

## Heart of the Valley sewer system needs \$22 million to rehab

By Brian Roebke  
Editor

Sewers, particularly sanitary sewers, are something people ordinarily don't like to think about but government leaders from the Heart of the Valley communities of Combined Locks, Kaukauna, Kimberly, Little Chute, and Darboy must think about it and the time is near to do something about the future of the Heart of the Valley Metropolitan Sewerage District.

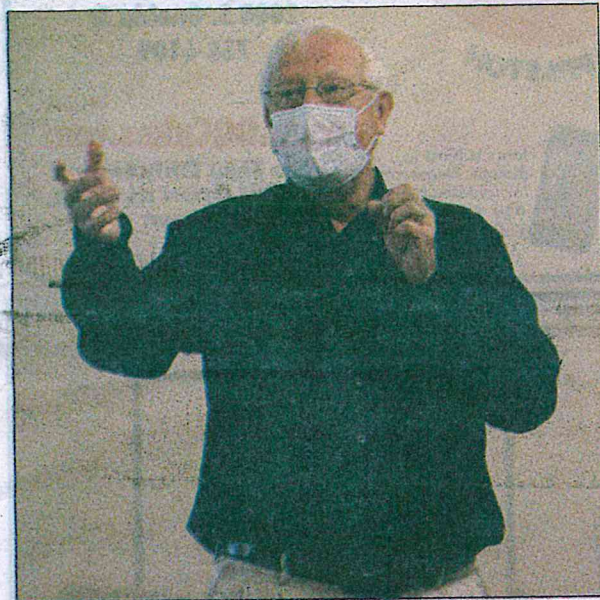
The communities came together in the 1970s to build a system that would handle all of the waste from the city of Kaukauna and villages of Combined Locks, Kimberly, and Little Chute and the Darboy Sanitary District that includes Buchanan and Harrison. All sewage

from those communities flowing into an interceptor placed in the Fox River, leading to the district's regional wastewater treatment facility located behind the Thilmany mill in Kaukauna.

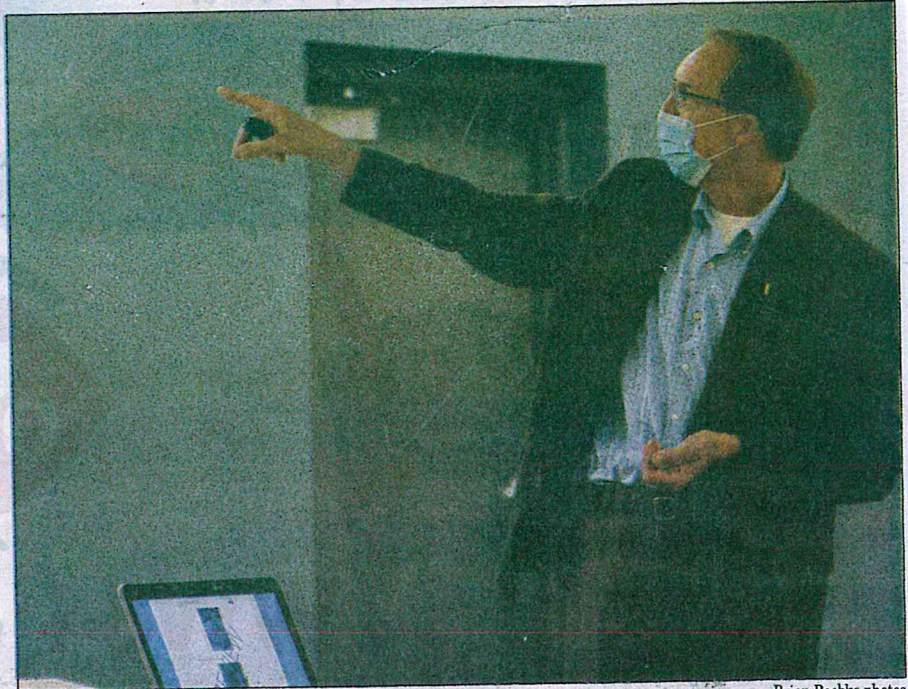
The interceptor, which starts by Island Park in Little Chute on the north side and Combined Locks on the south side, is a key piece of infrastructure that brings the waste water to the plant for treatment.

President David Casper told representatives from the communities at a special meeting last week that the system, built in 1977-78, is failing but is worth saving compared to relocating.

"We did a very sophisticated and in-depth assessment of its hydraulic capacity, how much water can it



David Casper, president of the Heart of the Valley Metropolitan Sewerage District told representatives from area communities at a special meeting last week that the system built more than 40 years ago in the Fox River is failing but is worth saving, but with a \$22 million price tag.



Brian Roebke photos

Scott Schramm of Strategic Municipal Services said the sanitary sewer interceptor pipe that runs at the bottom of the Fox River from Little Chute and Combined Locks to the treatment center in Kaukauna has significant corrosion problems that need to be addressed sooner than later.

convey, and it has enough capacity that it can easily carry more waste water for the foreseeable future that we can treat at the plant," he said.

During his presentation at the meeting, Scott Schramm of Strategic Municipal Services reviewed the problems with the interceptor, led by significant corrosion of the concrete pipe throughout the system during the past six months.

While the concrete has not degraded to the point where steel reinforcement is visible, the 48-inch inside pipe is an average of 49½ inches, meaning ¾ inch of pipe material was lost in the past three years.

This pipe is largely marine pipe, averaging a 6-8 inch wall that's been heavily reinforced with steel.

"We're at a point where there's a sense of urgency," Schramm said.

Waiting for 3-5 years is possible but not without knowing how fast the pipe will continue to degrade since conditions are favorable for continued corrosion.

Operational changes have preserved the largest segment as an overflow structure so they can save the smaller structures for daily use because it tends to move the waste water quicker and keeps colonies of

bugs from "having such a leisurely time at the buffet table and keep the corrosion down a bit," Casper said.

He feels very good the Department of Natural Resources is on board with the operational changes they made to improve the system.

"We have a system that's very, very expensive, probably could not be rebuilt in the river today for regulatory issues and cost issues," Casper said. "It will serve very well for a very long time in the future from a capacity standpoint and it's worth saving in that it's not structurally impaired."

The interceptor can be relined with a cast-in-place plastic liner that will make it smooth and resistant for a long time.

Casper compared it to a sewer pipe in the road that would be at the end of its life, but this pipe is nowhere near the end of its life.

Casper noted they need to move forward and engage services as quickly as they can to create a master plan for the project to happen. "We understand it is a massive engineering and construction feat that will require the understanding and cooperation of all of the communities," he added.

He noted the project will be disruptive to the people who live along

the river, park areas, and the environment on the river in terms of the ability to enjoy it for the entire summer.

It's very complicated in terms of keeping the system pumping while its being reconstructed.

"That means that all of the potential of millions of gallons that flow down that pipe have to be bypassed around the sections that are being worked on," Casper said.

The bypassing capacity in place must be enough to reach the maximum amount of flow possible before the work begins.

"To find a bypassing contractor that can pump 30 million gallons a day, they don't grow on trees," Casper said. "These are big, expensive contractors."

Casper doesn't think there is another system like this in at least the state, perhaps further.

Schramm gave some bad news in the form of a construction plan. Doing the work in stages would add perhaps 10 percent to the cost and isn't practical.

How the cost will be distributed remains to be determined but it was suggested users will need to pay. How that's determined will be an important and perhaps uncomfortable discussion.