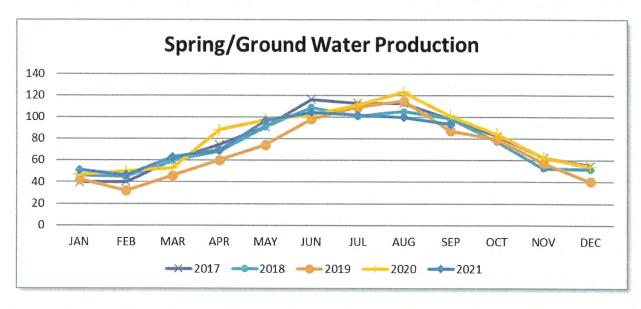
Assistant General Manager Report

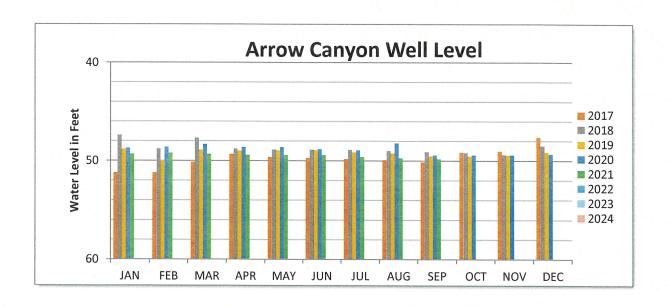


September

Arrow Canyon = 93,370,000 gallons

Baldwin Springs = 73,000 gallons

Total = 93,443,000 gallons



Meter Installs

No meter installs during September

Total Meters for CY 2021 = Twenty (20): 19 residential $(17 - 5/8" \times 3/4" \text{ and } 2 - 1") / 1 \text{ commercial } - 1"$

Gubler Project.

Crews have started on the Gubler Project as of September 21st. They have installed half of the 12" as of this week.

Inventory

Staff has been tracking the issues with availability and lead times of supplies. In light of this, Staff has ordered the needed inventory to allow MVWD able to make any needed repairs within the distribution system. There may be a few outliers, but hopefully we have majority of needed inventory covered. Staff has submitted an order to Mountainland Supply in the amount of \$25,667.86. Staff felt it was important to get this order processed to get these supplies on their way. We are letting the Board know by way of information, but can make it an agenda item for next month for approval to ratify this order, if desired.

General Manager's Report

October 2021

Supply Chain Shortages

Staff continues to adapt to material shortages. Dan Bevan has done an outstanding job trying to stay ahead of material shortages and price increases. The Districts relationships with our vendors is unique, out of the 3 distribution vendors we use 2 supply managers live in our community.

- Public Works Agencies Hit by Rising Prices and Supply Delays.
- Record Freight Volumes are Overloading the Transportation System, Leaving Key Supplies Stuck
 on Trucks, Trains, and Cargo Ships: At the busy Port of Los Angeles, container ships are now
 waiting more than a week to unload.
- Upwards of 60 Cargo Ships Waited to Port in California as well as New York this Week, Posing Serious Ramifications for Supply-Chains.
- Vendors cannot supply and do not have access to poly-pipe in the size range from 1"-2" for at least 4-6 months. If it is not on a utility shelf, it is not available. Availability of repair parts that include brass fittings are 4 months out without a guarantee of a shipping date. Water meters are now going on backorder due to electronic chip shortages.
- Pipe manufacturers are no longer taking orders. The demand has exceeded resin availability, particularly after Hurricane Ida. Ductile iron fittings are not much better in terms of availability

Nevada Capacity Development Strategy

I have been working with a stakeholders group updating the Capacity Development Strategy created in 2000. The Nevada Capacity Development Strategy (NCDS) provides a pathway for new and existing public water systems (PWS) to obtain the support needed to provide safe drinking water throughout the State. The NCDS is a vital tool to help NDEP monitor, educate, and regulate PWS. This tool helps systems in Nevada develop the technical, managerial, and financial capacity required to provide water that complies with the Safe Drinking Water Act. (78 invited, 15 participated, 7 water systems)

Source Water Protection Training Center

Staff continues to work with NvRWA, NDEP/BSDW, and Resource Concepts Inc on the training curriculum for source water protection training that will provide CEUs for water system operators that conform with NDEP operator CEU requirements.

This training center will provide a "southern hub" for public water systems for various coordination meetings, trainings, resource sharing efforts, and hosting agency meetings and events with partners virtually (including regular source water protection team meetings and coordination).

Public water system operators should be key advocates for local source water protection planning and implementation. Education about source water protection should be readily available and incorporated into the training framework for certified operators. This will promote development, update and implementation on source water and wellhead protection plans throughout the region.

General Manager's Report

October 2021

PROJECT GOALS AND TASKS

The goal of this project is to expand training for small water system operators and staff regarding source water protection planning and implementation.

- 1. Coordinate with NvRWA, Resource Concepts Inc. (RCI) and NDEP/BSDW to identify source water protection (SWP) topics and training resource needs and certified operator CEU requirements.
- 2. Purchase of key equipment for hosting stakeholder and training meetings.
- 3. Solicit input from small PWSs in southern Nevada regarding level of knowledge about SWP through NvRWA.
- 4. Develop draft curriculum and coordinate with local stakeholders.
- 5. Review process to meet BSDW criteria for operator CEUs.
- 6. Finalize curriculum
- 7. Develop marketing approach in collaboration with technical assistance providers to engage stakeholders in SWP training.
- 8. Establish needs for addition training equipment and resources.
- 9. Assist with purchase of key equipment through ISWPP contract.

Mason Stratton has taken the lead role in implementing the training curriculum through coordination with NvRWA and RCI. (staff has included a copy of the project profile)

Project Profile

Orphan Well Identification, Reduction & Public Outreach Plan

OVERVIEW

Site Location Description

Moapa Valley, Nevada

Primary Contact

Project Lead: To Be Determined

Project Partners who may be engaged in this Project are:

- NvRWA Source Water Protection Specialist
- Resource Concepts Inc. -Source Water Program Manager
- NDEP, Integrated Source Water Protection Program Coordinator
- NDEP, Bureau of Safe Drinking Water-Certified Operator Program Manager
- Southern Nevada Water Authority
- Las Vegas Valley Water District- NVWARN
- Bureau of Land Management
- Nevada Department of Wildlife
- Other landowners with orphan wells

PART A: GENERAL DESCRIPTION

Groundwater Basin, #

All groundwater basins in Moapa Valley:

Multiple: Clark, Lincoln and Nye counties

HUC-12 Name, #

All watersheds in Moapa Valley:

Multiple: Clark, Lincoln, and Nye counties

Source Water Protection Area A Source Water Protection Area (SWPA) or a Wellhead Protection Area (WHPA) is a locally established management area surrounding a surface water or groundwater resource that supplies water for public consumption.

Plans developed and adopted in Southern Nevada Include:

• Moapa Valley Wellhead Protection Plan

Problem
Statement and
Causes of Pollution

Wells that are no longer in use are called orphan wells. These wells can be a conduit for pollution to groundwater if they are not capped, locked or properly "abandoned." Groundwater quality may be compromised by contamination through illegal dumping and vandalizing of the well, rodents or insects getting into the well, and potential exposure to pesticides, fertilizers, and other contaminants.

PART A: GENERAL DESCRIPTION - continued

Problem
Statement and
Causes of Pollution
(continued)

An orphan well is typically an old unused well that has not been plugged and properly decommissioned. Private landowners may or may not be aware of an orphan well, a well that is no longer in use and has not yet been abandoned, on their property. These wells could be a safety hazard for small animals and children that could fall in the well. Therefore, it is required by regulation and is the property owner's responsibility to properly abandon a well.

The Nevada Division of Water Resources well regulations describe specific requirements for proper well decommissioning. Proper well abandonment can be costly and is dependent on the depth and diameter of the well, the geology of the area, accessibility to the well, and the well condition (NGWA, 2017). Despite being required by regulation, property owners may be reluctant to abandon wells because it is expensive.

Locating these wells can be difficult due to the lack of precision of recorded drilled well locations and historical changes made to the property. In addition, water rights associated with the well must be considered.

Project Summary

The MVWD is currently researching the general location of orphan wells in Moapa Valley with reference to the district's WHPAs to identify potential risk and reduce degradation of ground water quality, especially in high priority areas such as WHPAs. MVWD staff is mapping the orphan wells located in WHPAs to help the district prioritize well abandonment (figures and maps attached).

Historical water monitoring and studies have resulted in over 100 orphan wells in the Moapa Valley. Orphan wells are vessels for groundwater contamination from pollutants from surface activities. This Project will build on the district's existing efforts to locate areas where orphan wells may be found and prioritized for decommissioning.

In addition, property owners in the area will be provided orphan well education through NvRWA. NvRWA has an outreach and education program that will help inform these landowners about what an orphan well is and how to find it on their property, explain that properly abandoning or protecting the well will protect their health, safety and help to prevent groundwater contamination in the aquifer. The local regulations regarding well abandonment requirements will also be provided with contact information for reputable well closure companies.

PART B: PROJECT DETAILS

Project Goals and Tasks

The overarching goal of this Project is to decommission orphan wells in WHPAs and inform landowners, with the potential of having an orphan well, about why an exposed unused well is a health and safety hazard due to potential groundwater contamination. Spreading awareness of decommissioning orphan wells can begin the process of working towards abandoning these wells and protecting SWPAs.

PART B: PROJECT DETAILS - continued

Project Goals and Tasks (continued)

Moapa Valley Water District has outlined specific goals and objectives in their Wellhead Protection Plan, which is a living document that evolves as new challenges and priorities are identified. MVWD's first goal is to protect water quality and ecosystem health in the Muddy River Region.

The Project will be accomplished through a series of goals/tasks with corresponding activities.

Project Tasks:

- Research and utilize GIS to locate potential orphan well areas and determine landowners.
- Collaborate with NvRWA for outreach and education
- Schedule and plan outreach activities with the landowner focus group
- Collaborate with landowners to prioritize wells for decommissioning and procure funding sources for the project.
- Coordinate with NDWR for identifying orphan wells no longer used in groundwater monitoring and well drilling and decommissioning regulation guidance.
- Coordinate with Nevada Division of Environmental Protection (NDEP) Office of Financial Assistance for Drinking Water and Clean Water Projects to procure funding for well decommissioning and technical assistance through the Integrated Source Water Protection Program for project support and guidance.
- Implement orphan well decommissioning pilot project under the ISWPP.

Pollutant Load Reductions Anticipated

This Project will not directly quantify pollutant load reductions; however, it will spread awareness and develop a direct connection to landowners who may have an orphan well on their property about protecting groundwater quality. To prevent groundwater contamination in their local water supply private landowners that no longer depend on a well on their property should consider closing and abandoning their wells for their health and safety. By educating this focus group about ways to reduce means of contamination in their drinking water and preserving their local aquifer we may prevent future contamination.

Milestones

Table 1 on the following page provides an overview of proposed milestones, associated activities or tasks, timelines and deliverable items, and identifies the lead for each activity. MVWD's partnership coordinator will work with NDEP's ISWPP to ensure project goals are being met. MVWD is already working with NDWR to gather GIS mapping and historical well log records.

MVWD will develop a way to communicate with the landowners and partner with NvRWA to educate them about their orphan wells and how to effectively close them with the proper funding sources.

Funding sources will be explored and determined through MVWD and NDEP collaboration. The MVWD will rely on Resource Concepts Inc. (RCI, NDEP's ISWPP technical assistance provider) to continue collaborating with NvRWA's Watershed Coordinator in providing MVWD assistance on this project, make recommendations to the MVWD on program development and activities, assist MVWD to evaluate project timelines and schedules, and coordinate with NDEP's OFA funding sources best suited to implement the project.

PART B: PROJECT DETAILS - continued

(continued)

Milestones MVWD is currently working with NDEP's ISWPP and RCI to develop a pilot project to decommission a small number of orphan wells owned by MVWD. The pilot project will provide a basis for cost estimates and funding procurement moving forward.

Table 1. Proposed Milestones, Activities/Tasks, Timeline, Deliverables

Task	Time Frame	Milestone	Deliverable	Lead
1	Month 1 to	Gather resources of historical well data	Research and Report	MVWD
2	Month 1 to 3	GIS mapping and evaluation of locations based on criteria	GIS Tool	MVWD
3	Month 1 to 3	Organize a list of landowners with orphan wells	Coordination/Collaboratio	MVWD
4	Month 3 to 6	Educate landowners regarding orphan well locations	Outreach and Education	NvRWA
5	Month 3 to 6	Educate landowners about orphan well water quality concerns	Outreach and Education	NvRWA
6	Month 3 to	Collaborate with partners to develop funding framework and utilize existing programs for financial assistance	Procure Financial Assistance	NvRWA/NDEP
7	Month 3 to 6	Project management and technical assistance to partners, regional orphan well abandonment plan development (including cost estimates) and pilot project coordination under ISWPP.	Provide Technical Assistance	NDEP/RCI