



WAYNE COUNTY

PROJECT-AT-A-GLANCE

With no lower sprocket and low cost of ownership, the FlexRakes deliver reliability for a Michigan CSO facility

SITE: *Downriver Wastewater Water Treatment Facility*

EQUIPMENT: *Four (4) Duperon[®] FlexRake[®] FPFS*

INSTALLED: *March 2009*

“THE LOW MAINTENANCE HAS HELPED US TREMENDOUSLY”

The Wayne County Downriver WWTF in Wyandotte, Michigan, is a CSO facility servicing 13 area communities with an average flow of 40 MGD. For wet weather and storm events, the plant is rated for 225 MGD—second only to Detroit in the state of Michigan. The plant is home to seven screens: four used during everyday flow, and an additional three accessed primarily during storm events.

Prior to the installation of the Duperon[®] FlexRake[®] FPFS, the Downriver WWTF utilized a catenary screen. Over time, the screens proved to be a maintenance hassle for the facility, according to Dan Alford, Assistant Superintendent. “We had to take the whole channel out of service just to work on the screen, and it got excessive,” he relayed. “Just the general maintenance was costing us between 4 and 8 hours each week— and that was just the routine work. It was more when the unit was down or damaged, and if you didn’t spend the routine time on maintenance you could count on the screen to tear itself up.”

“ The ease of maintenance was important to us - getting away from that 8 hours each week of routine work...”

An engineer, Alford worked on the project that would replace the prior technology. After several site visits, a chain-and-sprocket technology was the front runner as a new solution when the Downriver Superintendent learned about Duperon. “The lower bearing had been a big issue with us before, so we decided to take a look and visited a few sites in Michigan.” Once the team had seen the Duperon[®] FlexRake[®] in operation, they knew they’d found a solution.



Though the initial investment in the Duperon® FlexRake® was greater than the cost of the traditional catenary screens, the Downriver WWTF soon found that the innovations of FlexRake® technology were evident in the unit's low cost of ownership. Without the inherent maintenance issues of the classic catenary technology, costs decreased. "It's saved us a bunch of money; the low maintenance has helped us tremendously," Alford shared.

"The ease of maintenance was important to us—getting away from that 8 hours each week of routine work," Alford shared. "That was the driver. The old screens required so much maintenance and spent so much time out of service that it was a real problem. We need our flow paths available to meet the 225 MGD, and we'd often find ourselves in a pinch because one or more of the older screens would be out of service. Reliability was key."

Alford and his team found the reliability they'd been looking for in the Duperon® FlexRake®. "It's been great, both in reliability and the maintenance. I get to spend a few hours every six months instead of hours every week. It's really surpassed our expectations. The customer service has been great all the way through. I'm very comfortable with the technology. It's been superb," Alford concluded.

ABOUT DUPERON

Duperon Corporation is the leader in innovative preliminary liquid/solids separation systems. For more than 35 years, Duperon has provided simple yet innovative solutions for a variety of screening and solids handling applications in the water and wastewater industry. Duperon technologies are designed and manufactured in Saginaw, Michigan.

