

KVID Citizen Rates and Governance  
Advisory Committee

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KVID History and Overview

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Meeting One – October 3<sup>rd</sup>, 2017



# KVID – History

- ▶ Kachina Village Improvement District (KVID) was formed in 1965 by the property owners in Kachina Village. At the time the property owners largely consisted of the area's developers.
- ▶ During the early 70s KVID raised funds through bond efforts to pay for paved roads as well as a water and sewer system for the community.



# KVID – History

- ▶ In 1974 the Environmental Protection Agency (EPA) issued a permit to KVID, allowing treated water to be discharged into Pumphouse Wash.
- ▶ In 1976 KVID entered into an agreement with Kachina Utilities, an Arizona corporation, to maintain the community's water and sewer system.



# KVID – History

- ▶ Under the management of Kachina Utilities, KVID struggled to maintain EPA compliance.
- ▶ Numerous issues occur going back as far as 1978.
- ▶ These issues culminate in 1986 with a consent decree being filed against the utility demanding resources be secured to properly upgrade and repair the treatment facilities to meet EPA standards



# KVID – History

- ▶ As a result Coconino County steps in to take over management of the utility (c. 1987).
- ▶ The residents of Kachina Village invested in KVID (via assessments), along with the County and grant funding through the EPA.
- ▶ The treatment plant was upgraded and the Kachina Wetlands constructed to provide safe disposal of treated water.



# KVID – History

- ▶ The utility continued to improve under County stewardship and has become a reliable fixture of the community.
- ▶ KVID has continued to improve operations and maintain its aging infrastructure.
- ▶ KVID has pursued efficiencies where possible, working to reduce energy costs and look for process improvements that will lead to cost savings.
  - Power savings from new installations has led to APS rebates
  - In house sludge handling has removed sludge hauling costs



# KVID – History

## KVID Resident Perspectives



# KVID – Successful Future

- ▶ KVID is now working on a plan for the future that includes:
  - Infrastructure Assessment (completed)
  - Rate Analysis (in progress)
  - Governance Evaluation (pending)



# KVID – Operations Overview

- ▶ KVID provides water and sewer services to approximately 1,400 residences in Kachina Village.
- ▶ Staffed by eight employees and currently overseen by the County's Public Works department.
- ▶ KVID meets and maintains all standards set by the EPA and ADEQ for water and wastewater utilities.



# KVID – Operations – Water

- ▶ Drinking water supplied by 5 deep aquifer wells (four primary and one backup).
- ▶ Well water is treated by a liquid chlorine injection system.
- ▶ Treated water is then housed in one of four above ground storage tanks.



# KVID – Operations – Water

- ▶ Water distribution occurs in 2 zones, with three booster stations available to pump water.
- ▶ Water is supplied to residents through roughly 50 miles of underground water lines.
- ▶ Usage varies from day to day but hovers around 150,000 gallons a day in the winter months to 250,000 gallons a day during peak times in the summer.



# KVID – Operations – Wastewater

- ▶ Raw sewage delivered to KVID's treatment plant through a gravity collection system.
- ▶ Three lift stations are used to accommodate Kachina Village's varied terrain.



# KVID – Operations – Wastewater

- ▶ KVID uses extended aeration as its primary method of treatment with disinfection provided by gaseous chlorine injection.
- ▶ Treated wastewater is pumped through a 3 mile pipeline to the Kachina Wetlands for evaporation and transpiration.
- ▶ Flows are typically around .15 million gallons of per day, but the plant is rated to handle .309 million gallons per day.



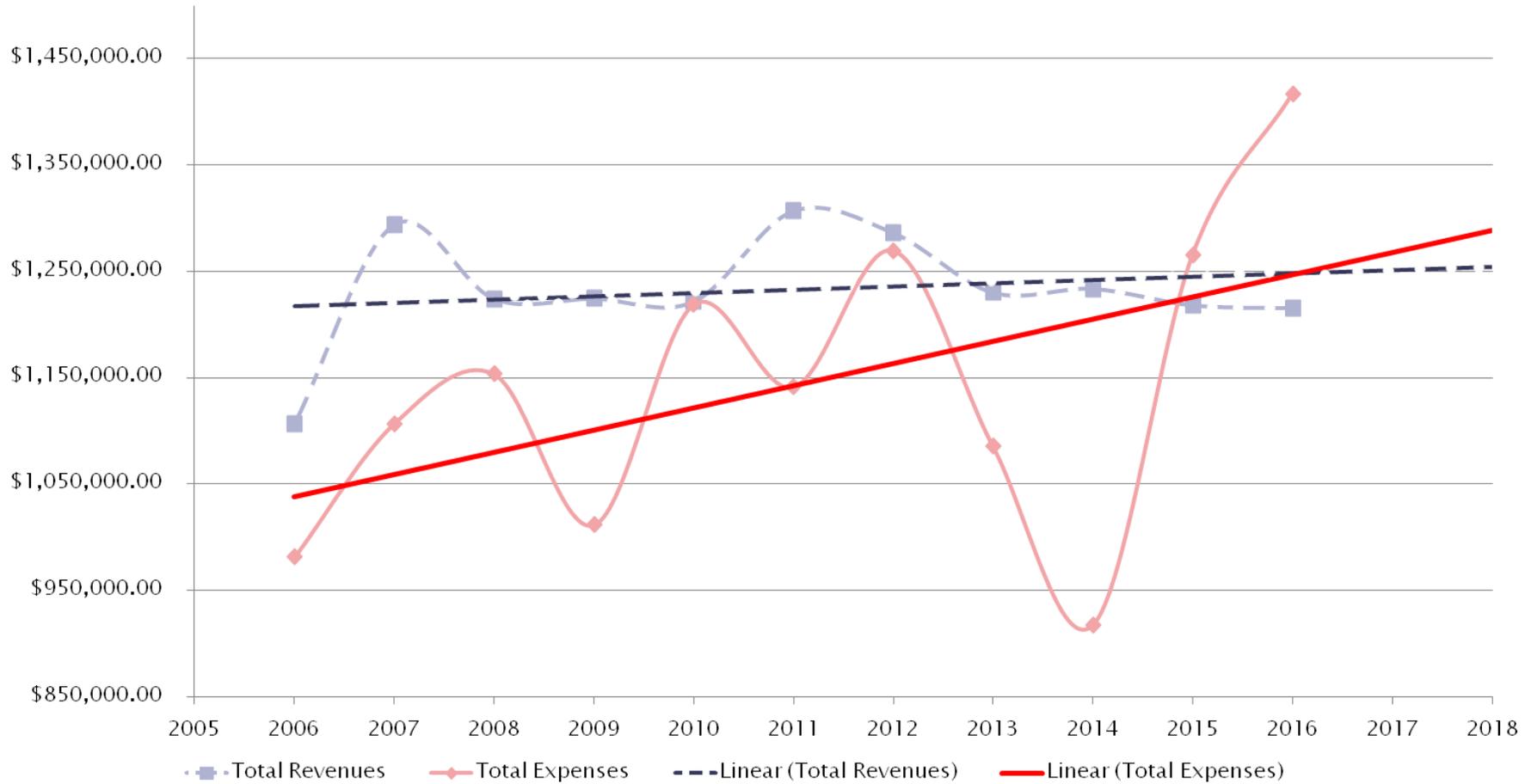
# KVID – Operations – Funding

- ▶ KVID is funded entirely through cost of service (utility rates and other paid services).
- ▶ KVID's annual revenues are relatively stable at about \$1.2M.
- ▶ KVID's annual expenses vary due to the utility's current pay as you go policy.



# KVID – Operations – Funding

## Total Revenues and Expenses FY06–FY16



# Questions and Discussion

