

Needles Well Situation Summary

The need for a new well and additional storage capacity has been known since a 2001 engineering report identified it as being essential. To date, the Needles Public Utility Authority (NPUA) has not had the financial resources to fund the necessary improvements. The need for reservoir and an additional well has been on at least 50 City agendas for discussion. This year the NPUA faced the problem due to the states regulatory action. The impediment has been the lack of \$5M of funding.

The LA Times story exposes failures in water infrastructure funding. It is apparent that while there is more than adequate state funding available, small rural communities like Needles have not been adequately funded. Instead, the unfair allocation of grant funding has gone to larger, more sophisticated communities that have more resources, including lobbyists to pursue grants.

While this matter is indeed urgent, there is not an imminent emergency where the community will be without any water. We need some funding to sink a second high volume well and we have applied to the state Water Resources Department for it. If we are unsuccessful, there are other options such as a revenue bond, or other borrowing, but they are more expensive ones and would require 100% local funding through increased water rates whereas state funding may not require local funding.

There is an obscene \$75B budget surplus in Sacramento, There are grants in that budget for water system upgrades with a special set-aside for "disadvantaged communities" which Needles is qualified because 57% of the community is on some form of government assistance. The vast preponderance of state water grants has been made to the coastal communities and Sacramento while the state has significantly underfunding small, rural communities using any kind of measurement that you can develop.

The NPUA believes that our situation warrants state assistance. The NPUA has applied for a grant for a new well, reservoir, and the interconnecting plumbing to the existing system. This is estimated to cost approximately \$5M. The NPUA has conducted the hydrogeological analysis and the Utility Board and Council selected the Murl Shaver Substation on Needles Highway as the preferred site because there is an adequate water supply, no evidence of Iron or Manganese, and it is on property that is already owned by the NPUA thus lessening the overall costs. The City Council has certified the environmental analysis report which shows that there are no significant environmental impacts arising from using that site. Engineering design is underway. The NPUA is nearly shovel-ready for construction.

The City and the NPUA are fighting for our fair share of state funding rather than raise the water rates on existing local residents and businesses.

In 2019 the state water board adopted new health standards for manganese and Iron in the water delivered to customers. The problem is created by the state of California and

the solution should rest with them. There is NO EVIDENCE THAT LOW LEVELS OF IRON OR MANGANESE IS CONSIDERED A THREAT TO HUMAN HEALTH. The article rightly points out that using terms like “could, “might”, and other unproven hypothesis is not a sound basis for regulating. Sound regulation must be based upon proven facts. Otherwise, everyone would constantly be living in fear that an airliner “could” or “might” crash through our roof. Instead, Iron and Manganese both add some minor discoloration. The regulations use health threat to regulate for aesthetic purposes. For example, if you have a white stucco house and your sprinklers overspray a little, your white stucco will show some minor discoloration after many years. No other state that the NPUA could identify includes these Iron or Manganese in their health standards for drinking water, only in California.

In 2019 the NPUA had 4 wells which when their capacity is combined, more than double supplied enough water for the City. There was planned redundancy in the system. Once the new Iron and Manganese standards came into existence the NPUA had to stop using three of those four wells thus creating an unnecessary reliance on the remaining well, near the bridge into Arizona. Since the new standards were adopted, the NPUA has not allowed one drop of non-compliant water from those wells to enter into the water system. The remaining well now operates 23 hours a day during peak days in the hottest part of the summer, pumping approximately 2200 gallons/minute to the reservoirs which is then gravity fed to the water customers throughout town. Thus, a second well is necessary in order to comply with the state standards and supply the community with the necessary water volume redundancy

Let it be known that approximately 120 days ago the NPUA spent nearly \$50,000 to rehabilitate one of the states determined unusable wells. The golf course has used that well daily, and it now operates at/or below the Iron and Manganese standards, but it does not have the volume to completely replace the primary well.

The NPUA has kept those three unusable wells in operating condition and connected to the water system for redundancy and emergency backup in the event of a catastrophic circumstance such as the well collapsing or other disruption in service. Last year the pump on the remaining useable well ceased operation. By having a backup in inventory, the NPUA was able to replace that pump within 12 hours. Today there are adequate back up pumps to change out a failed one and keep the system operating.

Earlier this year the state water agency cited the NPUA demanding that the three unusable wells be physically disconnected from the water system. The NPUA has been resisting that because their use is absolutely critical. In an emergency, it needs to be able to use them to feed the water system. Non-compliant water can be used if public notice is provided to customers within 24 hours of using it. This has not been necessary, but it could be, and we shouldn't foreclose that option. If it does, The NPUA doesn't want to have to go physically reconstruct the piping to the currently unused wells back to the system while we are dealing with what will likely be an emergency situation already.

As an absolute last resort, the NPUA could purchase pallets of bottled water and distribute it door to door as has occurred in the distant past.

Since the article came out, the NPUA has had offers of help from the Metropolitan Water District (water supplier to nearly all of SoCal), U.S. Department of Commerce, Economic Development Agency, a judge, contractors, developers, and Senator Diane Feinstein. Letters requesting support of the NPUA's grant request have been sent under the mayor's signature to Senator Shannon Grove, Assembly member Thurston Smith, Governor Newsom, Congressman Obernolte, and others.

In summary.

- The state standards are not science driven, based on threats to human health. They address aesthetics preferences.
- The state citation requiring physical separation is insensitive and unnecessary based upon the size and location of the City and the lack of readily available nearby community water systems to join.
- The City does have alternatives, but they are more expensive to our local water customers. For example, the NPUA could sell revenue bonds, raise rates, and the customers could pay for the well/reservoir over 30 years.
- There are hundreds of millions of funding available at the state level to assist local water system improvements with set asides for small, rural, disadvantaged communities such as Needles, but the money is disproportionately going to large coastal communities and Sacramento that can afford to have buildings full of grant writers and directly lobby the grantors and their staffs.
- We have applied for funding.
- This article is part of our efforts to gain state funding.
- The LA Times article, while somewhat painful to have our shortcomings discussed across the state and nation, has been proven successful in greatly improving the likelihood of state grant funding.

I hope that this quite long explanation helps you better explain the situation to your friends. If you have any questions or concerns, please do not hesitate to contact me.

UPDATE 7/29/2021

Last week a thunder/lightening and windstorm caused a power outage in the area of the single well. The NPUA was able to restore power to the well site, but the well pump control panel would not power the pump. Working overnight the NPUA was able to locate the electronic part that had failed. After 6 hours the NPUA was able to locate an available replacement part in Phoenix. After a trip to meet a shuttle from Phoenix, the part was installed 6 hours later. The pump immediately started to work. In the meantime, the available water stored in our reservoirs on the hills overlooking the City had dropped from full to less than half. This reduction was assisted when the City stopped providing water for construction projects and watering public spaces such as the parks, golf course, and ballfields.

In this case the community “dodged the bullet”, but the underlying problem still exists that the system needs a second high volume well, additional storage, and the interconnecting piping.

With the help from the LA Times article, and a variety of citizens, public officials, and interested parties, there is some progress with the state towards securing the grant for the new well. Engineering design and construction bid preparation is underway. The NPUA is taking two paths concurrently to secure the quickest grant authorization including possibly declaring an emergency, similar to what was done during the D Street transmission line blowout in January 2020.

Additionally, the NPUA is requesting funding for the new reservoir, piping and a booster station to feed the reservoirs from the new well site and requesting that one of the disqualified wells be reclassified as meeting the water standards because it has been within the limits since November 2020.

Thank you for the community support and patience while this overall problem is being solved.

If you have any question, please do not hesitate to contact me, Rainie Torrance at 760-326-5700. Extension, 140 or rtorrance@cityofneedles.com, or your locally elected City Councilor

Water System Requirements

The city relies on a single well source to supply water to all of its customers. The estimated project cost for a new well is \$1.5M.

The city’s current reservoir storage analysis shows that the current storage does **not** have enough capacity to supply one day of indoor and outdoor water usage, fire flow suppression and an emergency reserve. The construction of a new 1.5-million-gallon storage tank is estimated at \$2.4M.

The single water well does **not** have a backup generator and when the city loses power so does the well. When there is no power at the well, the city then relies on **only** the storage tanks. That project’s estimated cost is \$500,000.

To install a new well and reservoir, the city’s existing L Street Booster Station needs to be rehabilitated to move water from the lower zone to the upper zone. That project cost is estimated at \$600,000.

Project:	Estimated Project Cost:
New Well	\$1.5M
1.5M Gallon Storage Reservoir	\$2.4
Backup Generator	\$500K
L Street Booster Station	\$600K
Total	\$5M