NEW AVENUE MUTUAL WATER COMPANY SHAREHOLDERS MEETING
Alan Heinzen, Maintenance Report

THE WATER SYSTEM

The New Avenue Mutual Water Company system consists of three wells, three pressure circuits, with five 20,000 gallon tanks and about 8 miles of pipe. Most of the system was installed late in the 1970 and early 1980 as the development expanded. The original development used Well 1 first, which was an old agricultural well 405' deep, with a 30HP pump that is 323' deep and pumps about 200GPM.

Well 2 was included in the system as the development expanded south. Well 2 is another old agricultural well 273' deep, with a 30HP pump at 250' pumping about 200 GPM.

Well 1 and Well 2 are both in the Valley Water tax zone, and both were needed to meet the system demand for water. In 2013, Well 3 can on line it is 439' deep with a 40hp pump at 369' deep and pump about 240 gpm. Well 3 is our primary well and is out of Valley Water Tax zone.

The static water levels of wells 1 and 3 are checked monthly to help the Board manage the water system. Well 2 static level cannot be monitored because the well casing has been sleeved and there is not room for a measuring devise to check the static water levels. We have provided our data to Valley Water to show them that our wells water level is not affected by their aquifer recharge efforts. So far they have not changed the water tax zone. The following is some of the early static water levels data we have compared to current data:

	1978	1997	2005	2014	Aug2019	June 2020	June 2021
Well 1	**144'**				**93'**	**94'**	**121'**
Well 2		**117'**	**121'**				
Well 3				**145'**	**176'**	**168'**	**198'**

NEW AVENUE MUTUAL WATER COMPANY SHAREHOLDERS MEETING
Alan Heinzen, Maintenance Report

THE WATER SYSTEM cont.

The static levels of our water wells fluctuates with the rain fall that we have received for that year and the volume of water we are pumping from them. In the winter the aquifer fills up and we pump less water. In the summer we pump more water and the static level drops. The Data point for well 1 in 1978 was at the end of the drought of 1976 -1977, worst drought in 50 years. Coyote Lake was empty for 7 years in that time frame.

Our current drought situation is significate but it is not as bad yet as it was in 1978. If the drought continues we will have to deal with that.

PRESSURE LOOPS:

All of the wells pump into the Bridle Path pressure loop including Bridle Path, Bannister, Estates and Sugar Babe. This pressure loop includes the 40,000 gallon Twin tanks on the north end of Bridle Path and the 20,000 gallon Lower Butch Tank. These tanks are located at the same elevation and their water level controls the well starting and stopping. All of our tanks are vented to the atmosphere, the water pressure at a shareholder's house is a function of elevation of their home to the tanks. This pressure loop includes bypass lines from Bannister to Estates and from Duke to Bridle Path that help equalize the system pressure and flow between the tanks and the demand.

Howell Lane pressure loop is feed from the Twin Tanks with a 7.5Hp buster pump to the 20,000 gallon Howell tank and feeds the 7 homes. The Upper Butch pressure loop feeds from the Lower Butch tank to the 20,000 Gallon Upper Butch tank with a 20 hp buster pump and feeds 11 homes.

The wells and tanks are all connected with a system of 6" pipe and street valves to help control the water and isolate the system for repairs. Most of the pipe is about 40 years old and was done to code at the time. The codes have changes, the fire requirements have changed and the BOD is proactively up grading the

NEW AVENUE MUTUAL WATER COMPANY SHAREHOLDERS MEETING
Alan Heinzen, Maintenance Report

PRESSURE LOOPS: cont.

system as things fail and repairs are made. We no longer use any PVC glued fitting for example on service connections, we use polyethylene pipe and brass compression fittings. We are replacing all the mechanical meters with Ultrasonic digital transmitting meters.

The BOD has also authorized up grading of our Fire Hydrants to meet current fire code. We have identified and prioritize the first five to be replaced. We have replaced two to date.

Since we have been reading meters monthly we have been losing about 20% of the water we pump from our wells. This lose is a function of Meter Slippage and leaks. This year we have improved our loss to 14% but it is still about 8,000,000 gallons per year. To put that into perspective, it is 15 gallons per minute, 60 minutes per hour, 24 hours per day, 365 days per year. That is a ½" garden hose running somewhere over 8 miles of pipe and 108 meters. Our goal is to improve our water lose to 10% by continuing to upgrade our meters and improve our repairs.

It takes all of us who rely on this water to help not only conserve water but to find and report leaks and situations that could become leaks. We have good water and clean water and don't want to waste any of it.

SYSTEM OPERATION:

Our system is operated by Steve Keen, he has a T2 operating license. He inspects the system weekly and manages the Chlorinators at each well. He reads the meters monthly and does all the water sampling for the regular water tests we do. He also produces the Consumer Confidence Report required by the State of California. He performs 5 hours of maintenance a month included with this bill and helps with other maintenances work on an as needed basis.

NEW AVENUE MUTUAL WATER COMPANY SHAREHOLDERS MEETING
Alan Heinzen, Maintenance Report

SYSTEM OPERATION: cont.

He charges his time hourly for the extra maintenance work he does on the system. If you have a water problem he is your first call. If something happens to Steve, his back up operator is Thomas Estrada, also a T2 operator.

We have also developed a maintenance crew to do most of the repairs to the system. Chris Carrera, General Contractor, lives on New Avenue and can be called if Steve does not respond right away for emergency repairs.

BOD member Alan Heinzen also can be called for emergency water problems. He also manages all the system repairs. It is his job to monitor the system daily to ensure it is running as programed and to make changes if necessary.