

A. Identification and Coding Information

2. Date: October 1, 2009 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

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

Revised: _____

3. Project Name: Seneca WWTP Enhanced Nutrient Removal 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Lower Seneca P.A. 18

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.....	

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '09	(10) Estimate FY '10	(11) Total 6 Years	(12) Year 1 FY '11	(13) Year 2 FY '12	(14) Year 3 FY '13	(15) Year 4 FY '14	(16) Year 5 FY '15	(17) Year 6 FY '16	(18) Beyond 6 Years
Planning, Design & Supervision	3,222	820	938	1,464	488	488	488				
Land											
Site Improvements & Utilities											
Construction	9,523		1,000	8,523	3,500	3,500	1,523				
Other	1,193		194	999	399	399	201				
Total	13,938	820	2,132	10,986	4,387	4,387	2,212				

C. Funding Schedule (000's)

State Aid	13,938	820	2,132	10,986	4,387	4,387	2,212				
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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); WSSC Preliminary Engineering Report, (September, 2008)

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
Costs were increased for inflation.

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

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	13,279
Present Cost Estimate	13,938
Approved Request, Last FY	5,012
Total Expenditures & Encumbrances	820
Approval Request FY 11	4,387
Supplemental Approval Request Current FY (10)	

G. Status Information

Land Status: No land or R/W required
 % Project Completion: D-70%
 Est. Completion Date: October 2012

H. Map Map Reference Code:

MAP NOT AVAILABLE

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