Watering Nipomo



Emily Smith

Filling a glass with water in Nipomo town depends on scuba divers, massive storage tanks, underground pipelines, and chlorine injections.

While residents may not understand the complexities of moving water from ground to glass, they comprehend its power. On the mesa, water has dictated growth and sparked lawsuits.

With a grasp of the NCSD water system, however, residents may further appreciate a flowing faucet. An understanding may also alleviate fears the liquid will someday disappear.

NCSD General Manager Doug Jones took my photographer and I on an extensive tour of the dis-



TOP OF THE TANK — At the top of the Nipomo Community Service District's 100-foot water storage tank, one can see across Nipomo. Shot on a recent, rainy day, the tank was built in 1993 and is earthquake-safe.

All photos by Glenn Bolivar

trict's water system. He has managed the NCSD since 1993. We have documented the journey to educate readers, in light of crucial, upcoming studies.

After new Nipomo Community Advisory Council chair Jesse Hill followed Jones across the mesa, he gained new insight about the spider web of NCSD wells.

"I was surprised by how exten-

sive the piping network is on the mesa," said Hill, who also chairs the NCAC water committee." "They're moving water all over the mesa."

Before the tour, Hill believed the district should move water from the west to the east but later realized "that's what they're already doing."

A tour, Hill said, offers the NCSD's 9,000 residents the best

way to learn the basics of water transportation.

Computing water power The NCSD's water and sewage systems are both operated by a computer program.

"It's fascinating that on a desktop, you could run the whole water system," Hill said.

The NCSD was one of the first districts in the county to hook to a computer, according to Jones.

On one screen, an operator can determine water levels of storage tanks and wells. The picture resembles a video game.

Highest demand occurs on Monday morning — "wash day," as Jones deems it.

At noon, the computer charts another small surge in use, with yet another peak demand in the evening after people arrive home from work.

If the computer crashes, wells, could be monitored with a backup system or manually.

"The board has been very progressive," said Jones, explaining technology has saved both manpower and money. In two months, the manager said district employees will adopt automatic meter readers, saving "half a man," Jones said.

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Water: Tour of the NCSD water

WATER, FROM PAGE 1

Keeping Nipomo watertight

NCSD's seven residential wells pump into a main, underground pipeline. Water that flows to individual houses comes from that pipeline. Any excess liquid flows into storage tanks.

Last year, the NCSD added another million-gallon tank at the corner of Foothill and Tefft. The district has four tanks. Water from the tanks' top half is used when the pipeline cannot supply enough during peak demands. Water in the bottom half is reserved for fire protection.

Before the million-gallon tank was completed, the tanks would be considerably drained. Now, levels don't dip below the halfway mark.

"With the 24-foot tank (for example), we seldom get down to 15 feet," said Lee Douglas, utilities supervisor for the NCSD.

To impede corrosion, electrical currents run inside the massive tanks.

Across town on Hetrick Road, a 100-foot tank pierces the sky. The height keeps the elevation between storage tanks level to prevent any overflows. The tank, built in 1993, features gigantic bolts and a T-shaped foundation to stabilize the structure in case of an earthquake. A 16-inch pipe runs in and out of storage units.

Tank upkeep includes assigning a scuba diver to regularly inspect the tanks' interiors using a camera and light.

Currently, engineers are completing a study (the Boyle report) to determine if the district is providing enough wells, storage, and big enough lines. Engineers perform such analysis every five years. In three months, the district will receive the data and may have to upgrade its system to meet demand, Jones said.

He added the district has enough acreage to add another million-gallon storage tank,



system leads to vital understanding

if necessary.

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Harnessing water power

The NCSD operates seven wells within its town division and two in the Black Lake division. Wells produce from 125 to 1,000 gallons a minute.

The number of wells in use depends on demand. In winter, one well services the entire district, Douglas said. During summer, numerous wells pump water across the mesa.

As demand increases, the computer turns on more wells.

Wells pump on a rotating basis to keep down wear and tear. On average, a well can pump for 20 years.

All the wells pump into the pipeline, which ranges from six to 16 inches, so no one well services a specific area.



Wells are located, mostly on acre easements, across Nipomo from the Catholic Church in Olde Towne to Sundale Road. At each well site, chlorine is injected into the water to treat bacteria.

On Sundale, the largestproducing well pumps 1,000 gallons a minute.

Black Lake Village residents voted to secure their own water system, consisting of two wells and a 400,000-gallon storage tank.

"They wanted a standalone system for political reasons," Jones said, adding they pay slightly higher rates as their storage tank costs less to maintain.

In case of an emergency

Water will flow, even during a power outage, Jones said. The Sundale well runs on natural gas and could service the district by itself, according to the manager. "Depending on the time of year, we could go indefinitely (without power)," Jones said, estimating the well could easily provide enough water for six months.

The district also installed an emergency bypass system, two years ago in case Black Lake wells shut down. The NCSD can also provide Cals Cities' (a local water company) customers with water. "Last year, they had a well go down and we supplied them water for a period of time," Jones said. "We sent them a \$10,000 bill."

If a well fails in the NCSD, the computer will dial out an alarm sending operators to the rescue. Dial-outs are but one of the numerous challenges of the job.

"There's always something: to do," supervisor Douglas said.

To take an NCSD water tour, call 929-1133