

On the edge

Wilsonville's Marine Industrial Construction works hand in hand with PGE to clear debris from Willamette Falls and its dam

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The Bernert family has worked on the Willamette River for nearly as long as Oregon has been a state.

Beginning in the 1860s, the company has mined the local aggregate, manufactured gravel and roamed the Willamette, dredging the muddy river bottom and shipping goods downstream to the Port of Portland. It started with drifting logs to Oregon City mills using oar-powered boats, eventually expanding its operations as the decades passed.

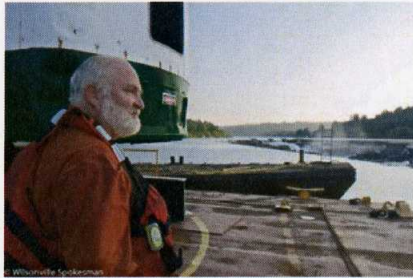


Photo By: Josh Kulla

Joe Bernert, co-owner of Wilsonville Concrete Products and Marine Industrial Construction, surveys Willamette Falls, where MIC is removing debris from the top of the dam operated by Portland General Electric.

Joe Bernert and his brother David are the fifth generation to hold the reins of the company, which now counts dozens of tug and tow boats, dredges and barges among its inventory.

"We've been here since 1958," Joe Bernert said recently as he watched a crew finish offloading a 100-foot barge containing roughly 1,000 cubic feet of logs and other debris removed from the top of the dam at Willamette Falls in Oregon City.

"We typically do this every year," he said. "We did some of the initial repairs on the fish ladders back in the 60s, and we've done construction projects associated with the dam and locks in that area for well over, well probably the first stuff was in the late (19)40s, early 50s."

Wilsonville Concrete Products, and its more recent offshoot Marine Industrial Construction, have completed numerous recent projects including berth deepening at the Port of Vancouver and Priest Rapids Dam pumphouse dredging last year, as well as repair work at the Rocky Reach Dam and maintenance dredging for CalPortland at Santosh Slough the year prior to that. They've even salvaged lost aircraft from the river.

The annual clearing of logs and other debris from the dam surrounding

Willamette Falls in Oregon City is the most lucrative for MIC. But it definitely is one its most visible marine operations.

"I think it works out good, and it's part of our goal as a company," Bernert said. "We feel our crew is one of our valuable assets, and that's why it keeps them busy."

An annual job

Every winter, hundreds of tons of debris, mostly logs, makes its way downriver during periods of high water. Some gets carried over the 40-foot drop at Willamette Falls, but a good proportion gets hung up on the concrete structure, rocks and other obstacles.

"We've been doing this since the 60s," said **Tim Bernert**, who grew up with brothers Joe and Dave on the river back when Wilsonville could count fewer than 1,000 official residents. "1967 or 68 was when we started doing it regularly."

These days, the company has refined the debris removal operation to the point where they need fewer than 10 crew members on board the barges and tugs to complete the task.

"It's something that has to be addressed," PGE communications specialist **Steve Corson** said. "It varies from year to year how much debris we have to remove. Some years we really don't require much in the way of cleanup, but generally speaking it's something we have to deal with each year."

The company has owned and operated the 14 megawatt T.W. Sullivan power plant on the west side of the river since 1895, and has worked with Wilsonville Concrete and now Marine Industrial Construction for decades on debris removal and other projects.

Over the years, the company has continually upgraded various parts of the plant, which was the first in the United States to generate electricity for long-distance transmission, beating Niagra Falls and its turbines by six years.

This year, however, there is more work than usual following the installation of a new boom near the dam by PGE aimed at guiding the flow of water through the dam more efficiently.

"Usually we do what we call maintenance clearing," Joe Bernert said. "But this year we're pretty much clearing everything out of the area."

Debris removal started during the second week of July and is expected to continue for another one to two weeks. After the debris is shipped back upriver to the company's Wilsonville docks, it is then moved by truck to various Willamette Valley sites for use in restoring riparian habitats and other environmentally friendly uses.

At the same time as the debris removal began, PGE crews also installed seasonal flash boards at the top of the dam to help maintain water levels upstream during the driest part of the year.

"It allows us to increase the amount of water behind the falls," Corson said, adding that this helps maintain power generation through the Sullivan plant's turbines as well as aid the passage of fish through the falls.

"There are other benefits that flow from that as far as increasing the amount of water that is upstream of the falls," he added. "It helps with navigation, too. The boards will remain in place until the fall, when Mother Nature will be kind enough to remove them for us."

Another addition to this year's work agenda was the installation of aluminum hand railings along the top of the dam itself. These, Corson said, allow the PGE crew installing the flashboards to work with a greater margin of safety than in the past.

"The other part of what we're doing this year is unique," he said. "It's not something we do every year. The folks with MIC worked with us to install handrails to make installation of flashboards safer. We've been doing the flash boards for a very long time; it's something that our crews are used to doing and our goal is to make sure they can do it safely."

With thousands of recreational boaters using the river each year, along with anglers and commercial users such as MIC, the work certainly doesn't go

unnoticed.

"There are so many things invisible to the general public that really makes thing tick," said **Sandy Carter**, director of the Willamette Falls Heritage Foundation, a group aiming to secure a federal historical site designation for the dam and its facilities. "Like putting up these boards every year; there are more people than one might imagine that are affected by that dam, and the job of putting it up in the summer time, it's not an everyday thing."

Scientific ownership

As a former scientist for the federal Environmental Protection Agency and a current professor for Oregon State University, Joe Bernert is not who one might expect to find heading up a heavy construction firm. His brother, Dave, serves as a vice-president at Hewlett-Packard, and together they bring a cutting edge technological vision to the company.

The company also has embraced the idea of becoming an industry leader in shepherding projects through the regulatory maze involved in dredging and other industrial operations.

"You just don't go dig anymore," Bernert said. "I used to work for EPA and the (Oregon) DEQ; you don't fight it, you do what's required. That's just business. There's a reason things are being done, so it's our responsibility anyway."

A side issue that has impacted MIC and its business is the ongoing closure of the Willamette Falls Locks. With no foreseeable date for a re-opening on tap, the Bernerts and MIC can only watch as their fleet of barges, tugs and other water craft remains separated by the falls.

This isn't a huge concern for the company, Bernert said, because of the fact its most lucrative contracts, including with the Port of Portland, remain below the falls. At the same time, it does make debris removal a bit more challenging.

"We're less efficient this year, primarily because this crane is about half the size of the crane we usually use," Bernert said from the pilot house of one of the company's tug boats. "It's the same with our barges; we're usually using a barge that is 150 feet long and 37 feet wide. But the one we're using this year is only 100 feet long and 30 feet wide.

"With the other barges we can load twice the tonnage," he added. "With these we hit volume capacity before tonnage, but there's no other barge or crane in the upper river right now. So, really, before this job started we had to do a lot of prep work to get ready because the equipment we usually use is in Portland Harbor."

But if there's one thing the company prides itself on it's getting the job done with the gear at hand.

"It's a nice job," Bernert said. "It's local, it's fairly high visibility, and we know how to do it. It's all fun in different ways."

Below is a photo gallery taken by Josh Kulla showing the debris removal around Willamette Falls and the dam.



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