State of Nevada
Nevada Division of Environmental Protection
Office of Financial Assistance
901 So. Stewart Street, Suite 4001, Carson City NV 89701-5249

Technical, Managerial and Financial (TMF) Capacity Survey for Public Water Systems (PWS)

Public Water System Name: State PWS ID#:

____Community ____Non-Transient, Non-Community ____ Transient, Non-Community

Address:

PWS Type:
_____Public Municipal _____Private Municipal _____General Improvement District
_____Mobile Home Park _____Homeowner's Association _____Private, Non-profit
_____Other, Please Specify

Contact Name, Title: Contact Phone:
Contact Email: Contact FAX:

Interview Date: Person Performing Evaluation:

For ease of calculation, please use the accompanying TMF Capacity Survey Calculator spreadsheet.

TECHNICAL SCORE:
MANAGERIAL SCORE:
FINANCIAL SCORE:
TOTAL CAPACITY EVALUATION SCORE:

Water system satisfies NRS 445A.817, 827 and 847 Statutory Definitions for "Technical, Managerial and Financial Capability." Please note that capacity and capability are used interchangeably in this document. Assumes a score of 65% or higher in each capacity category.
_____Yes _____No

Note that water systems that lack adequate TMF Capacity or that cannot reasonably achieve adequate TMF Capacity may be ineligible for financial assistance from the Drinking Water State Revolving Fund (NAC 445A.67563).

_____PWS Uninterested/Uncooperative _____Contact Not Possible

For each indicator, please rate yourself on a scale of 1-3, based on your system's current capacity. If your water system is interested in technical assistance for a particular question/indicator, please check the item labeled "Interested in TA" and provide any comments.

Technical Capacity

NRS 445A.847 "Technical capability" defined. *"Technical capability" means the ability of a public water system to:*

1. *Obtain an adequate and reliable source of water that is necessary to provide the quantity and quality of water required by the system;*
2. *Establish and maintain an adequate infrastructure for the treatment, storage and distribution of the quantity and quality of water required by the system; and*
3. *Employ operators who have the technical knowledge and ability to operate the system*

1. Does the water system have a digital utility map/service area map of the entire service area that includes the location of each water source, treatment facility, pumping station, reservoir, pressure zone and control and isolation valve? Are service area boundaries outlined? Does the map include future growth areas? Are precise "As-Built" plans or drawings prepared and maintained for all new facilities? The water system should have copies of the actual CAD drawings as well as paper copies.

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			**Score (1-3)**
Mapping	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
As-Built Plans	As-Built plans have been reviewed and are 100% accurate	As-Built plans have been reviewed but are <100% accurate	As-Built plans have not been reviewed, or are not accurate, or are not maintained for any facilities	
Computer Aided Design (CAD) Maps	PWS has up-to-date CAD maps both in digital and paper format	PWS has CAD maps in both digital and paper format, but they have not been updated to reflect recent water system changes (e.g. adding valves etc.)	PWS only has maps in paper format	
Water System Assets	All current water system assets are identified in maps including: sources, storage tanks, valves, booster pumps, water lines, hydrants, etc.	Because maps are not updated annually, some water system assets &/or minor changes have not yet been included	Because maps are not updated annually, many water system assets/changes have not yet been included	

Updating	Maps are reviewed and/or updated annually Date of last update: ____	Maps are reviewed and/or updated every 2 years Date of last update: _____	Maps have not been reviewed in over 3 years Date of last update: _____	
Geographical Information Systems (GIS)**	PWS has or is currently developing GIS maps	PWS is interested in GIS mapping, but has not started the process	PWS is not interested in GIS mapping	
** Extra credit, but shouldn't count against small systems that do not have the capability or funding to expand into GIS at this point.			**Total**	
			Score = Total ÷ 4	

2. How well does the water system meet requirements for water system facilities and back-up power (e.g., wells, pumps, power, etc.) for adequate redundancy to ensure reliable service?

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			**Score (1-3)**
Service Reliability	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Source Redundancy	PWS has more than one well that can supply safe drinking water	PWS has a back-up source that can be used but the water is not high quality &/or quantity	PWS only has one water source	
Back-up Equipment	PWS maintains a back-up generator for each water source PWS keeps spare parts onsite and can obtain spare parts within 24 hours (e.g. pump)	PWS has a back-up generator for at least one source PWS does not keep spare parts onsite but works with a distributor to ensure equipment w/in 24 hours	PWS does not have a back-up generator PWS does not maintain any spare parts onsite and does not have a spare parts distributor who can provide equipment if there is an emergency	
			Total	
			Score = Total ÷ 2	

3. Maintaining sufficient pressure throughout the distribution system prevents contaminants from entering the water lines. Drops in pressure can also result in backflow. How well does the water system meet state and local codes and ordinances regarding water pressure? Typical ranges are 40-70 psi. Minimum Requirements (NAC 445A.6672): at least 20 psi during fire flow and fire demand conditions experienced during maximum day demand; at least 30 psi during peak hour demand; and at least 40 psi during maximum day demand

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			Score (1-3)
Pressure	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Demand	PWS can meet the requirements of NAC 445A.6672 (fire flow demands, peak hour demand and maximum day demand)	PWS can meet peak demand and maximum day demand but cannot meet 20 psi during fire demand conditions during maximum day demand	PWS can only meet maximum day demand or less but cannot meet fire flow demand or peak hour demand	
Pressure Range & Zones	Typical pressure ranges are between 40 to 70 psi If necessary pressure zones have been created to regulate pressure	Typical pressure ranges are between 40 to 70 psi Pressure zones have been created, but pressure could be improved by creating more zones	Pressure ranges fluctuate outside of 40 to 70 psi	
			Total	
			Score = Total ÷ 2	

4. Six-inch pipes help ensure that demand for fire suppression purposes can be met. Does the water system meet state and local codes and ordinances regarding pipe size (pipes should be 6-inches or larger)? Minimum Requirements (NAC 445A.67115): nominal size of at least 6 inches

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			Score (1-3)
Pipes	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Pipe Size	100% of pipes are 6-inches or larger	At least 75% of pipes are 6-inches or larger	< 75% of pipes are 6-inches or larger	
			Total	
			Score = Total ÷ 1	

5. How well prepared is the water system to provide adequate fire flow and storage in compliance with state and local codes (i.e., 1,000 gpm for residential and 2,500 gpm for commercial - or flows specified by the local Fire Marshall)? How long can current storage sustain average day demand if wells can't be pumped?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Fire Flow & Storage	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Fire Flow Rate	PWS can meet demand for all required flows.	PWS can meet residential fire demand but cannot meet commercial	PWS cannot meet either 1,000 gpm or 2,500 gpm for fire flow demand	
Storage: Operational/Emergency	If wells can't be pumped, water can be supplied for at least two full days (according to average daily demand) Average Daily Demand: _____	If well can't be pumped storage can supply water for ~1 full day (according to average daily demand) Average Daily Demand: _____	Storage can supply water for less than 1 day if wells can't be pumped (according to average daily demand) Average Daily Demand: _____	
Storage: Fire Reserve	In addition to Operational/Emergency Storage, PWS retains storage that can provide fire demand for at least two hours at the suggested commercial flow rate	In addition to Operational/Emergency Storage, PWS retains storage that can provide fire demand for less than two hours at the suggested commercial flow rate	PWS does not have fire reserve in addition to operational and emergency storage.	
Hydrant Testing	Hydrants are flow tested annually	Hydrants are flow tested every 2-3 years	Hydrants are non-existent or have never been flow tested	
			Total	
			Score = Total ÷ 4	

6. Routine maintenance can prolong the lifespan of equipment and help identify problems early. How well is the infrastructure and related equipment maintained? Is routine maintenance done to assure performance (e.g., valves exercised, hydrants flushed, equipment inspected and repaired, etc.)?

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			Score (1-3)
Routine Maintenance	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Inspection & Addressing Problems	Source(s) and pumps are inspected daily Issues are addressed as soon as possible after they are detected	Source(s) and pumps are inspected at least weekly Issues are addressed as soon as possible after they are detected	Source(s) and pumps are inspected rarely (once a month or less). There is a significant lag in time to fix identified issues	
Valves & Hydrants	Valves are exercised and hydrants/dead end lines are flushed at least annually	Valves and hydrants are exercised/flushed every 2 years Dead end lines are flushed less than annually	Valves, hydrants and dead ends are rarely/never exercised or flushed	
			Total	
			Score = Total ÷ 2	

7. Water systems may experience water loss in a variety of ways, some under their control, others not. Line breaks, hydrant flushing, faulty metering and theft are common culprits in water loss. Water that has been conveyed from the source, treated to drinking water standards then not sold equals lost revenue for the system. It also puts increased pressure on the source, as additional water must be withdrawn to make up for that which has been lost. Some "non-revenue" water (NRW) is inevitable; however systems should become concerned if water loss exceeds 10-15%. At a bare minimum, systems should track water loss monthly. How prepared is the water system to address un-accounted for water losses (has a water audit been performed, is a leak detection program in place, what steps are being taken to address leaks in the distribution system)? What is the percentage of water lost to leaks?

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			Score (1-3)
Water Loss	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Metering	PWS is 100% metered	PWS is >75% metered with plans in place to meter up to 100%	PWS is <75% metered. No plans are in place to reach 100% metering	

Non-Revenue Water	NRW is accurately tracked <u>monthly</u> and is below 10 - 15%, or, if above 10 - 15%, a plan to reduce is underway Hydrant flushing is metered Other departments (Parks, Fire, etc.) are billed for their water usage Leak detection equipment is available and utilized	NRW is accurately tracked monthly and is above 10-15%, however a plan to reduce has not been developed	NRW is not tracked or improperly tracked	
			Total	
			Score = Total ÷ 2	

8. Cross-connection control/backflow prevention ensures that there are no unprotected connections between the public water system and any source of pollution or contamination which can be discharged or drawn into the public water system as a result of back-siphonage or backpressure and potentially harm consumers. (NAC 445A.67185 – 445A.67255). Is there an <u>active</u> cross-connection control program? Date of last Plan Update:

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			**Score (1-3)**
Cross-Connection Control	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Implementation	A CCC plan is available and actively being implemented PWS is surveying facilities and requiring all facilities to install appropriate backflow protection where deemed necessary	A CCC plan is available, but is not being completely implemented All new commercial businesses are required to install appropriate protection No enforcement with established businesses	No CCC plan is in place or being implemented Some businesses have installed appropriate protection of their own accord	
Certifications	PWS has a Certified Cross-Connection Control Specialist and a Certified Backflow Tester on staff	PWS has a Certified Backflow Tester on staff or PWS works closely with a private testing company on a regular basis	No certified testers or specialists are on staff and no working relationship has been formed with a private testing company	

Public Education	PWS has implemented public education to spread awareness about the risks of backflow The public has been involved in the planning process	PWS has started to discuss backflow prevention with commercial businesses and some businesses are protected Some involvement from the public with the planning process	Public education is negligible	
Record Keeping	PWS keeps up-to-date records including survey results, testing results, and repairs of assemblies Customers are notified prior to their annual testing date to test their devices	Records on testing, repairs or surveys are incomplete No notification process is in place	PWS maintains no records.	
			Total	
			Score = Total ÷ 4	

9. Water systems must have a water conservation plan and it must be approved by the Division of Water Resources (NRS 540.131 – 540.151). Is there a water conservation plan in place and do current policies appropriately address water conservation as spelled out in the plan? What percentage of facilities is metered? Date of Last Plan Update:

   _____ Interested in TA _____ N/A

   Comments:

	Assessment			**Score (1-3)**
Water Conservation	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Planning	An approved Water Conservation Plan is on file with the Division of Water Resources and has been updated in the last 5 years	An approved Water Conservation Plan was developed for the PWS but has not been updated in more than 5 years	No Water Conservation Plan has been developed	
Policies/ Ordinances	PWS has developed policies which are implemented to promote water conservation (e.g. watering during certain hours, not watering sidewalks etc.)	Water conservation policies have been adopted but are not actively promoted or enforced	No policies are in place for water conservation	
Metering	100% of facilities are metered and rates encourage conservation, especially during peak water use	> 75% of facilities are metered and/or rates do not encourage conservation	< 75 % of facilities are metered and/or customers are charged a flat rate regardless of water use or given a cost break for high water use	

Public Education	PWS actively engages in public education at town events, in bill inserts etc. to promote water conservation	Minimal public education takes place. PWS assumes water rates generally promote water conservation	No public education is underway	
			Total	
			Score = Total ÷ 4	

10. How is the water system performing in meeting the monitoring and reporting schedule requirements? How is the water system performing in meeting all applicable water quality standards? Have there been any issues in the last three years? How familiar is the water system with its current monitoring and reporting requirements? Are results on file?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Water Quality Monitoring & Reporting	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Water Quality	No MCLs or Action Levels (AL) are exceeded No unaddressed or uncorrected violations If an MCL or AL has been exceeded the PWS has implemented controls to remediate the issue ETT Score: _____	An MCL or AL is exceeded and the PWS is actively working to monitor and control the issue ETT Score: _____	MCLs or AL are exceeded and the PWS has no plans in place to remedy the issue PWS a priority system with the BSDW and/or is facing formal enforcement action ETT Score: _____	
Monitoring	PWS submits all monthly, annual, and 3-year monitoring and reporting requirements to the Bureau of Safe Drinking Water on time	PWS is usually on time with monitoring and reporting but has missed a couple sampling events within the past three years	PWS has missed 3 or more sampling events in the past three years	
Reporting/ Public Notification	PWS follows all correct protocol for re-testing and public notification in case of an MCL/AL exceedance or positive bac-t test	PWS has had issues with following the correct protocol for re-testing and needed assistance from the NDEP With assistance they follow public notification correctly	PWS has not followed public notification procedure correctly	
			Total	
			Score = Total ÷ 3	

11. How interested would you be in consolidating either physically or managerially with another public water system? Has this been investigated or has a feasibility study been done? Is it a feasible option? Note: If this option is not feasible, this question is not counted toward the final technical score.

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Consolidation	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Physical / Managerial Consolidation	PWS is currently consolidated managerially with other PWS(s) or PWS is in the process of consolidating either physically or managerially with other PWS(s)	PWS is working on or has completed a feasibility study and would consider either physical or managerial consolidation; however, funding or other issues are currently inhibiting further action	PWS could consolidate either physically or managerially with other PWS(s) but chooses not to	
			Total	
			Score = Total ÷ 1	

12. Are water system operator(s) certified to an appropriate grade for water treatment and distribution? Are the water system operator(s) on-site and available? How many certified operators or OITs are on staff and what are their certification levels?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Certified Operators	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Number of Operators	At least 2 operators certified to the appropriate grade for water treatment and/or distribution or The system has one Certified Operator and an agreement is in place with a nearby system or contractor to provide backup Certified Operator services when necessary	At least 1 operator certified to the appropriate grade for water treatment and/or distribution	No certified operator or operator not certified to the appropriate grade	

Availability	More than one operator is onsite/available 24/7	Only one operator available 24/7	Certified Operator is an off-site contract operator, only available periodically	
			Total	
			Score = Total ÷ 2	

13. How familiar is management with the most recent Sanitary Survey? Are there any items on the most recent sanitary survey which have not been addressed? How familiar is management with the most recent Technical, Managerial and Financial (TMF) Capacity Survey?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Sanitary Surveys	**Strong Technical Capacity 3**	**Moderate Technical Capacity 2**	**Weak or deficient Technical Capacity 1**	
Pre-Sanitary Surveys	PWS participates in pre-Sanitary Surveys and Capacity Surveys to identify and remedy potential deficiencies prior to the official Sanitary Survey PWS has requested and received technical assistance to improve TMF capacity	PWS participates in pre-Sanitary Surveys and Capacity Surveys, but does not remedy the issues prior to the official Sanitary Survey	PWS does not participate in pre-Sanitary Surveys and/or Capacity Surveys	
Familiarity	Operator/Manager can recall findings of the previous sanitary survey w/o prompt	Operator/Manager can recall some, but not all, of the findings of the previous sanitary survey	Operator/Manager cannot recall the previous sanitary survey	
Deficiencies	All deficiencies have been corrected	Some, but not all, deficiencies have been corrected	No deficiencies have been corrected	
			Total	
			Score = Total ÷ 3	

Enter your score from each of the questions 1 – 13 above. Divide the total by 13 to get your final technical score. Note that if Question #11 is not applicable, enter 0 in the box below and divide by 12 to get your total score.

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*Total*

Managerial Capacity

NRS 445A.827 "Managerial capability" defined. *"Managerial capability" means the ability of a public water system to conduct its administrative affairs in a manner that ensures compliance with all applicable standards based on:*

1. *The accountability, responsibility and authority of the owner or operator of the system;*
2. *The personnel and organization of the system; and*
3. *The ability of the persons who manage the system to work with:*

(a) Jurisdictional, regulatory and other governmental agencies;

(b) Trade and industry organizations; and

(c) The persons served by the system

Compliance is often considered a technical capacity indicator. However, compliance also has a very strong managerial component. In order to comply, the management must understand what their responsibilities are with regard to regulations. For example, the proper samples must be taken when and where required, records must be kept on site, and if deficiencies are noted on sanitary surveys, they must be corrected. In addition, the management must support operator training and certification to ensure that the system is run by a competent, qualified individual.

A utility's compliance status and compliance history is a good indication of the strength of the managerial capacity. A system who has frequent monitoring and reporting violations is one in which there is little regard for the regulations or for which there is a lack of training or understanding. A system with long-term unresolved sanitary survey deficiencies shows a lack of regard for the regulations and a lack of understanding of the actions it will take to correct the deficiencies. A system who lacks a certified operator at the appropriate level is not demonstrating proper support for operator training, recruitment and retention. A system that has non-compliance for a particular contaminant does not possess sufficient managerial capacity to change operations to fix the problem or to obtain the funding necessary to remedy the situation. A good compliance history is one indication of strong managerial capacity.

14. How adequate is the current source water supply (quantity)? Is there sufficient supply to sustain existing and future populations? How adequate are existing water rights for future growth projections? How well are water rights being maintained and managed? Does the PWS submit regular (monthly or quarterly) pumpage documentation to the Department of Water Resources [this is a requirement of the PWS permit]?

    _____ Interested in TA _____ N/A

    Currently Using (acre-ft): Currently Permitted Water Rights (acre-ft):

    Comments:

	Assessment			Score (1-3)
Water Quantity & Rights	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Quantity, Rights & Population Growth	Population could double and the water quantity and water rights are sufficient	Quantity and rights are more than sufficient to meet the existing population, but another source and additional rights would be required if the population were to grow by 50% PWS has plans in place to identify a new source and secure additional rights and is currently setting aside funds	PWS can barely meet the needs of the existing population, and the source could not sustain any extra demand PWS does not have plans in place to secure another source or additional rights.	
Water Rights Management	Water rights are managed by the PWS and are reviewed at least annually for adequacy PWS has a close working relationship with the Dept. of Water Resources	Water rights are managed by a private company; PWS is "hands-off" with their management but is kept up to date at least every 2 years with their status PWS receives copies of all correspondence regarding their water rights	PWS is not involved in water rights management and has difficulty quantifying the rights they have and how many they may need in the future	
			Total	
			Score = Total ÷ 2	

15. Each community public water system must provide its customers an annual consumer confidence report which contains information on the quality of the water delivered by the system. How is the water system performing in submitting annual consumer confidence reports (are reports submitted consistently and on-time)?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			Score (1-3)
Consumer Confidence Reports	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Preparation	PWS is self-sufficient in preparing their CCR.	PWS needs limited assistance from the BSDW, but largely prepares the document in-house.	PWS completely relies on the NDEP or other assistance providers to prepare the CCR.	

Submittal	CCRs have been prepared and submitted on-time every year for the past 5 years.	CCRs have been submitted late once in the last 5 years.	CCRs have been submitted late 2 or more times in the past 5 years.	
Information Sharing	PWS obliges with the mandatory legal requirements of the CCR, and uses the CCR as a tool to promote public relations and share other relevant information.	CCR only includes the mandatory legal requirements.	CCR barely meets the mandatory legal requirements.	
			Total	
			Score = Total ÷ 3	

16. Source water protection is a proactive way to prevent contaminants from entering a community's drinking water source and is much less expensive than cleaning up contamination or identifying a new source. How well does the water system identify and locate all major contamination hazards (e.g., waste disposal sites, landfills, animal feedlots, etc.), actual or potential, within the system's service area or in adjacent areas that might impact the system's water source(s)? Does the water system have a source water protection plan in place (WHPP)? Date of Last Plan Update?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Source Protection	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Potential Contaminant Sources (PCS)	All PCS within the PWS's service area have been identified. Controls and monitoring are underway to control each PCS	All PCS have been identified, but controls are not in place	PWS has not taken steps to identify, document or manage PCS	
Community Source Water Protection/ Wellhead Protection (CSWP)	A CSWP plan has been developed and approved by the Board	A CSWP plan has not been developed, but concrete plans are underway to work on a plan and funding has been approved or is actively being sought	No CSWP plan is in place, nor is the PWS making plans to develop one	
Policies/ Ordinances	The CSWP plan has been approved by the NDEP Policies &/or ordinances are in place to protect the CSWP area	The CSWP plan has been approved by the NDEP, but no policies or ordinances have legally been adopted by the Board	No policies are in place	

Public Education	Public education is ongoing for residents and businesses within the source's contribution area Signage is posted conspicuously within the CSWP area.	Public education is minimal, i.e. periodic bill inserts No signage in the CSWP area	Public education is negligible	
			Total	
			Score = Total ÷ 4	

17. Are records of routine maintenance kept? How are the records managed? Are the records audited annually?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Records Management	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Records Maintenance System	PWS uses a system to maintain records regarding well maintenance, pumpage documentation, valve exercising, hydrant/dead-end flushing, backflow prevention assembly testing etc. This system can be a simple filing system, an Excel spreadsheet, or software such as CUPSS	PWS maintains records of routine maintenance, but no organized system is in place to locate or document specific records and records are incomplete	Record maintenance is negligible	
Auditing	Records of operation and maintenance are summarized and presented to the Board at each monthly board meeting	Records of O&M are summarized and presented periodically at board meetings or only when requested	Records are not reviewed or audited	
			Total	
			Score = Total ÷ 2	

18. An Operation and Maintenance (O&M) Manual should detail the water system from source to treatment to distribution. This plan should include specific details on start up and stop of the system and daily, monthly and yearly maintenance performed on the system. It should read as a comprehensive document that someone not familiar with the system can follow. The O&M Manual is not solely a compilation of manuals for various pieces of equipment. Is there an updated O&M plan? Date of last update? How well does the O&M manual describe operational activities, daily operational practice, and routine maintenance? How familiar is personnel with the O&M plan (is it utilized and referenced frequently)?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Operations & Maintenance Manual	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
O&M Manual Contents	The O&M Manual clearly states the daily/monthly/annual operation of the water system and includes a description of the water sources and distribution system, start and stop procedures and other intricacies of the specific water system that can easily be followed by someone not familiar with the PWS	The O&M Manual consists of a collection of specific manuals for various pieces of equipment, but no summary on how to actually run the PWS or a description of normal operation The information is available, but an actual O&M manual needs to be developed that includes a summary of water system intricacies	No O&M manual in any form exists	
Updating O&M Manual	Manual is reviewed annually and changes are made as necessary	Manual is reviewed every two years and changes are made as necessary	Manual is rarely reviewed (> every 5 years) and is out of date	
Familiarity of Personnel	Personnel are familiar with the contents of the O&M, know where to look for specific information, and refer to the O&M as necessary	Personnel have reviewed the O&M manual only when they were new to the PWS, but have not reviewed the manual since then even though changes to the system have occurred	Personnel rarely/never refer to the O&M Manual	
			Total	
			Score = Total ÷ 3	

19. How well does the water system Emergency Response Plan (ERP) outline procedures to respond to emergencies? Is the plan up to date and available upon request? Does the ERP define responsible personnel and a clear chain of command and responsibilities? Does the ERP identify an emergency operations center and communication network? Date of Last Plan Update or Table Top Exercises:

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Emergency Response	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Plan	Plan includes: - immediate steps to take when an emergency occurs - a clear chain of command and responsibilities - an outline of procedures to assess damage - current emergency phone numbers - an inventory of resources that may be available upon request - emergency procedures to monitor progress of repairs and restoration	Plan is available but is limited in its content: - chain of command is included but plan lacks clearly defined responsibilities - some steps to take when an emergency occurs are included but could be elaborated - phone numbers are out of date	PWS does not have a plan or emergency response procedures are solely limited to a list of phone numbers	
Review	Plan is reviewed and updated at least annually	Plan is only updated every 2-4 years	Plan is nonexistent or has not been updated in 5+ years	
Exercises	The majority of PWS employees have participated in exercises to practice emergency response within the last two years	Less than the majority of PWS employees have participated in exercises to practice emergency response within the last two years	PWS has never rehearsed emergency response exercises	
Mutual Assistance	PWS is an active member of NvWARN or other mutual assistance network (i.e. neighboring PWS)	PWS collaborates with their closest neighbor to share equipment in case of emergencies	PWS does not participate in any mutual assistance network	
Health Authority Notification	PWS notifies the health authority when an emergency occurs and submits necessary documentation	PWS notifies the health authority when an emergency occurs, but is delayed in submitting the necessary documentation	PWS does not notify the health authority	
			Total	
			Score = Total ÷ 5	

20. Is there adequate security in place to protect the water system assets?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Security	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
SCADA / Telemetry	PWS utilizes SCADA to monitor the water system remotely and to alert operators when issues arise	PWS has some telemetry, i.e. for tank water levels, but it does not monitor the entire system Operators are alerted when there are low tank levels	PWS has no telemetry Water system must be physically monitored	
Housing, Fencing, Locks, Etc.	Assets are housed, fenced, locked and alarmed An alarm at a facility is transmitted to the operators	Assets are housed, fenced and locked	Assets are not secured	
Location	Assets are located within the town and visible and/or are monitored remotely with security cameras and alarms	Assets are located partially outside of town and only partly visible There are no security cameras	Assets are located quite a distance from town and no form of alarm or surveillance is in place	
			Total	
			Score = Total ÷ 3	

21. How well trained is the water system governing board in understanding applicable regulations, regulatory agencies, rules, ordinances and professional practices in the water supply area? Are job duties clearly delineated? Is there an organizational chart? Does the governing board review and update policies/ordinances related to water system operations regularly? Are regular board meetings held? Does the board adhere to Open Meeting Law (NRS 241)?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Governing Body	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Governing Body Training	At least a majority of governing body members have attended training on water system management	Less than a majority of governing body members have attended training on water system management	No governing body members have attended training on water system management	

Member Participation in Meetings	The governing body holds regular meetings that all members attend	The governing body holds meetings on an as-needed basis. Member attendance at meetings is sporadic	The governing body does not hold meetings Not all seats on the governing body are filled	
Open Meetings	Meetings of the governing body are open to customers and staff At least 3 days advanced notice of meetings is provided	The governing body has procedures for open meetings, but does not follow them Notice of meetings is inadequate	The governing body does not hold open meetings	
Staff Communication with Governing Body	An operational and financial report are presented by staff and reviewed by the governing body each month	Operational and financial information is provided by staff to the governing body upon request	There is poor communication between the governing body and staff	
Customer Communication with Governing Body	At all meetings of the governing body: - public comment periods are provided prior to each agendized action by the governing body - public comments are included as a separate items on the agenda	There is a public comment period on the agenda at meetings of the governing body	There is no public comment period at meetings of the governing body	
Open Records	Meeting minutes and other records required by law are accessible to staff, customers and the public in general	Meeting minutes and other records required by law are inconsistently maintained or not accessible to customers and staff	Meeting minutes and other records required by law are not maintained	
Budget	Water system has annual operating and capital budgets that are approved by the governing body The governing body reviews a budget comparison each month	Water system has an annual operating budget that is approved by the governing body	Water system does not have an annual budget	
			Total	
			Score = Total ÷ 7	

22. Policies enable a water system to establish its business practices regarding personnel, contracts, and customer service (complaints and billing). Policies provide a consistent way for a system to respond to recurring situations or unusual conditions. They provide guidance for staff as well as provide information for customers so expectations and responsibilities are clear. Policies should be adopted by the governing body or delineated in an ordinance and distributed to staff and made available to customers. The size of the utility and number of staff will determine the number and complexity of the policies. Policies do not have to be elaborate or lengthy, but they should be

clear. How adequately do the existing policies/ordinances address day-to-day operations, water conservation, back-flow prevention, late fees, hook-up fees, capacity fees, service charges, meter replacement fees, shut-off and re-connection fees, etc.? Do the existing policies ensure compliance with regulations?

_____ Interested in TA _____ N/A

Comments:

	Assessment			**Score (1-3)**
Type of Policies	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or Deficient Managerial Capacity 1**	
General	Clearly written policies are distributed to staff and customers Policies are enforced consistently and fairly	There are some written policies but not everyone is aware of them, lax application or enforcement of policies	Very few or no policies	
Personnel	Written job descriptions with clearly understood job expectations; clear policies on training, business use of utility cell phones and vehicles	Some personnel policies, but not consistent or fairly applied	No job descriptions or job expectations	
Contracts	Written contracts for operations with clearly defined responsibilities	Loosely worded written contracts, expectations unclear	Only verbal contracts	
Customer Service – Complaints	Complaints are recorded and responded to within a specified time frame by assigned staff	Minimal logging of complaints; no staff specifically tasked with responding so response is inconsistent	No recording of complaints; very inconsistent response or no response at all	
Customer Service – Billing	Clear information on procedures for new service; payment procedures; late payments, termination of service for non-payment, collection of past due accounts; restoration of service	Some polices but not enforced consistently or fairly	No policy on late payments, past due accounts, or termination of service; poor collection rate	
			Total	
			Score = Total ÷ 5	

23. It is important for customers to understand the service being provided by the utility. Customer support is the foundation upon which the utility builds support for rate increases, system upgrades, infrastructure replacement, operator salaries and others. The utility is also responsible for educating customers on important issues such compliance with new regulations, the need for water conservation, the importance of backflow prevention, and other issues. How well does the PWS communicate with the public?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Communication	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or Deficient Managerial Capacity 1**	
Public Relations - Notification	All required public notifications are completed and distributed, such as: Consumer Confidence Reports, violations, boil water notices, etc.	Some required public notifications are not completed or not distributed effectively	Required public notifications are not completed Utility does not know or understand requirements	
Public Relations - Education	System has developed effective methods of communicating with customers such as: bill stuffers, newsletters, website, radio announcements, etc. System participates in community events such as health fairs, water fairs, etc.	Some communication with customers, but no thought given to most effective methods	No communication with customers about impact of new regulations, water conservation or other topics.	
			Total	
			Score = Total ÷ 2	

24. How adequately is the water system staffed? Do responsible persons have sufficient time devoted to operations? Are roles, responsibilities and authorities clearly specified (including contract operators)?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Staffing	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or Deficient Managerial Capacity 1**	
Defined Responsibilities	Roles & Responsibilities are clearly defined in job descriptions	Some responsibilities are included in the job description, but the descriptions are incomplete	Job descriptions do not include clearly specified roles and responsibilities	

Staff	Office staff as well as operators are able to devote enough time to water system operations including conducting and documenting routine maintenance, seeking funding for projects and complying with all federal and state laws	Office staff and/or operators have difficulty completing all of the mandatory responsibilities in the form of daily and weekly tasks and constantly work overtime to meet requirements Additional staff would be appreciated and additive to the operation	Staff has difficulty completing responsibilities in the form of daily, weekly, monthly and yearly tasks They are always trying to play catch up	
			Total	
			Score = Total ÷ 2	

25. A system practicing comprehensive asset management knows what assets they have, the condition, criticality and value of each asset, when maintenance will be needed and when replacement of the asset should be considered. Asset Management Plans (AMP) can inform Capital Improvement Plans (CIP) by providing a projection of asset maintenance and replacement expenditures. In addition to minimizing emergency repair or replacement incidents, AMPs and CIPs can be used to budget and justify rate increases. How adequately does management prepare for future capital improvements and for the replacement of aging and failing infrastructure (depreciation)? Is there an updated capital improvement plan? Does the plan include a planning horizon of at least 5 years? Is there an up-to-date asset inventory and asset management plan? Has the utility adequately assessed the condition of and remaining service life of existing facilities and identified critical facilities that if inoperable, would result in a water outage and/or water quality failure?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Capital Improvements/ Asset Management	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Preparation	PWS has developed a CI plan and is actively saving money for funding PWS is also looking into various financing options	PWS has a CI plan, but is not saving money for funding nor have they started to look into their financing options	No CI plan has been developed and no funding is being set aside for projects	
CI Planning Horizon	PWS's CIP includes a planning horizon of 10 years	CIP includes a planning horizon of 5 years	No planning horizon	

Asset Management Planning	PWS has an inventory of all water system assets that includes: - date of installation - price when installed - anticipated life span - a maintenance schedule that will prolong the life of the asset	PWS has an incomplete inventory of water system assets Records on installation date, cost and maintenance are lacking	No inventory of assets is maintained	
Prioritizing	PWS has prioritized each water system asset based on criticality to the water system and remaining service life	Incomplete assessment of water system assets criticality to service	PWS is unaware of which assets are likely to fail first and/or what maintenance could be done to prolong their service	
Funding Depreciation	Funds are being set aside to fully account for depreciation	Funds are being set aside for depreciation but at a lower rate than to fully fund the assets	Depreciation is not included in budgeting	
			Total	
			Score = Total ÷ 5	

26. The PWS ultimately has all responsibility for a public works project regardless of who they may hire to assist with review and documentation. How well do you think your system is equipped to manage a construction project (e.g., staffing, record keeping, equipment, state and/or federal requirements such as State Prevailing and/or Davis-Bacon wage rates, etc.)?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Project Management	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Staff	PWS has had successful construction projects in the past and has staff experienced with construction oversight	PWS has limited staff but can complete small construction projects PWS can oversee construction projects with assistance from Engineer and the State	PWS has no experience with construction, they would need extensive assistance from their Engineer and the State to oversee a project	

Record Keeping	PWS keeps excellent records documenting progress, wages, equipment, and finances for all projects Updates are provided to those financing the project as required	PWS keeps most records documenting progress, wages, equipment, and finances for projects but some information is lacking Updates are provided to the financier but only after frequent prompting	Records are lacking in content and accountability PWS has difficulty in providing updates because of poor record keeping	
State/Federal Project & Wage Requirements	PWS is knowledgeable and has experience with soliciting bids for public works projects PWS is knowledgeable and has experience with state and federal wage comparisons, reviewing certified payrolls, and all requirements of the Davis-Bacon Act and State Prevailing Wage requirements	PWS relies on their Engineer to provide appropriate bid documents and follow the bidding process through to contract award PWS relies on its Engineer or other contracted help to take care of state and/or federal wage requirements	PWS has no experience with state or federal project or wage requirements	
			Total	
			Score = Total ÷ 3	

Enter your score from each of the questions 14 – 26 above. Divide the total by 13 to get your final managerial score.

14	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*	*23*	*24*	*25*	*26*	*Total*

Financial Capacity

NRS 445A.817 "Financial capability" defined. *"Financial capability" means the ability of a public water system to:*

1. *Pay the costs related to maintenance, operations, depreciation and capital expenses;*
2. *Maintain creditworthiness; and*
3. *Establish and maintain adequate fiscal controls and accounting methods required for the operation of the system*

27. Budgeting is crucial to effective management of water system finances. Budgeting is typically considered an indicator of financial capacity. However, it is also an important managerial capacity indicator because the water system governing body plays such an important role in the budget process. Although the draft budget may be prepared by water system staff, it should be approved by the governing body. The governing body should also get a status report each month comparing budget projections to actual revenue and expenditures. With this information, it can monitor financial trends, provide oversight, and ensure that the allocation of funds reflects the goals of the water system.

    How adequate is the existing budget (does the budget project out 5 years, include a line item for capital improvements and depreciation reserves, are line items properly defined and easily understood and does the budget realistically project all revenues and expenses)? Are water system revenues and expenses tracked separately from other utility and general funds?
    Rates can help you gauge whether a utility is charging the full cost of providing water and if there is willingness to raise rates to keep up with costs. This indicator is often considered financial, yet governing bodies are responsible for positioning the system to be financially sound. This includes understanding the full cost of providing service, now and into the future, and educating customers about those costs. It also includes the development of a rate structure that encourages conservation, preserving the system's source, and reducing energy costs and wear and tear on the system. How well do the existing rates meet the budget demands (are they based on the current budget and adequately recover the cost of service)? Are rates sufficient to cover all operating expenses including depreciation reserves, debt service, capital improvements and emergency reserves? Does utility management review the rates annually for adequacy? Are they reasonable (> or = 1.5% of the service area MHI)? What is the current charge for a 3/4-inch residential metered customer for 15,000 gallons used in a month? $95.00

    Are there reserves available for improvements? Has preventative maintenance or replacement of major system components been postponed for financial reasons? How much is the system saving annually? How much is currently saved?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			Score (1-3)
Budget Management	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Budget	PWS budget: - projects out 5 years - realistically projects all revenues and expenses - line items are properly defined and easily understood - includes a line item for capital improvements and depreciation reserves - revenues and expenses are tracked separately from other utilities and the general fund	PWS budget: - projects out 1-2 years - line items are properly defined and easily understood - includes a line item for some reserves - revenues and expenses are not tracked separately from other utilities and the general fund	PWS budget: - covers only the current year - missing or understated expenses (sometimes due to lack of revenue) - line items may be confusing - may include inaccuracies (generally found by the Dept. of Taxation) - does not include a line item for some reserves - revenues and expenses are not tracked separately from other utilities and the general fund	
Operating Cash Reserve	PWS has enough set aside to cover expenses that occur before all payments come in	System sometimes does not have cash available to cover expenses that occur before payments come in	System does not have cash available to cover expenses that occur before payments come in	
Emergency Reserve	System has enough funding available to cover the most expensive component of the system	System has some funding available, but not enough to cover the most expensive or vulnerable component of the system	System does not have any funding available to respond to an emergency	
Water Rates	PWS charges a 'reasonable' rate for water used Rates are sufficient to cover all operating expenses including depreciation reserves, debt service, capital improvements and emergency reserves – they cover the full current and anticipated costs of providing safe, reliable drinking water Rates are reviewed/increased annually to keep up with costs Customers understand the full cost of service	Rates are sufficient to cover operating expenses and debt service with little left for depreciation reserves or capital improvements Rates are not reviewed on an annual basis and are increased only when emergent needs arise Customers do not understand the full cost of service	PWS does not know the full cost of service and water rates do not cover operating expenses Rates are rarely reviewed and there is reluctance on the part of the governing board to consider increases	

Short-lived Assets (Components that last 5-6 years) Reserve	System has funding available to replace short-lived assets over the next 5-6 years	System has some funding available to replace short-lived assets over the next 5-6 years	System does not have funding available to replace short-lived assets over the next 5-6 years	
Capital Reserve	System has a plan in place to finance long-term capital investments to the system	System will be able to finance some, but not all long-term capital investments to the system	System does not have a plan to finance long-term capital investments to the system System indicates they need a grant to cover future costs	
			Total	
			Score = Total ÷ 6	

28. When consumers have various options to pay bills, utilities are more likely to receive payments on-time. How appropriate is the current water system billing and collection process? Does the PWS accept credit cards, online payments, automatic payments, cash, checks etc.? Are payments generally received on time (are there many overdue accounts)?

    _____ Interested in TA _____ N/A

    Comments:

	Assessment			**Score (1-3)**
Billing /Collections	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
Billing	PWS accepts all forms of payment: online payments, credit cards, automatic payments, cash, checks, money orders, etc.	PWS accepts credit cards, cash, checks and money orders and is actively pursuing adding the ability to accept online payments or automatic payments	PWS accepts cash, checks or money orders and is not interested in or does not have the capability of adding any other forms of payment	
Overdue Accounts	Few accounts are overdue and the PWS enforces policies that address late payments	<10% of accounts are overdue and PWS is working with those customers to pay prior bills	>10% of accounts are overdue and the PWS has not taken collection actions	
			Total	
			Score = Total ÷ 2	

29. Does management retain a certified public accountant and/or management consultant or retain staff that is qualified and uses generally accepted accounting principles (GAAP) in compliance with the Governmental Accounting Standards Board (GASB), the Financial Accounting Standards Board (FASB) and/or National Association of Regulatory Utility Commissioners (NARUC) in preparation of

financial statements and audits? Does the PWS use Quick Books or other finance management software? How well are financial records kept? Do financial audits include any findings of significant concern? Are audits available for review?

_____ Interested in TA _____ N/A

Comments:

	Assessment			Score (1-3)
Accounting	**Strong Managerial Capacity 3**	**Moderate Managerial Capacity 2**	**Weak or deficient Managerial Capacity 1**	
GAAP	PWS has staff that is qualified in financial management and uses GAAP	PWS retains a certified public accountant and/or management consultant	PWS does not do their own accounting and is not aware of it financial status It relies on the City or the County to generally manage their finances	
Financial Software	PWS uses widely accepted finance management software (Caselle, Inhance, QuickBooks, etc.)	PWS uses personal financial software such as Quicken	PWS does not have any financial software or is unable to use it effectively	
Record Keeping	PWS keeps excellent financial records that are available for review	PWS keeps most records documenting progress, wages, equipment, and finances for projects but some information is lacking Updates are provided to the financier but only after frequent prompting	PWS does not maintain its financial records The County handles the financial records PWS is somewhat weak in its understanding but this is the best solution for many of our small systems	
Department of Taxation /Financial Audits	PWS has never received a letter of concern from the Department of Taxation regarding their current financial situation Financial audits include no findings of significant concern	PWS has not received a letter of concern from the Department of Taxation regarding their current financial situation in the past 5 years Any issues previously noted by taxation were corrected Financial audits in the last 5 years include no findings of significant concern	PWS has received a letter of concern in the last year and has not addressed those concerns Financial audits include findings of significant concern	
			Total	
			Score = Total ÷ 4	

Enter your score from each of the questions 27 – 29 above. Divide the total by 3 to get your final financial score.

27	*28*	*29*	*Total*

Enter your score from each of the sections – technical, managerial, and financial – above. Divide the total by 3 to get your final capacity score.

Technical	*Managerial*	*Financial*	*Total Capacity Score*

Other Comments or Specific Requests for Assistance –

Attach additional sheets as needed