for contracted vendor assistance including both RCAC and NVRWA. Both vendors had completed their respective assignments within the contract expiry date.

- *Rural Community Assistance Corporation (RCAC)*

RCAC provided a variety of direct technical assistance for water systems and hosted training sessions throughout the State. RCAC provided direct assistance to water systems in the area of manuals and plans, budget and rate setting, asset management plans, income surveys, board and staff training, sanitary survey and deficiency resolution, PWS compliance, and funding. RCAC also held 66 class sessions, delivered trainings to 1,674 participants, and provided 4,140 hours of course content.

- *Nevada Rural Water Association (NVRWA)*

During SFY 2023, NVRWA provided operator certification trainings and a conference, where water operators can network and learn the latest technology. Scholarships for water operators were provided. NVRWA also conducted outreach activities to educate, encourage and engage potential new water system operators on the opportunities, challenges, and benefits of a career in a public water system. NVRWA also prepared information materials and attended community career events.

Impairments—Prioritization and identification of systems needs that help address water quality and quantity issues.

Major concern focus: Personnel and Management, Financial Sustainability, PWS Characteristics, Planning and Source Water Quality and Quantity,

Identification of systems in need

Efforts to identify capacity deficiencies as well as infrastructure upgrades/replacement needs in all systems in Nevada is ongoing. Some systems are hesitant to address any issues with government entities. Other systems are simply unaware or do not have the resources to investigate. OFA will continue to work in collaboration with BSDW and TA providers through the use of sanitary surveys and TMF capacity surveys to identify systems needs and develop a system of identification that will prioritize the needs of water systems across the State.

Planning and training for Existing and New Rules

Due to new agency staff and new management at water systems, basic training on existing regulations and requirements is needed. In addition, new federal regulatory requirements are being issued concurrently. Regulatory requirements that will require training for both NDEP staff as well as drinking water systems include such items as Emerging Contaminants, the Arsenic Rule, Lead/Copper Rule, Manganese, PFAS Rule, Legionella, UCMR 5- Lithium, Consumer Confidence Report Revision, Cyber Security, the Revised Total Coliform Rule and The Groundwater Rule.

Prioritization of federal and state funding for system projects and assistance

Many sources of funding are available to fund project implementation. This includes the traditional SRF funding, along with several new grants designed to perform specific tasks for water systems. Each funding source has different requirements and timelines and therefore navigating the best source of funding for each specific project, is complicated for borrowers and grant administrators alike.

Construction projects are further impacted by the availability of contractors, particularly in rural areas, along with construction materials. Construction schedules may get extended resulting in changing project budgets and completion dates.

Project funding and implementation

Project bids let in the FY23 timeframe frequently came in higher than engineer estimates; borrowers had to either remove elements from their project scope or attempt to secure additional funding within a short time frame. In addition, Nevada continues to hear the message from our borrowers that federal funding requirements continue to present difficulties in moving forward with project implementation. Requirements to adhere to Davis Bacon, American Iron and Steel, as well as trying to navigate new requirements tied to Build America, Buy America (BABA) has been frustrating to borrowers. Nevada offers technical assistance to assist with compliance with these requirements; however, borrowers have not requested this type of technical assistance to date.

Nevada has seen a significant drop in borrowers willing to take out traditional loans. Some facilities have indicated that the Federal funding requirements have contributed to their resistance to using the SRF program. In addition, many smaller systems haven't kept up rate increases to address system upgrades needed over time. These small systems often can't afford to take on new debt and are hesitant to increase rate structures. Also, with the availability of federal earmark funding and other grant funding such as ARPA, systems are pursuing grant funding to entirely fund their project rather than pursuing SRF funding.

Quantity of water in drought conditions

As the driest state in the U.S., Nevada has long recognized the value of efficient water use and reuse. In accordance with EPA sustainable priorities, the Nevada Division of Water Resources requires that every water system submit a Water Conservation Plan that includes measures to evaluate the effectiveness of the plan. These plans have been required since July 1992, with updates every five years. TA providers have helped multiple communities prepare and update these plans. In addition to user-based conservation measures, systems are being educated on auditing and charting the amounts of water produced and sold monthly. Once usage patterns are established, changes in use may prompt managers to implement leak detection studies. NvRWA trains water system staff on electronic and acoustic leak detection equipment specifically to enhance their technical capacity. The training keeps staff up to date on detection technologies, while also locating any leaks. Control of leakage in water systems does more than just save water; it protects the water quality and cuts energy costs.

After many years of drought, water levels at Lake Mead are rising from the April 2023 recorded level of 1,055 feet due to record snowfall and rainfall during the winter of 2022/spring of 2023. Water levels are expected to rise by 22 feet by the end of calendar year 2023. However, following two decades of drought, continued water conservation and methods to increase water use efficiency are needed. These significant drops in Lake Mead water levels have led to new strategies in the southern portion of the state. New conservation strategies such as septic to sewer conversions not only help to protect groundwater quality from regulated and unregulated constituents but also provide a treated water quality source to the Colorado River to comply with required return flow credits.

Another innovative water strategy for managing water resources within the Truckee Meadows includes the development of an Advanced Purified Water Facility by OneWater Nevada that treats recycled water from the Reno-Stead Water Reclamation Facility. Treated water will be injected into the aquifer where it can be recovered by a pilot irrigation project and later, indirect potable reuse.

Asset Management Plans

As part of the 2023 DWSRF Intended Use Plan (IUP), the DWSRF requires asset management plans for systems receiving principal forgiveness loans for construction projects from the DWSRF program. Loan applicants must certify as part of the loan contract that the recipient has, or will develop, an asset management plan prior to the final draw on the loan and re-evaluate the plan every five years. These reports will help educate system management and the users of the system about the cost of their water system.

The plan includes an analysis of all assets, identifies critical assets of the system, evaluates the condition of the assets, documents the useful life of the assets, contains a plan for funding maintenance, repair, and replacement, and evaluates the systems level of service. In another effort to develop fiscal responsibility, the 2023 DWSRF IUP requires principal forgiveness loan recipients to set aside funds in a reserve account for capital replacement. TA providers include this analysis as part of the asset management plan.

RCAC developed five asset management plans for water systems, three of which have moved forward for funding from the DWSRF. These systems include Hillcrest Manor, Logan Creek GID Estates and Goldfield Town Water. Attachment 2 shows the list of systems receiving support in the current year for asset management plans

Prioritizing Public Water Systems

Compliance with the Safe Drinking Water Act

Nevada's State capacity development coordinators and TA providers work closely with State enforcement staff to review the ETT list provided each quarter. They identify systems that lack TMF capacity. OFA and BSDW staff then determine steps to help the system return to compliance in a timely manner. With funding provided through the DWSRF small systems TA contract, vendors focus on systems that score above the ten-point threshold to help get them off the ETT list and stay off. As shown below in Figure 1, Nevada continues to track the program's progress in assisting water systems to return to compliance.

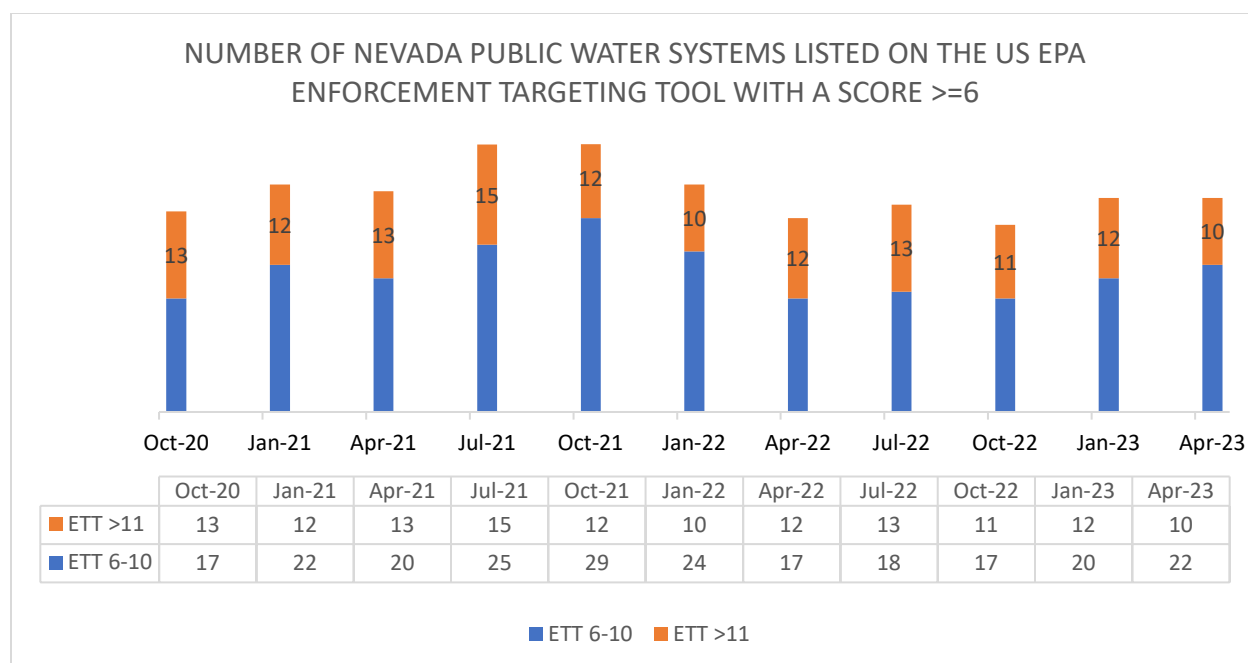


Figure 1: ETT tracking over time

A total of **10** systems scored 11 or above during the end of the current reporting period (April – June 2023). Out of these, **3** systems are new this quarter, 7 PWS were listed in 2nd quarter of the reporting period, and 7 systems have been on the list for at least a year. In addition, there were a total of 44 Health based violations of which 10 were addressed this year.

Focused Technical Assistance under EPA Grant

PWSs in Nevada: Ensuring PWS compliance with laws and regulations requires a multi-faceted approach. NDEP oversees approximately 593 PWSs with diverse service populations. Many of these regulated water systems are not in the primary business of supplying water; rather, their business requires that they have water for drinking and hygiene purposes. Only a handful of systems in Nevada (21 systems including businesses like Casinos) serve a population greater than 10,000 and 439 systems serve a population less than 500. This information underscores the capacity challenges faced by a typical PWS in Nevada. A vast number of very small sized PWSs in Nevada typically operate on very small budgets with limited ability to meet unexpected capacity deficiencies. NDEP acknowledges this hardship and strives to serve the systems with additional emphasis on intra-agency collaboration and assistance. As such, 99.9% of all PWSs in Nevada are compliant, validating the constant adjustments and strategies that NDEP performs in meeting the capacity needs of any given typical PWS.

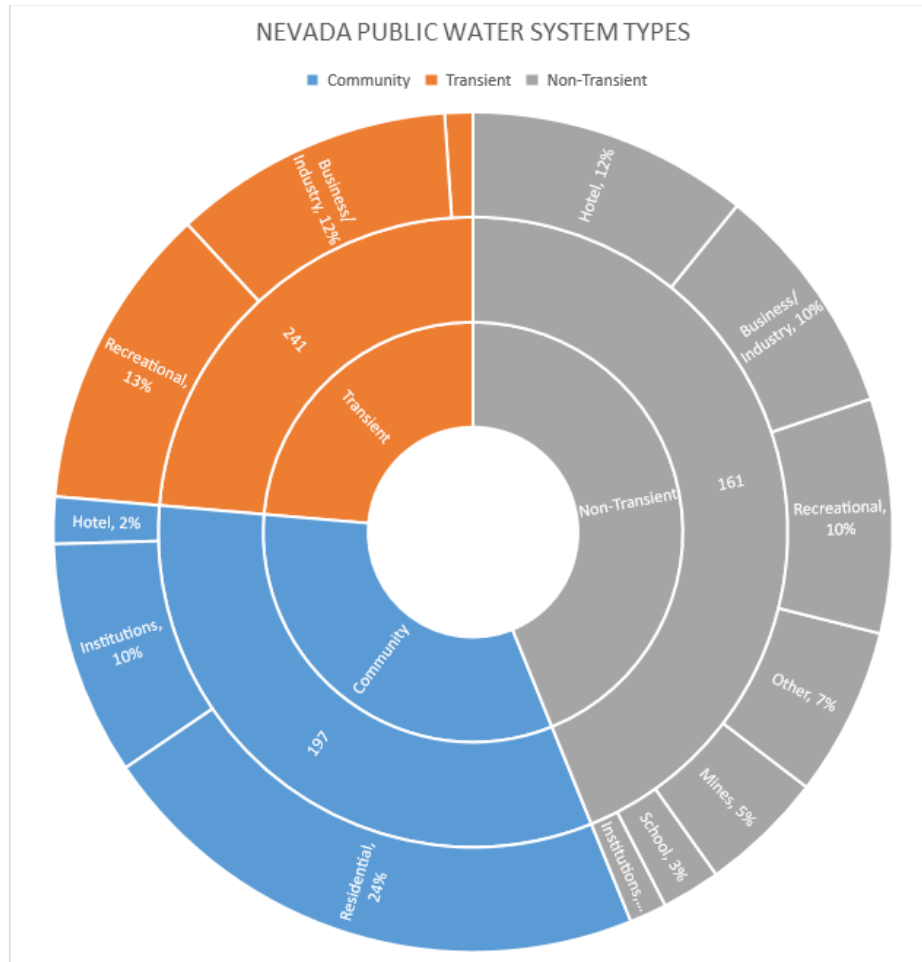


Figure 2: Service footprint of PWSs in Nevada

Newly permitted systems

In the last three years, NDEP permitted 11 systems. Enforcement Targeting Tool (ETT) scores through the second quarter of calendar year 2023 have been monitored. See Table 1 for the details of these systems.

#	Activity Date	County	PWS Type	PWS ID	PWS Name	Population Served	ETT Score
1	8/11/2021	CLARK	NTNC	NV0001169	CAESARS PALACE	6372	0
2	11/12/2020	CLARK	NC	NV0004119	COYOTE SPRINGS GOLF COURSE	25	0
3	8/12/2020	NYE	NC	NV0004132	FORELAND REFINERY	25	0
4	7/21/2021	DOUGLAS	NTNC	NV0001201	HARRAHS LAKE TAHOE	1688	1
5	10/20/2021	CLARK	NTNC	NV0001168	HARRAHS LAUGHLIN	3351	0
6	7/21/2021	DOUGLAS	NTNC	NV0001182	HARVEYS LAKE TAHOE	1950	0
7	3/8/2021	CLARK	NTNC	NV0001177	MARRIOTT GRAND CHATEAU	1228	0
8	10/24/2022	NYE	NC	NV0004139	PAHRUMP MUSEUM	25	0
9	2/10/2021	WASHOE	NTNC	NV0001196	PARR RENO WATER COMPANY	25	0
10	6/3/2021	CLARK	NTNC	NV0001210	RESORTS WORLD LAS VEGAS	11250	0
11	1/10/2022	CLARK	NTNC	NV0001206	WYNDHAM GRAND DESERT	1291	0

Table 1. New Public Water System (PWS) within Nevada in the last 3 years. PWS types: C-Community; NC- Transient Non-Community; NTNC-Non-Transient Non-Community

Found Systems Program Technical Assistance

A PWS is a drinking water system that regularly serves at least 25 people and/or 15 service connections for 60 days a year. On occasion, water systems cross this minimum threshold and require permitting without knowing that their status changed and are subject to Safe Drinking Water Act regulatory requirements enforced by NDEP. Such systems are found to be operating without a permit and have been dubbed “found systems.” A unique program was implemented in SFY 2016 to actively look for these types of public water systems, provide technical managerial and financial assistance, ensure they comply with the appropriate regulatory programs, and issue permits or consolidate them with existing PWSs. See Figure 3 for a historic perspective on the program.

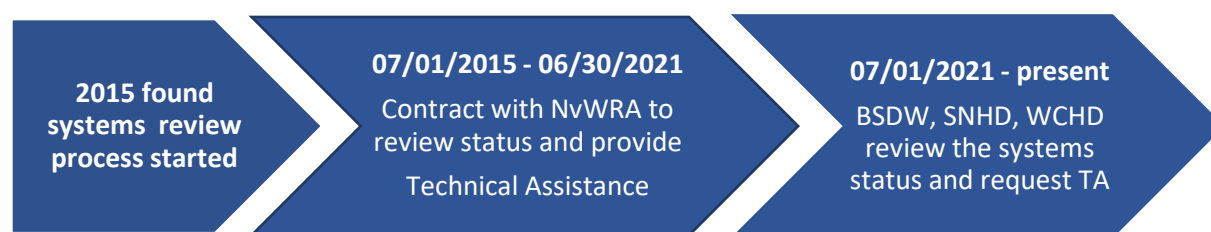


Figure 3: TMF provided to PWS in Nevada over time

NDEP has observed that the number of found systems fluctuates with changing economies and has implemented creative ways to maximize “boots on the ground” with outreach for the found system program. NDEP has worked with other permitting agencies to increase statewide professional common understanding in identifying potential public water systems. In SFY 2023, these outreach efforts included presenting at the Nevada Environmental Health Association Conference, as well as coordinating with local and state public and environmental health agency staff. By making permitting agencies aware of the SDWA regulatory requirements, they help prevent the creation of found PWSs and partner with NDEP to leverage permitting authorities.

NDEP is made aware of potential PWSs through multiple methods; public and permitting agency inquiries, NDEP staff investigations, permitted PWSs, and technical assistance providers. The first step of the process is to determine if the potential system meets the definition of a PWS. From this point there are two paths that may occur. See Figure 4 for a summary of this process.

If the potential PWS is identified as a PWS, BSDW and partner agencies provide technical assistance to guide the systems and build their technical, managerial, and financial capacity. Through this process, BSDW activates the PWS as unpermitted, monitoring is required, staff conducts a sanitary survey, and BSDW and technical assistance providers assist the system in completing the work necessary to lead the PWS through the permitting process. Technical Assistance includes sample collection and analysis training, developing operation and maintenance, emergency response and cross connection control plans, documenting the infrastructure design, providing as-built engineered plans, and other compliance measures.

These items are part of the PWS documentation to establish that the PWS has the TMF Capacity to operate a PWS. Systems identified as meeting the definition of a community public water system rank highest on the list for review and/or assistance due to the relative potential impact to public health.

If the potential PWS does not meet the criteria to qualify as a PWS but shows potential to qualify in the future, that system is placed on a continuous verification list for outreach. Continuous verification is a rolling outreach effort for PWS status determination. Staff continues to periodically reach out and seek information on current usage and potential qualification as a PWS through continuous verification. Periodic outreach is currently managed collectively for these potential systems by BSDW, Washoe County Health District, and Southern Nevada Health District.

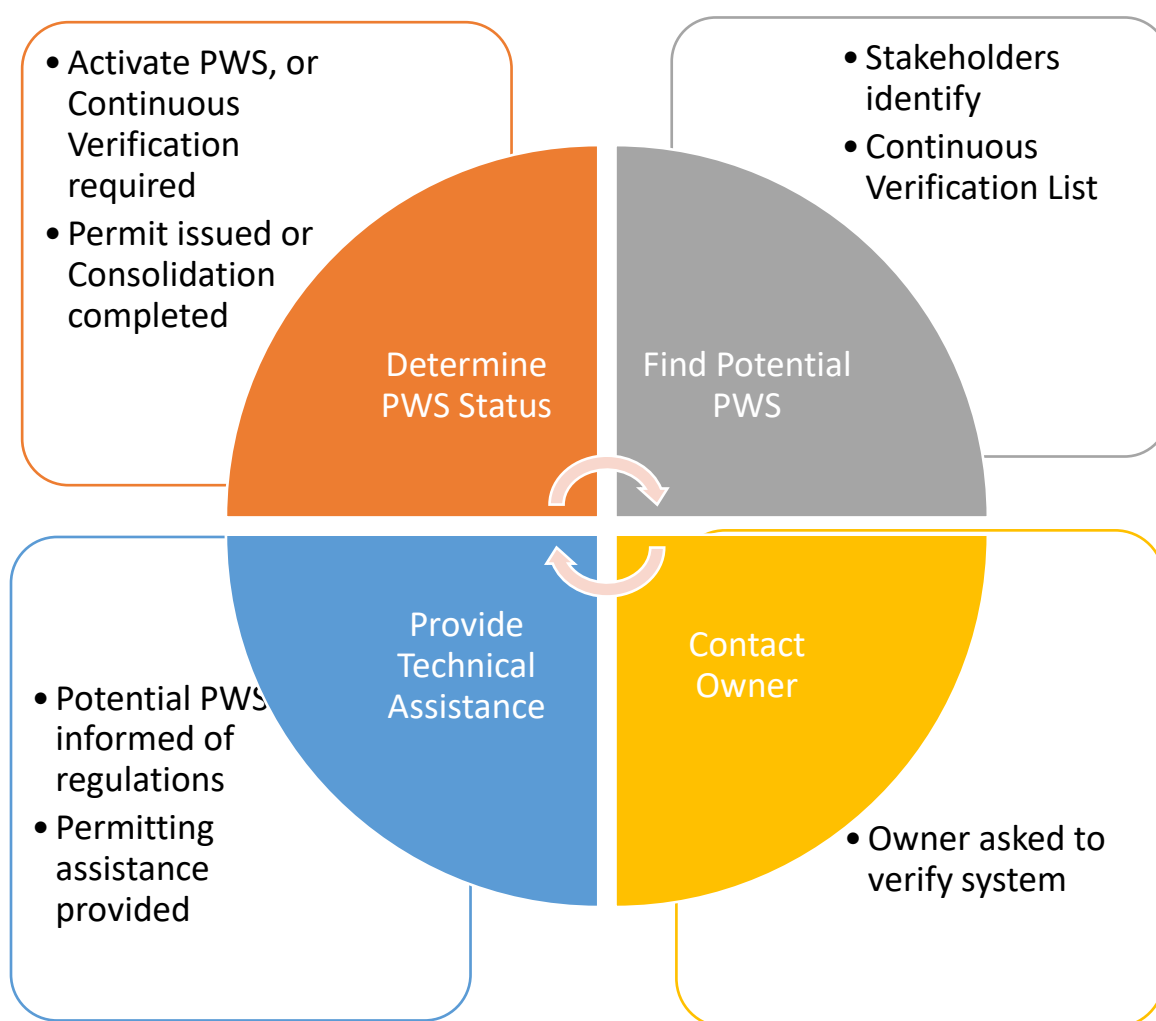


Figure 4: Found System Process Diagram

During SFY 2023, 23 found systems actively worked towards compliance and permitting, including two Community (C), ten Non-Transient Non-Community (NTNC) and ten Transient Non-Community (TNC) water systems. Additionally, 27 of 98 potential systems were verified

from the continuous verification list, and no new systems were activated. Table 2 provides a summary of each found system, and following is a summary of the information.

- Nineteen systems were technically supported by BSDW, RCAC, NvRWA, WCHD and SNHD.
- Five PWSs completed the process and were issued permits.
- Four PWSs were inactivated.
- Zero found systems activated.

<i>PWS Name</i>	<i>PWS #</i>	<i>PWS Type</i>	<i>Activity Status</i>	<i>Date Activated</i>	<i>Permit status</i>	<i>Date Constructed</i>	<i>Health-Based Violation</i>
<i>Desert Sunrise Water Users Assoc</i>	NV000 0426	C	Inactive	8/30/2022	Unpermitted		No
<i>Fort Apache Ann NE Water Assoc</i>	NV000 0430	C	Active	9/8/2020	Unpermitted		No
<i>Acres Cultivation</i>	NV000 1181	NTNC	Active	2/25/2020	Unpermitted	Well 03/21/1959	Yes
<i>CSS Farms</i>	NV000 1191	NTNC	Active	2/5/2020	Unpermitted	1971	Yes
<i>DWR POU 74505 /Wallflower Dispensary</i>	NV000 4137	NTNC	Active	9/29/2021	Unpermitted	Well 1/31/1995	
<i>Denton Rawhide</i>			Inactive				
<i>Isabella Pearl Mine</i>	NV000 1178	NTNC	Active	1/22/2020	Unpermitted		Yes

<i>Premier Magnesia</i>	NV000 1170	NTNC	Active	5/5/2017	Unpermitted	very old	Yes
<i>Speed Vegas</i>	NV000 4108	NTNC	Active	6/9/2022	Transitioning from TNC to NTNC		No
<i>Parr Reno Water Company</i>	NV000 1196	NTNC	Active	2/10/2021	Permitted 05/2023		No
<i>Lee Canyon Ski Area</i>	NV000 0307	NTNC	Active	1/1/2020	Transitioning from TNC to NTNC	1980	No
<i>Blue Diamond Rainbow SW Plaza Water</i>	NV000 0323	NTNC	Active	12/21/199 5	Transitioning from TNC to NTNC	Well 4/24/1992	No
<i>Aravada Springs</i>	NV000 4140	TNC	Active	6/30/2020	Permitted 02/2023		No
<i>Blue Diamond Rainbow NW Plaza Water</i>	NV000 4131	TNC	Active	6/19/2020	Unpermitted	5/8/1982	Yes
<i>Cowboy Trail Rides</i>	NV000 4134	TNC	Active	7/1/2021	Unpermitted		No

<i>Olam SVI</i>	NV000 4028	TNC	Active	4/13/2016	Unpermitted	wells: 03/15/1980, 04/19/1986	No
<i>Kruse Feed</i>	NV000 0700	TNC	Inactive	11/6/2018	Unpermitted	10/29/2014	Yes
<i>Sierra Safari Zoo</i>	NV000 4125	TNC	Active	12/1/2017	Unpermitted	9/16/1952	Yes
<i>Kellogg Park</i>	NV000 4115	TNC	Active	2/1/2017	Permitted	12/6/2021	Yes
<i>Holy Spirit Catholic Church</i>	NV000 4145	TNC	Active	8/11/2020	Unpermitted	7/16/1986	No
<i>Foreland Refinery</i>	NV000 4132	TNC	Active	8/12/2020	Permitted		No
<i>Camp Stimson LDS</i>	NV000 4024	TNC	Active	2/14/2014	Permitted		No
<i>Virgin Hyperloop</i>	NV000 1184	TNC	Inactive	7/27/2022	Unpermitted		

Table 2: Summary of Found Systems

Measurement of Success

Elements of Capacity	Benchmarks
Personnel and Management	
Water Operator Certification testing, surveys, and system staffing	An increase in the number of certificates was observed between SFY22 and SFY23. In SFY2022, 252 new certificates were issued; that number increased to 289 in SFY2023.
Financial Sustainability	
Water rate studies completed	9 studies were completed by Nevada's TA providers including 8 rates studies and 1 income survey.
PWS Characteristics	
Number of PWSs with a sanitary survey showing no significant deficiencies.	Of the 180 Sanitary Surveys completed, only 4 of these systems had Health Based Violations
Health based violations that were returned to compliance	There were a total of 44 Health based violations of which 10 were addressed in SFY2023.
Planning	
Developing and reviewing plans (Asset Management Plan, Emergency Response Plan, Cross-Connection Control Plan, Operation/Maintenance Plan, etc.)	25 plans were developed; 3 were reviewed and approved by the Bureau of Safe Drinking Water.
Source Water Quality and Quantity	
Number of consolidations for capacity development.	Over SFY 2021-2023, 39 systems have inactivated / consolidated as public water systems

ATTACHMENT 1: Technical Assistance Flyer

Free assistance for your water system

Nevadans not only rely on public water systems to provide safe, reliable drinking water, but they also expect excellent service and low water rates. Why not work to exceed these expectations by taking advantage of free, comprehensive training and on-the-ground support?

NDEP's third-party contractors offer free assistance on all aspects of operating a water system, from water sampling to water rights management to public accounting and more.

- Business and management processes
- Regulatory compliance
- Technical processes
- Financial planning and strategy



GET STARTED

This brochure only scratches the surface of the free services available to you. For a complete list of services, visit ndep.nv.gov/water/financing-infrastructure or contact NDEP's Office of Financial Assistance by emailing ndep-ofa@ndep.nv.gov.

We're here to help



901 S. Stewart Street, Suite 4001
Carson City, NV 89701



775-687-9436



ndep-ofa@ndep.nv.gov



ndep.nv.gov/water/financing-infrastructure



DRINKING WATER ASSISTANCE

FREE SERVICES FOR PUBLIC WATER SYSTEMS

Free Services for Public Water Systems

Office of Financial Assistance
BUREAU OF ADMINISTRATIVE SERVICES



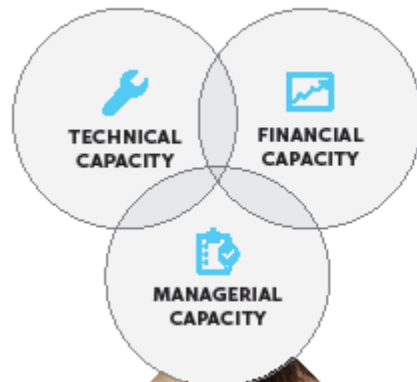
NEVADA DIVISION OF
ENVIRONMENTAL PROTECTION

Build your system's capacity

NDEP's free services focus on building capacity so your water system thrives, not just gets by. This opens doors for opportunities to refine your processes:

- Better system performance and efficiency
- Increased compliance to protect public health
- Excellent service to your community
- More effective business processes
- Long-term financial stability

Three parts of a capable water system



FINANCIAL CAPACITY Help with finances

Shore up the financial capacity of your system to provide top-notch water services both sustainably and efficiently.

- Budgeting and rate setting
- Income surveys
- Understanding financial reports
- Grants and loans management
- Fiscal sustainability plans
- Bookkeeping and public accounting



MANAGERIAL CAPACITY Help with business processes

Expand the managerial capacity of your system using targeted help with the business side of public water service.

- Consumer confidence reports and public notifications
- Operation and maintenance manuals
- Emergency response plans
- Water and energy conservation
- Technical, managerial, and financial capacity surveys
- Labor, water rights, records, and contract management



TECHNICAL CAPACITY Help with technical processes

Improve the technical capacity of your system with expert help on important regulations and processes that keep things running smoothly.

- Assistance with state and federal drinking water rules
- Help resolve violations in a timely manner
- Sampling, water quality testing, and troubleshooting
- Responses to sanitary surveys
- Digital mapping of system components



Free, third-party support to enable you to provide safe, reliable water service to your community.

FREE TRAINING

We also offer training so your team has the knowledge base to get the job done.

- Board training
- Clerical and office staff training
- Operator certification training
- Security and health threats training

ATTACHMENT 2: Specific TA Vendor Services

SFY 2023

Funding Source State of Nevada Fiscal Year 2023		Local Set-Aside	
Type of Assistance	Total Costs	Percent of Total	
Operator Certification Training	\$ 314,854.88	83.64%	
Lead and Copper Inventory	\$ 29,871.88	7.94%	
Board and Staff Training	\$ 15,344.38	4.08%	
Future Water System Operators	\$ 11,060.87	2.94%	
Project and other Funding Outreach	\$ 3,631.75	0.96%	
PWS Compliance	\$ 1,674.11	0.44%	
Grand Total	\$376,437.86	100.00%	

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Funding Source		Small Set-Aside				
State of Nevada Fiscal Year 2023						
Component	System Name	System Number	Federal System Type	System Population	Actual Expense	Percent of Total
= Manuals and Plans					\$126,820.95	44.52%
	☐ BLUE DIAMOND RAINBOW SW PLAZA WATER	☐ NV0000323	☐ NTNC	1,082	\$ 5,520.36	1.94%
	☐ BLUE DIAMOND WATER CO OP INC	☐ NV0000092	☐ C	85	\$ 6,068.68	2.13%
	☐ BUCKBOARD GENERAL STORE	☐ NV0000389	☐ NC	25	\$ 6,334.34	2.22%
	☐ CAMP LADY OF THE SNOWS	☐ NV00002509	☐ NC	60	\$ 5,772.52	2.03%
	☐ CHICKEN RANCH	☐ NV00004085	☐ NC	25	\$ 6,487.85	2.28%
	☐ COLD CREEK CANYON HOMEOWNERS	☐ NV00004000	☐ C	180	\$ 13,752.68	4.83%
	☐ EASTLAND HEIGHTS WATER ASSOCIATION	☐ NV0000106	☐ C	400	\$ 9,651.17	3.39%
	☐ FORT APACHE ANN NE WATER ASSOC	☐ NV0000430	☐ C	25	\$ 3,483.50	1.22%
	☐ HARRIS SPRINGS RANCH	☐ NV0001080	☐ C	40	\$ 3,179.62	1.12%
	☐ IDLE SPURS LOUNGE AND RESTAURANT	☐ NV00004073	☐ NC	58	\$ 5,311.51	1.86%
	☐ KINGS ROW TP	☐ NV0000287	☐ C	860	\$ 3,856.36	1.35%
	☐ LONGSTREET INN AND CASINO	☐ NV0000871	☐ NTNC	185	\$ 5,449.02	1.91%
	☐ LUNA VISTA	☐ NV0000140	☐ C	66	\$ 10,710.95	3.76%
	☐ MOOSE LODGE 808	☐ NV0002142	☐ NC	25	\$ 4,239.50	1.49%
	☐ MT CHARLESTON WATER COMPANY	☐ NV0001015	☐ C	335	\$ 6,025.61	2.12%
	☐ PINEVIEW ESTATES	☐ NV0000172	☐ C	450	\$ 4,950.23	1.74%
	☐ PIONEER SALOON	☐ NV0001012	☐ NC	40	\$ 4,269.16	1.50%
	☐ SHETLAND WATER DISTRICT	☐ NV0000126	☐ C	38	\$ 6,407.22	2.25%
	☐ SPIRIT MOUNTAIN UTILITY	☐ NV0000221	☐ C	375	\$ 4,376.97	1.54%
	☐ SPRING MOUNTAIN RANCH STATE PARK	☐ NV0001071	☐ NC	754	\$ -	0.00%
	☐ SUNRISE ACRES WATER ASSOCIATION	☐ NV0000124	☐ C	231	\$ 6,722.75	2.36%
	☐ TORREY PINES TINA LN WTR ASSOC	☐ NV0000314	☐ C	70	\$ 4,250.95	1.49%
	☐ VALLEY OF FIRE STATE PARK	☐ NV0001075	☐ NC	2,365	\$ -	0.00%
= Budgeting and Rate Setting					\$ 68,200.74	23.94%
	☐ BAKER WATER AND SEWER GID	☐ NV0000863	☐ C	18	\$ 3,749.48	1.32%
				85	\$ 9,120.59	3.20%
	☐ GOLD COUNTRY ESTATES	☐ NV0003079	☐ C	958	\$ 9,270.58	3.25%
	☐ MOUNTAIN CITY WATER AND SEWER	☐ NV0000170	☐ C	30	\$ 16,966.98	5.96%
	☐ SHOSHONE ESTATES WATER CO INC	☐ NV0005028	☐ C	240	\$ 2,945.17	1.03%
	☐ SPIRIT MOUNTAIN UTILITY	☐ NV0000221	☐ C	375	\$ 11,051.09	3.88%
	☐ TOPAZ RANCH ESTATES GID AND WATER CO	☐ NV0000239	☐ C	1,545	\$ 10,801.36	3.79%
	☐ TROUT CANYON LAND AND WATER USERS ASSC	☐ NV0004060	☐ NC	25	\$ 4,295.49	1.51%
= Asset Management Plans					\$ 42,608.40	14.96%
	☐ AMARGOSA WATER COMPANY	☐ NV0002558	☐ C	54	\$ 8,513.23	2.99%
	☐ GOLDFIELD TOWN WATER	☐ NV0000072	☐ C	375	\$ 12,707.68	4.46%
	☐ HILLCREST MANOR WATER USERS ASSOCIATION	☐ NV0000145	☐ C	450	\$ 6,860.33	2.41%
	☐ LOGAN CREEK ESTATES GID	☐ NV0002050	☐ C	60	\$ 5,442.35	1.91%
	☐ RANCHO VISTA 4	☐ NV0002571	☐ C	50	\$ 9,084.82	3.19%
= Income Surveys					\$ 11,370.40	3.99%
	☐ TROUT CANYON LAND AND WATER USERS ASSC	☐ NV0004060	☐ NC	60	\$ 11,370.40	3.99%
= Management and Operations					\$ 9,304.79	3.27%
	☐ MCDERMITT WATER SYSTEM	☐ NV0000162	☐ C	200	\$ 4,004.62	1.41%
	☐ TROUT CANYON LAND AND WATER USERS ASSC	☐ NV0004060	☐ NC	41	\$ 5,300.17	1.86%
= PWS Compliance					\$ 7,127.00	2.50%
	☐ EMPIRE MINING COMPANY	☐ NV0000042	☐ C	350	\$ 4,126.12	1.45%
	☐ PEACOCK CHARITABLE REMAINDER UNITRUST	☐ NV0004067	☐ NTNC	50	\$ 2,119.75	0.74%
	☐ ROSEMOUNT WATER CO	☐ NV0000767	☐ C	54	\$ 881.13	0.31%
- Prioritized PWS and ETT Score					\$ 6,608.45	2.32%
	☐ TROUT CANYON LAND AND WATER USERS ASSC	☐ NV0004060	☐ NC	25	\$ 6,608.45	2.32%
- Board and Staff Training					\$ 5,861.27	2.06%
	☐ BAKER WATER AND SEWER GID	☐ NV0000863	☐ C	85	\$ 3,203.64	1.12%
	☐ GOLCONDA GID	☐ NV0005029	☐ C	60	\$ 2,657.63	0.93%
- Sanitary Surveys and Deficiency Resolution					\$ 4,249.73	1.49%
	☐ HEYDAY INN	☐ NV0004037	☐ NC	80	\$ 4,249.73	1.49%
- Project and other Funding Outreach					\$ 2,718.86	0.95%
	☐ BRANDOS SPORTS BAR	☐ NV0000321	☐ NC	5-100	\$ 822.09	0.29%
	☐ GOLCONDA GID	☐ NV0005029	☐ C	60	\$ 766.27	0.27%
	☐ MIDDLEGATE STATION	☐ NV0002027	☐ NC	25	\$ 1,130.50	0.40%
Grand Total					\$284,870.59	100.00%

Rural Community Assistance Corporation T/A Training Sessions July 2022-June 2023 (FY 23)

RCAC Technical Assistance- Training Name	Advertised Start Time	Registrants	City	Contact Hours	Contact hours awarded
Developing the Operator Workforce (Nevada) 081122-10	8/11/2022	5	Online	2	10
Operator Math 101 (Nevada) 081822-10	8/18/2022	9	Online	2	18
Distribution Operator Prep Series Part 1 of 3 (Nevada) 082422-10	8/24/2022	9	Online	2	18
Treatment Operator Prep Series Part 1 of 3 (Nevada) 082422-2	8/24/2022	9	Online	2	18
Operator Math 102 (Nevada) 082522-10	8/25/2022	10	Online	2	20
Cyber Security 101: Safety and Security (Nevada) 083022-10	8/30/2022	5	Online	2	10
Distribution Operator Prep Series Part 2 of 3 (Nevada) 083122-10	8/31/2022	11	Online	2	22
Treatment Operator Prep Series Part 2 of 3 (Nevada) 083122-2	8/31/2022	8	Online	2	16
Operator Math 201 (Nevada) 090122-10	9/1/2022	10	Online	2	20
Distribution Operator Prep Series Part 3 of 3 (Nevada) 090722-10	9/7/2022	11	Online	2	22
Treatment Operator Prep Series Part 3 of 3 (Nevada) 090722-2	9/7/2022	9	Online	2	18
Operator Math 301 (Nevada) 090822-10	9/8/2022	10	Online	2	20
Build America, Buy America (Nevada) 091322-10	9/13/2022	5	Online	2	10
Regulations Update (Nevada) 092822-10	9/28/2022	12	Online	2	24
Contaminants of Concern 100422	10/4/2022	4	Reno	6	24
Contaminants of Concern 100622	10/6/2022	4	Elko	6	24
Funding Options in Nevada 101922-8	10/19/2022	15	Online	2	30
Small System Operations 110922	11/9/2022	5	Tonopah	6	30
Contract Operator; Understanding the Duties of a Water System Operator (Nevada) 111022-6	11/10/2022	26	Online	2	52
All Things Lead and Copper (Nevada) 111622-10	11/16/2022	59	Online	2	118
Filtration and Instrumentation 120722	12/7/2022	8	Sparks	6	48
Planning for Water Utility Workforce Succession (Nevada) 120822-10	12/8/2022	41	Online	2	82
Source Water Protection (Nevada) 011123-10	1/11/2023	34	Online	2	68
Arsenic (Nevada) 011123-10	1/12/2023	31	Online	2	62
Cyber Security 101: Safety and Security (Nevada) 011823-10	1/18/2023	15	Online	2	30
Asset Management 012423	1/24/2023	5	Mojave Valley	6	30
Asset Management 012623	1/26/2023	5	Ely	6	30
Operator Safety; An Overview (Nevada) 020123-10	2/1/2023	39	Online	2	78

Operator Math 101 (Nevada) 020223-10	2/2/2023	36	Online	2	112
Capacity Building Through Partnerships (Nevada) 020823-10	2/8/2023	13	Online	2	26
Operator Math 102 (Nevada) 020923-10	2/9/2023	55	Online	2	110
Distribution Operator Prep Series Part 1 of 3 (Nevada) 021523-10	2/15/2023	76	Online	2	152
Treatment Operator Prep Series Part 1 of 3 (Nevada) 021523-2	2/15/2023	40	Online	2	80
Operator Math 201 (Nevada) 021623-10	2/16/2023	53	Online	2	106
Distribution Operator Prep Series Part 2 of 3 (Nevada) 022223-10	2/22/2023	73	Online	2	146
Treatment Operator Prep Series Part 2 of 3 (Nevada) 022223-2	2/22/2023	37	Online	2	74
Operator Math 301 (Nevada) 022323-10	2/23/2023	48	Online	2	96
Distribution Operator Prep Series Part 3 of 3 (Nevada) 030123-10	3/1/2023	70	Online	2	140
Treatment Operator Prep Series Part 3 of 3 (Nevada) 030123-2	3/1/2023	36	Online	2	72
Storage and Distribution 032123	3/21/2023	13	Carson City	6	78
Sanitary Surveys 032223	3/22/2023	11	Yerington	6	66
Customer Notification (Nevada) 032923-10	3/29/2023	30	Online	2	60
Operator Math 101 (Nevada) 033023-10	3/30/2023	44	Online	2	88
Distribution Operator Prep Series Part 1 of 3 (Nevada) 040523-10	4/5/2023	44	Online	2	88
Treatment Operator Prep Series Part 1 of 3 (Nevada) 040523-2	4/5/2023	35	Online	2	70
Operator Math 102 (Nevada) 040623-10	4/6/2023	47	Online	2	94
Distribution Operator Prep Series Part 2 of 3 (Nevada) 041223-10	4/12/2023	44	Online	2	88
Treatment Operator Prep Series Part 2 of 3 (Nevada) 041223-2	4/12/2023	29	Online	2	58
Operator Math 201 (Nevada) 041323-10	4/13/2023	36	Online	2	72
Distribution Operator Prep Series Part 3 of 3 (Nevada) 041923-10	4/19/2023	38	Online	2	76
Treatment Operator Prep Series Part 3 of 3 (Nevada) 041923-2	4/19/2023	31	Online	2	62
Operator Math 301 (Nevada) 042023-10	4/20/2023	30	Online	2	60
Asset Management 042723	4/27/2023	11	Winnemucca	6	66
Treatment 050323	5/3/2023	7	Henderson	6	42
Distribution 101 050423	5/4/2023	20	Henderson	6	120
Cross Connection Controls 050923	5/9/2023	11	Eureka	6	66
Emergency Planning and Disinfection 051123	5/11/2023	7	Tonopah	6	42

Arsenic Treatment and Solutions 051723	5/17/2023	9	Sparks	6	54
Sampling 101 052323	5/23/2023	14	West Wendover	6	84
Consumer Confidence Reporting (Nevada) 060723-10	6/7/2023	19	Online	2	38
All Things Lead and Copper (Nevada) 060823-10	6/8/2023	37	Online	2	74
A Day in the Life of an Operator (Nevada) 062123-10	6/21/2023	38	Online	2	76
Drought Contingency and Water Conservation (Nevada) 062823-9	6/28/2023	34	Online	2	68
Lead Services Line Inventories 060123	6/1/2023	23	Las Vegas	6	138
Lead Services Line Inventories 053023	5/30/2023	29	Carson City	6	174
Lead Services Line Inventories 052523	5/25/2023	12	Elko	6	72
		Total Attendees		Average CEU's per person	Total Contact Hours
		1674		2.5	4140

Nevada Rural Water Association Training Sessions July 2022-June 2023 (FY 23)

Technical Assistance	Number of Individuals Receiving Assistance	Sum of Expenditures
Conference Scholarships	70	\$48,807.49
Operator/Workforce Development		\$11,060.87
Grand Total		\$59,868.36

ATTACHMENT 3: TA Vendor Services in SFY 2023

1. Technical Assistance to Water Systems

1.1. PWS Compliance

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.

- 1.1.1. This task may include training for staff personnel and/or board members over the necessary PWS compliance components.
- 1.1.2. This task may include assisting 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

1.2. Prioritized PWS and ETT Score

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.
- 1.2.3. This task may include training for staff personnel and/or board members over the necessary requirements to be removed from the ETT list.
- 1.2.4. This task may include assisting 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
- 1.2.5.

1.3. Sampling, Water Quality Testing and Troubleshooting

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.

- 1.3.11. This task may include training for staff personnel and/or board members over the necessary requirements sampling, testing, and troubleshooting.
- 1.3.12. This task may include assisting 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

1.4. Sanitary Surveys and Deficiency Resolution

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.

- 1.4.1. This task may include training for staff personnel and/or board members over the sanitary survey deficiencies and responsible management of the system.
- 1.4.2. This task may include assisting 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.

1.5. Revised Total Coliform Rule Level 1 Assessment

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.
- 1.5.6. This task may include training for staff personnel and/or board members over the Revised Total Coliform Rule.
- 1.5.7. This task may include assisting 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.

1.6. Digital Mapping and GPS Asset Location

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.

- 1.10. This task may include training for staff personnel and/or board members over the need for mapping and asset identification.
- 1.11. This task may include assisting 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. Managerial Assistance to Water Systems

2.1. PNR and CCR

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.
- 2.1.3. This task may include training for staff personnel and/or board members over the need for timely communication to the public for health risk violations.
- 2.1.4. This task may include assisting 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.

2.2. Manuals and Plans

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.
 - 2.2.1.1. Submitting any updates of water system assets to BSDW in order to maintain an accurate SDWIS database.
- 2.2.2. Development and implementation of a CCCP.
 - 2.2.2.1. Public outreach efforts to improve the public's understanding of the need for and importance of such a program.
- 2.2.3. Preparing new or updating existing system- and site-specific ERPs; and
 - 2.2.3.1. Evaluating system security and necessary upgrades including but not limited to:
 - 2.2.3.1.1. Fencing.
 - 2.2.3.1.2. Locks.
 - 2.2.3.1.3. SCADA.
 - 2.2.3.1.4. Alarms; and
 - 2.2.3.1.5. Security cameras
 - 2.2.3.2. Provide training and emergency assistance in implementing ERPs when systems face natural disasters, critical system component failures and risks to public health.
- 2.2.4. The awarded vendor(s) may be required to assist water systems with completing, updating, and implementing water conservation plans in compliance with the requirements of the DWR.

- 2.2.4.1. Metrics to be used by the systems to analyze the effectiveness of the plan.
- 2.2.4.2. Developing and implementing feasible water conservation measures and public awareness campaigns.
- 2.2.4.3. Water loss audits to assist system personnel in resolving unaccounted-for water.
- 2.2.4.4. Energy conservation opportunities including but not limited to:
- 2.2.4.5. Energy efficient equipment.
- 2.2.4.6. Alternative power generation; and
- 2.2.4.7. Off-peak power use.
- 2.2.5. This task may include training for staff personnel and/or board members over the need for manuals, their use, and the need to keep them updated.
- 2.2.6. This task may include assisting 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.

2.3. Management and Operations

- 2.3.1. The awarded vendor(s) may be required to assist the water system with personnel management.
 - 2.3.1.1. Personnel policies.
 - 2.3.1.2. Job descriptions.
 - 2.3.1.3. Contracts for operations, maintenance and/or administration
- 2.3.2. 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:
 - 2.3.2.1. Well pumpage.
 - 2.3.2.2. Valve exercising.
 - 2.3.2.3. Hydrant/dead-end flushing; and
 - 2.3.2.4. Backflow prevention assembly testing.
- 2.3.3. The awarded vendor(s) may be required to assist the water system with contracts management:
 - 2.3.3.1. Technical services solicitations.
 - 2.3.3.2. Review of bid specifications/construction contracts.
 - 2.3.3.3. Project documentation included but not limited to:
 - 2.3.3.3.1. Certified payroll review.
 - 2.3.3.3.2. Funding draws; and
 - 2.3.3.3.3. Reporting as required by federal, state, and/or funding agencies.
- 2.3.4. The awarded vendor(s) may be requiring to:
 - 2.3.4.1. Assist water system staff in understanding the organizational and governing structure and responsibility; and
 - 2.3.4.2. 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.
- 2.3.5. This task may include training for staff personnel and/or board members over sound management of a water system, troubleshooting workflows, contracting, and being responsive to customer needs.

- 2.3.6. This task may include assisting 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

2.4. Water Rights Management

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

- 2.4.1. Reviewing and understanding water rights and associated documentation.
- 2.4.2. Determining if water quantity and water rights are sufficient for existing and projected future population; and
- 2.4.3. Properly recording and submitting pumpage documentation to DWR.
- 2.4.4. This task may include training for staff personnel and/or board members over the importance of water rights.
- 2.4.5. This task may include assisting 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

3. Financial Assistance to Water Systems

3.1. Budgeting and Rate Setting

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.
- 3.1.4. This task may include training for staff personnel and/or board members over the importance of budgeting and rate setting.
- 3.1.5. This task may include assisting 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

3.2. Fiscal Sustainability Plans (FSP) or Asset Management Plans

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. Original price.
 - 3.2.1.4. Anticipated life span.
 - 3.2.1.5. Replacement costs.
 - 3.2.1.6. An evaluation of their condition and performance; and
 - 3.2.1.7. 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; and
- 3.2.4. Defined level of service goals for:
 - 3.2.4.1. Physical performance of the assets, and
 - 3.2.4.2. Customer expectations and satisfaction
- 3.2.5. This task may include training for staff personnel and/or board members over the importance of having an FSP or Asset Management Plan.
- 3.2.6. This task may include assisting 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

3.3. Income Surveys

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

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.
- 3.4.4. 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.
- 3.4.5. The awarded vendor(s) may be required to assist water systems with:
 - 3.4.5.1. Understanding the importance of internal controls in their accounting framework.
 - 3.4.5.2. 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
 - 3.4.5.3. 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.
- 3.4.6. This task may include training for staff personnel and/or board members over the importance of bookkeeping, transparency, internal controls, and sound accounting practices.
- 3.4.7. This task may include assisting 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

4. Training

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, Clerical, and Office staff Training

The awarded vendor(s) may be required to assist water systems with board training not previously identified in another task in this scope of work.

4.2. Operator Certification Training

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.

4.3. Security and Health Threat Training

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 tabletop exercises to help water system staff develop capacity and maintain preparedness to address emergency response needs.

4.4. Drinking Water State Revolving Fund Training

The awarded vendor(s) may be required to assist water systems with training on various aspects of the Drinking Water State Revolving Fund. These components could include, but are not limited to:

- 4.4.1. Application Process
- 4.4.2. Davis-Bacon Wage Requirements
- 4.4.3. American Iron and Steel Requirements
- 4.4.4. Procurement Requirements
- 4.4.5. Project Management Requirements
- 4.4.6. Environmental review requirement and federal crosscutters

5. Outreach

5.1. Project and Other funding Outreach

The awarded vendor(s) may be required to assist public water systems identify potential funding opportunities and applications for grants and loans for capital improvement projects and other activities under specific financial programs. 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

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.

ATTACHMENT 4: Vulnerability Assessment and Monitoring Waiver Form



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources
Steve Scola's, Governor
Rachelle Crockett, Governor
Peggy Smith, Administrator

**BUREAU OF SAFE DRINKING WATER
WAIVER APPLICATION OR RENEWAL
FORM "B"**

PWS NAME	
PWS ID #	
PWS SOURCE ID*	

*Complete a form for each source

<input type="checkbox"/> IOC II	<input type="checkbox"/> IOC V	<input type="checkbox"/> CYANIDE	<input type="checkbox"/> SOC II & V	<input type="checkbox"/> DIOXIN	<input type="checkbox"/> ASBESTOS
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Have there been any major changes to your water distribution system? (If yes, please elaborate in the space provided below.)	<input type="checkbox"/> YES <input type="checkbox"/> NO

Has there been any new construction, development, or zoning changes within a 3000-foot radius of your well in the past 3 years? (If yes, please elaborate in the space provided below.)	<input type="checkbox"/> YES <input type="checkbox"/> NO

Have there been any activities or occurrences (chemical spills, floods, improper storage of chemicals, etc.) in the past 3 years that may have potentially increased the possibility of contamination to the aquifer supplying your source water within a 3000-foot radius? (If yes, please elaborate in the space provided below.)	<input type="checkbox"/> YES <input type="checkbox"/> NO

For any questions contact Rheanna Morgan at: (775) 687-9448 or rmorgan@ndep.nv.gov

I hereby affirm the above information I have provided is true and accurate to the best of my knowledge.

Print Name	Title
Signature	Date