

A Discussion about Your ALWSD

Alto Lakes Water &
Sanitation District 

Presented to ALPOA by
Dan Knorr, President of
ALWSD Board of Directors

February 14, 2018

About ALWSD

- Need for system improvements and low cost capital funding created need for public authority
- ALWSD formed in 2005 to buy and operate the facilities of the Alto Lakes Water Corporation.
- ALWSD powers similar to a municipality – may include providing water, wastewater services, roads, solid waste collection and recreational facilities.

About ALWSD

- Managed by a Board of Directors elected by the voters of the district.
- The boundaries of the ALWSD include all of the Alto Lakes subdivisions.
- The District provides domestic water to some areas outside of the district - Kokopelli and Eagle Creek II.

ALWSD Board of Directors

- Dan Knorr – President
- George Holmes – Vice President
- Gary Parker – Secretary
- Roy Webb – Treasurer
- Nicki Foreman – Member

- David Edington – District Manager

Over \$8.8 million invested since formation of ALWSD in 2005

- 2008 – \$2.5 million - System purchased from Alto Lakes Water Corporation
- 2009 - \$0.3 million - Solid Waste Facility
- 2011 - \$1.5 million - Water Treatment Plant
- 2012 - \$3.0 million - Pipelines and Fire Hydrants
- 2015 - \$1.5 million - Pipelines and Fire Hydrants
- Since 2012 - Increased from 4 to 111 Fire Hydrants

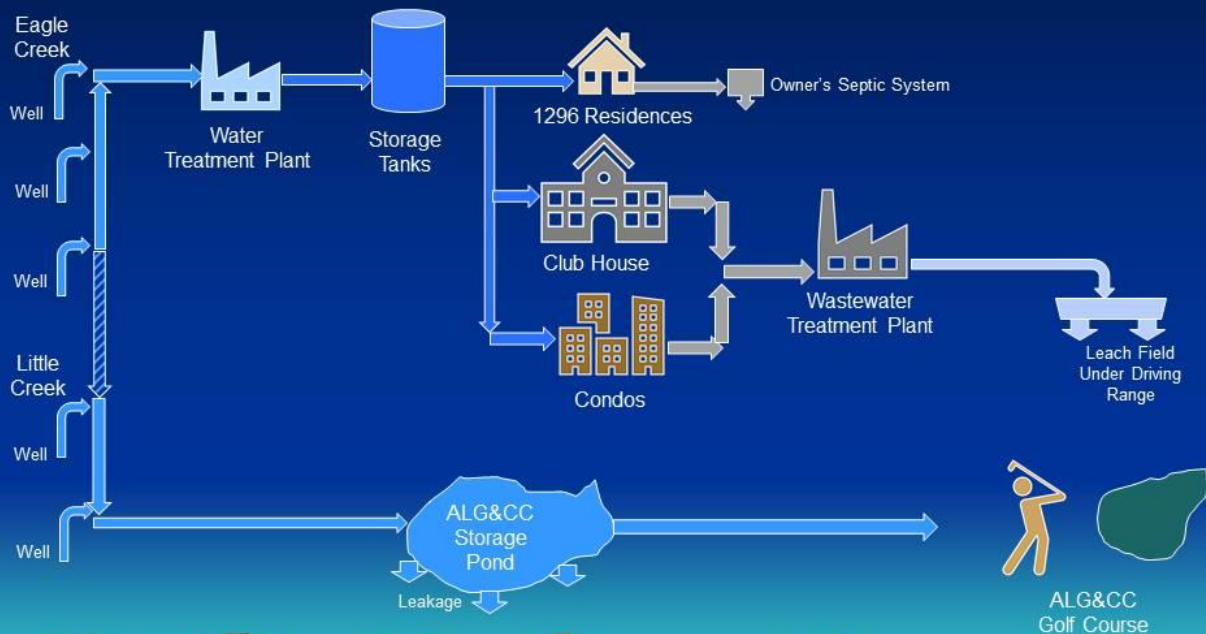
Funding Sources to Date

- State grants \$2,700,000
- Low interest loans \$4,800,000
- ALWSD Earnings + System Upgrade Fees \$1,300,000

ALWSD facilities are located throughout Alto Lakes



ALWSD systems provide water and wastewater services



A view of ALWSD Facilities



Typical Well



Storage Tank and Booster Pumps



Water Treatment Plant



Iron, Manganese Removal and Filtration



System Monitoring and Control



Wastewater Treatment Plant

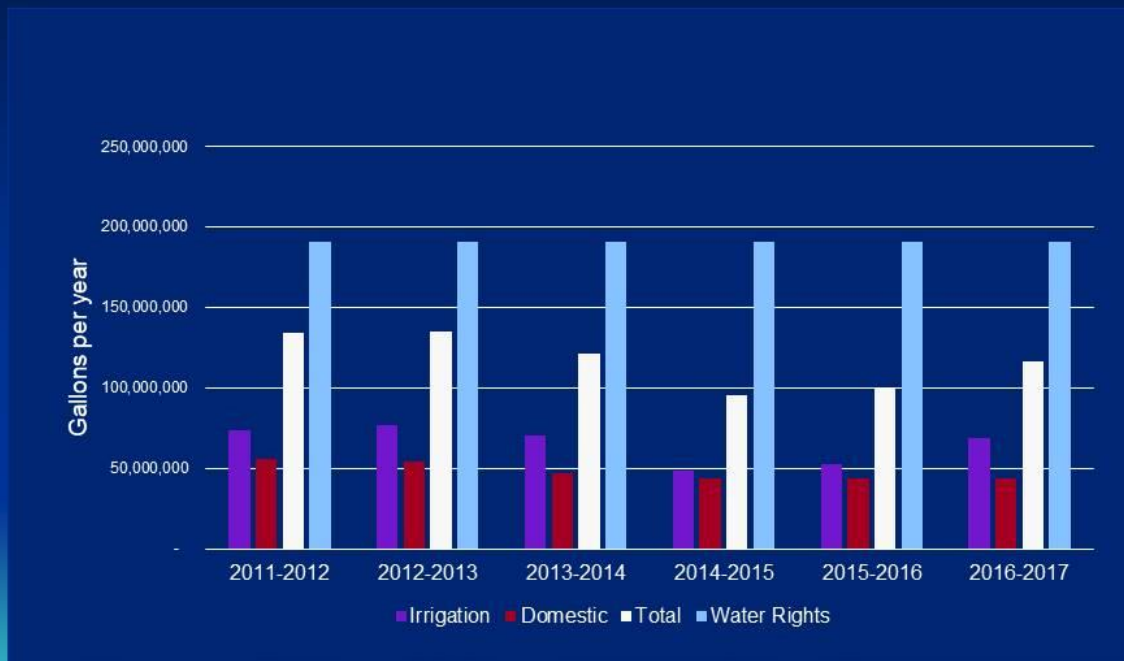


Solid Waste Handling Facility

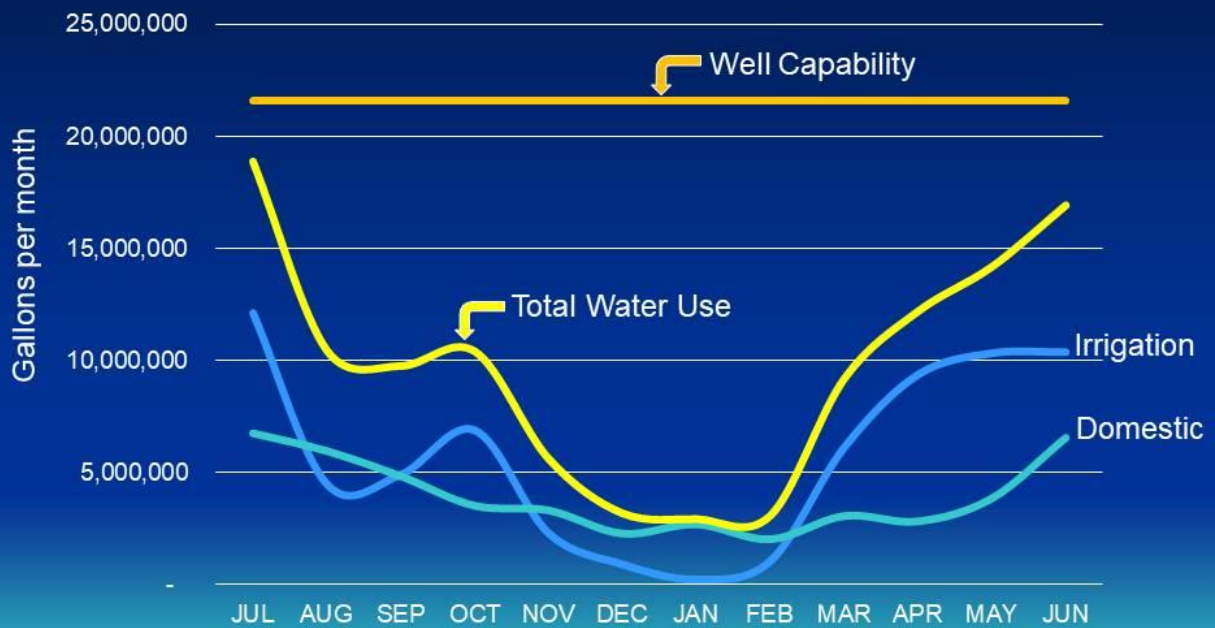
Our water supply

- ALWSD owns or leases **614 Acre Feet per Year** of water rights = to 200 Billion Gallons per year
- About 29% have pre 1900 priority date
- The remainder are pre 1965 priority date
- In 2017,
 - 215 AFY for golf course
 - 175 AFY for domestic and commercial
 - About 63% of our water rights

Water Rights are Sufficient



Production capacity exceeds demand



Little Bear Fire positively impacted our water supply

Elimination of 44,000 acres of forest has raised our ground water levels from about 450 feet to 250 feet below ground.



Water Quality in Alto

- Ground water in our area is very hard.
- Water Softeners are recommended.
- Set softener at:
 - 55 grains/gallon in winter
 - 70 grains/gallon in summer
- Our water treatment removes iron and manganese and suspended particles.
- Reverse osmosis treatment of drinking water is recommended.

Water Pressure in Alto

- Generally 60-80 psi, some areas 45 to 100 psi.
- 9 pressure zones.
- 24 pressure reducing regulators for control.
- Recommend each house have a pressure reducing regulator set at 60 psi.
- Protects toilet valves, water softeners, water heater in case of system PRV malfunction.
- Each customer required to have shutoff downstream of meter. Turn off when gone.

Water Conservation in Alto

- The water use per household has decreased
 - from 159 gallons/day in 2004
 - to 114 gallons/day in 2017
 - or 28% decrease.
- Due to:
 - System improvements
 - Public awareness
 - Residential irrigation limitations

Future Facility Improvements

- **2019**- Implementation of the Use of Reclaimed Wastewater on Golf Course - \$1 million
- **2020** - Replacement of Main Storage Tanks - \$1.2 million
- **2021** – Water Main Replacements and Hydrants western part of Alto Lakes – \$1 to \$4 million **depending on funding available**
- **Future needs - \$15+ million - water main replacements**

Potential Funding Sources for New Projects

- NM Water Trust Board – **Very Competitive**
 - 40 to 60% Grant
 - 20 to 40% Loan– ½% interest 20 years
- State Revolving Fund Loans
 - 100% Loan – 2% interest 20 years
- Local Funds from retained earnings and **system upgrade fees**

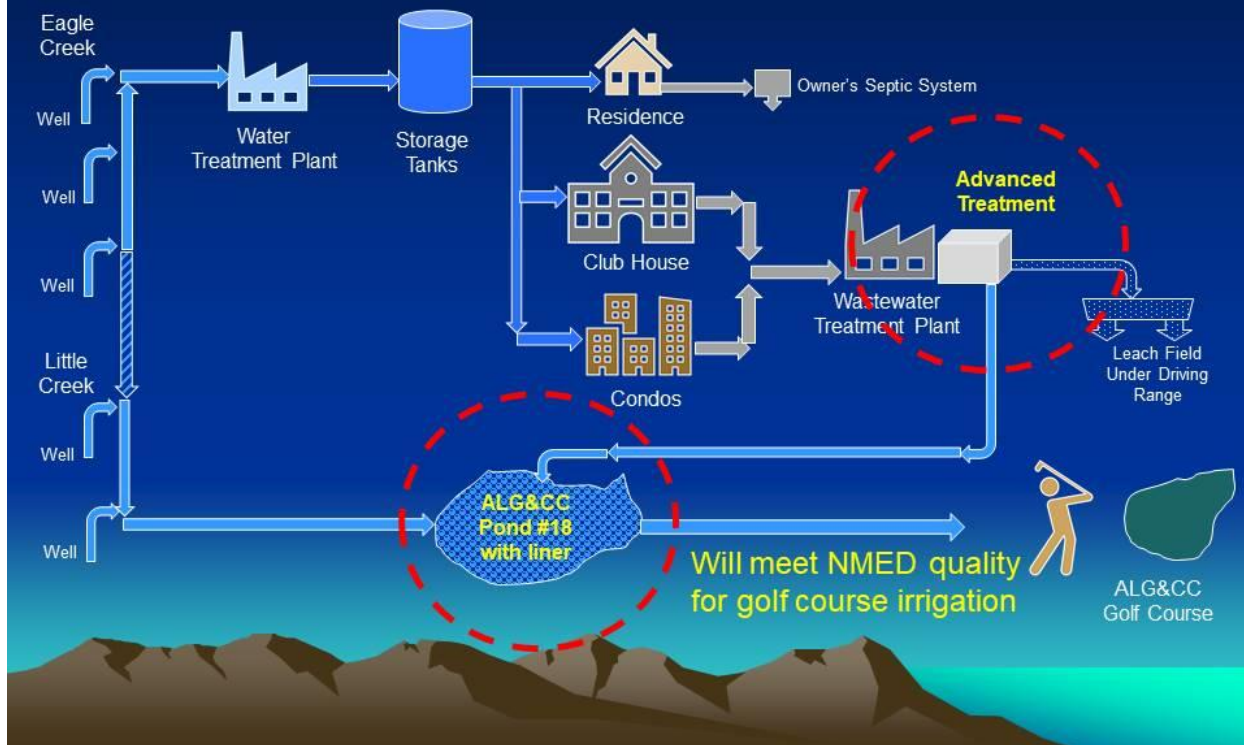
System Upgrade Fee

- Currently \$8.61 per month
- Used to provide local matching funds and pay debt service on loans. Currently \$1.87 is used for debt service.
- In 2020 the need for the fee, except for that used for debt service, is to be reconsidered.
- In the past, the District has held a referendum to see if the customers want to continue the fee to improve the system.

Golf Course Water Reuse Project

- Uses reclaimed wastewater for about 5% of Golf Course irrigation water.
- Lowest cost solution to wastewater treatment.
- Eliminates leakage from pond near pavilion.
- Is the best environmental solution as it conserves water for the community
- Implemented with in conjunction with ALG&CC improvements to #18 pond and #18 fairway.

Golf Course Reuse Project



Water Conservation from Reuse Project

- Using reclaimed wastewater for golf course irrigation is the norm around the Southwest.
- This project will lower the water consumption of the Alto Lakes Community by about 10%.
- The installation of the liner in Pond #18 will save about 10,000,000 gallons per year.
- The use of reclaimed wastewater will save about 2,400,000 gallons per year.

The project will also reduce ALG&CC water costs

- Using reclaimed water lowers irrigation water purchases by over \$5,000 per year.
- Elimination of leakage from Pond #18 estimated to save over \$25,000 per year.
- ALWSD will fund the treatment plant improvements and the pond liner project.
- The ALG&CC will use the value of water saved to refund a portion of the pond liner expense.

In Summary,

- The ALWSD is working to serve our customers, maintain production capability and implement conservation.
- The current drought situation could cause higher irrigation demands that could stress our production system.
- Please be water conscious and follow the water restrictions should they be necessary.

