

CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEARS 2005 TO 2010

Proposed

	Fiscal Year						Prior Allocation	Balance to Complete	Total Project Cost
	2005	2006	2007	2008	2009	2010			
UTILITIES ENTERPRISE:									
Clarifier Painting/Reconditioning	\$0	\$0	\$115,500	\$1,040,050	\$0	\$0	\$0	\$0	\$1,155,550
Freedom Area Sewer Study Update	0	75,000	0	0	0	0	0	0	75,000
Freedom Wastewater Treatment Plant Upgrade	0	111,315	556,574	679,016	0	0	0	0	1,346,905
Freedom Water Treatment Plant Upgrade and Expansion	0	0	0	0	0	0	14,279,237	0	14,279,237
Freedom/Hampstead - Water Meters	60,115	63,120	66,272	69,600	71,340	73,123	0	1,135,155	1,538,725
FSK Wastewater Pump Stations & Force Main	1,655,257	0	0	0	0	0	263,800	0	1,919,057
Gaither Road 8" Sewer Line	0	0	23,850	101,500	0	1,091,546	0	0	1,216,896
Gaither Road 8" Water Main	0	0	0	248,750	0	1,368,070	0	0	1,616,820
Hampstead Area Sewer Study	200,000	0	0	0	0	0	0	0	200,000
Hydrant Replacement	90,550	90,550	92,820	92,820	95,150	95,150	0	989,270	1,546,310
Hydraulic Looping	279,200	577,150	0	50,000	50,000	363,000	243,800	661,302	2,224,452
Lake Forest Pumping Station Dimmonneuter (Grinder)	0	0	75,337	0	0	0	0	0	75,337
New Force Main & Gravity Sewer Main to North Station	0	0	43,750	637,500	0	0	0	0	681,250
Obrecht Road Looping	410,795	0	0	0	0	0	68,000	0	478,795
Pine Hill Wastewater Pumping Station Upgrade	0	123,200	0	844,910	0	0	0	0	968,110
Piney Run Wastewater Pump Station Renovation	0	1,092,195	1,092,195	0	0	0	311,400	0	2,495,790
Pleasant Valley Backup Well	0	100,000	0	0	0	44,963	175,037	0	320,000
Pleasant Valley Wastewater Treatment Plant Grinder	42,000	0	0	0	0	0	0	0	42,000
Poly Aluminum Chloride Facility	195,000	630,000	0	0	0	0	0	0	825,000
Programmable Logic Controller	0	272,679	0	0	0	0	35,900	0	308,579
Shiloh Pumping Station	100,000	0	0	0	0	0	12,000	0	112,000
Snowden's Run Pumping Station Dimmonneuter (Grinder)	0	73,500	0	0	0	0	0	0	73,500
Sykesville Elevated Water Storage Tank #6	0	333,550	1,832,137	0	0	0	62,000	0	2,227,687
Sykesville Wastewater Pumping Station Replacement	78,600	150,000	872,900	0	0	0	0	0	1,101,500
Tank Painting	40,000	40,000	40,000	40,000	40,000	40,000	0	0	240,000
Waste Sludge Operations	0	0	140,428	459,200	0	0	0	0	599,628
UTILITIES ENTERPRISE TOTAL	\$3,151,517	\$3,732,259	\$4,951,763	\$4,263,346	\$256,490	\$3,075,852	\$15,451,174	\$2,785,727	\$37,668,128

SOURCES OF FUNDING:

Bonds	\$2,182,257	\$843,500	\$277,640	\$1,849,245	\$135,150	\$180,113	\$444,837	\$1,628,266	\$7,541,008
Maintenance Fee	170,315	842,658	1,382,362	981,333	71,340	73,123	4,572,007	496,159	8,589,297
Area Connection Charges	798,945	2,046,101	3,291,761	1,432,768	50,000	2,822,616	10,434,330	661,302	21,537,823
UTILITIES ENTERPRISE TOTAL	\$3,151,517	\$3,732,259	\$4,951,763	\$4,263,346	\$256,490	\$3,075,852	\$15,451,174	\$2,785,727	\$37,668,128

Clarifier Painting/Reconditioning

Freedom Water

6364

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for reconditioning/painting of the clarifier at the Freedom District Water Treatment Plant (FDWTP). A clarifier is a large tank or basin where the water is held for a period of time during which the heavier suspended solids settle to the bottom. This clarifier has been in operation since 1978 and has never been overhauled. The clarifier must be operating to produce water, therefore this project is planned to follow the improvements to the FDWTP.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design			115,500						115,500
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings				945,500					945,500
Other				94,550					94,550
EXPENDITURES									
TOTAL	0	0	115,500	1,040,050	0	0	0	0	1,155,550
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds				1,013,705					1,013,705
Maintenance Fee			115,500	26,345					141,845
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Freedom Area Sewer Study Update

Freedom Sewer

6385

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for the next five-year update of the Comprehensive Sewer Study in the Freedom service area. This study evaluates the growth of the sewer system then analyzes and addresses the potential issues of each pumping station. A five-year storm event is simulated to represent a worse case scenario to the sewer system should a pump fail and there are flooding conditions in an area. In the analysis, it is determined if the remaining pumps and lines can handle an overflow to make up for the failed pump and flooding.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		75,000							75,000
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	0	75,000	0	0	0	0	0	0	75,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Maintenance Fee									0
Area Connection Charges		75,000							75,000
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Freedom Wastewater Treatment Plant Upgrade

Freedom Sewer

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to upgrade the Freedom Wastewater Treatment Plant. The plant currently treats an average daily flow of 3.5 MGD and would be increased to meet the Department of Planning's projection of wastewater flows in the Freedom District of 4.2 MGD average. The Maryland Environmental Service (MES) operates and manages this facility for the County. MES identified a number of components that would need upgrading or complete replacement including: grit removal system, primary clarifier, primary sludge pumps/piping, activated sludge/nitrogen removal systems, secondary clarifiers, filters, gravity thickener sludge pumps, emergency generator, sludge handling/disposal, and an infiltration and inflow (I/I) control program.

Projected operating impacts include: increased maintenance and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		111,315							111,315
Land Acquisition									0
Site Work									0
Construction			278,287	278,287					556,574
Equipment/Furnishings			278,287	278,287					556,574
Other				122,442					122,442

EXPENDITURES

TOTAL	0	111,315	556,574	679,016	0	0	0	0	1,346,905
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Maintenance Fee		66,789	333,944	387,703					788,436
Area Connection Charges		44,526	222,630	291,313					558,469

PROJECTED OPERATING IMPACTS	0	0	0	27,760	28,660	29,591			
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Freedom/Hampstead - Water Meters

Kim Frock, Senior Budget Analyst (410) 386-2082

This on-going project provides funding for the enhancement and replacement of approximately 8,300 existing meters on an average sixteen year life cycle. The enhancements will enable current staff to collect meter readings while driving by homes. Software and hardware equipment to read the meters from the vehicles will also be included.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings	60,115	63,120	66,272	69,600	71,340	73,123		1,135,155	1,538,725
Other									0
EXPENDITURES									
TOTAL	60,115	63,120	66,272	69,600	71,340	73,123	0	1,135,155	1,538,725
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds								638,996	638,996
Maintenance Fee	60,115	63,120	66,272	69,600	71,340	73,123		496,159	899,729
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			0

FSK Wastewater Pump Stations & Force Main

Kim Frock, Senior Budget Analyst (410) 386-2082

Proj#

This project provides planned funding for the design and construction of a wastewater pumping station and approximately 18,000 feet of sanitary force main to be solely used by Francis Scott Key High School. The wastewater will be pumped from existing tanks at the Francis Scott Key High School to the Union Bridge sewer system located at the Jackson Ridge development, where the wastewater treatment process will take place.

Projected operating impacts include: personnel, utilities, maintenance and sewer usage costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							263,800		263,800
Land Acquisition	5,257								5,257
Site Work									0
Construction	1,500,000								1,500,000
Equipment/Furnishings									0
Other	150,000								150,000
EXPENDITURES									
TOTAL	1,655,257	0	0	0	0	0	263,800	0	1,919,057
SOURCES OF FUNDS									
Transfer from General Fund									0
Local Income Tax									0
Bonds	1,655,257						263,800		1,919,057
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	23,720	23,917	24,634	25,373	26,134			

Gaither Road 8" Sewer Line

Freedom Sewer

6369

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for approximately 2.25 miles of 8" sewer line from Obrecht Road to the end of Patapsco Road and along Patapsco Road and Patapsco Drive to the existing pumping station. There are approximately 275 parcels that will be connected to this sewer line.

Projected operating impacts include: maintenance costs of the new sewer line.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design				92,273					92,273
Land Acquisition			23,850						23,850
Site Work									0
Construction						992,315			992,315
Equipment/Furnishings									0
Other				9,227		99,231			108,458
EXPENDITURES									
TOTAL	0	0	23,850	101,500	0	1,091,546	0	0	1,216,896
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Maintenance Fee									0
Area Connection Charges			23,850	101,500		1,091,546			1,216,896
PROJECTED OPERATING IMPACTS	0	0	0	0	540	556			

Gaither Road 8" Water Main

Freedom Water

6365

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for approximately 2.6 miles of 8" water line to serve existing and planned development along Gaither Road. This line would extend from Obrecht Road to the ends of Gaither Road and Patapsco Drive. There are approximately 275 parcels that will be connected to this sewer line.

Projected operating impacts include: maintenance costs of the new water main.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design				248,750					248,750
Land Acquisition									0
Site Work									0
Construction						1,243,700			1,243,700
Equipment/Furnishings									0
Other						124,370			124,370
EXPENDITURES									
TOTAL	0	0	0	248,750	0	1,368,070	0	0	1,616,820
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Maintenance Fee									0
Area Connection Charges				248,750		1,368,070			1,616,820
PROJECTED OPERATING IMPACTS	0	0	0	0	1,260	1,298			

Hampstead Area Sewer Study

Hampstead Sewer

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding for the Comprehensive Sewer Study for the Hampstead service area. This study evaluates the growth of the sewer system then analyzes and addresses the potential issues of each pumping station. A five-year storm event is simulated to represent a worse case scenario to the sewer system should a pump fail and there are flooding conditions in an area. The analysis will determine if the remaining pumps and lines can handle an overflow to make up for the failed pump and flooding.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	200,000								200,000
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	200,000	0	0	0	0	0	0	0	200,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds	200,000								200,000
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Hydrant Replacement

Freedom Water

6359

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides on-going funding to replace the County's 600 hydrants. The estimated useful life of these hydrants is thirty years. Some of these existing hydrants have already begun failing. Thirty of these hydrants were replaced in FY 03 and twenty-five are scheduled to be replaced in FY 04. The yearly allocation to this project funds approximately twenty-five hydrants each year at a cost for purchase and installation of more than \$3,600 each. Additional funding for inflation is included in FY 05, FY 07 and FY 09.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings	90,550	90,550	92,820	92,820	95,150	95,150		989,270	1,546,310
Other									0
EXPENDITURES									
TOTAL	90,550	90,550	92,820	92,820	95,150	95,150	0	989,270	1,546,310
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds				17,590	95,150	95,150		989,270	1,197,160
Maintenance Fee	90,550	90,550	92,820	75,230					349,150
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Hydraulic Looping

Freedom Water

6358

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding to run water mains along several southern County roads as part of an effort to provide adequate looping in the Freedom Water System. Looping mains is the joining of two dead ends in a water line. The lines that are not looped create problems of stale water, and unequal and low volume water pressure. These water pressure problems may result in damage the system and reduce fire hydrant water pressure. The upgrade of the water line at the Springfield Hospital property from 12" to 16" for the new main constructed by the State is included in this project. New development may partially cover the cost of some projects.

This project is to be completed in the following phases:

FY 05 Hunters Crossing - Construction; FY 05 Pine Knob - Land Acquisition; FY 05 Sandosky Road - Construction; FY 06 Pine Knob - Construction; FY 08 Brangles Road - Design; FY 09 Land Acquisition; FY10 Construction; Looping to be completed beyond the six year CIP plan - Monroe Avenue, Bandy Avenue, Caren Drive, Emerald Valley Estates, and Enterprise Street.

Projected operating impacts include: maintenance costs of the additional lines.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	82,700			50,000			61,900		194,600
Land Acquisition	50,000				50,000				100,000
Site Work									0
Construction	115,000	577,150				330,000	130,000	661,302	1,813,452
Equipment/Furnishings									0
Other	31,500					33,000	51,900		116,400

EXPENDITURES

TOTAL	279,200	577,150	0	50,000	50,000	363,000	243,800	661,302	2,224,452
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Maintenance Fee									0
Area Connection Charges	279,200	577,150		50,000	50,000	363,000	243,800	661,302	2,224,452

PROJECTED OPERATING IMPACTS	993	6,007	6,187	6,373	6,564	9,611			
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Lake Forest Pumping Station Dimmonneuter (Grinder)

Freedom Sewer General

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to purchase a dimmonneuter (grinder) for the Lake Forest Pumping Station. The dimmonneuter grinds up debris into small pieces which the pumps can pass without clogging. Lake Forest is one of the County's larger pumping stations, handling 354,857 gallons of sewage a day. Currently, there is a large amount of debris which must be removed by staff from the sewage flow before entering the station to prevent clogging of the pumps. Past experience with this equipment at the Hampstead Waste Water Treatment Plant, as well as the Piney Run and Shiloh pumping stations has been very positive.

Projected operating impacts include: maintenance costs and additional electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction			23,570						23,570
Equipment/Furnishings			51,767						51,767
Other									0
EXPENDITURES									
TOTAL	0	0	75,337	0	0	0	0	0	75,337

SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds			75,337						75,337
Maintenance Fee									0
Area Connection Charges									0

PROJECTED OPERATING IMPACTS	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10
	0	0	300	309	318	328

New Force Main & Gravity Sewer Main to North Station

Hampstead Sewer

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for a replacement force main, two additional pumps, and controls in order for the facility to meet demand created by future development near the North Station facility that is located near the intersection of Maryland Routes 30 and 482. The project is to replace the existing six inch force main that was installed in 1969 with a new eight inch force main and the replacement of the existing eight inch gravity sewer mains with larger mains along parts of Panther Drive for the increased flows of the new force main.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design			18,750						18,750
Land Acquisition			25,000						25,000
Site Work									0
Construction				625,000					625,000
Equipment/Furnishings									0
Other				12,500					12,500
EXPENDITURES									
TOTAL	0	0	43,750	637,500	0	0	0	0	681,250
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds			21,875	318,750					340,625
Maintenance Fee									0
Area Connection Charges			21,875	318,750					340,625
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Obrecht Road Looping

Freedom Water

6363

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides construction funding to address looping needs in the Obrecht Road area. The design phase is in process and those funds were appropriated in a prior year. Looping is the joining of two dead ends in a water line. Water flows terminate at dead ends creating problems of stale water, unequal water pressure and low volume water pressure. This project will be completed during the Obrecht Road Phase III reconstruction and extension project that is planned for FY 05.

Projected operating impacts include: maintenance costs for the new lines.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							68,000		68,000
Land Acquisition									0
Site Work									0
Construction	357,215								357,215
Equipment/Furnishings									0
Other	53,580								53,580
EXPENDITURES									
TOTAL	410,795	0	0	0	0	0	68,000	0	478,795
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Maintenance Fee									0
Area Connection Charges	410,795						68,000		478,795
PROJECTED OPERATING IMPACTS	0	3,009	3,099	3,192	3,288	3,387			

Pine Hill Wastewater Pumping Station Upgrade

Freedom Sewer

6370

Kim Frock, Senior Budget Analyst (410) 386-2082

In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in July 1998 several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced inefficient pumping of wastewater through the system. This project provides planned funding to increase the Pine Hill Pumping Station to a capacity of 1.4 million gallons a day and to increase the force main to 8".

Projected operating impacts include: increased maintenance and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		75,700							75,700
Land Acquisition		47,500							47,500
Site Work									0
Construction				756,900					756,900
Equipment/Furnishings									0
Other				88,010					88,010

EXPENDITURES

TOTAL	0	123,200	0	844,910	0	0	0	0	968,110
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Maintenance Fee		61,600		422,455					484,055
Area Connection Charges		61,600		422,455					484,055

PROJECTED OPERATING IMPACTS	0	0	0	0	6,180	6,365
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Piney Run Wastewater Pump Station Renovation

Freedom Sewer

6371

Kim Frock, Senior Budget Analyst (410) 386-2082

In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in July 1998 several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced inefficient pumping of wastewater through the system. This project provides planned funding to increase the Piney Run Pumping Station to a capacity of 17.0 million gallons a day and to increase the force main to 30".

Projected operating impacts include: increased maintenance and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							195,800		195,800
Land Acquisition							115,600		115,600
Site Work									0
Construction		978,750	978,750						1,957,500
Equipment/Furnishings									0
Other		113,445	113,445						226,890
EXPENDITURES									
TOTAL	0	1,092,195	1,092,195	0	0	0	311,400	0	2,495,790
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Maintenance Fee		273,049	273,049				77,850		623,948
Area Connection Charges		819,146	819,146				233,550		1,871,842
PROJECTED OPERATING IMPACTS	0	0	0	8,850	9,116	9,389			

Pleasant Valley Backup Well

Pleasant Valley Water

6388

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding for a backup well source to the main well for Pleasant Valley that was placed in service in 2000. This well will be used as the water source for the community in the event of a failure of the main well. A site for this well has not yet been determined by the County's Bureau of Environmental Resource Management.

Projected operating impacts include: maintenance and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							35,000		35,000
Land Acquisition		100,000							100,000
Site Work							20,000		20,000
Construction						44,963	105,037		150,000
Equipment/Furnishings									0
Other							15,000		15,000
EXPENDITURES									
TOTAL	0	100,000	0	0	0	44,963	175,037	0	320,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds		100,000				44,963	175,037		320,000
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	4,162			

Pleasant Valley Wastewater Treatment Plant Dimmonneuter (Grinder)

Pleasant Valley WWTP

Proj #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding to purchase a dimmonneuter (grinder) for the Pleasant Valley Wastewater Treatment Plant. The dimmonneuter grinds up the debris into small pieces which the pumps can pass without clogging. Pleasant Valley Wastewater Treatment Plant serves the small community of Pleasant Valley. Currently, there is debris which must be removed by staff from the sewage flow before it enters the plant to prevent clogging of the pumps. Past experience with this equipment at the Hampstead Waste Water Treatment Plant, as well as the Piney Run and Shiloh Pumping Stations has been very positive.

Projected operating impacts include: maintenance and additional electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings	42,000								42,000
Other									0
EXPENDITURES									
TOTAL	42,000	0	0	0	0	0	0	0	42,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds	42,000								42,000
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	300	309	318	328	338	348			

Poly Aluminum Chloride Facility

Hampstead WWTP

Proj #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project includes funding for the replacement of the existing Poly Aluminum Chloride Facility (PAC) that was placed in service in 1976 and is now beyond its useful life. The PAC facility is the storage unit for the chemicals that are used in the wastewater treatment process. The new PAC facility will be moved into a vacant building that is no longer utilized in the treatment process. The new facility will be designed for manual as well as automatic control and will comply with all current safety and system operations design criteria for storage, metering, and mixing of the chemicals for process application.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	189,540								189,540
Land Acquisition									0
Site Work									0
Construction		250,000							250,000
Equipment/Furnishings		236,000							236,000
Other	5,460	144,000							149,460
EXPENDITURES									
TOTAL	195,000	630,000	0	0	0	0	0	0	825,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds	195,000	630,000							825,000
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Programmable Logic Controller

Hampstead Sewer

6372

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to computerize many monitoring functions through a programmable logic controller. The controller will allow an operator to monitor operations such as flows and chemical mixture more quickly from a central location and would enable the operator to re-start the treatment process from any point in the treatment cycle should a problem occur.

Projected operating impacts include utility costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							35,900		35,900
Land Acquisition									0
Site Work									0
Construction		144,217							144,217
Equipment/Furnishings		100,962							100,962
Other		27,500							27,500

EXPENDITURES

TOTAL	0	272,679	0	0	0	0	35,900	0	308,579
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Maintenance Fee									0
Area Connection Charges		272,679					35,900		308,579

PROJECTED OPERATING IMPACTS	0	360	371	382	393	405
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Shiloh Pumping Station

Hampstead Sewer

6389

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides funding to add an additional pump, as well as associated piping, electrical wiring and controls. The station currently has two of the three planned pumps. Due to increasing flows it is necessary to proceed with the third pump to ensure capacity and guard against overflows in the event of failure of a pump.

Projected operating impacts include: maintenance and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							12,000		12,000
Land Acquisition									0
Site Work									0
Construction	100,000								100,000
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	100,000	0	0	0	0	0	12,000	0	112,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds	50,000						6,000		56,000
Maintenance Fee									0
Area Connection Charges	50,000						6,000		56,000
PROJECTED OPERATING IMPACTS	2,200	2,266	2,334	2,404	2,476	2,550			

Snowden's Run Pumping Station Dimmonneuter (Grinder)

Freedom Sewer General

Proj. #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to purchase a dimmonneuter (grinder) for the Snowden's Run pumping station. The dimmonneuter grinds the debris into small pieces which the pumps can pass without clogging. Snowden's Run is one of the County's larger pumping stations, handling 191,571 gallons of sewage a day. Currently, there is a large amount of debris which must be removed by staff from the sewage flow before entering the station to prevent clogging of the pumps. Past experience with this equipment at Hampstead Wastewater Treatment Plant, as well as the Piney Run and Shiloh pumping stations has been very positive.

Projected operating impacts include: maintenance and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction		22,995							22,995
Equipment/Furnishings		50,505							50,505
Other									0
EXPENDITURES									
TOTAL	0	73,500	0	0	0	0	0	0	73,500
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds		73,500							73,500
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	300	309	318	328	338			

Sykesville Elevated Water Storage Tank #6

Freedom Water

6390

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding for a one million gallon storage tank to provide additional water capacity for the Freedom Water Area and address pressure and fire storage needs in the growing Sykesville area. The site of the storage tank has not yet been determined.

Projected operating impacts include: utility costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		333,550							333,550
Land Acquisition							62,000		62,000
Site Work									0
Construction			1,707,137						1,707,137
Equipment/Furnishings									0
Other			125,000						125,000

EXPENDITURES

TOTAL	0	333,550	1,832,137	0	0	0	62,000	0	2,227,687
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Maintenance Fee		250,050	320,052				62,000		632,102
Area Connection Charges		83,500	1,512,085						1,595,585

PROJECTED OPERATING IMPACTS	0	0	900	927	955	983
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Sykesville Wastewater Pumping Station Replacement

Freedom Sewer

6337

Kim Frock, Senior Budget Analyst (410) 386-2082

In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in July 1998, several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced inefficient pumping of wastewater through the system. This project provides planned funding to replace the current Sykesville pumping station.

Projected operating impacts include: maintenance costs, operating supplies and electricity costs.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	78,600								78,600
Land Acquisition		150,000							150,000
Site Work									0
Construction			786,400						786,400
Equipment/Furnishings									0
Other			86,500						86,500
EXPENDITURES									
TOTAL	78,600	150,000	872,900	0	0	0	0	0	1,101,500
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Maintenance Fee	19,650	37,500	180,725						237,875
Area Connection Charges	58,950	112,500	692,175						863,625
PROJECTED OPERATING IMPACTS	0	0	0	8,700	8,961	9,230			

Tank Painting

Kim Frock, Senior Budget Analyst (410) 386-2082

6332

This project provides on-going funding to paint water tanks. The County currently has the following tanks that were put in service: Bartholow Road - 1970; Martz Road - 1989; Bark Hill - 1993; Pleasant Valley - 1991; Linton Springs - 1998; Liberty High School - 1999; Greater Carroll Industrial Park - 1993 and a future Sykesville tank. The schedule includes painting Bartholow Road in the spring of 2004. *This project continues to be evaluated for future funding needs to paint the additional tanks.*

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	3,000	3,000	3,000	3,000	3,000	3,000			18,000
Land Acquisition									0
Site Work	34,000	34,000	34,000	34,000	34,000	34,000			204,000
Construction									0
Equipment/Furnishings									0
Other	3,000	3,000	3,000	3,000	3,000	3,000			18,000
EXPENDITURES									
TOTAL	40,000	40,000	40,000	40,000	40,000	40,000	0	0	240,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds	40,000	40,000	40,000	40,000	40,000	40,000			240,000
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			

Waste Sludge Operations

Hampstead WWTP

Proj #

Kim Frock, Senior Budget Analyst (410) 386-2082

This project provides planned funding to refurbish the tank components that were last upgraded in 1984 to sludge storage and thickening units. While the existing concrete tank structures are sound and suitable for continued service, the majority of the tank sludge piping and valves require replacement due to age and clogged pipelines.

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design			139,913						139,913
Land Acquisition									0
Site Work									0
Construction				351,050					351,050
Equipment/Furnishings									0
Other			515	108,150					108,665
EXPENDITURES									
TOTAL	0	0	140,428	459,200	0	0	0	0	599,628
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds			140,428	459,200					599,628
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			