

Lake County Nutrient Reduction Facility (NuRF) *receives two Mud Cat MC 50E dredges*

TAVARES, FL – The Lake County Nutrient Reduction Facility (NuRF) located on the Apopka-Beauclair Canal south of the Lake Beauclair, just took delivery of two brand-new custom-built Mud Cat MC 50E dredges from Ellicott Dredge Technologies, LLC. The dredges were purchased through open tender to replace the original units built by another U.S. supplier in 2008. The new dredges will systematically remove phosphorus and nitrogen from the waterway using two off-line flocculation settling ponds. The water is then returned to its original path in its new nutrient reduced form reducing algae blooms downstream.



Lake County's NuRF facility is the largest of its kind in the world for treatment of storm-water. The two 9-acre settling ponds capture the inflow from the canal after alum is added to create a floc. The floc then settles in the bottom of the ponds capturing the phosphorous and nitrogen rich materials and allowing the clean water to flow back downstream. Lake County's Mud Cat MC 50E units are fully automated and use Mud Cat's proprietary automated technologies including the following: Auto Sense™:

The dredge finishes its cut and then automatically returns to the start position to prepare for the next deeper cut or move laterally to the next cut, depending on the system program.

Lateral Sense™:

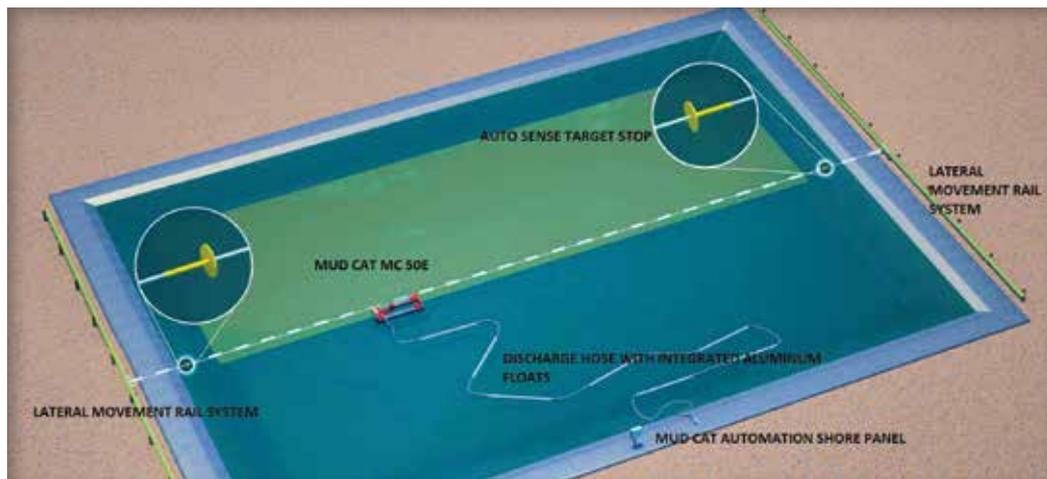
The dredge automatically moves to its next parallel cut as programmed.

Solids Sense™:

The density meter monitors slurry solids density and reacts to composition changes by accelerating or decelerating the traverse winch speed.

Bottom Sense™:

When the horizontal auger cutter-head





One of two Mud Cat 50E units delivered to Lake County's NuRF site.

reaches the bottom layer a sensor raises the cutter to a level which will not disturb a liner or bottom layer.

"I visited the site multiple times to meet with the engineers and was able to come up with a system that met their current production requirements and would allow room for expansion in the future," said Michael Young, Technical Sales Manager, Ellicott Dredge Technologies, LLC.

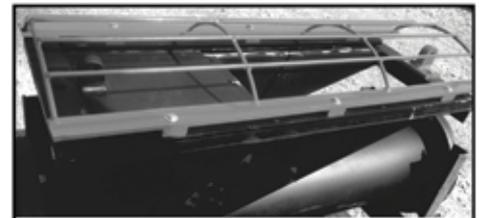
The Mud Cat 50E units are operating infinitely in separate lagoons down to a maximum dredging depth of 18 ft. (5.5m). The cutter-head excavates an alum floc from the bottom of the lagoons consisting of sedimentary silts, clays, decaying biologicals, and fine sand. The total dynamic head requirement for each pump system to reach the centrifuge dewatering stage is 145 ft. (44m) at 900 gpm (56.8lps). The slurry is pumped a maximum distance of 1,900 ft. (579.3m) with 25 ft. (7.6m) terminal elevation. The shore panel was programmed by an electronics specialist from the factory and an additional Autec radio remote control was provided as a back-up system.



*Above L :
The Mud Cat
automation shore
panel.*

*L :
The back-up Autec
radio remote control to
manually control each
dredge system*

See ad on pg. 21 ○



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