

COX CREEK WRF ENR

Background

This is one of seven Enhanced Nutrient Removal (ENR) projects that the County is pursuing in compliance with the State's Bay Restoration Program. When complete, nitrogen concentrate levels will be reduced from 8mg/L to 3 mg/L and phosphorus from 2 m/L to 0.3 mg/L.

This project includes an advanced, innovative and state-of-the-art technology called Membrane Bioreactor Filtration (MBR) as well as revised biological processes to the wastewater treatment process. By adding the MBR, there is no need to construct more conventional concrete secondary settling tanks for the same level of treatment. This is imperative given the limited space of the Cox Creek Facility and it's location that borders the Patapsco River and the close proximity to Constellation Energy's Brandon Shores Power Plant. As shown in the photograph, there is virtually no space for expansion.

This project includes two phases:

- Phase I: reduction of existing primary clarifier tanks
- Phase II: concentration of new membrane building at vacated primary clarifier location

Benefits

- Meet pollutant load limits set in Bay Restoration Program
- Significantly reduce nitrogen effluent concentration from 8 mg/L to 3 mg/L, and phosphorous effluent concentration from 2 mg/L to 0.3 mg/L.

Funding Sources

State Grant (89%)
County Funds (11%)

Project Status

- Phase I under construction
- Phase II under design



Project Information

Project Manager	Richard Meehan (410) 571-0092
Design Consultant	Stearns & Wheler
Contractor	Pizzagali
Inspection Manager	Black & Veatch
Estimated Total Project Cost	\$162.6 Million
Design Notice to Proceed	Phase II—April 2010
Construction Notice to Proceed	Phase I—March 2010 Phase II—June 2012
Projected Completion Date	2016

For more information contact Customer Relations at 410-222-7582 or email us at customer@aacounty.org