Océ Solutions at a Major U.S. Water Utility

An Océ Customer Profile

The Océ TCS400

Offers an Endless Stream of Possibilities for Large Western U.S. Water Utility

Power of Color Runs Deep as City Reprographic Department Taps New Ways to Expand Internal Large Format Printing Business

A major water utility based in the Western United States is responsible for ensuring a continuous supply of water to the city and county. As the state's oldest and largest water utility, it controls the collection, storage, quality and distribution of drinking water to nearly one fourth the state's residents and serves more than 14,000 water fire hydrants.

Imagine what would happen if any of the water mains within the over 2,500 miles of pipelines in the system sprung a serious leak. What if a service repair team dispatched to the field was unable to locate a major shut-off and fix the problem in a timely manner? The board that runs the utility has taken new steps to help ensure that the over one million citizens it serves in the state's metropolitan area won't go thirsty, incur flooding or drink contaminated water.

The latest source of innovation resides in what might be considered an unexpected place: the Reproduction Services department. Supported by an Océ TCS400 — a fully integrated large format color print, copy and scan system — the Reproduction Services supervisor has found creative new ways to help the water utility better serve both its external *and* its internal customers.

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Testing the Waters with GIS Applications

Using the new technology of the Océ TCS400, Reproduction Services has tapped into the power of color for its large format geographic information systems (GIS) documents. By applying color to map books, Reproduction Services is helping field service technicians more readily navigate the complex maze of water pipes that supply the city. These map books (or sets) are carried aboard service trucks at all times. There are 64 map sets, each containing approximately 1,600 map pages and 30-40 initial index sheets that overlay the actual maps. These indexes serve as ledgers to help the drivers quickly locate the right map within the large map sets.

Updating the indexes is not a small job. Whenever changes are required, the Reprographic Services department has to run index sheets for all 64 map books - totaling around 2,000 top index sheets. A full set is typically generated twice a year, but individual maps are modified and printed as the need arises.

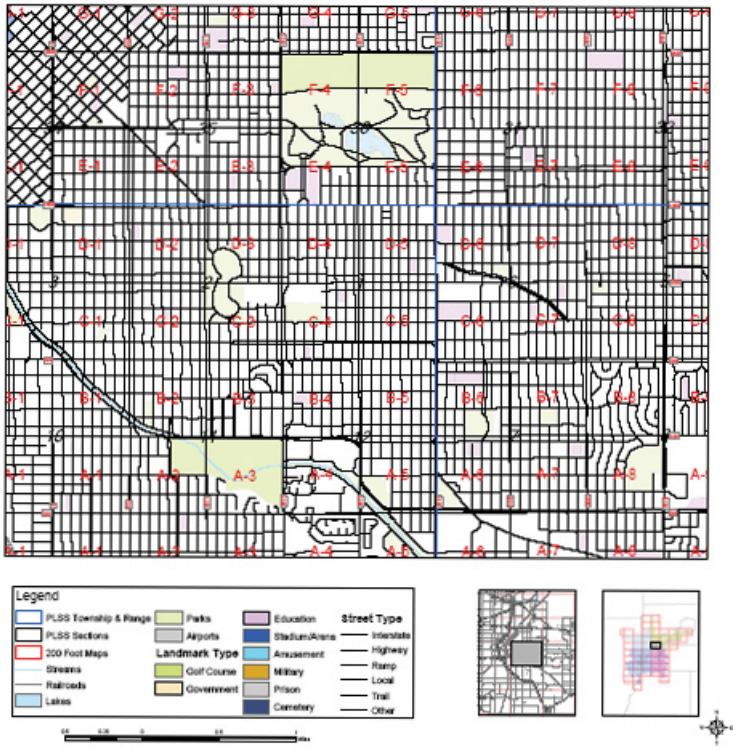
Until recently, the utility generated C-sized (21 x 22-inch) index sheets in black-and-white because this was the only alternative available using in-house printing technology. "It probably wasn't the best option, but it sufficed," said the Reprographic Services supervisor. "Imagine you're a service tech driving to a broken water main in the middle of the night. Your truck is dark because there are no street lights in a rural area, and you have to rely on black-and-white index pages in a map book to find your destination. What's wrong with this picture?"

Reprographic Services discovered that color coding the 2,000 top index sheets would help the drivers locate the underlying maps in their books that much easier. The index sheets serve as a quick reference guide (or legend) to help drivers thumb to the right map and even narrow down specific sections or landmarks within these maps. For example, if a service tech wants to find the water main next to a school in a central quadrant of the city, the index acts like a "map to a map" by using a color to designate this region, and another color to identify education "landmarks".

The grid maps, themselves, are not difficult to read since the hydrant symbols are clearly distinguished. Therefore they are still printed in monochrome.

There were times, however, when the utility needed to highlight specific locations on a map and resorted to hand-coloring the grid sections in highlighter markers. As many as 20 maps at a time were colored by hand to avoid the expense of outsourced color printing or copying. The Reprographic Services department had no internal system to photocopy these highlighted large format maps in color.

Now, using the Océ TCS400, it's a matter of simply scanning in the highlighted maps and reproducing them in-house on an as-needed basis. The Reprographics Services department can also receive color files digitally. Covers, index sheets and sometimes the maps themselves can be either printed from a digital or scanned file or photocopied from an original hard copy. The department typically uses 20-pound bond paper, but the system can accommodate a variety of different large format media.



The Océ TCS400 large format color printer produces color-coded index sheets to help water department service technicians quickly find the correct map in a set.

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"The advantage of using color to clarify and communicate the intricacies of our vast pipeline network on paper speaks for itself," the supervisor said. "Locations are easier to find, maps are simpler to read and problems are quicker to solve. It's not that we didn't recognize the value of color before, but we just didn't have the means to exploit its true benefits on a grand scale because of our technical limitations and the expense of outsourcing large format color prints," she added.

A Rich Pipeline of Possibilities to Meet Growing Customer Needs

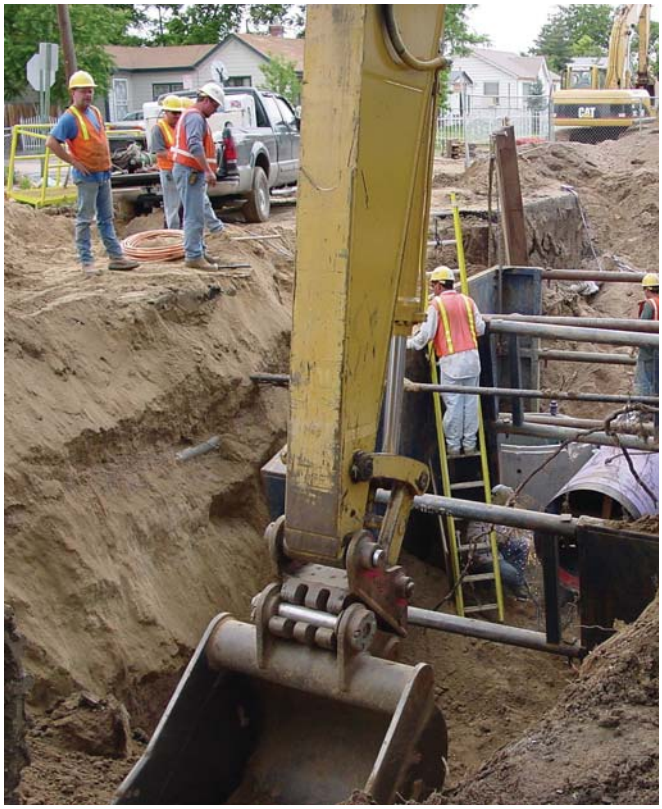
Having a large format color document management system in-house has also expanded the breadth of offerings that the Reproduction Services department is able to provide to other areas of the utility. The department's three-person staff has found a variety of ways to creatively promote the multi-function capabilities of the Océ TCS400 on several different fronts with various internal departments.

For example, the system's photocopying feature adds value to the Public Affairs department, which often needs large newspaper clippings duplicated in presentation-quality. Copying the size of the actual clipping versus reducing it keeps it legible and adds impact to a presentation.

The Planning and Engineering departments also have grown to rely on the Océ TCS400 for its scan-to-print capabilities, especially when reproducing maps in color to enhance their clarity and communicate complex detail.

Even the Legal department has discovered the value of color using the Océ TCS400 to generate oversized diagrams and documents for courtroom presentations.

"We've only begun to explore the full utility of the Océ TCS400, but word about the new system has traveled fast throughout our organization. Now everyone wants their large format documents copied or printed in color. It's definitely a 'one-size-fits-all' solution!" the Reprographic Services supervisor explained.



The Planning and Engineering departments have grown to rely on the Océ TCS400 to enhance drawing clarity and communicate complex detail in construction projects.

This kind of flexibility was virtually unknown to the Reprographic Services staff, which had resorted to either outsourcing or cutting and pasting narrow format color copies together whenever there was a request for a large format document in color. Today, the applications for the Océ TCS400 are virtually limitless. "As more people grow accustomed to color, more people want color. Once they see it, they don't want to go back to black-and-white," the supervisor added.

The Océ TCS400 complements the Océ TDS600 large format monochrome printer, which is used for high volume, high speed black and white scanning, printing, and copying. Now, Reprographic Services can reap the advantages of both systems.

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No Jams, High Demand

Recalling the print demand that the new color system created throughout the utility, the supervisor claimed: "Fortunately, the Océ TCS400 allows me to interrupt a lower priority job when a more urgent assignment takes precedence. It makes shuffling jobs a lot easier. The copy quality is also very good. And, like our other Océ printer, jams aren't an issue. If fact, with all the volume we generate from the Océ TCS400, it has never jammed, not even once."

Because of its user-friendly appeal and walk-up, intuitive "Green Button" copying capabilities, Reproduction Services may eventually set up the Océ TCS400 for self-service. Allowing employees to help themselves to the system will further broaden its use throughout the organization. At the same time, Reprographic Services may consider moving to a print-for-pay arrangement and bill back its services to internal clients.

"In the long run, the system will save us a lot of money," the supervisor noted. "We've successfully used the Océ TCS400 for GIS, engineering, legal and numerous other applications. Now that employees have a full range of color capabilities at their disposal, the need for large format color documents will never dry up."

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