

CHANNEL ISLANDS BEACH COMMUNITY CREATES EFFICIENCY WITH OPERATIONAL TRANSPARENCY

customer story



A wide-angle photograph of a rugged coastline. In the foreground, a large, dark, rocky outcrop juts out into the sea. The middle ground shows a series of steep, rocky cliffs that drop down to the water's edge. The ocean is a deep blue, with white foam from waves crashing against the rocks. In the background, more distant, hazy mountains are visible under a clear sky.

Channel Islands Beach Community Services District (District) provides water, sanitation, and garbage collection services to approximately 10,000 people in the Channel Islands Harbor area. The community's infrastructure was laid in the 1960s so much of it is nearing the end of its life expectancy. Roughly 80% of the District's water comes from local groundwater sources and about 20% is brought in through the Metropolitan Water District, which is helpful in times of drought, but more costly. Ensuring the water distribution system is in optimal working order minimizes water loss and helps with water conservation efforts to keep rates low for residents.





Pre-pandemic, the District recognized the need to improve its asset management and move away from paper “fix it” notes, to an actual software program that accounted for all assets in one platform and had the capability of managing day-to-day operations. Knowing the condition of all assets in real time, would enable the District to better address urgent needs, plan for regular maintenance and forecast replacement projects.

Peter Martinez, the General Manager for Channel Islands Beach Community Services District, oversees a staff of eight people. Martinez said, “For a small office like ours, we need to be as efficient as possible. If we can automate reports and schedule and track field work while sharing information in real time, we can get more done. Like any utility, we also need data to make the best decisions for infrastructure upgrades and replacement, and that’s hard to gather from paper records. There’s a lot to address when it comes to aging infrastructure and it was clear we needed a good operational management program to help us prioritize maintenance and spending to best serve our ratepayers.”

The District chose Sedaru, a utility operational management platform by Aquatic Informatics. Jesus Navarro, Operations Manager with the District said, “Today people use intuitive software in their daily life, so if it feels like you need to be a software engineer to operate an office program, it’s going to be very hard to get staff on board. We chose Sedaru because it is easy for everyone to use, and the benefits are

clear to see. Staff buy-in is crucial to a successful software deployment so we set up lunch and learns that allowed people to play around with it and ask questions. This was very successful.”

Deploying the new software before the pandemic shutdown, slowed the speed at which new programs were added to the platform, but on the flip side, it gave the district the ability to run operations remotely. Work orders were dispatched, completed and recorded through the platform, allowing staff to continue efficiently performing their roles. “We never had this kind of transparency across the board. Without this, many staff would have been in the dark,” said Martinez.

Today the District runs several asset management programs through the platform, including hydrants, water sampling stations, pipes, valves, lift stations, smart meters and more. When the fire hydrant maintenance program was first input into the platform, it identified a few hydrants as inoperable. With this knowledge, the District was able to prioritize and replace the hydrants in-house.

Field crews record work performed while in the field, record information like static pressure and can update missing information and add pictures. “A picture can be worth a thousand words,” said Navarro. “When you look at a photograph, you can often make better sense of what was done.”



Now if a customer calls to complain about their water pressure, the front office staff simply click on the nearest hydrant and read the static pressure to determine if the problem is on the distribution line and needs to be checked out, or if it is a resident issue.

Water quality sampling is done by a third party that collects samples and provides the district with weekly lab results that are uploaded into Sedaru. "If a customer calls with a water quality concern, our front office staff can click on the nearest sample station and give the latest results. Tracking of this information also makes regulatory reporting much more efficient, and with customizable dashboards and selection criteria it is easier to identify areas that need changes in treatment regimens or flushing," said Martinez.

Prior to the new platform, there was no valve maintenance program. For the most part, valves are neatly tucked away and can continue to work uninterrupted for years if not decades, until something goes wrong. Most valve checks at the District were done according to staff knowledge based on years of experience. Now the District connects Sedaru directly to its Wachs valve exercising machine and the work is automatically uploaded as it is performed.

"The field person just clicks on the asset hookup, and the machine records everything straight into Sedaru, including how many turns, how much torque it took, and so on," said Navarro. "These tools working together eliminate operator

error. We now have accurate organized data that makes it possible to generate reports with a couple of clicks and easily identify faulty valves for replacement. We have taken this data, and now have a board-approved valve replacement program, which would have been very hard to justify without knowing what we now know."

As the District moved to smart meters, field crews were able to complete the changeout work orders, input new serial information to be used for billing and add any specifics for future servicing. If a communication node stops working, Navarro can dispatch a work order to a field crew in the area to replace the node. By using a connected mobile device field crews have all the information at their fingertips and can complete the work order in the field and move on to the next task without going back to the office to complete paperwork or pick up the next job.

"As time went on, we wanted to have the ability to have a "follow up" feature as some meter work requires customer service staff to make other changes. For instance, if a house is knocked down and a new rebuild takes place, the resident may request a larger water service line, which then requires a different meter. These meters tend to be closer to the curb, which can lead to cars parking on top of the meters, so we need to make further adjustments. The Sedaru staff were able to add a "follow up" feature quite easily and are very supportive in customizing features to improve workflow," said Navarro.



Channel Islands Beach Community borders the Pacific Ocean and is surrounded by harbors, so it is vital that the District's sewer system is well maintained and monitored to ensure there is no spillage. The new platform runs a sewer lift station program that requires weekly maintenance along with monitoring of the sewer main line. The gravity sewer lines are on a two-year cycle, with some hot spots visually identified on maps that require a higher frequency of cleaning. Sewer wet wells are also scheduled for a quarterly cleaning.

The new platform also manages work orders for anything relating to trash service, including delivery of new barrels, scheduling a special pickup and routine changes in service.

Today field crews can look at Sedaru and see the whole day's work ahead. They can take the right tools and people to get the job done. If a new work order gets placed in priority, they can instantly see it and go straight to the site. Prior to this crews would come all the way back to the office once they completed a task. "Being a small community, we really value quick response times and our residents expect that high level of service, so anything we can do to improve efficiency makes everyone happier, especially the staff," said Martinez.

The District is already in the midst of addressing the aging workforce with Martinez and Navarro both new hires within the last four years. Moving from paper to digital has meant that the District is in a new phase of capturing information. In the last two years of deploying the new platform, the District has gathered a wealth of information that will be easily transferable to new hires. Martinez will be able to show the enormous amount of work that is done daily and the positive impact that is realized by this small community that now has its finger on the pulse of every piece of infrastructure.

"What we like about the platform is that it is dynamic. As we use the program more, we realize our needs are unique and we can customize features and dashboards to streamline our workflow. We know we will continue to change and improve, so having a solution that can adapt with us is key."

Martinez said, "The days of being subjective and shooting from the hip are over. The new platform has changed us from the Flintstones to the Jetsons. In another 10 months or so, we'll have a baseline of data to be able to set clear goals and measure performance."

Discover a better way to manage
your water resources.

Get in Touch