

APPENDIX

MAY 2010

water resources

FUNCTIONAL PLAN



Appendix 6

WSSC Adopted Waste Water Flow Projections



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MontgomeryPlanning.org

WASHINGTON SUBURBAN SANITARY COMMISSION

Interoffice Memorandum

TO: CRAIG A. FRICKE, GROUP LEADER
PLANNING GROUP

FROM: KENNETH DIXON, PLANNING UNIT COORDINATOR
PLANNING GROUP

DATE: MAY 8, 2008

SUBJECT: ADOPTION OF DRAFT 2006 WSSC WASTEWATER FLOW PROJECTIONS

The Planning Group's Wastewater Planning Unit developed wastewater flow projections for the wastewater treatment plants serving the Sanitary District. Using the same methodology as used in the December 2001 projections report, wastewater treatment flow projections were made from 2005 to 2030 using "sewered area" Round 7 demographic forecasts for single- and multi-family households as well as employees in the Bi-County service area.

Attached are the most recent projections conducted in 2006, at five-year increments, with the accompanying charts indicating the current (2006) projection and the previous projection made in 2001.

I recommend that these 2006 Wastewater Flow Projections be approved for wastewater planning purposes.

Endorsed and transmitted to the Chief Engineer:

Recommend approval

CAF
5-9-08

cc:

Approved
[Signature]
Gary J. Gamm, P.E.
Chief Engineer
5/30/08

Blue Plains

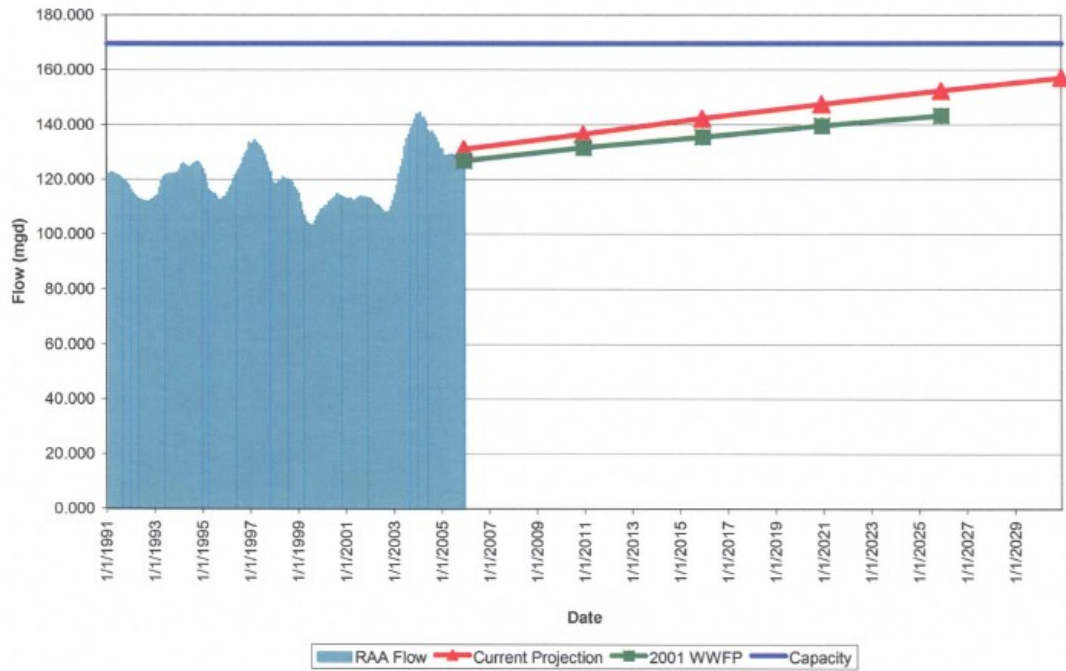
Existing Flow 2005 131.12 mgd
Total 131.12 mgd

Flow Factors

SFDU = 255 gpd/sfdu
MFDU = 178 gpd/mfdu
EMP = 40 gpd/emp

Year	SFDU	MFDU	EMP	AWF		2001 WWFP	Capacity
2005	238032	140016	570796	131.12	mgd	127.08	169.6
2010	247504	151189	595271	136.50	mgd	131.8	169.6
2015	249759	168198	647286	142.19	mgd	135.67	169.6
2020	253280	182086	691923	147.34	mgd	139.74	169.6
2025	256506	195270	735747	152.26	mgd	143.34	169.6
2030	258884	209906	772129	156.93	mgd	#N/A	169.6

Blue Plains WWTP Service Area Flow Projection



Damascus

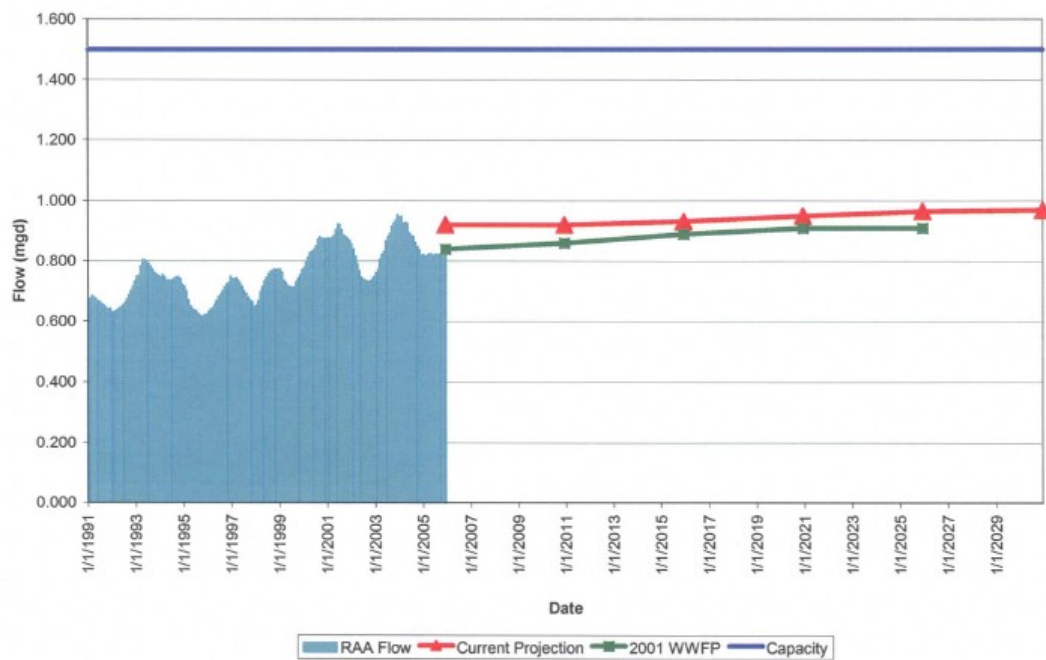
Existing Flow 2005 0.92 mgd
Total 0.92 mgd

Flow Factors

SFDU = 255 gpd/sfdu
MFDU = 178 gpd/mfdu
EMP = 40 gpd/emp

Year	SFDU	MFDU	EMP	AWF	2001 WWFP	Capacity
2005	1436	188	777	0.92 mgd	0.84	1.5
2010	1436	188	777	0.92 mgd	0.86	1.5
2015	1481	188	781	0.93 mgd	0.89	1.5
2020	1519	234	785	0.95 mgd	0.91	1.5
2025	1547	279	790	0.96 mgd	0.91	1.5
2030	1561	279	807	0.97 mgd	#N/A	1.5

Damascus WWTP Service Area Flow Projection



Mattawoman

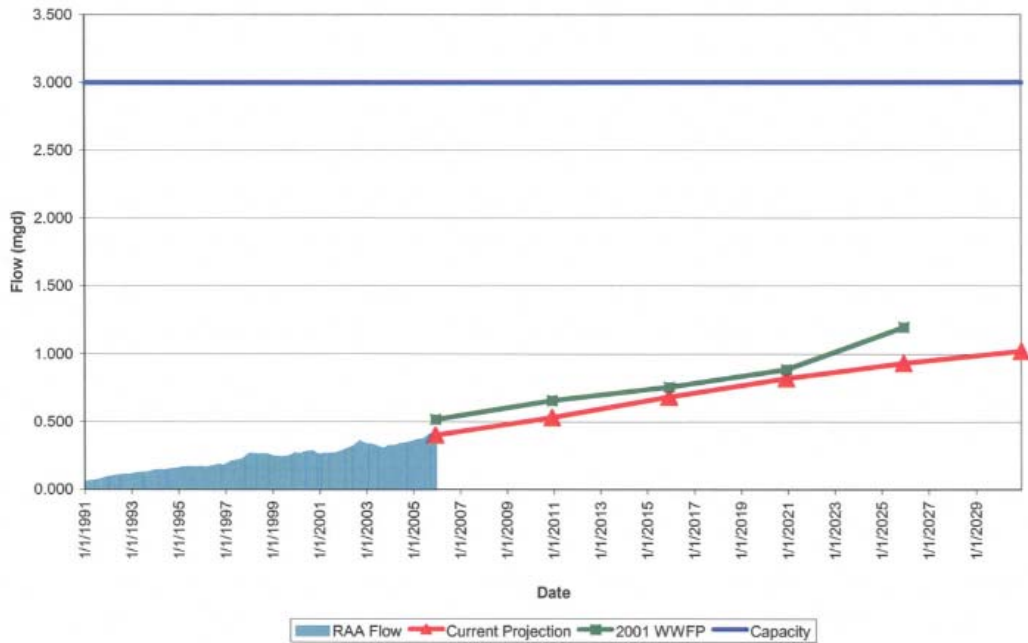
Existing Flow 2005 0.40 mgd
 Total 0.40 mgd

Flow Factors

SFDU = 255 gpd/sfd
 MFDU = 178 gpd/mfd
 EMP = 40 gpd/emp

Year	Units			AWF	S.S.Study Projections	Capacity
	SFDU	MFDU	EMP			
2005	1074	3	2312	0.40 mgd	0.52	3
2010	1489	3	2958	0.53 mgd	0.66	3
2015	1894	58	3952	0.68 mgd	0.76	3
2020	2275	63	4923	0.82 mgd	0.89	3
2025	2567	63	5842	0.93 mgd		3
2030	2761	227	6127	1.02 mgd		3

Mattawoman WWTP Service Area Projection



Parkway

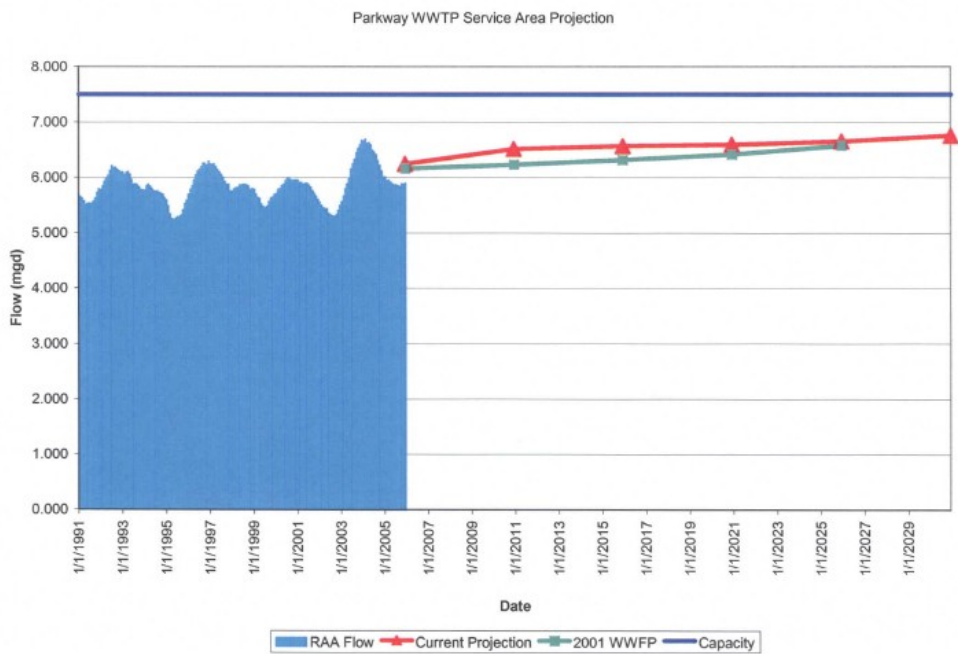
Existing Flow 2005 6.24 mgd
Total 6.24 mgd

Flow

Factors

SFDU = 255 gpd/sfdu
MFDU = 178 gpd/mfdu
EMP = 40 gpd/emp

Year	SFDU	MFDU	EMP	AWF	2001 WFP	Capacity
2005	9537	6917	18097	6.24 mgd		7.5
2010	10154	7216	19607	6.51 mgd		7.5
2015	10466	7088	19438	6.56 mgd		7.5
2020	10594	6989	19751	6.59 mgd		7.5
2025	10693	7038	20417	6.65 mgd		7.5
2030	10789	7230	21445	6.75 mgd		



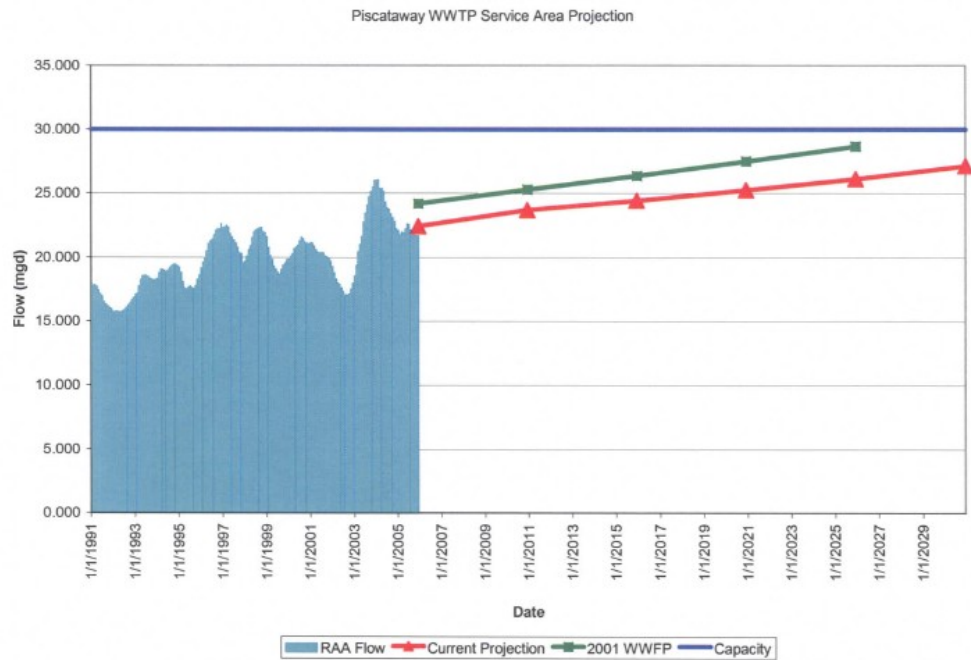
Piscataway

Existing Flow 2005 22.42 mgd
Total 22.42 mgd

Flow Factors

SFDU = 255 gpd/sfd
MFDU = 178 gpd/mfd
EMP = 40 gpd/emp

Year	SFDU	MFDU	EMP	AWF	2001 WWFP	Capacity
2005	42373	12679	52134	22.42 mgd	24.22	30
2010	46095	13516	56081	23.68 mgd	25.32	30
2015	46945	14635	63993	24.41 mgd	26.38	30
2020	47764	16726	69938	25.23 mgd	27.52	30
2025	48747	18601	76952	26.10 mgd	28.68	30
2030	50226	20764	83488	27.12 mgd	#N/A	30



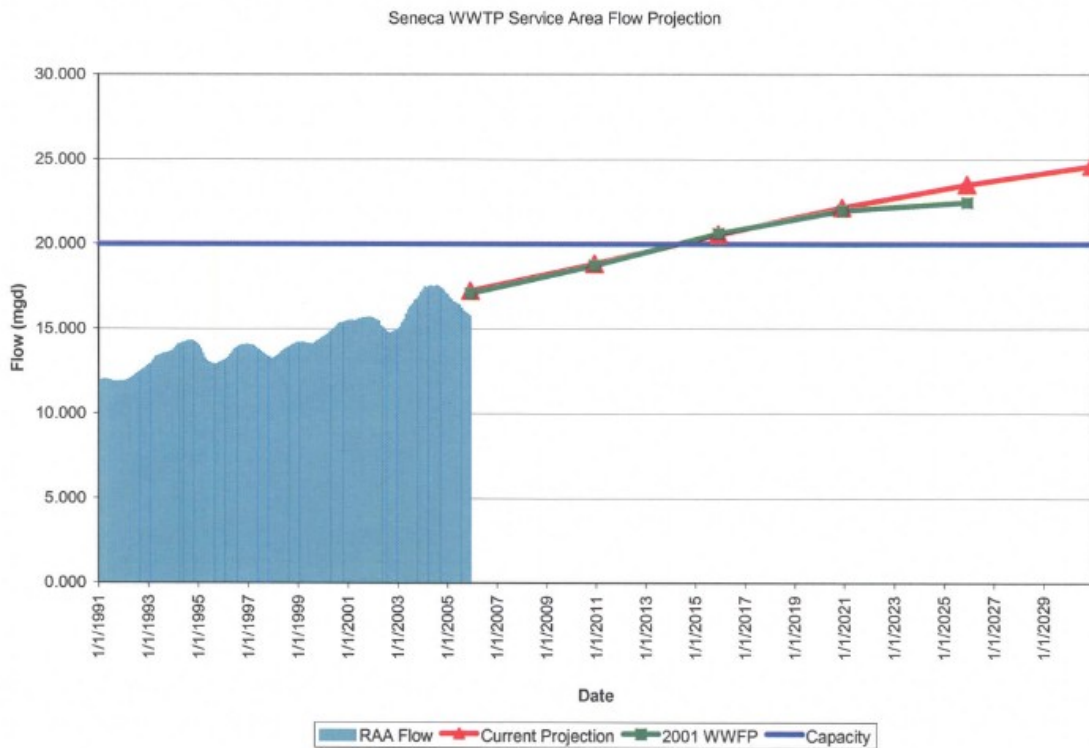
Seneca

Existing Flow 2000 17.23 mgd
 Total 17.23 mgd

Flow Factors

SFDU = 255 gpd/sfd
 MFDU = 178 gpd/mfd
 EMP = 40 gpd/emp

Year	SFDU	MFDU	EMP	AWF	2001 WWFP	Capacity
2005	38717	18884	70361	17.23 mgd	17.11	20
2010	42188	21178	77739	18.82 mgd	18.76	20
2015	46102	22754	89501	20.57 mgd	20.64	20
2020	48865	24760	102010	22.13 mgd	21.99	20
2025	49610	28585	114153	23.49 mgd	22.48	20
2030	49744	32565	122968	24.58 mgd	#N/A	20



Note: An expansion of the Seneca WWTP from 20 mgd to 26 mgd is underway. This expanded capacity will be sufficient to accommodate projected flows beyond this Plan's 2030 horizon.

Western Branch

Existing Flow 2000 21.29 mgd
 Total 21.29 mgd

Flow Factors

SFDU = 255 gpd/sfd
 MFDU = 178 gpd/mfd
 EMP = 40 gpd/emp

Year	SFDU	MFDU	EMP	AWF	2001 WWFP	Capacity
2005	67514	11100	81517	21.29 mgd	20.96	30
2010	71766	12612	88859	22.94 mgd	23.03	30
2015	74447	14209	92842	24.06 mgd	24.83	30
2020	76582	16176	98270	25.17 mgd	26.87	30
2025	78653	17890	110674	26.50 mgd	28.25	30
2030	82600	19859	117509	28.13 mgd		30

