

Keeping Natomas residents informed and keeping them out of the water. The work is ongoing with a great team.



he's glad to have the help. "Every drop of rain that hits the Natomas basin at some point comes to us," he says. "In addition, after farmers irrigate their fields a certain amount runs off and that water enters the District's drains, which then comes to our pumping plants. So we pump water throughout the year even when it's not raining and our system must always be ready."

(left) Gabe Holleman is a forward-thinking individual. As the Operations Manager of RD 1000, he provides direction and support to the Operations and Maintenance team.

Work is underway now at pumping plant 3, where the overhaul will include new motors, switches and gears, upgraded debris racks, and new piping to take water up and over the levee. The plant will be operational again in early March. Plant 4 is scheduled to be torn down and rebuilt starting in December of this year, pending availability of parts.

Emergency backup generators have been installed at plants 1A and 1B, and work in 2022 will include scoping the costs and process for acquiring and installing backup generators for plants 2, 3, and 5.

Underscoring the importance of backup capacity, Holleman says



(above) Tony De Catillo has served the District since 2007. He recently accepted a promotion to Operations Supervisor leading a crew of 7.

## Infrastructure

### RECLAMATION DISTRICT 1000

Capital improvement projects are underway to shore up and improve Natomas' flood protection system, as part of Reclamation District 1000's first major infrastructure overhaul in 30 years. The District maintains the 42.6 miles of levees, 30 miles of main drainage canals, 150 miles of sub drainage canals, eight exterior and two interior pumping plants that make up Natomas' flood protection system. A comprehensive Capital Improvement Plan (CIP) approved in 2020 lays out a plan to complete a backlog of projects bringing infrastructure up to date.

While work has already begun on the CIP, funding it will be another ambitious project. A financing plan estimates that \$96 million will be needed over 30 years. The District's first priority is to rebuild, modernize and rehabilitate all or portions of the eight exterior pumping plants, which will require an estimated \$35 million in capital improvements in the next 10 years.

Operations Manager Gabe Holleman says the schedule for specific projects in the CIP has already been affected by the nationwide supply chain slowdown. At pumping plant 1B, trash cages and screens that keep debris from clogging and disabling pumps were scheduled for replacement last year, but availability of parts created a delay. "That's our first line of defense, and they'll be replaced this year," Holleman says. Next year, electrical components at Plant 1B will have reached their functional life expectancy, and are scheduled for replacement.

A remote-control monitoring system, known as SCADA - Supervisory Control and Data Acquisition - has been installed in four pumping plants. It allows remote viewing of all pump functions 24 hours a day, alerting staff to respond to problems immediately.

Operations Supervisor Tony Del Castillo will be using SCADA to deploy his seven-person crew, and

(page 17 top) Pump 3 is being overhauled on Garden Highway just above San Juan Road. The work will have Garden Highway closed for a while longer.

(page 17 bottom) Pumps 8 & 9 on Northgate just above Arena Boulevard is another RD1000 plant that has been recently overhauled.





spring to prepare for next winter's rain runoff.

"As projects are completed, and funding is available, the District will make adjustments to the CIP schedule. Our priority is to replace infrastructure prior to catastrophic failure, which in our world means flooding and potentially loss of life and property."

(immediate left) Pump 4 is at the very north end of the district just east of Verona Village Campground and Garden Highway



last October's heavy rainfall was a 200-year event. "We had to get rid of an enormous amount of rainwater with two of our pumping plants

(just above) Pumps 1 & 2 on Garden Highway were originally cast by Macaulay Foundry nearly 100 year ago in the Bay Area. These pumps are hard to find parts for.

down for construction. In addition to that, when you have a large amount of water rushing through our canals it pushes debris down to our pumping plants. Our trash racks were inundated with material which tripped the screens offline. When that happens, our pumps become inoperable as a failsafe. My crews worked round the clock to manually clear the debris and keep the pumps running. It's good to know we're capable of it."

This year, scoping work will begin on the District's biggest project, replacement of pumping

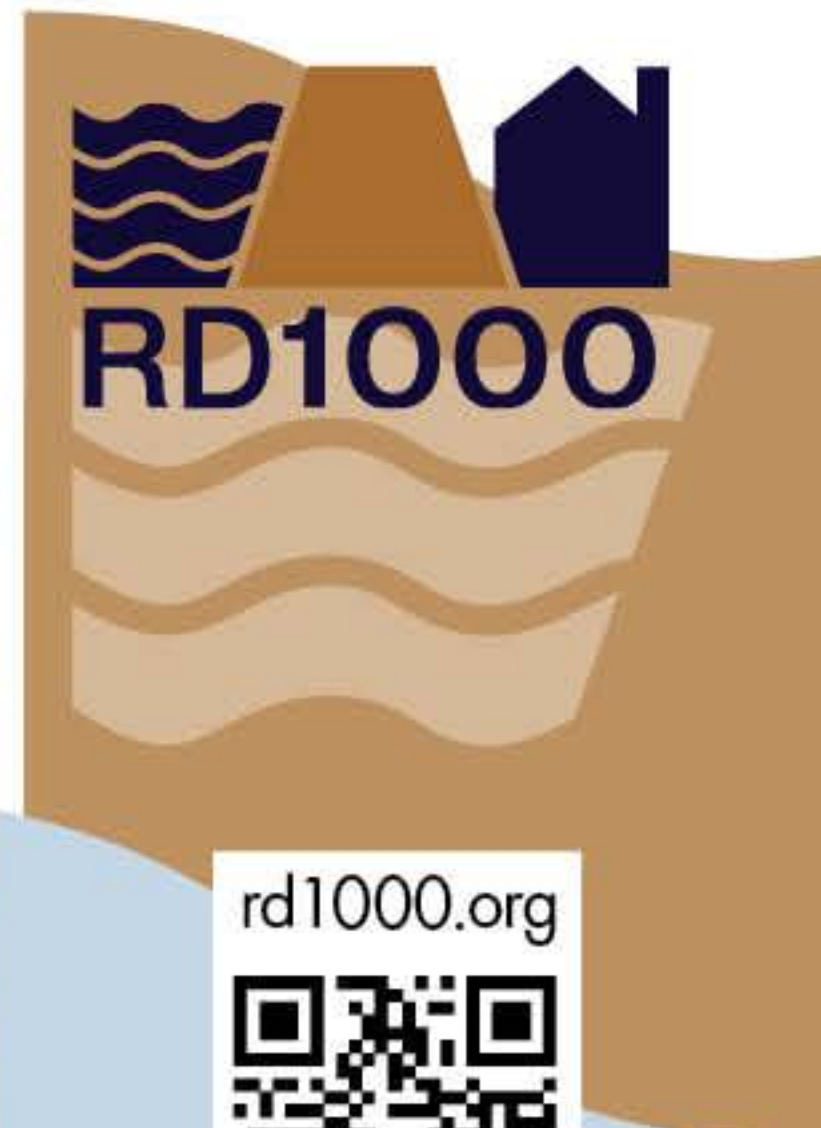
plant 8. It is the District's largest and most-used plant. "We'd have a hard time pumping water out of the basin without it," says Holleman.



The rebuild is estimated to cost \$10-25 million, and Holleman says the replacement will be done in phases, depending on availability of funding.



The CIP also calls for replacing culverts and drains in the 150 miles of subdrainage canals the District maintains. Crews will clean out canals and slope ditch banks in



[rd1000.org](http://rd1000.org)



### Learn More

Capital Improvement Plan on Website: [rd1000.org/reclamation-district-1000-plans-project](http://rd1000.org/reclamation-district-1000-plans-project)

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