

FIRST DRAFT

Modern technology meshes with century-old irrigation systems

In his truck, as he makes his morning rounds of the Mesa County Irrigation District, Dave Voorhees checks a program on his computer tablet that shows him where each property lies, who owns it, and where headgates and laterals are located.

That's important, because the Mesa County Irrigation District is a



BOB SILBERNAGEL

complicated system of canals, headgates,

public and private laterals. Its boundaries sometimes overlap with other systems.

Voorhees is the only ditch rider and the manager for the Mesa County Irrigation District, known as MCID. The district provides water to some 1,200 acres of property between De Beque Canyon and 30 Road, including agricultural land and subdivisions.

The Silbernagels irrigate our three acres with MCID water.

MCID provides irrigation water through the Stubb Ditch, north of the Government Highline Canal, but it also distributes water to users directly through the Highline.

Palisade Irrigation District, or PID, provides water to about 6,500 acres through its Price Ditch, south of the Highline Canal. The larger district has three full-time and two part-time employees.

The two districts operated separate diversion dams until 1910, when they joined forces and built a new dam and pump plants on the Colorado River at the west end of De Beque Canyon.

By 1918, according to a 1920 report from what was then the U.S. Reclamation Service, the machinery used by the two districts had become obsolete, costly to maintain and inefficient.

"The method used by the districts in pumping their water thus made it necessary to waste 1,200 second feet of water to irrigate only 8,400 acres of land," the report said.

So, the two districts agreed to join the recently constructed Government Highline system, operated by Grand Valley Water Users Association. MCID and PID would maintain their respective water rights, but water would be delivered through Highline Canal instead of from the districts' dam and pumps.

In 1919, the Reclamation Service built a new pump station east of Palisade for the two districts.

As Highline Canal water rushes out of Tunnel No. 3 and into the Grand Valley, water for MCID and PID is diverted and spilled into the pump station. Price Ditch water runs through the pumping plant, turning turbines that pump MCID water back uphill into the Stubb Ditch.

The plant began operation in April 1919, and the 1920 report declared the \$46,000 project a success.

"The service during the season of 1919 has demonstrated that a plant of this type is not only highly efficient but is very dependable and economical in its operating and maintenance," it said.

Fast forward 102 years, and the pump station is still performing well.

"We still use the same pump that was installed in 1919," Voorhees said.

"Although some of the



PHOTO FROM THE RECLAMATION RECORD, JULY 1920, COURTESY OF PALISADE IRRIGATION DISTRICT

The Price-Stubb Pump Plant in 1920. Water flows out of Tunnel No. 3 into a forebay. The main flow continues to the right in Government Highline Canal. Water for Price and Stubb ditches is diverted to penstock at left of the forebay, to the pump plant. There, water for the Stubb Ditch is pumped back uphill into an open ditch and wooden trestle in foreground.

parts have been replaced over the years."

"It's amazing what vision can do for you," said Dan Crabtree, superintendent of Palisade Irrigation District. Both districts now have dependable water supplies today, thanks to the vision of people in 1919.

Both systems changed again in the 1990s, from open ditches to having their primary canals in underground concrete pipes as part of the U.S. Bureau of Reclamation's effort to reduce salinity in the Colorado River.

Crabtree was an engineer for the Bureau of Reclamation then and designed the concrete pipe system for the Price Ditch.

Despite the important changes that have been made over the past century, some typical irrigation issues remain.

"When it gets really hot, everyone wants to water at the same time," Voorhees said. "The subdivisions want a lot of water, and that sometimes creates a rift between subdivisions and agricultural users."

There were fears this year that because of the extended drought, water rationing might be required. But so far that hasn't occurred. Summer rains have helped tremendously.

"We've never had to shut headgates or go into rotational water use," Crabtree said. "But if we have to, we will."

For both Crabtree and Voorhees, the biggest problem typically isn't getting adequate water to irrigators, but flooding caused by excessive watering.

"Our biggest challenge is drainage," Crabtree said.

Voorhees echoed that. "The worst fight I ever had" as a ditch rider occurred this summer when one irrigator watered heavily and flooded his neighbor. State laws require ditch riders to shut down headgates when overflow occurs for an extended period.

After a warning, Voorhees said, "I had to shut him down. The guy called my board, Grand Valley Water Users, Palisade Irrigation District, Grand Valley Drainage District, and everybody told him the same thing. I was following the law."

Such encounters aren't unusual in modern irrigation systems, he said.

"We have people threaten to sue every year," he said. "I tell them, 'I look forward to a letter from your attorney.'"

But the district rarely



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Dave Voorhees, manager of the Mesa County Irrigation District, stands next to the forebay at the opening for Tunnel No. 3, where some of the flow from the Government Highline Canal is diverted to the Price-Stubb Pump Station.



Dan Crabtree, superintendent of Palisade Irrigation District, stands atop a computerized irrigation water dump station. He can adjust the flow of the dump station using his cellphone.

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receives such letters because lawyers usually understand water law.

Subdivisions can create special problems if the homeowners don't work together, Voorhees said. Near 30 Road, there is a subdivision with no Home Owners Association and no one willing to open and close gates on the private lateral serving the subdivision.

"People don't want to talk to their neighbors anymore," noted Crabtree. "They don't want to say 'Hey, your tail water (irrigation runoff) is flooding me.' Now they want us to do it."

Now, when new subdivisions are built on the MCID system, flow meters are required to show how much water the subdivision is using.

Some are also installing pressurized lines and low-water landscaping to reduce irrigation water demand, Voorhees said.

Palisade Irrigation District employs three men to oversee the irrigation system, who are called field technicians, not ditch riders, Crabtree said. "Our work is more technical than just checking headgates. It involves the operation and maintenance of pipelines, changing valves and repairing broken pipes," he explained.

It also involves com-

puter technology. When Crabtree and I visited one of the places along the Price Ditch where excessive water can be dumped into drainage ditches that flow back to the Colorado River, he explained the computer information available to him.

"Today we call it a Supervisory Control and Data Acquisition dump station, or SCADA. I can read the data and adjust how much water is being released with my cellphone from anywhere in the world, as long as I have cell service."

That's a far cry from the old days, when ditch riders had to travel the canals on horseback and adjust each dump station and headgate manually.

Even so, people like Voorhees and Crabtree travel along their canals almost daily, examining headgates and dump stations, looking at wastewater, determining who needs water and who is irrigating excessively.

Sources: Dave Voorhees, manager of Mesa County Irrigation District and Dan Crabtree, superintendent of Palisade Irrigation District; "The Price-Stubb Pumping Plant," by S.O. Harper, Reclamation Record, July 1920, courtesy of Palisade Irrigation District.

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Colorado City says police ties to polygamous group are past

By BEN WINSLOW
FOX13 NEWS

SALT LAKE CITY — Colorado City, Arizona, is asking a federal judge for changes in a long-running lawsuit alleging discrimination in policing and government services by members of a polygamous church.

In a recent court filing, Colorado City said a policing consultant has completed his tasks and his services should no longer be required.

"Nothing else remains. And because all the tasks are now complete, the Consultant has moved into a monitoring role, in which he periodically meets with various individuals at the CCMO (Colorado City Marshal's Office)," wrote attorney Jeffrey Matura. "While Colorado City appreciates the Consultant's monitoring efforts, that work is not cheap and costs

Colorado City several thousands of dollars in fees payable to the Consultant each month. Colorado City is a public entity; therefore, it is the residents of Colorado City who ultimately bear the financial burden of the Consultant's continuing monitoring efforts."

Matura wrote that the city's police force has had a 100% turnover since 2017 and supervisors within the agency have no ties to the Fundamentalist Church of Jesus Christ of Latter-Day Saints.

But in a response to the motion, a court-appointed monitor for the community suggested Colorado City hasn't changed all that much since a jury found the town on the Utah border discriminated against non-members of the FLDS Church.

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