

COMMUNITY INVESTMENT PLAN FOR FISCAL YEARS 2007 TO 2012

Adopted

	Fiscal Year						Prior Allocation	Balance to Complete	Total Project Cost
	2007	2008	2009	2010	2011	2012			
UTILITIES ENTERPRISE:									
Bramble Hills Well System Rehabilitation	\$72,000	\$401,000	\$0	\$0	\$0	\$0	\$0	\$275,000	\$748,000
Freedom Area Groundwater System - Phase IV	0	0	0	0	0	127,000	3,496,180	0	3,623,180
Freedom District Sewer Study Update	0	0	0	0	0	89,250	75,000	0	164,250
Freedom Wastewater Treatment Plant Expansion	0	120,000	600,000	732,000	0	0	0	0	1,452,000
Freedom Water Treatment Plant Upgrade and Expansion	8,296,473	0	0	0	0	0	14,539,487	0	22,835,960
Freedom/Hampstead - Water Meters	69,600	71,300	73,100	74,900	76,800	78,700	870,355	1,135,155	2,449,910
Gaither Road 8" Sewer Line	0	0	132,000	0	1,146,900	0	0	0	1,278,900
Gaither Road 8" Water Main	0	0	261,200	0	1,473,600	0	0	0	1,734,800
Hydrant Replacement	95,150	97,500	99,900	102,400	105,000	107,600	433,300	898,720	1,939,570
Hydraulic Looping	288,575	50,000	50,000	363,000	0	0	811,575	1,900,000	3,463,150
Influent Pumping Station Rehabilitation	0	0	0	0	24,800	107,200	0	0	132,000
Lake Forest Pumping Station Dimmonneuter (Grinder)	75,400	0	0	0	0	0	0	0	75,400
Oxidation Ditch Operations Rehabilitation	47,900	164,500	0	0	0	0	0	0	212,400
Pine Hill Wastewater Pumping Station Upgrade	0	849,750	0	0	0	0	123,200	0	972,950
Piney Run Wastewater Pumping Station Upgrade	1,547,600	0	0	0	0	0	1,403,595	0	2,951,195
Relief Sewer No. 2	0	0	0	110,700	792,000	0	0	0	902,700
Replacement Force Main & Gravity Sewer Main/North Station	0	0	120,000	26,900	673,000	0	147,025	0	966,925
Sanitary Sewer Manhole Rehabilitation	150,000	150,000	150,000	150,000	150,000	150,000	0	0	900,000
Shiloh Wastewater Pumping Station Renovation	104,000	591,000	0	0	0	0	112,000	0	807,000
Sludge Dewatering Facility Replacement	480,000	0	0	200,000	1,080,000	0	0	0	1,760,000
Snowden's Run Wastewater Pumping Station Rehabilitation	0	90,000	0	600,000	0	0	0	0	690,000
Sykesville Wastewater Pumping Station Renovation	180,000	0	0	0	0	0	578,952	0	758,952
Tank Painting	40,000	40,000	40,000	40,000	40,000	40,000	375,182	0	615,182
Ultraviolet Disinfections System Renovation	0	90,000	325,000	0	0	0	0	0	415,000
Waste Activated Sludge Tank Renovation	0	158,200	670,000	0	0	0	0	0	828,200
UTILITIES ENTERPRISE TOTAL	\$11,446,698	\$2,873,250	\$2,521,200	\$2,399,900	\$5,562,100	\$699,750	\$22,965,851	\$4,208,875	\$52,677,624

SOURCES OF FUNDING:

Transfer from General Fund	\$72,000	\$401,000	\$0	\$0	\$0	\$0	\$0	\$275,000	\$748,000
Bonds	1,933,306	935,700	1,055,000	813,450	1,490,013	0	2,109,418	0	8,336,887
Enterprise Fund - Utilities	265,400	190,000	265,090	292,400	319,800	540,109	503,932	2,033,875	4,410,606
Maintenance Fee	1,666,619	661,383	448,551	553,267	150,268	32,641	4,514,586	0	8,027,315
Area Connection Charges	7,509,373	685,167	752,559	740,783	3,602,019	127,000	15,837,915	1,900,000	31,154,816
UTILITIES ENTERPRISE TOTAL	\$11,446,698	\$2,873,250	\$2,521,200	\$2,399,900	\$5,562,100	\$699,750	\$22,965,851	\$4,208,875	\$52,677,624

Bramble Hills Well System Rehabilitation

Water

6400

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides funding for the rehabilitation of the Bramble Hills water system. The County was court-ordered to take ownership of the system, and was found to be in very poor condition. To meet current standards, a new building will be required so the existing well is not housed in the same building as the chemicals for treating the water. Also included in the new building will be the motor control center, sampling station, and alarm system. The existing electric service does not meet current code. Along with a new electric service, the County will install phone lines so the system can be monitored from the Freedom Water Treatment Plant. A generator will be included to keep the pump operating when power is lost for extended periods of time. The distribution system has leaks repaired by field staff every few months and will be replaced with a four inch water main and new services to each of the twelve houses. A backup well may be required by MDE in the future.

Projected operating impacts include: utility costs, decrease in maintenance costs.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design	47,000							35,000	82,000
Land Acquisition	25,000							100,000	125,000
Site Work								20,000	20,000
Construction		365,000						105,000	470,000
Equipment/Furnishings									0
Other		36,000						15,000	51,000
EXPENDITURES									
TOTAL	72,000	401,000	0	0	0	0	0	275,000	748,000
SOURCES OF FUNDS									
Transfer from General Fund	72,000	401,000						275,000	748,000
Bonds									0
Enterprise Fund - Utilities									0
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	0	850	880	910	930	970			

Freedom District Sewer Study Update

Freedom Sewer

6385

Larry Brown, 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 issues affecting each pumping station. In the analysis, 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. It determines if the remaining pumps and lines can handle an overflow to make up for the failed pump and flooding.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design						89,250	75,000		164,250
Land Acquisition									0
Site Work									0
Construction									0
Equipment/Furnishings									0
Other									0

EXPENDITURES

TOTAL	0	0	0	0	0	89,250	75,000	0	164,250
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities						89,250			89,250
Maintenance Fee									0
Area Connection Charges							75,000		75,000

PROJECTED OPERATING IMPACTS	0	0	0	0	0	0
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Freedom Wastewater Treatment Plant Expansion

Freedom Sewer

6386

Larry Brown, 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 average wastewater flows in the Freedom District of 4.2 MGD. 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 utility and maintenance costs.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		120,000							120,000
Land Acquisition									0
Site Work									0
Construction			300,000	300,000					600,000
Equipment/Furnishings			300,000	300,000					600,000
Other				132,000					132,000
EXPENDITURES									
TOTAL	0	120,000	600,000	732,000	0	0	0	0	1,452,000
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities									0
Maintenance Fee		70,128	350,641	367,667					788,436
Area Connection Charges		49,872	249,359	364,333					663,564
PROJECTED OPERATING IMPACTS	0	0	0	29,590	30,550	31,540			

Freedom Water Treatment Plant Upgrade and Expansion

Freedom Water

6347

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides additional funding to design and construct a 4.0 million gallon per day plant adjacent to the current Freedom Water Treatment Plant (FWTP). A hydraulic analysis and site plan will be completed during the design process. The City of Baltimore owns the land and rights to the water that this plant draws upon. The new treatment plant includes: a utilities control center, new raw water intake line, membrane filtration system, improved disinfection methods, a new clarifier for water processing, clear well storage, and the addition of a twenty inch parallel water main on Oakland Road and Mineral Hill Road to handle the expanded flow and distribution of the additional water capacity. In FY 05, four related projects were combined with the FWTP Upgrade and Expansion project. This combination of projects, coupled with projected increased construction costs, requires additional funds to be allocated to the project.

Projected operating impacts include: personnel, utility, insurance, and maintenance costs.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							811,866		811,866
Land Acquisition									0
Site Work									0
Construction	5,996,473						13,719,321		19,715,794
Equipment/Furnishings							8,300		8,300
Other	2,300,000								2,300,000
EXPENDITURES									
TOTAL	8,296,473	0	0	0	0	0	14,539,487	0	22,835,960
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds	1,353,406						1,943,238		3,296,644
Enterprise Fund - Utilities							128,750		128,750
Maintenance Fee	1,128,861						2,769,139		3,898,000
Area Connection Charges	5,814,206						9,698,360		15,512,566
PROJECTED OPERATING IMPACTS	0	130,630	133,890	137,240	140,670	144,190			

Gaither Road 8" Sewer Line

Freedom Sewer

6369

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides planned funding for approximately 2.25 miles of eight inch sewer line along Obrecht Road and down Gaither Road to the County line, to the existing pumping station. Approximately 275 parcels will be connected to this sewer line along Obrecht and Gaither Roads, and connecting side streets, including Gaither Manor Apartments.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design			97,000						97,000
Land Acquisition			25,000						25,000
Site Work									0
Construction					1,042,600				1,042,600
Equipment/Furnishings									0
Other			10,000		104,300				114,300
EXPENDITURES									
TOTAL	0	0	132,000	0	1,146,900	0	0	0	1,278,900
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities									0
Maintenance Fee									0
Area Connection Charges			132,000		1,146,900				1,278,900
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			0

Hydraulic Looping

Freedom Water

6358

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides on-going funding to run water mains along several County roads in the Freedom area 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 have problems with stale water and unequal/low volume water pressure. These water pressure problems may result in damage to the system and reduce fire hydrant water pressure. New development may partially cover the cost of some projects.

This project is to be completed in the following phases:

FY 07 Pine Knob Road - Construction, Piney Ridge Parkway - Construction, Sandosky Road - Construction

FY 08 Brangles Road - Design, Monroe Avenue - Construction

FY 09 Brangles Road - Land Acquisition

FY 10 Brangles Road - Construction

FY 11 Oakland Mills Road and MD 26 (Liberty Road bridge crossing)

FY 12 Liberty Road

Looping to be completed beyond the CIP plan - Hunters Crossing (Macbeth Way), Bandy Avenue, Caren Drive, Emerald Valley Estates, and Enterprise Street.

Projected operating impacts include: maintenance costs.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		50,000					144,600	100,000	294,600
Land Acquisition			50,000				50,000		100,000
Site Work									0
Construction	288,575			330,000			533,575	1,800,000	2,952,150
Equipment/Furnishings									0
Other				33,000			83,400		116,400

EXPENDITURES

TOTAL	288,575	50,000	50,000	363,000	0	0	811,575	1,900,000	3,463,150
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities									0
Maintenance Fee									0
Area Connection Charges	288,575	50,000	50,000	363,000			811,575	1,900,000	3,463,150

PROJECTED OPERATING IMPACTS	6,190	6,370	6,560	9,610	12,750	15,980			
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Influent Pumping Station Rehabilitation

Hampstead WWTP

Proj #

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides planned funding for upgrading the influent pumping station at the HWWTP. It was part of the original plant construction in 1970. Since then modest modifications have taken place. To address the inefficiencies of the system, a new pump control system should be installed. This system will offer new state of the art level sensing and sequenced pump control in response to wet well levels. Some of the proposed system's benefits will be multiple pump speeds to maintain wet well levels, reduced energy costs, and variable speed cycling scenarios. This project was identified and prioritized in the 2003 Evaluation Report completed by Whitman, Requardt, and Associates, LLP.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design					24,800				24,800
Land Acquisition									0
Site Work									0
Construction						82,500			82,500
Equipment/Furnishings									0
Other						24,700			24,700

EXPENDITURES

TOTAL	0	0	0	0	24,800	107,200	0	0	132,000
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities					24,800	107,200			132,000
Maintenance Fee									0
Area Connection Charges									0

PROJECTED OPERATING IMPACTS

	0	0	0	0	0	0
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Lake Forest Pumping Station Dimmonneuter (Grinder)

Freedom Sewer General

6401

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides funding to add a dimmonneuter (grinder) to the Lake Forest Pumping Station. The dimmonneuter grinds up debris into small pieces which the pumps can then pass without clogging. Lake Forest is one of the County's larger pumping stations, handling 355,000 gallons of sewage a day. Currently, staff must remove large amounts of debris from the sewage flow before entering the station to prevent clogging of the pumps. This equipment has worked well at the Hampstead Waste Water Treatment Plant, as well as the Piney Run and Shiloh pumping stations.

Projected operating impacts include: utility and maintenance costs.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design									0
Land Acquisition									0
Site Work									0
Construction	23,600								23,600
Equipment/Furnishings	51,800								51,800
Other									0
EXPENDITURES									
TOTAL	75,400	0	0	0	0	0	0	0	75,400
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities	75,400								75,400
Maintenance Fee									0
Area Connection Charges									0
PROJECTED OPERATING IMPACTS	200	210	210	220	230	230			

Pine Hill Wastewater Pumping Station Upgrade

Freedom Sewer

6370

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides planned funding to increase the capacity of Pine Hill Pumping Station to 1.4 million gallons a day and to increase the force main to eight inches. In a comprehensive study of the Freedom District wastewater collection system by Black & Veatch in 1998, several pumping stations were identified as being potentially undersized. In the modeling of a five-year storm event, these pumping stations experienced insufficient pumping of wastewater through the system. The existing station will be evaluated for any needed modernization.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design							75,700		75,700
Land Acquisition							47,500		47,500
Site Work									0
Construction		772,500							772,500
Equipment/Furnishings									0
Other		77,250							77,250

EXPENDITURES

TOTAL	0	849,750	0	0	0	0	123,200	0	972,950
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds									0
Enterprise Fund - Utilities									0
Maintenance Fee		422,455					61,600		484,055
Area Connection Charges		427,295					61,600		488,895

PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			0
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Replacement Force Main & Gravity Sewer Main/North Station

Hampstead Sewer

6398

Larry Brown, Senior Budget Analyst (410) 386-2082

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

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design			120,000						120,000
Land Acquisition				26,900					26,900
Site Work									0
Construction					673,000		147,025		820,025
Equipment/Furnishings									0
Other									0
EXPENDITURES									
TOTAL	0	0	120,000	26,900	673,000	0	147,025	0	966,925
SOURCES OF FUNDS									
Transfer from General Fund									0
Bonds			60,000	13,450	410,013				483,463
Enterprise Fund - Utilities									0
Maintenance Fee									0
Area Connection Charges			60,000	13,450	262,987		147,025		483,462
PROJECTED OPERATING IMPACTS	0	0	0	0	0	0			0

Ultraviolet Disinfections System Renovation

Hampstead WWTP

Proj #

Larry Brown, Senior Budget Analyst (410) 386-2082

This project provides funding to provide new equipment and new variable power dual bank UV system technology at the HWWTP. The existing system is designed and operated in compliance with the Draft Maryland Department of the Environment (MDE) Discharge Permit for disinfections requirements. This project was identified and prioritized in the 2003 Evaluation Report completed by Whitman, Requardt, and Associates, LLP.

	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	Prior Allocation	Balance to Complete	Total Project Cost
Engineering/Design		90,000							90,000
Land Acquisition									0
Site Work									0
Construction			37,000						37,000
Equipment/Furnishings			213,000						213,000
Other			75,000						75,000

EXPENDITURES

TOTAL	0	90,000	325,000	0	0	0	0	0	415,000
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SOURCES OF FUNDS

Transfer from General Fund									0
Bonds		90,000	325,000						415,000
Enterprise Fund - Utilities									0
Maintenance Fee									0
Area Connection Charges									0

PROJECTED OPERATING IMPACTS	0	0	0	0	0	0
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