

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
073800	S-53.21	Change

2. Date: October 1, 2007

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised:

5. Agency: **WSSC**

3. Project Name: Seneca WWTP Enhanced Nutrient Removal

4. Program: **Sanitation** 6. Planning Area: Lower Seneca P.A. 18**B. Expenditure Schedule (000's)**

Cost Elements	(8) Total	(9) Thru FY '07	(10) Estimate FY '08	(11) Total 6 Years	(12) Year 1 FY '09	(13) Year 2 FY '10	(14) Year 3 FY '11	(15) Year 4 FY '12	(16) Year 5 FY '13	(17) Year 6 FY '14	(18) Beyond 6 Years
Planning, Design & Supervision	2,163	121	1,100	942	430	210	252	50			
Land											
Site Improvements & Utilities											
Construction	8,975			8,975		3,750	4,500	725			
Other	1,653		165	1,488	65	594	713	116			
Total	12,791	121	1,265	11,405	495	4,554	5,465	891			

C. Funding Schedule (000's)

State Aid	12,791	121	1,265	11,405	495	4,554	5,465	891			
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D. Description & Justification**DESCRIPTION**

This project provides for the planning, design, and construction of improvements at the Seneca WWTP necessary to meet the requirements of MDE's Environmental Nutrient Removal (ENR) Program at 20 MGD. The preliminary recommendation continues the operation of existing basins in the Modified Ludzack-Ettinger (MLE) mode and provides for an additional 150-foot clarifier and expansion of the filter gallery to include three new sand filters designed for phosphorous removal down to the permit goal of 0.18 mg/l at the maximum month flow of 33 MGD (design flow 26 MGD).

Service Area Seneca Creek Drainage Basin

JUSTIFICATION**Plans & Studies**

ENR Alternatives for the Seneca Wastewater Treatment Plant, Gannett Fleming (June, 2005); Maryland Department of the Environment, Feasibility Study Approval Letter (July 27, 2005)

Specific Data

As the result of an Executive Order issued by the Governor of Maryland in November, 2002 calling for Maryland wastewater plants to be upgraded to the "limits of technology" for nutrient removal, the Maryland Department of the Environment introduced the ENR Strategy in May, 2003. The ENR Strategy calls for assigning "load goals" to municipal wastewater treatment plants based on annual average effluent concentrations of total nitrogen (4 mg/l) and total phosphorous (0.3 mg/l), and permitted design capacity. These load goals have been incorporated into the Chesapeake Bay Program tributary strategies Maryland adopted in 2004.

The ENR Strategy also calls for wastewater treatment plants to continue optimizing nutrient removal performance and attempt to achieve an annual average effluent nitrogen concentration of 3 mg/l as a goal, not a permit limit. Maryland has proposed new water quality standards for the Chesapeake Bay. Once these standards have been adopted, the load goals of the ENR Strategy will be incorporated into NPDES permits as enforceable effluent limits. The more stringent concentration goals will remain as goals.

The ENR Strategy also calls for the creation of an ENR grant program to provide funding for the necessary wastewater treatment plant upgrades. The Chesapeake Bay Restoration Act was passed in 2004 and authorized the collection of a surcharge on water and sewer utility bills paid by Maryland residents and businesses. The funds are to be used largely to fund up to 100% of eligible planning, design, and construction costs for ENR upgrades, which are defined generally as the cost of converting a Biological Nutrient Removal (BNR) facility to an ENR facility. The definition of "eligible", while not specifically defined in the legislation, is interpreted as the necessary liquid treatment processes to meet the ENR program limits for total nitrogen and phosphorous.

Cost Change

The cost has increased significantly for this project due to: differences between initial planning and preliminary design cost proposals; construction estimates for filters, blowers, piping and electrical improvements, and inflation.

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff	
	Other	
Facility Costs	Maintenance	
	Debt Service	
Total Costs.....		
Impact on Water or Sewer Rate.....		

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	22,862
Cost Estimate Last FY	7,889
Present Cost Estimate	12,791
Approved Request, Last FY	858
Total Expenditures & Encumbrances	121
Approval Request FY 09	495
Supplemental Approval Request Current FY (08)	

G. Status Information

Land Status:	No land or R/W required
% Project Completion:	D-0%
Est. Completion Date:	August 2011

H. Map Map Reference Code:**MAP NOT AVAILABLE**

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 53.21

Project Name: Seneca WWTP Enhanced Nutrient Removal

STATUS Preliminary Design (WSSC Contract No. CD4260A05,).

OTHER

The project scope has remained the same. Expenditures shown in Block B are planning level estimates only and may change further based upon site specific conditions, design constraints and negotiations with the Maryland Department of the Environment.

COORDINATION

Montgomery County Government, Montgomery County Department of Environmental Protection, Maryland Department of the Environment and WSSC Projects S-53.20, Seneca WWTP Ultraviolet Disinfection Facilities and S-53.22, Seneca WWTP Expansion, Part 2.

NOTE This project supports 100% Environmental Regulation.