

1. Project Number	Agency Number	Update Code
143802	W-73.21	Change

2. Date: October 1, 2013

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

Revised:

5.Agency: **WSSC**

3. Project Name: Potomac WFP Corrosion Mitigation

4. Program: **Sanitation**      6. Planning Area: **Bi-County**

B.	Expenditure Schedule (000's)
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	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Cost Elements	Total	Thru FY '13	Estimate FY '14	Total 6 Years	Year 1 FY '15	Year 2 FY '16	Year 3 FY '17	Year 4 FY '18	Year 5 FY '19	Year 6 FY '20	Beyond 6 Years
Planning, Design & Supervision	669	439	105	125	100	25					
Land											
Site Improvements & Utilities											
Construction	15,883		9,000	6,883	6,800	83					
Other	1,612		911	701	690	11					
<b>Total</b>	<b>18,164</b>	<b>439</b>	<b>10,016</b>	<b>7,709</b>	<b>7,590</b>	<b>119</b>					

C.	Funding Schedule (000's)
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WSSC Bonds	18,164	439	10,016	7,709	7,590	119					
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#### D. Description & Justification

DESCRIPTION
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This project provides for the planning, design and construction required to upgrade and replace the existing metallic components in the eight Sedimentation Basins due to accelerated corrosion observed since the implementation of the full-scale Low pH Enhanced Coagulation Program in 2008. The project will also upgrade components in the Rapid Mix and Flocculation process areas in anticipation of the Ferric Chloride Feed System Project completion that will introduce a coagulant that is not compatible with several of the existing metallic components.

## JUSTIFICATION

## Plans & Studies

Technical Memorandum No. 1 - Impact of Ferric Chloride on Existing Facilities, Hazen and Sawyer, (May 2010); Potomac Sedimentation Basin Corrosion Study, Hatch Mott MacDonald, (July 2010).

### Specific Data

Sedimentation Basin components, such as valve hardware, pipe couplings, operator extensions, cross beams, cross collector drive chains and pipe support brackets, are all essential elements. Failure could mean losing important and significant process capacity, possibly for extended periods of time. This could hinder the Commission's ability to meet water supply demands, particularly when the system may need to recover quickly, as in the case of a major water main break. Replacing the metallic components with 316 Stainless Steel will help maintain the integrity of our system. The project also includes the replacement of the existing polyurethane sprockets, chains for the cross collector drive, augers, auger shafts, and auger chains.

### Cost Change

The change in cost is the result of escalated material cost and increased quantities of equipment to be replaced.

**STATUS** Final Design (WSSC Contract No. BF5250A11, ).

## OTHER

The project scope has remained the same. Expenditures and schedule projections shown in Block B above are design level estimates and may change based on site-specific conditions and design constraints.

## COORDINATION

WSSC Project W-73.20, Potomac WFP Stage 2 Disinfection Byproducts Rule Implementation(Ferric Chloride Feed System).

**NOTE** This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)	
2019	2020
2021	2022
2023	2024
2025	2026
2027	2028
2029	2030
2031	2032
2033	2034
2035	2036
2037	2038
2039	2040
2041	2042
2043	2044
2045	2046
2047	2048
2049	2050
2051	2052
2053	2054
2055	2056
2057	2058
2059	2060
2061	2062
2063	2064
2065	2066
2067	2068
2069	2070
2071	2072
2073	2074
2075	2076
2077	2078
2079	2080
2081	2082
2083	2084
2085	2086
2087	2088
2089	2090
2091	2092
2093	2094
2095	2096
2097	2098
2099	2100

FY of Impact

Program Costs	Staff .....	....	
	Other .....	....	
Facility Costs	Maintenance .....		
	Debt Service .....	1250	17
Total Costs.....		1250	17
Impact on Water or Sewer Rate.....	3¢		17

#### F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 14
Date First Approved	FY 14
Initial Cost Estimate	7,443
Cost Estimate Last FY	7,443
Present Cost Estimate	18,164
Approved Request, Last FY	4,644
Total Expenditures & Encumbrances	439
Approval Request FY 15	7,590
Supplemental Approval Request Current FY (14)	

### G. Status Information

Land Status:	Not applicable
% Project Completion:	D-100%
Est. Completion Date:	October 2015

<b>H. Map</b>	<b>Map Reference Code:</b>
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**MAP NOT APPLICABLE**