



KVID Rate Increase: Frequently Asked Questions November 29, 2017

“Supplying Quality Water and Wastewater Services”

A rate increase is needed...

No matter how much you like or need a service, paying more on a bill is never on your wish list, but when it comes to your water and sewer rates, the simple fact is an increase is needed.

Kachina Village’s water has the reputation of being some of the best water in the state of Arizona. Its wastewater treatment has produced a manufactured wetlands sought out by bird enthusiasts. To ensure continued reliable safe water and environmentally sound wastewater treatment we need to not only *maintain* our system, but to *invest* in the future. This requires long term planning to stay ahead of potential problems, investment in *reliable and efficient* system upgrades and scheduling the replacement of aging infrastructure.

Clean water and environmentally safe sewage treatment and disposal are essential.

Kachina currently has very good, clean, and reliable water; so why do we need to make changes?

- Inflation – Revenues have remained unchanged while expenses have climbed. The last rate increase was nearly 12 years ago in 2006. Inflation alone over that time would amount to a 21% increase.
- Need for a complete **dual** system of wastewater treatment. If one side goes down or just needs maintenance, the other side keeps the effluent flow steady and moving. This redundancy is an important part of providing continuous services to Kachina Village.
- KVID must continue to replace system components with the latest efficient technology to reduce operating costs and problems over time.
- Electricity costs continue to go up. Water pumps and most other components run on electricity. From 2006 to 2016 electricity costs have increased 28.9%. At the same time KVID has lowered their electrical usage by almost 17%. KVID strives to use less electricity, but must still spend more dollars on electricity each year.
- Aging infrastructure and underground piping need to be replaced on a scheduled basis rather than waiting for structural failure. Most of KVID’s water and sewer piping is from the original installation and is in the neighborhood of 50 years old.

What is needed and what are the costs?

Current Operational Costs - \$1.2M Annually. This includes:

- Residential usage monitoring to help identify customer leaks.
- Inspections, sampling, monitoring and reporting.
- Response time to service calls, leaks and equipment failures.
- Maintenance of evaporation ponds and aquatic wastelands.
- Recruit and maintain qualified and ADEQ certified staff to maintain the aging system.
- Meet and maintain all standards set by Arizona Department of Environmental Quality (ADEQ) and the Environmental Protection Agency (EPA).

Capital Improvement Projects (next 3-5 years)

Improving service reliability & efficiency - \$2.5 million

Primary Projects include:

- Clarifier Phase I – New Aerobic Digester \$445,200
- Clarifier Phase II – Second Clarifier Installation \$361,800
- Clarifier Phase III – Rehab Existing Clarifier \$458,500
- Additional Water Well (provides redundancy) \$925,000



- Begin upgrades to 50 miles of underground water and wastewater piping, a process expected to continue over the next 20 years.

Projected Timeline for Capital Improvements

Year	Project
2018	Clarifier Phase I
2018	Clarifier Phase II
2019	New Well Design
2019	Water Underground Infrastructure Replacement (begin)
2020	New Well Install
2021	Clarifier Phase III
2021	Manhole Rehabilitation (begin)
2021	Wastewater Underground Infrastructure Replacement (begin)

How is the water and sewer bill assessed?

While rates are going up, Kachina Utilities is committed to keeping water affordable, particularly for the essential indoor water use that is vital for drinking, cooking and sanitation. KVID currently uses an inverted Tier system to encourage conservation. This means that the more water you use, the higher the price that is charged.

KVID Current Residential Water and Sewer Rates

Water Base Rate	19.67 (flat rate regardless of usage)
Sewer Base Rate	25.91 (flat rate regardless of usage)

Tier	Usage (gallons)	Water Rate (per 1,000 gallons)	Sewer Rate (per 1,000 gallons)
I	0-3,000	\$1.56	\$3.34
II	3,001-6,000	\$2.68	\$6.23
III	6,001-9,000	\$4.68	Sewer charges capped for residential users
IV	9,001-12,000	\$7.48	
V	12,001-50,000	\$12.47	
VI	50,001+	\$19.94	

A residential user at 2,800 gallons a month currently pays around \$60 monthly for their combined water and sewer bill.

A residential user at 5,000 gallons a month currently pays around \$78 monthly for their combined water and sewer bill.



How will these improvements be funded?

A rate increase is being considered by the County Board of Supervisors in conjunction with KVID staff and recommendations from KVID’s “Citizen Rates and Governance Advisory Committee”. The current proposal is to phase the needed rate increase in over three years.

How much is my water bill going up?

The average water use for Kachina customers is a conservative 2,800 gallons a month, with a bill of \$60. Larger families, or those with higher usage habits, may use around 5,000 gallons a month and pay a bill of around \$78. Here is a summary of what the proposed rate increase could do to those water and sewer bills:

KVID - Potential Rate Increase			
3 year phase in (water and sewer combined)			
2,800 gallons monthly usage		5,000 gallons monthly usage	
\$60	Current (2017)	\$78	
\$70 - \$74	2018 (20% - 24% increase)	\$94 - \$100	
\$78 - \$85	2019 (14% - 16% increase)	\$106 - \$116	
\$86 - \$96	2020 (12% - 14% increase)	\$118 - \$132	

If the new subdivision is built in Kachina Village, will current residents have to pay for it?

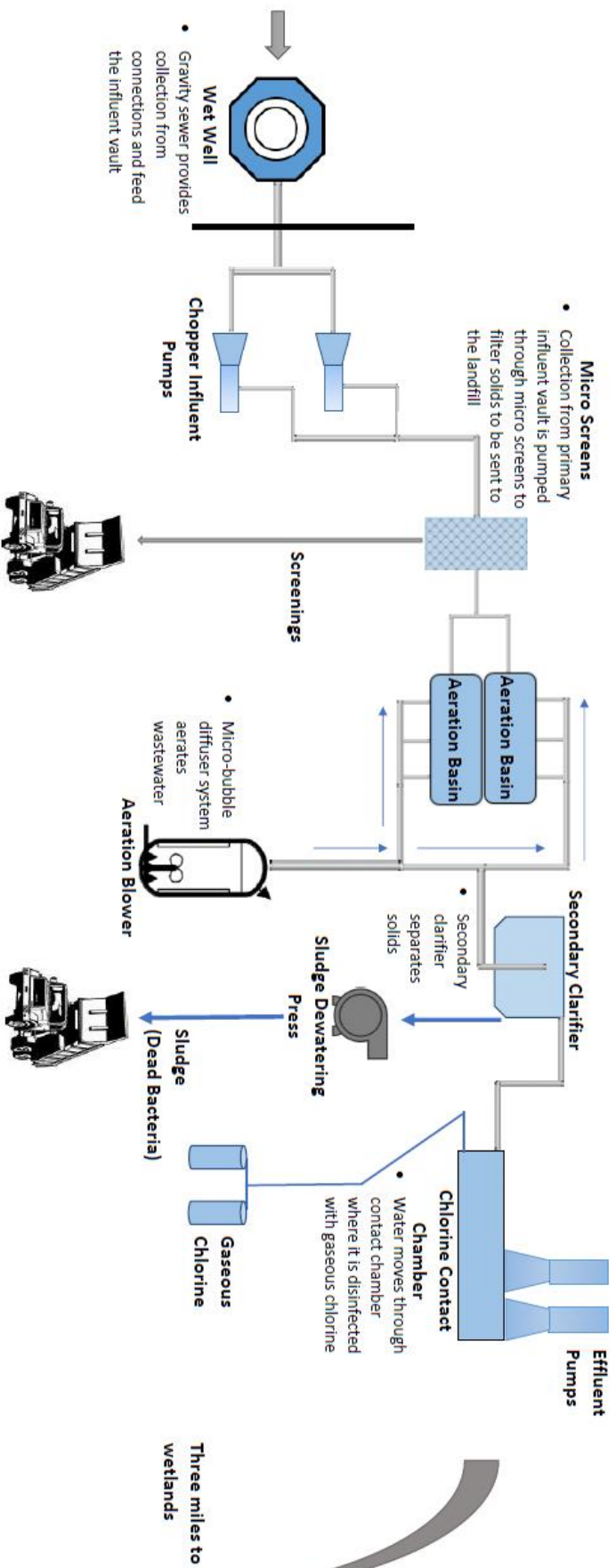
No, the developer pays for the added infrastructure for the 132 new homes. These new homes would pay for water and sewer costs just as we all do now – including the fees associated with connecting to our water and sewer systems. KVID currently serves around 1380 connections and around 2,800 people. These new connections represent about a 10% increase in demand. KVID already has the additional capacity to support these new homes.

What about conservation of water?

Conservation and the efficient use of water are always encouraged and our data shows that the residents of Kachina Village are already doing a great job at conserving water. If you are not already do so, three of the most cost-saving tips for water conservation are:

1. Installation of Low-flow shower heads.
2. Installation of Low-flow or water saving toilets.
3. Minimal use of water for landscaping.

KVID Wastewater Treatment Plant Flow Diagram



Wetlands Evaporation / Transpiration Disposal

- Treated effluent is pumped through a three-mile pipeline to wetlands
- Wetlands contain disinfected reclaimed water
- Wetlands are composed of nine clay lined ponds that facilitate evaporation of the water and return to the water cycle

