



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

River Water Filtration Applications

Jackson County Port Authority Pascagoula, MS

Jackson County Port Authority supplies non-potable water to a refinery for Chevron and other industrial sites in Pascagoula, MS. Water is pumped from the Pascagoula River and treated using chemical clarifiers. These clarifiers were followed by eight sand filters, which had been failing in recent years. The plant evaluated several options for replacing these sand filters including cloth media filtration, which was pilot tested and installed.

One 24-disk Aqua MegaDisk® unit with 12 disks installed was installed in March 2016. With 12 disks installed, this unit was designed to treat up to 6,500 gpm. The remaining 12 disks were installed in July 2017 which increased the filter capacity to 12,000 gpm. The project is well underway to install a second unit. This unit is expected to startup in late 2018. These two filters will eliminate the need for the sand filters with a combined maximum flow of 26,000 gpm.

Several pictures are included below of the unit are shown below.



Figure 1: Aqua MegaDisk Cloth Media Filter at Jackson County Port Authority



Figure 2: Aqua MegaDisk Cloth Media Filter at Jackson County Port Authority



Figure 3: Influent weirs on Aqua MegaDisk filter at Jackson County Port Authority

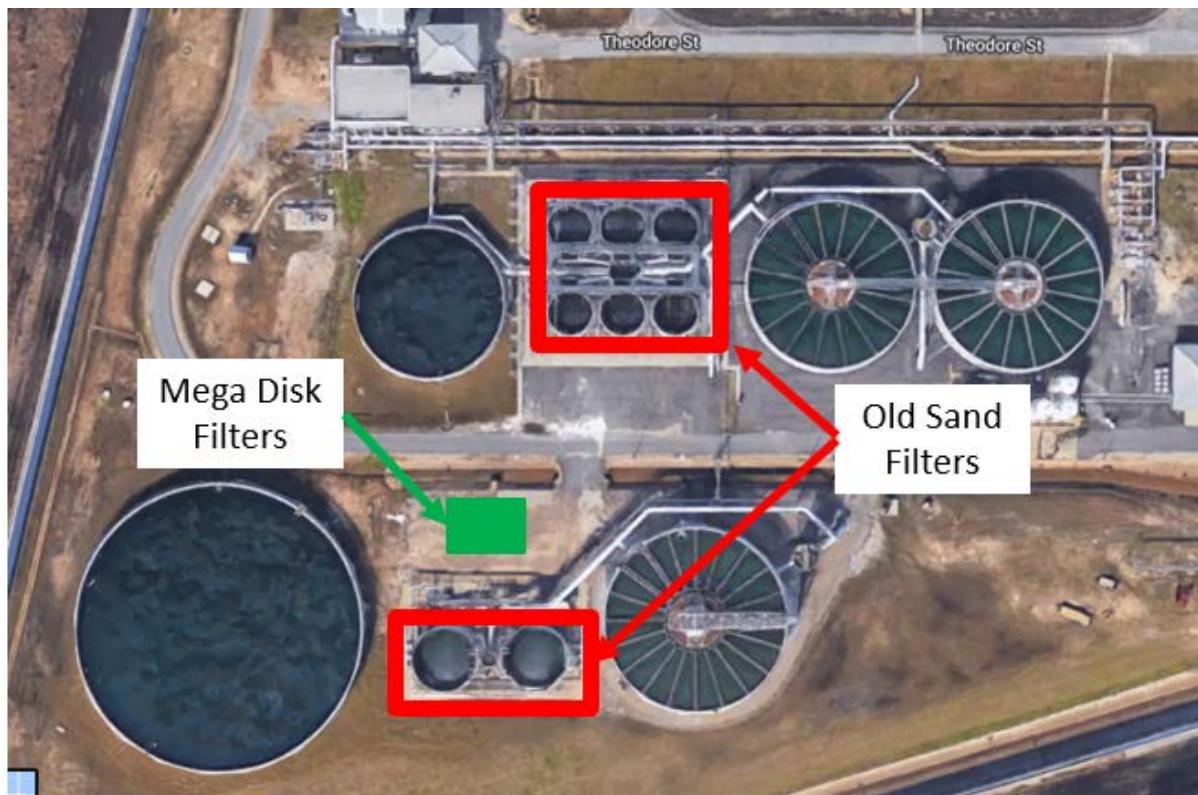


Figure 4: Footprint comparison between sand filters an MegaDisk filters at Jackson County Port Authority

Wiley Nash WRF, Deland, FL 103704B

The Wiley Nash Water Recovery Facility their cloth media filters for reuse.

Secondary effluent is supplemented with river water during the summer months to increase production.

Equipment:

- 2 AquaDiamond® Cloth Media Filters

This facility has been in service since 2015. The site contact is Jody Harrison (386-898-3092). The table below shows the operating data from this facility from 2016. Each month, the effluent TSS was below their detection limit of 2.6 mg/L.

Table 1: Filter performance at Wiley Nash WRF

Month	Average Flow *	Peak Flow *	FILTER INFLUENT			EFFLUENT		
			TSS	NTU	TP	TSS *	NTU	TP
Jan	3.16	3.91				<2.5		3.43
Feb	3.3	3.72				<2.5		2.66
Mar	3.14	3.4				<2.5		3.46
Apr	3.12	3.75				<2.5		3.2
May	3.09	5.08				<2.5		2.83
Jun	3.17	3.89				<2.5		4.88
Jul	3.12	3.49				<2.5		2.98
Aug	3.11	3.45				<2.5		3.6
Sep	3.24	3.89				<2.5		3.58
Oct	3.45	4.22				<2.5		2.74
Nov	3.16	3.94				<2.5		2.88
Dec	2.89	3.28				<2.5		3.87

Desert Mountain Aquifer Storage and Recovery (AKA CAP) 106311

<http://www.cap-az.com/>

The Central Arizona Project (CAP) is a large canal that carries water from Lake Havasu to the southern boundary of the San Xavier Indian Reservation southwest of Tucson. It is a 336 mile long system of aqueducts, tunnels, pumping plants, and pipelines.

Equipment:

- Three 6-Disk AquaDisk® Cloth Media Filters