

Metropolitan Sewer District of Greater Cincinnati

Capital Budget and Capital Improvement Program Year 2011 Phase 1

PROPOSED

Friday, December 03, 2010

**Metropolitan Sewer District of Greater Cincinnati
Capital Budget and Capital Improvement Program
Year 2011
Phase 1**

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Glossary of Terms

Abbreviation

Description

BOCC	Board of County Commissioners, Hamilton County, OH
CEHRT	Chemically Enhanced High Rate Treatment
CIP	Capital Improvement
CSO	Combined Sewer Overflow; discharge from a combined sewer collection system.
DEFA	Division of Environmental and Financial Assistance (Administers OEPA low interest loan - same as WPCLF).
DFFO	Director's Final Findings and Orders; administrative directive issued by the Director of the OEPA
EPA	Environmental Protection Agency
HA	Highly Active SSOs (HASSOs)
HW/DW	High Water, Dry Weather, refers to a specific type of CSO, the condition that occurs when the interceptor sewer floods from area rivers or creeks back-flowing into a CSO structure, resulting in extraneous waters that cause a combined discharge further down the collection system
MGD	Million Gallons per Day
MSD	Metropolitan Sewer District
NPDES	National Pollution Discharge Elimination System; permitting authority overseen by USEPA
O&M	Operations and Maintenance
OEPA	Ohio Environmental Protection Agency
PACKAGE PLANT	Small, remote treatment facility
PS/PUMP STATION	Installation that serves to lift the wastewater from a deep section of the collection system to a level closer to the ground surface
PSO	Pump Station Overflow
RDI/I	Rainfall Derived Infiltration Inflow (IL), extraneous sources of storm ground water into a sanitary sewer system
SCADA	Supervisory Control and Data Acquisition
SMU	Stormwater Management Utility
SSO	Sanitary Sewer Overflow; discharge from a separate sanitary sewer
USEPA	United States Environmental Protection Agency
WIB	Water-In-Basement
WPCLF	Water Pollution Control Loan Fund Assistance (OEPA low interest loan)
WWC	Wastewater Collection Division of MSD
WWIP	Wet Weather Improvement Program
WWT	Wastewater Treatment Division of MSD
WWTP	Wastewater Treatment Plant



2011 CIP Phase 1 Projects

Metropolitan Sewer District of Greater Cincinnati

EXHIBIT A

Planning/Design/Easement Funding Request

Project No	CIP Type	Project Type	Project Name	P/D/E Funds Requested
10170789	WWIP	TRT	LMWWTP Planning Bundle (Planning)	\$1,033,700
10180900	WWIP	ALW	MSD Sustainable (Green) Infrastructure Program (Planning,Design,Easement)	\$4,450,000
10180105	WWIP	ALW	Manhole Rehabilitation Trenchless Technology Program (Design,Construction)	\$654,900
10180465	WWIP	ALW	Rainfall Derived Infiltration and Inflow Program (Planning,Design)	\$750,000
10180100	WWIP	ALW	Sewer Relining Trenchless Technology Program (Design,Construction)	\$3,929,100
10180360	WWIP	ALW	WIB Prevention Program (Design,Easement)	\$1,375,000
10180750	WWIP	ALW	WWIP Progress Studies and Recreation Management (Planning,Design)	\$842,300
10130740	WWIP	CSO	Werk & Westbourne EHRT Facility (Planning)	\$439,000
10199000	WWIP	PGA	Wet Weather Program Management and Support Services (Design)	\$3,200,000
10270056	ASSET	SWR	Beckman Pump Station Elimination (Design,Easement)	\$110,300
10240031	ASSET	SSO	Benson Street Sewer Replacement (Design,Construction)	\$175,000
10280124	ASSET	ALW	CIP Project Planning 2011 (Planning,Design)	\$4,000,000
10230077	ASSET	CSO	CSO 198 and CSO 518 Basin Study (Planning)	\$950,000
10230079	ASSET	CSO	CSO 523 Basin Study (Planning)	\$800,000
10240051	ASSET	TRT	DIW Office and Laboratory Improvements (Design)	\$149,700
10280035	ASSET	SWR	Emergency Sewer Repairs 2011 (Design,Construction)	\$4,075,000
10280440	ASSET	ALW	Flow Modeling (Planning)	\$1,050,000
10280422	ASSET	ALW	Flow Monitoring and Rain Gauges (Planning)	\$1,900,000
10240029	ASSET	SWR	German Cemetery Sewer Replacement (Design,Easement)	\$314,100
10280451	ASSET	SWR	High Risk System Asset Renewal 2011 (Design,Construction)	\$2,575,000
10280002	ASSET	ALW	Land Acquisition (Easement)	\$1,000,000
10270060	ASSET	TRT	Little Miami WWTP-Four Mile Pump Station Improvements (Design)	\$86,400
10240271	ASSET	CSO	Lower Mill Creek HW DW Protection (Planning)	\$375,000
10280500	ASSET	ALW	MSD-Duke Energy Sewer Televising Partnership (Design,Construction)	\$125,000
10240142	ASSET	SWR	Macauley Street Sewer Replacement (Design,Easement)	\$98,800
10240290	ASSET	TRT	Mill Creek WWTP Anaerobic Digester Conversion to Mixing Holding Tanks (Design)	\$373,100
10270090	ASSET	SWR	Moeller Avenue Sewer Replacement (Design)	\$12,500
10230065	ASSET	TRT	Muddy Creek WWTP Electrical Upgrades (Design,Construction)	\$190,000
10240028	ASSET	CSO	North Avondale Basin Study (Planning)	\$698,000
10280114	ASSET	TRT	SCADA System Installs and Upgrades (Design)	\$1,451,500
10290030	ASSET	ALW	Value Engineering (Design)	\$375,000
10280150	ASSET	TRT	WWT Roofing and Paving Rehab Replacement (Design,Construction)	\$9,200
10280180	ASSET	TRT	WWT System Asset Renewal (Design,Construction)	\$2,277,500
10240032	ASSET	CSO	Walnut Hills Basin Study (Planning)	\$800,000
10290015	ASSET	TRT	Water Quality Program (Planning)	\$268,000
10221220	ASSET	SWR	Wesselman Road Sewer Phase 2-A (Design,Construction)	\$70,000
10200005	ASSET	SWR	West Fork Basin Regional Strategy Development (Planning)	\$500,000



2011 CIP Phase 1 Projects

Metropolitan Sewer District of Greater Cincinnati

EXHIBIT A

Planning/Design/Easement Funding Request

Project No	CIP Type	Project Type	Project Name	P/D/E Funds Requested
37 Planning/Design/Easement Projects in 2011				\$ 41,483,100

This table summarizes the list of projects and the associated costs requesting to be legislated at the time of approval of the 2011 CIP. In general, this table summarizes those projects requesting planning, design, and easement funding. The exceptions are project ID's 10280035 Emergency Sewer Repairs, 10280451 High Risk System Asset Renewal, 10280180 WWT System Asset Renewal, 10180100 Sewer Relining Trenchless Technology Program and 10180105 Manhole Rehabilitation Trenchless Technology Program, which are to be legislated for construction funding. For all other projects: if the parenthetic note following the project name includes "construction", then construction and related costs will be legislated separately in 2011.



Project Groundwork

Phase 1 Milestone Schedule

Project ID	Project	PTI Submittal Milestone	Start Construction Milestone	End Construction Milestone	Pages
10130740	Werk & Westbourne EHRT Facility	31-DEC-2013	31-DEC-2014	31-DEC-2017	20



2011 CIP Phase 1 Projects

Metropolitan Sewer District of Greater Cincinnati

Project ID	Project Category	Project Type	Project Name	2011 Phase 1 Requested	Total Project Cost
10170789	WWIP	TRT	LMWWTP Planning Bundle (Planning)	\$1,033,700	\$6,616,500
10180900	WWIP	ALW	MSD Sustainable (Green) Infrastructure Program (Planning,Design,Easement)	\$4,450,000	\$213,150,100
10180105	WWIP	ALW	Manhole Rehabilitation Trenchless Technology Program (Design,Construction)	\$654,900	\$9,107,855
10180465	WWIP	ALW	Rainfall Derived Infiltration and Inflow Program (Planning,Design)	\$750,000	\$19,814,463
10180100	WWIP	ALW	Sewer Relining Trenchless Technology Program (Design,Construction)	\$3,929,100	\$60,533,288
10120460	WWIP	SWR	Towers East P.S. Elimination (Construction)	\$2,635,000	\$3,425,200
10180360	WWIP	ALW	WIB Prevention Program (Design,Easement)	\$1,375,000	\$20,323,600
10180750	WWIP	ALW	WWIP Progress Studies and Recreation Management (Planning,Design)	\$842,300	\$10,920,400
10130740	WWIP	CSO	Werk & Westbourne EHRT Facility (Planning)	\$439,000	\$46,895,100
10199000	WWIP	PGA	Wet Weather Program Management and Support Services (Design)	\$3,200,000	\$177,190,000
10240119	ASSET	CSO	Badgeley Run RTC Relocation and Grit Pit (Construction)	\$1,873,000	\$2,173,000
10270056	ASSET	SWR	Beckman Pump Station Elimination (Design,Easement)	\$110,300	\$426,700
10230115	ASSET	SWR	Bender Rd. Aerial Sewer Crossing (Construction)	\$129,000	\$343,400
10240031	ASSET	SSO	Benson Street Sewer Replacement (Design,Construction)	\$2,859,000	\$2,859,000
10280124	ASSET	ALW	CIP Project Planning 2011 (Planning,Design)	\$4,000,000	\$10,000,000
10230077	ASSET	CSO	CSO 198 and CSO 518 Basin Study (Planning)	\$950,000	\$950,000
10230079	ASSET	CSO	CSO 523 Basin Study (Planning)	\$800,000	\$800,000
10240051	ASSET	TRT	DIW Office and Laboratory Improvements (Design)	\$149,700	\$2,546,400
10280035	ASSET	SWR	Emergency Sewer Repairs 2011 (Design,Construction)	\$4,075,000	\$8,150,000
10280440	ASSET	ALW	Flow Modeling (Planning)	\$1,050,000	\$2,100,000
10280422	ASSET	ALW	Flow Monitoring and Rain Gauges (Planning)	\$1,900,000	\$3,800,000



2011 CIP Phase 1 Projects

Metropolitan Sewer District of Greater Cincinnati

<u>Project ID</u>	<u>Project Category</u>	<u>Project Type</u>	<u>Project Name</u>	<u>2011 Phase 1 Requested</u>	<u>Total Project Cost</u>
10240029	ASSET	SWR	German Cemetery Sewer Replacement (Design,Easement)	\$314,100	\$957,100
10280451	ASSET	SWR	High Risk System Asset Renewal 2011 (Design,Construction)	\$2,575,000	\$5,150,000
10280002	ASSET	ALW	Land Acquisition (Easement)	\$1,000,000	\$16,500,000
10270060	ASSET	TRT	Little Miami WWTP-Four Mile Pump Station Improvements (Design)	\$86,400	\$2,255,800
10240271	ASSET	CSO	Lower Mill Creek HW DW Protection (Planning)	\$375,000	\$375,000
10280500	ASSET	ALW	MSD-Duke Energy Sewer Televising Partnership (Design,Construction)	\$2,500,000	\$40,875,000
10240142	ASSET	SWR	Macauley Street Sewer Replacement (Design,Easement)	\$98,800	\$399,700
10240290	ASSET	TRT	Mill Creek WWTP Anaerobic Digester Conversion to Mixing Holding Tanks (Design)	\$373,100	\$20,030,000
10270090	ASSET	SWR	Moeller Avenue Sewer Replacement (Design)	\$12,500	\$1,134,500
10230065	ASSET	TRT	Muddy Creek WWTP Electrical Upgrades (Design,Construction)	\$7,067,500	\$7,584,000
10240028	ASSET	CSO	North Avondale Basin Study (Planning)	\$698,000	\$698,000
10280114	ASSET	TRT	SCADA System Installs and Upgrades (Design)	\$1,451,500	\$14,095,200
10290030	ASSET	ALW	Value Engineering (Design)	\$375,000	\$2,750,000
10280150	ASSET	TRT	WWT Roofing and Paving Rehab Replacement (Design,Construction)	\$719,200	\$4,641,500
10280180	ASSET	TRT	WWT System Asset Renewal (Design,Construction)	\$2,277,500	\$22,775,000
10240032	ASSET	CSO	Walnut Hills Basin Study (Planning)	\$800,000	\$800,000
10290015	ASSET	TRT	Water Quality Program (Planning)	\$268,000	\$2,536,000
10221220	ASSET	SWR	Wesselman Road Sewer Phase 2-A (Design,Construction)	\$3,937,500	\$5,232,500
10200005	ASSET	SWR	West Fork Basin Regional Strategy Development (Planning)	\$500,000	\$500,000
40 CIP Projects for 2011				\$ 62,634,100	\$751,414,306

ANNUAL CIP LEGISLATION ASSUMPTIONS

The purpose of this page is to provide readers with very broad and high-level assumptions pertaining to the MSD annual CIP legislation. For all in-depth assumptions the reader should refer to the MSD Financial Analysis Manual.

Escalation, Inflation, and Labor Inflation

Per MSD's Financial Analysis Manual (which is updated annually):

- a. Escalation = 3.5%
- b. Inflation = 3.5%
- c. Labor inflation = 3.0%

Planning / Study

The cost for planning or study, during any stage of the planning phase, by MSD personnel or by consultant contract.

Design

The cost for design during the design phase by MSD personnel or by consultant contract.

Project Administration

The cost of MSD project manager, secretarial, and other MSD personnel costs performing non-design functions. Other groups that will likely charge to this item include, Legislation, Accounting, Contract Administration, Legal, and the Office of the Director.

Miscellaneous Expense

The cost of all permit fees paid directly by MSD, including, PTI, street opening permit, building permits, 401 permits, and other permit fees. Includes utility relocations if not handled during construction.

This is for the design phase only. The basis for this number is found in the MSD's Financial Analysis Manual.

Right of Way

The cost of easement acquisition by City Real Estate personnel, professional services, for appraisal and title opinions, appropriation costs, court costs, and compensation paid to property owners for easements.

Construction

The bid cost to construct the project as estimated by the engineer including startup and commissioning if required for project.

Contingency

The cost for contingency is unforeseen construction costs identified after construction starts and for bids above the amount legislated for construction.

This is calculated based on assumptions in MSD's Financial Analysis Manual.

Field Engineering and Inspection

The cost for construction services during the construction phase by MSD personnel or by consultant contract. This is assumed to be the same duration as the construction phase of the project.

Interest/Financing

The cost to finance the project

This is calculated using a formula in MSD's Financial Analysis Manual.

Rounding of Estimates

All estimates are rounded to the nearest hundred dollar.

2011 CIP Phase 1 WWIP Projects



2011 CIP Phase 1 Projects

Metropolitan Sewer District of Greater Cincinnati

WWIP (Alphabetically)

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10170789	WWIP	TRT	LMWWTP Planning Bundle (Planning)	\$1,033,700	\$0	\$1,033,700	12
10180900	WWIP	ALW	MSD Sustainable (Green) Infrastructure Program (Planning,Design,Easement)	\$4,450,000	\$0	\$4,450,000	13
10180105	WWIP	ALW	Manhole Rehabilitation Trenchless Technology Program (Design,Construction)	\$654,900	\$0	\$654,900	14
10180465	WWIP	ALW	Rainfall Derived Infiltration and Inflow Program (Planning,Design)	\$750,000	\$0	\$750,000	15
10180100	WWIP	ALW	Sewer Relining Trenchless Technology Program (Design,Construction)	\$3,929,100	\$0	\$3,929,100	16
10120460	WWIP	SWR	Towers East P.S. Elimination (Construction)	\$2,635,000	\$0	\$2,635,000	17
10180360	WWIP	ALW	WIB Prevention Program (Design,Easement)	\$1,375,000	\$0	\$1,375,000	18
10180750	WWIP	ALW	WWIP Progress Studies and Recreation Management (Planning,Design)	\$842,300	\$0	\$842,300	19
10130740	WWIP	CSO	Werk & Westbourne EHRT Facility (Planning)	\$439,000	\$0	\$439,000	20
10199000	WWIP	PGA	Wet Weather Program Management and Support Services (Design)	\$3,200,000	\$0	\$3,200,000	21
Total Cost for 10 WWIP CIP Projects				\$19,309,000	\$0	\$19,309,000	

2011 Capital Budget and Capital Improvement Program

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Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	LMWWTP Planning Bundle	
Project ID	10170789	CIP Number
CIP Subtype	Treatment	Sewer Number

Purpose and Justification

The project bundle will provide the firm pumping capacity of 55 MGD average daily flow and 100 MGD peak wet weather flows to the plant as required by the WWIP. It will also provide more reliability to pump and treat flows with necessary electrical upgrades at the Four Mile Pump Station and the addition of secondary power for the entire facility.

Impact to Operating Budget

Description and Location

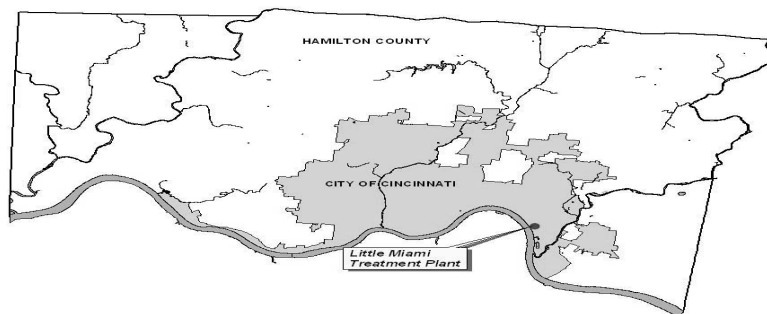
The project bundle will plan the Little Miami WWTP Bundle. This request is to begin the planning effort on five of these projects; 10170782 LM Four Mile Pump Station Upgrade, 10170785 LMWWTP Pump Station Hydraulic Improvements, 10170786, LMWWTP Primary to Secondary Hydraulic Improvements, 10170794 Standby Power, 10172260 Dry Weather Pump Station. These five projects are included in WWIP Phase 1 for planning and design but reliability concerns at the Four Mile PS may advance these to construction in Phase 1. These projects are in the East End neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$6,616,500	\$0	\$1,033,700	\$5,582,800	\$6,616,500
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$6,616,500	\$0	\$1,033,700	\$5,582,800	\$6,616,500

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$1,033,700	\$5,582,800	\$0	\$0	\$6,616,500

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$0	\$6,401,904	\$490,359	\$0	\$0	\$6,892,263



2011 Capital Budget and Capital Improvement Program

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Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	MSD Sustainable (Green) Infrastructure Program	
Project ID	10180900	CIP Number
CIP Subtype	Allowances	Sewer Number

Purpose and Justification

This program will fund the use of Low Impact Development Best Management Practices (LID BMP), storm water offloading through stream separation, and promotion of sustainable best practices to remove storm water from sewers in both CSO and SSO areas.

Impact to Operating Budget

Description and Location

This program's activities will initially include LID Demonstration projects (to evaluate technologies and reduce storm water impacts to CSO's), Pilot projects (to evaluate multiple methods in a set of multiple projects), Regional BMP projects (larger sewershed projects expected to capture over 10 million gallons), and Large Scale projects (long term projects in major CSO sewersheds)

NOTE: MSD Sustainable Infrastructure Program is expected to require future funding beyond the present 5 year CIP window (2011-2015)

Cost Account Manager: Marty Umberg

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$30,125,400	\$9,000,000	\$1,000,000	\$20,125,400	\$30,125,400
Design	\$36,283,200	\$9,000,000	\$2,000,000	\$25,283,200	\$36,283,200
Project Administration	\$9,295,200	\$2,000,000	\$450,000	\$6,845,200	\$9,295,200
Miscellaneous Expense	\$1,432,500	\$300,000	\$0	\$1,132,500	\$1,432,500
Right-of-Way	\$15,090,400	\$500,000	\$1,000,000	\$13,590,400	\$15,090,400
Construction	\$99,652,500	\$0	\$0	\$99,652,600	\$99,652,600
Contingency	\$10,860,400	\$0	\$0	\$10,860,400	\$10,860,400
Field Eng & Inspection	\$9,960,400	\$0	\$0	\$9,960,400	\$9,960,400
Interest / Financing	\$450,000	\$0	\$0	\$450,000	\$450,000
Total	\$213,150,000	\$20,800,000	\$4,450,000	\$187,900,100	\$213,150,100

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$20,800,000	\$4,450,000	\$34,000,000	\$40,000,000	\$45,000,000	\$46,350,100
						\$190,600,100

Prior Legislation Action

Jul 2009, Dec 2009



2011 Capital Budget and Capital Improvement Program

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Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Manhole Rehabilitation Trenchless Technology Program		
Project ID	10180105	CIP Number	2008-03
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification

The Global Consent Decree requires MSDGC to rehabilitate 150 manholes each year to reduce infiltration and inflow upstream of SSOs to reduce overflows. This project creates development credits upstream of an SSO.

Impact to Operating Budget

Description and Location

This program provides a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehab projects are identified through investigations and are prioritized based on a standardized condition assessment procedure.

This program is expected to require future funding beyond the present 5 year CIP window (2011-2015)

Cost Account Manager: Tom Schwiers

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$369,754	\$111,854	\$24,100	\$233,800	\$369,754
Miscellaneous Expense	\$352,200	\$94,300	\$24,100	\$233,800	\$352,200
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$6,662,250	\$1,497,350	\$481,500	\$4,683,400	\$6,662,250
Contingency	\$721,285	\$158,885	\$52,950	\$509,450	\$721,285
Field Eng & Inspection	\$681,400	\$165,900	\$48,150	\$467,350	\$681,400
Interest / Financing	\$320,966	\$63,066	\$24,100	\$233,800	\$320,966
Total	\$9,107,855	\$2,091,355	\$654,900	\$6,361,600	\$9,107,855

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$2,091,355	\$654,900	\$1,355,600	\$1,403,100	\$1,452,200	\$1,495,800
						\$8,452,955

Prior Legislation Action

Jan 2008, Dec 2008, Dec 2009



2011 Capital Budget and Capital Improvement Program

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Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	Rainfall Derived Infiltration and Inflow Program	
Project ID	10180465	CIP Number
CIP Subtype	Allowances	Sewer Number

Purpose and Justification This program will assist in the elimination of sanitary sewer overflows.	Impact to Operating Budget
	Description and Location Projects for RDI I are identified through investigations which may use intrusive methods. Remedial projects are funded through this program or either or both of the sewer relining and manhole rehabilitation allowance programs, depending on the choice of construction methods. This program will impact various locations throughout Hamilton County. NOTE: Rainfall Derived Infiltration and Inflow Program is expected to require future funding beyond the present 5 year CIP window (2011-2015) Cost Account Manager: Tom Schwiers

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$1,414,900	\$237,000	\$300,000	\$877,900	\$1,414,900
Design	\$410,700	\$210,700	\$200,000	\$0	\$410,700
Project Administration	\$2,086,547	\$180,547	\$150,000	\$1,756,000	\$2,086,547
Miscellaneous Expense	\$217,300	\$117,300	\$100,000	\$0	\$217,300
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$15,487,064	\$561,164	\$0	\$14,925,900	\$15,487,064
Contingency	\$0	\$56,117	\$0	\$0	\$56,117
Field Eng & Inspection	\$0	\$125,000	\$0	\$0	\$125,000
Interest / Financing	\$0	\$16,835	\$0	\$0	\$16,835
Total	\$19,616,511	\$1,504,663	\$750,000	\$17,559,800	\$19,814,463

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total	
Prior Legislation	\$1,504,663	\$750,000	\$4,166,100	\$4,311,900	\$4,462,800	\$4,619,000	\$19,814,463

Prior Legislation Action
 Dec 2008, Aug 2009, Dec 2009



2011 Capital Budget and Capital Improvement Program

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Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Sewer Relining Trenchless Technology Program		
Project ID	10180100	CIP Number	2008-02
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification

Lining provides a cost-effective method of rehabilitating deteriorated sewers while improving the hydraulic performance of the sewer. This work may also increase development credits.

Impact to Operating Budget

Description and Location

This program conducts internal lining of sewers and external lining of aerial sewers throughout the system as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limit itself to, spiral wound pipe, pipe bursting, carbon filament wrapping, directional drilling, and jack-and-boring. These projects are identified through investigations of the sewer lines and are prioritized based on a standardized condition assessment procedure.

This program is expected to require future funding beyond the present 5 year CIP window (2011-2015)

Cost Account Manager: Tom Schwiers

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$30,000	\$30,000	\$0	\$0	\$30,000
Project Administration	\$2,401,480	\$857,680	\$144,450	\$1,402,350	\$2,404,480
Miscellaneous Expense	\$2,160,245	\$613,445	\$144,450	\$1,402,350	\$2,160,245
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$44,490,925	\$13,653,725	\$2,889,050	\$28,098,150	\$44,640,925
Contingency	\$4,779,453	\$1,404,853	\$317,800	\$3,056,800	\$4,779,453
Field Eng & Inspection	\$4,446,050	\$1,367,550	\$288,900	\$2,804,600	\$4,461,050
Interest / Financing	\$2,057,135	\$510,335	\$144,450	\$1,402,350	\$2,057,135
Total	\$60,365,288	\$18,437,588	\$3,929,100	\$38,166,600	\$60,533,288

Projected Legislation Dates

Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$18,437,588	\$3,929,100	\$8,133,200	\$8,417,900	\$8,712,500	\$8,973,900	\$56,604,188

Prior Legislation Action

Jan 2008, Feb 2008, Dec 2008, Jan 2009, Dec 2009



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Towers East P.S. Elimination		
Project ID	10120460	CIP Number	2004-12
CIP Subtype	Sewer	Sewer Number	5062

Purpose and Justification

This project will eliminate the Towers East Pump Station that was installed in 1971. This pump station requires high maintenance that requires the blockage of Shepherd Creek Road. This project is listed in the Wet Weather Improvement Plan Project ID 20460.

Impact to Operating Budget

Description and Location

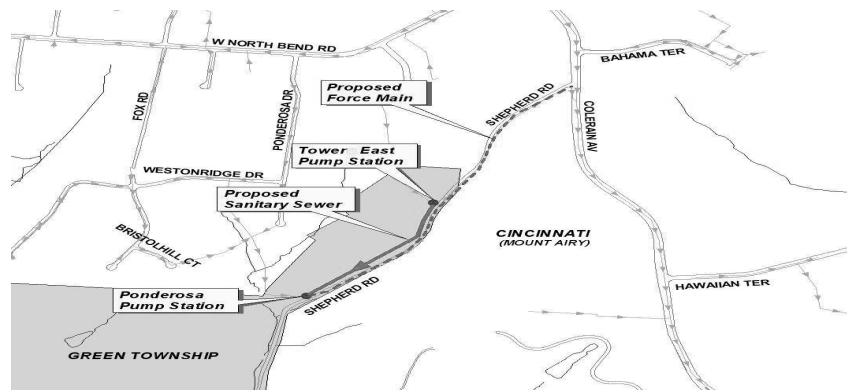
This project consists of the installation of approx. 1,430 feet of sanitary sewer from the Towers East Pump Station to the Ponderosa Pump Station, replacing the Ponderosa Pump Station, and replacement of 2200 feet of existing forcemain from the Ponderosa Pump Station to the intersection of Sheperd Road and Colerain Ave. This project will eliminate the Towers East Pump Station. This project is located in Green Township and the City of Cincinnati. END CONSTRUCTION MILESTONE: 12 31 2013

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$138,000	\$138,000	\$0	\$0	\$138,000
Design	\$142,900	\$312,500	\$0	\$0	\$312,500
Project Administration	\$75,300	\$117,600	\$0	\$0	\$117,600
Miscellaneous Expense	\$57,100	\$57,100	\$0	\$0	\$57,100
Right-of-Way	\$0	\$165,000	\$0	\$0	\$165,000
Construction	\$1,583,900	\$0	\$2,150,000	\$0	\$2,150,000
Contingency	\$316,800	\$0	\$215,000	\$0	\$215,000
Field Eng & Inspection	\$158,400	\$0	\$160,000	\$0	\$160,000
Interest / Financing	\$95,000	\$0	\$110,000	\$0	\$110,000
Total	\$2,567,400	\$790,200	\$2,635,000	\$0	\$3,425,200

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$790,200	\$2,635,000	\$0	\$0	\$0	\$3,425,200

Prior Legislation Action
Dec 2006, Dec 2007, Jun 2009

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$1,234,297	\$1,234,297	\$520,401	\$141,716	\$0	\$3,130,711



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	WIB Prevention Program		
Project ID	10180360	CIP Number	2007-13
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification This program eliminates water in basement problems in a more cost effective way than upgrading area sewers.	Impact to Operating Budget
	Description and Location This program performs modifications on private property to eliminate sewage backups in buildings from wet weather-related surcharged sanitary and combined sewer systems. Solutions include installation of backflow prevention valves, pumping systems, plumbing changes, upgraded electrical services, waterproofing, recessed driveway filling, regrading of earth, or other technologies. This program operates clean-up claims, prevention activities, customer education and communication, property acquisition, and other activities related to the administration and management of this program. NOTE: WIB Prevention Program is expected to require future funding beyond the present 5 year CIP window (2011-2015)

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$1,184,000	\$723,200	\$200,000	\$260,800	\$1,184,000
Project Administration	\$529,400	\$99,000	\$300,000	\$130,400	\$529,400
Miscellaneous Expense	\$262,000	\$99,000	\$32,600	\$130,400	\$262,000
Right-of-Way	\$14,178,300	\$5,652,400	\$842,400	\$7,683,500	\$14,178,300
Construction	\$3,611,600	\$0	\$0	\$3,611,600	\$3,611,600
Contingency	\$34,500	\$0	\$0	\$34,500	\$34,500
Field Eng & Inspection	\$360,800	\$0	\$0	\$360,800	\$360,800
Interest / Financing	\$163,000	\$0	\$0	\$163,000	\$163,000
Total	\$20,323,600	\$6,573,600	\$1,375,000	\$12,375,000	\$20,323,600

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$6,573,600	\$1,375,000	\$2,750,000	\$2,750,000	\$2,750,000	\$18,948,600

Prior Legislation Action
 Feb 2007, Dec 2008, Dec 2009



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	WWIP Progress Studies and Recreation Management	
Project ID	10180750	CIP Number
CIP Subtype	Allowances	Sewer Number

Purpose and Justification The purpose of this allowance is to a) create and implement a focused recreation management strategy tied to weather radar and ultimately the System Wide Model and b) to develop strategies pertaining to the implementation of the WWIP.	Impact to Operating Budget
	Description and Location This program's key components include the development and implementation of a) a monitoring program, b) a reliable water quality index, c) reliable tools to assess water quality, d) effective communication, and e) WWIP strategies that will provide direction to MSD's Project and Business Development Division NOTE: WWIP Progress Studies and Recreation Management allowance is expected to require future funding beyond the present 5 year CIP window (2011-2015) Cost Account Manager: Marty Umberg

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$9,496,600	\$2,414,300	\$732,600	\$6,349,700	\$9,496,600
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$946,800	\$240,700	\$72,850	\$633,250	\$946,800
Miscellaneous Expense	\$477,000	\$121,200	\$36,850	\$318,950	\$477,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$10,920,400	\$2,776,200	\$842,300	\$7,301,900	\$10,920,400

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total	
Prior Legislation	\$2,776,200	\$842,300	\$1,730,400	\$1,527,900	\$1,577,000	\$1,624,300	\$10,078,100

Prior Legislation Action
 Dec 2008, Dec 2009



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Werk & Westbourne EHRT Facility		
Project ID	10130740	CIP Number	1995-47
CIP Subtype	CSO	Sewer Number	

Purpose and Justification This project will remediate a source of frequent health, odor, and esthetic problems in the neighboring area due to CSO discharges.	Impact to Operating Budget
	Description and Location This project consists of a high rate treatment facility to provide storage, settling, and screening for combined sewage CSO 522 at Werk and Westbourne Drive. This project is located in Green Township. END CONSTRUCTION MILESTONE: 12 31 2017

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$493,700	\$493,700	\$439,000	\$0	\$932,700
Design	\$493,700	\$4,546,500	\$0	\$0	\$4,546,500
Project Administration	\$296,200	\$1,212,400	\$0	\$0	\$1,212,400
Miscellaneous Expense	\$197,500	\$197,500	\$0	\$0	\$197,500
Right-of-Way	\$293,100	\$293,100	\$0	\$270,000	\$563,100
Construction	\$5,144,600	\$0	\$0	\$30,309,700	\$30,309,700
Contingency	\$1,094,800	\$0	\$0	\$3,031,000	\$3,031,000
Field Eng & Inspection	\$547,400	\$0	\$0	\$1,555,700	\$1,555,700
Interest / Financing	\$328,400	\$0	\$0	\$4,546,500	\$4,546,500
Total	\$8,889,400	\$6,743,200	\$439,000	\$39,712,900	\$46,895,100

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$6,743,200	\$439,000	\$0	\$0	\$39,442,900	\$0	\$46,625,100

Prior Legislation Action
 Oct 2000, Dec 2006, Jan 2007, Dec 2009

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$2,679,430	\$2,266,474	\$843,290	\$4,807,305	\$12,514,283	\$23,110,782



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Wet Weather Program Management and Support Services		
Project ID	10199000	CIP Number	2007-23
CIP Subtype	Program Administration	Sewer Number	

Purpose and Justification This project supports the internal efforts, supplemental staff and professional services necessary to carry out the Wet Weather Program. The activities will include project and program scheduling, project estimating, project controls, risk management efforts, program communications and outreach services.	Impact to Operating Budget
	Description and Location This project will provide for the administration of the Wet Weather Program as specified in the Consent Order.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$8,000,000	\$8,000,000	\$0	\$0	\$8,000,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$107,885,900	\$36,377,200	\$3,200,000	\$129,612,800	\$169,190,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$115,885,900	\$44,377,200	\$3,200,000	\$129,612,800	\$177,190,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$44,377,200	\$3,200,000	\$12,650,000	\$13,915,000	\$15,306,500	\$16,837,200
						\$106,285,900

Prior Legislation Action
 Nov 2005, Dec 2006, Dec 2007, Dec 2008, Dec 2009



2011 CIP Phase 1 Asset Projects



2011 CIP Phase 1 Projects

Metropolitan Sewer District of Greater Cincinnati

ASSET (Alphabetically)

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10240119	ASSET	CSO	Badgeley Run RTC Relocation and Grit Pit (Construction)	\$1,873,000	\$0	\$1,873,000	25
10270056	ASSET	SWR	Beckman Pump Station Elimination (Design,Easement)	\$110,300	\$0	\$110,300	26
10230115	ASSET	SWR	Bender Rd. Aerial Sewer Crossing (Construction)	\$129,000	\$0	\$129,000	27
10240031	ASSET	SSO	Benson Street Sewer Replacement (Design,Construction)	\$0	\$2,859,000	\$2,859,000	28
10280124	ASSET	ALW	CIP Project Planning 2011 (Planning,Design)	\$4,000,000	\$0	\$4,000,000	29
10230077	ASSET	CSO	CSO 198 and CSO 518 Basin Study (Planning)	\$950,000	\$0	\$950,000	30
10230079	ASSET	CSO	CSO 523 Basin Study (Planning)	\$800,000	\$0	\$800,000	31
10240051	ASSET	TRT	DIW Office and Laboratory Improvements (Design)	\$149,700	\$0	\$149,700	32
10280035	ASSET	SWR	Emergency Sewer Repairs 2011 (Design,Construction)	\$4,075,000	\$0	\$4,075,000	33
10280440	ASSET	ALW	Flow Modeling (Planning)	\$1,050,000	\$0	\$1,050,000	34
10280422	ASSET	ALW	Flow Monitoring and Rain Gauges (Planning)	\$1,900,000	\$0	\$1,900,000	35
10240029	ASSET	SWR	German Cemetery Sewer Replacement (Design,Easement)	\$314,100	\$0	\$314,100	36
10280451	ASSET	SWR	High Risk System Asset Renewal 2011 (Design,Construction)	\$2,575,000	\$0	\$2,575,000	37
10280002	ASSET	ALW	Land Acquisition (Easement)	\$1,000,000	\$0	\$1,000,000	38
10270060	ASSET	TRT	Little Miami WWTP-Four Mile Pump Station Improvements (Design)	\$86,400	\$0	\$86,400	39
10240271	ASSET	CSO	Lower Mill Creek HW DW Protection (Planning)	\$375,000	\$0	\$375,000	40
10280500	ASSET	ALW	MSD-Duke Energy Sewer Televising Partnership (Design,Construction)	\$2,500,000	\$0	\$2,500,000	41
10240142	ASSET	SWR	Macauley Street Sewer Replacement (Design,Easement)	\$98,800	\$0	\$98,800	42
10240290	ASSET	TRT	Mill Creek WWTP Anaerobic Digester Conversion to Mixing Holding Tanks (Design)	\$0	\$18,803,100	\$18,803,100	43
10270090	ASSET	SWR	Moeller Avenue Sewer Replacement (Design)	\$12,500	\$0	\$12,500	44
10230065	ASSET	TRT	Muddy Creek WWTP Electrical Upgrades (Design,Construction)	\$0	\$7,067,500	\$7,067,500	45
10240028	ASSET	CSO	North Avondale Basin Study (Planning)	\$698,000	\$0	\$698,000	46
10280114	ASSET	TRT	SCADA System Installs and Upgrades (Design)	\$1,451,500	\$0	\$1,451,500	47
10290030	ASSET	ALW	Value Engineering (Design)	\$375,000	\$0	\$375,000	48
10280150	ASSET	TRT	WWT Roofing and Paving Rehab Replacement (Design,Construction)	\$719,200	\$0	\$719,200	49



2011 CIP Phase 1 Projects
Metropolitan Sewer District of Greater Cincinnati
ASSET (Alphabetically)

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10280180	ASSET	TRT	WWT System Asset Renewal (Design,Construction)	\$2,277,500	\$0	\$2,277,500	50
10240032	ASSET	CSO	Walnut Hills Basin Study (Planning)	\$800,000	\$0	\$800,000	51
10290015	ASSET	TRT	Water Quality Program (Planning)	\$268,000	\$0	\$268,000	52
10221220	ASSET	SWR	Wesselman Road Sewer Phase 2-A (Design,Construction)	\$3,937,500	\$0	\$3,937,500	53
10200005	ASSET	SWR	West Fork Basin Regional Strategy Development (Planning)	\$500,000	\$0	\$500,000	54
Total Cost for 30 ASSET Projects				\$33,025,500	\$28,729,600	\$61,755,100	

2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Badgeley Run RTC Relocation and Grit Pit		
Project ID	10240119	CIP Number	
CIP Subtype	CSO	Sewer Number	

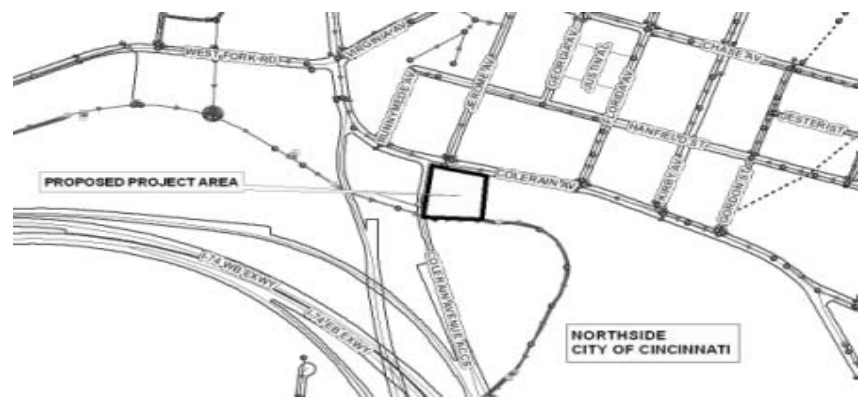
Purpose and Justification This project will relocate CSO 125 and the real time controls access manhole out of the proposed roadway of the ODOT I-74 improvement project in this area. MSD has also identified the need for a grit pit at the facility in order to protect the facility. The grit chamber will be incorporated into the design of the facility relocation. This project is needed in order to maintain operation of the real time control facility at CSO 125 by providing adequate access for proper maintenance and inspection	Impact to Operating Budget
	Description and Location This project will relocate CSO 125 and portions of the real time controls outside of the proposed Colerain Avenue roadway by providing the following: 1) CSO Regulator, 2) RTC Access Manhole, 3) Level sensors, 4) Sluice Gate, 5) New underflow sewer from the relocated CSO to the West Fork Channel Interceptor sewer and 6) a new grit chamber. This project is located approximately 240 feet south of the intersection of Colerain and Jerome Avenues in the Northside neighborhood of the City of Cincinnati

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$80,000	\$80,000	\$0	\$0	\$80,000
Design	\$135,000	\$135,000	\$0	\$0	\$135,000
Project Administration	\$55,000	\$55,000	\$0	\$0	\$55,000
Miscellaneous Expense	\$30,000	\$30,000	\$0	\$0	\$30,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,558,000	\$0	\$1,558,000	\$0	\$1,558,000
Contingency	\$156,000	\$0	\$156,000	\$0	\$156,000
Field Eng & Inspection	\$105,000	\$0	\$105,000	\$0	\$105,000
Interest / Financing	\$54,000	\$0	\$54,000	\$0	\$54,000
Total	\$2,173,000	\$300,000	\$1,873,000	\$0	\$2,173,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$300,000	\$1,873,000	\$0	\$0	\$0	\$2,173,000

Prior Legislation Action
Mar 2010

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$800,000	\$800,000	\$20,000	\$0	\$0	\$1,620,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	Beckman Pump Station Elimination	
Project ID	10270056	CIP Number
CIP Subtype	Sewer	Sewer Number

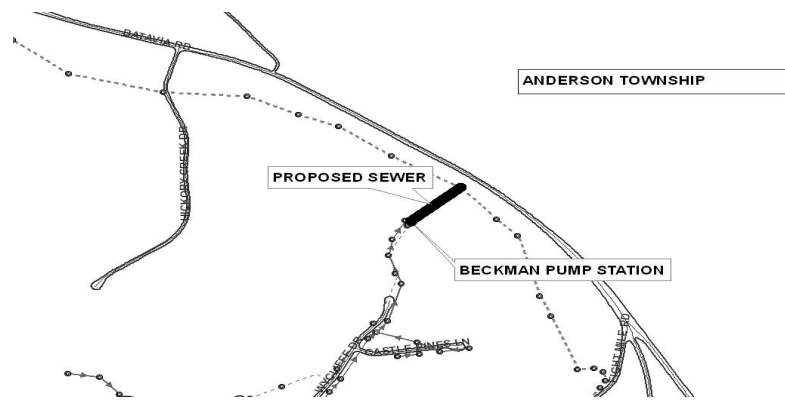
Purpose and Justification This project will eliminate the Beckman Avenue Pump Station. The Dry Run Sewer currently being constructed will make eliminating this pump station feasible. The cost of eliminating this pump station is less than the one hundred year net present value of a gravity elimination sewer.	Impact to Operating Budget
	Description and Location This project will eliminate the Beckman Pump Station by installing approximately 307 feet of 8-inch sewer. This pump station is located at the terminus of Wycliffe Rd in Anderson Township.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$55,300	\$0	\$55,300	\$0	\$55,300
Project Administration	\$9,600	\$0	\$9,600	\$0	\$9,600
Miscellaneous Expense	\$23,300	\$0	\$23,300	\$0	\$23,300
Right-of-Way	\$22,100	\$0	\$22,100	\$0	\$22,100
Construction	\$240,200	\$0	\$0	\$240,200	\$240,200
Contingency	\$48,000	\$0	\$0	\$48,000	\$48,000
Field Eng & Inspection	\$26,100	\$0	\$0	\$26,100	\$26,100
Interest / Financing	\$2,100	\$0	\$0	\$2,100	\$2,100
Total	\$426,700	\$0	\$110,300	\$316,400	\$426,700

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$110,300	\$0	\$316,400	\$0	\$0	\$426,700

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$50,000	\$60,300	\$316,400	\$0	\$0	\$426,700



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Bender Rd. Aerial Sewer Crossing		
Project ID	10230115	CIP Number	2006-29
CIP Subtype	Sewer	Sewer Number	5853

Purpose and Justification

This project will protect a spiral welded steel sewer pipe which is located above Bender Creek and the normal pool level of the Ohio River. The aerial sewer is in the path of creek debris, including sections of fallen trees, which have resulted in several dents to the sewer. This project will construct a protective frame upstream on Bender Creek to protect the sewer from direct impacts from debris.

Impact to Operating Budget

Description and Location

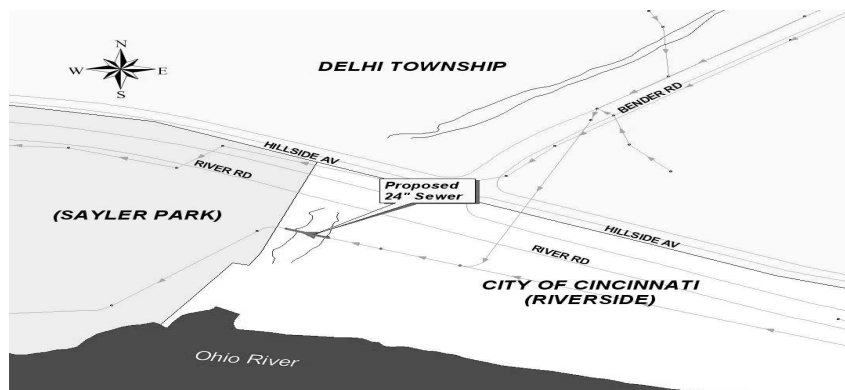
This project consists of the protection of approximately 75 feet of 24 inch sanitary sewer beginning approximately 210 feet west and 170 feet south of the intersection of Hillside Ave and Bender Rd., then continuing westward 75 feet. This project is located in the Riverside neighborhood of the City of Cincinnati

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$69,000	\$82,600	\$0	\$0	\$82,600
Project Administration	\$15,700	\$21,800	\$0	\$0	\$21,800
Miscellaneous Expense	\$15,000	\$15,000	\$0	\$0	\$15,000
Right-of-Way	\$25,000	\$95,000	\$0	\$0	\$95,000
Construction	\$179,000	\$0	\$80,000	\$0	\$80,000
Contingency	\$35,800	\$0	\$12,000	\$0	\$12,000
Field Eng & Inspection	\$8,700	\$0	\$36,000	\$0	\$36,000
Interest / Financing	\$500	\$0	\$1,000	\$0	\$1,000
Total	\$348,700	\$214,400	\$129,000	\$0	\$343,400

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$214,400	\$129,000	\$0	\$0	\$0	\$343,400

Prior Legislation Action
Dec 2005, Dec 2006, Dec 2009

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$161,000	\$49,000	\$0	\$0	\$0	\$210,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	Benson Street Sewer Replacement	
Project ID	10240031	CIP Number
CIP Subtype	SSO	Sewer Number

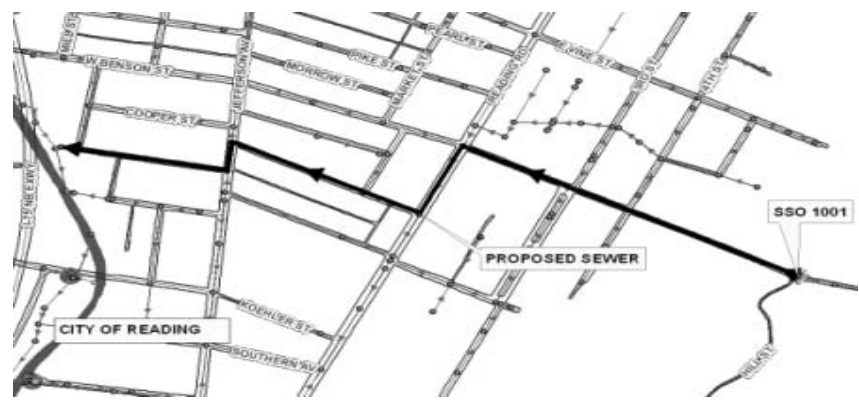
Purpose and Justification <p>The gravity sewer main along Benson Street from the Mill Creek interceptor sewer to the intersection with Hill Street currently experiences sewer main overloading at the intersection with Reading Road, encompasses SSO 1001 and provides service to several parcels of developable land in the vicinity. This project will address the sewer main overloading in this area, eliminate SSO 1001 and provide capacity to enable development within the sewershed. Planning and Design of this project was accomplished using the WWIP Urgent Capacity allowance (Project ID 10190209)</p>	Impact to Operating Budget
	Description and Location <p>This project will replace and upsize approximately 4100 feet of sewer varying in size from 12-inches to 30-inches from the Mill Creek Interceptor sewer to SSO 1001. This project is located in the City of Reading.</p>

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$135,000	\$0	\$135,000	\$0	\$135,000
Miscellaneous Expense	\$40,000	\$0	\$40,000	\$0	\$40,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$2,260,000	\$0	\$2,260,000	\$0	\$2,260,000
Contingency	\$226,000	\$0	\$226,000	\$0	\$226,000
Field Eng & Inspection	\$113,000	\$0	\$113,000	\$0	\$113,000
Interest / Financing	\$85,000	\$0	\$85,000	\$0	\$85,000
Total	\$2,859,000	\$0	\$2,859,000	\$0	\$2,859,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$2,859,000	\$0	\$0	\$0	\$0	\$2,859,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$2,859,000	\$0	\$0	\$0	\$0	\$2,859,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CIP Project Planning 2011		
Project ID	10280124	CIP Number	
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification This project will provide capital funding to support planning CIP projects. Capital funding for the planning of these types of projects will allow all costs to be tracked against the specific project effort and will serve to reduce MSD operating expenses accordingly	Impact to Operating Budget
	Description and Location This project consists of funding the necessary planning resources for capital projects.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$8,500,000	\$0	\$3,500,000	\$5,000,000	\$8,500,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$1,500,000	\$0	\$500,000	\$1,000,000	\$1,500,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$10,000,000	\$0	\$4,000,000	\$6,000,000	\$10,000,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$4,000,000	\$0	\$0	\$0	\$0	\$4,000,000

Prior Legislation Action



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	CSO 198 and CSO 518 Basin Study	
Project ID	10230077	CIP Number
CIP Subtype	CSO	Sewer Number

Purpose and Justification

The project encompasses the 2600 acre area upstream of CSO 198 and CSO 518, which consists of 22 miles of sanitary sewers and 48 miles of combined sewers. The basin study will assist planning efforts for the CSO 198 and CSO 518 basins. A basin study will allow an integrated approach to meeting WWIP objectives by identifying improvements within the basins in addition to improvements at the CSO's. Properly identifying projects in the basin will lead to a cost effective strategy for reducing CSO during the Business Case Evaluation. Projects identified during the study may include asset management projects in addition to wet weather projects, and projects that utilize wet weather allowances.

Impact to Operating Budget

Description and Location

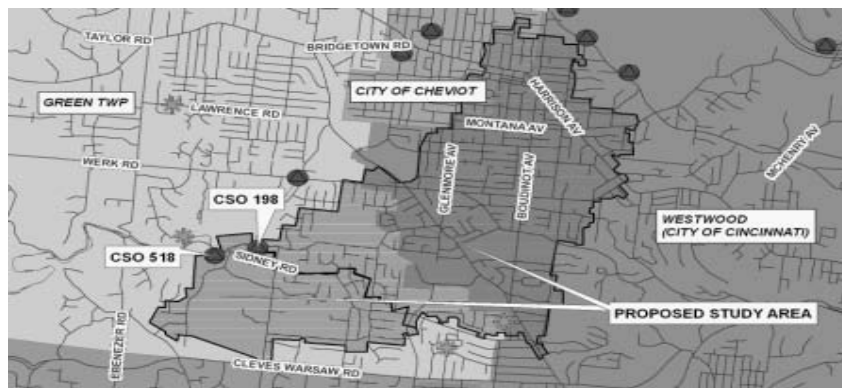
This project will study the combined, sanitary, and storm conveyance system upstream of CSO 198 and CSO 518 to help determine what portion of combined sewer overflow control can be economically achieved by stormwater removal, separation, or sustainable design (green infrastructure). This project is located in the Westwood neighborhood of the City of Cincinnati, portions of Green Township, and the City of Cheviot.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$950,000	\$0	\$950,000	\$0	\$950,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$950,000	\$0	\$950,000	\$0	\$950,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$950,000	\$0	\$0	\$0	\$0	\$950,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$950,000	\$0	\$0	\$0	\$0	\$950,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	CSO 523 Basin Study	
Project ID	10230079	CIP Number
CIP Subtype	CSO	Sewer Number

Purpose and Justification

This project encompasses the 1500 acre area upstream of CSO 523, which consists of 21 miles of sanitary sewers and 16 miles of combined sewers. The basin study will assist planning efforts for the CSO 523 basin. A basin study will allow an integrated approach to meeting WWIP objectives by identifying improvements within the basin in addition to improvements at the CSO. Properly identifying projects in the basin will lead to a cost effective strategy for reducing CSO during the Business Case Evaluation. Projects identified during the study may include asset management projects in addition to wet weather projects, and projects that utilize wet weather allowances.

Impact to Operating Budget

Description and Location

This project will study the combined, sanitary, and storm conveyance system upstream of CSO 523 to help determine what portion of combined sewer overflow control can be economically achieved by stormwater removal, separation, or sustainable design (green infrastructure). This project is located in Delhi Township, portions of Green Twp, and the West Price Hill neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$800,000	\$0	\$800,000	\$0	\$800,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$800,000	\$0	\$800,000	\$0	\$800,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$800,000	\$0	\$0	\$0	\$800,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$800,000	\$0	\$0	\$0	\$0	\$800,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	DIW Office and Laboratory Improvements	
Project ID	10240051	CIP Number
CIP Subtype	Treatment	Sewer Number

Purpose and Justification

A study recommended the recommissioning and reorganization of existing DIW facilities as the strategy for addressing the identified key issues. The study recommended optimization of HVAC and lab exhaust system operation & maintenance, lab operations & use of facilities including DIW office facilities. The project will be completed in two phases. The lab study, design and construction for the phase one will be in year 2011, and the design and construction for the second phase will be completed in year 2012. This project will also update the facility plan in year 2013.

Impact to Operating Budget

Description and Location

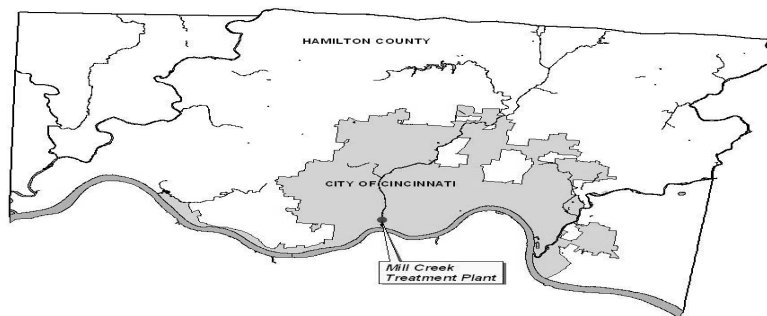
This project will result in improvements to the DIW Office and Laboratory based on the division's facility plan. The project would improve safety, improve effective operation of the building's HVAC and lab exhaust system. Also, It will optimize use of the office facilities, increase operational efficiency and minimize energy consumption. This project is located at the Mill Creek WWTP in the Lower Price Hill neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$327,000	\$0	\$112,000	\$215,000	\$327,000
Project Administration	\$75,000	\$0	\$28,700	\$46,300	\$75,000
Miscellaneous Expense	\$17,000	\$0	\$9,000	\$8,000	\$17,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,870,300	\$0	\$0	\$1,870,300	\$1,870,300
Contingency	\$187,100	\$0	\$0	\$187,100	\$187,100
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$70,000	\$0	\$0	\$70,000	\$70,000
Total	\$2,546,400	\$0	\$149,700	\$2,396,700	\$2,546,400

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$149,700	\$1,582,400	\$0	\$0	\$1,732,100

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$964,000	\$1,582,400	\$0	\$0	\$0	\$2,546,400



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Emergency Sewer Repairs 2011		
Project ID	10280035	CIP Number	
CIP Subtype	Sewer	Sewer Number	

Purpose and Justification

This project will allow MSDGC to quickly respond to sudden, unexpected sewer system failures which may threaten the public health, welfare, or safety. Conditions that warrant emergency sewer repairs include cave-ins, structurally failed sewers, manholes or building sewers, sewer backups into private property, sewer overflows that may violate permits and regulations, and imminent danger to structures or real property.

Impact to Operating Budget

Description and Location

Emergency sewer system repairs are completed throughout the entire District using competitively bid as-needed sewer repair contracts. This project allows MSD to quickly and efficiently restore and maintain interrupted service while mitigating the risk of additional damages or losses.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$150,000	\$0	\$75,000	\$75,000	\$150,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$8,000,000	\$0	\$4,000,000	\$4,000,000	\$8,000,000
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$8,150,000	\$0	\$4,075,000	\$4,075,000	\$8,150,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$4,075,000	\$0	\$0	\$0	\$0	\$4,075,000

Prior Legislation Action



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Flow Modeling		
Project ID	10280440	CIP Number	
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification This project will provide sewer modeling services to be used to support MSD's long-range planning needs, and to meet MSD's SSO and CSO monitoring requirements. Sewer modeling is used to assist in the planning and design process and is required as part of the Global Consent Decree and MSD's CSO NPDES permit.	Impact to Operating Budget
	Description and Location MSD plans and designs wastewater collection and treatment projects throughout its district through the use of computer models. Note: This includes the modeling of sustainable infrastructure. Cost Account Manager: Joe Koran

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$2,100,000	\$0	\$1,050,000	\$1,050,000	\$2,100,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$2,100,000	\$0	\$1,050,000	\$1,050,000	\$2,100,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$1,050,000	\$0	\$0	\$0	\$0	\$1,050,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$2,100,000	\$0	\$0	\$0	\$0	\$2,100,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Flow Monitoring and Rain Gauges		
Project ID	10280422	CIP Number	
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification This project will provide sewer flow monitoring and rain gauge services to be used to support MSD's long-range planning needs, meet MSD's SSO and CSO monitoring requirements, and perform CIP post-construction monitoring. Flow monitoring is used to assist in the modeling, planning and design process. Flow monitoring is required as part of the Global Consent Decree and MSD's CSO NPDES permit.	Impact to Operating Budget
	Description and Location MSD plans wastewater collection and treatment projects throughout its district. Flow monitors are installed to support this planning process by measuring actual system performance while providing the necessary data to meet mandated reporting requirements. Note: This includes the monitoring of sustainable infrastructure. Cost Account Manager: Joe Koran

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$3,800,000	\$0	\$1,900,000	\$1,900,000	\$3,800,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$3,800,000	\$0	\$1,900,000	\$1,900,000	\$3,800,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$1,900,000	\$0	\$0	\$0	\$0	\$1,900,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$3,800,000	\$0	\$0	\$0	\$0	\$3,800,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	German Cemetery Sewer Replacement	
Project ID	10240029	CIP Number
CIP Subtype	Sewer	Sewer Number

Purpose and Justification

This project will rehab a failing combined sewer and prevent further deterioration in other sections. This project is needed to prevent total failure of the sewer which would result in sewage backups in homes, a cemetery, or the public right of way

Impact to Operating Budget

Description and Location

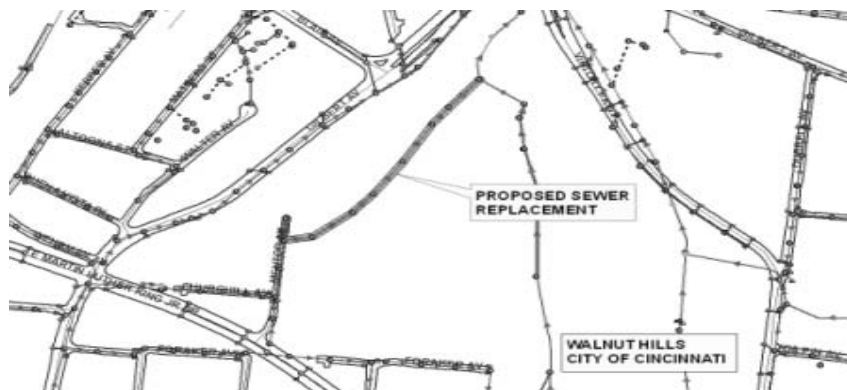
This project will rehab 1100 feet of failing 12, 18, 22, and 24-inch combined sewer beginning at the north terminus of Mentor Street and continuing northeast towards Gilbert Avenue. This work will involve replacement of some sewer sections and lining of other segments. This project is in the Walnut Hills neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$78,100	\$0	\$78,100	\$0	\$78,100
Project Administration	\$31,200	\$0	\$31,200	\$0	\$31,200
Miscellaneous Expense	\$17,200	\$0	\$17,200	\$0	\$17,200
Right-of-Way	\$187,600	\$0	\$187,600	\$0	\$187,600
Construction	\$520,700	\$0	\$0	\$520,700	\$520,700
Contingency	\$78,100	\$0	\$0	\$78,100	\$78,100
Field Eng & Inspection	\$37,700	\$0	\$0	\$37,700	\$37,700
Interest / Financing	\$6,500	\$0	\$0	\$6,500	\$6,500
Total	\$957,100	\$0	\$314,100	\$643,000	\$957,100

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$314,100	\$0	\$643,000	\$0	\$0	\$957,100

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$91,500	\$100,000	\$460,400	\$0	\$0	\$651,900



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	High Risk System Asset Renewal 2011	
Project ID	10280451	CIP Number
CIP Subtype	Sewer	Sewer Number

Purpose and Justification This project will allow MSDGC to replace entire high risk assets or portions of system assets that are currently unable, or anticipated to be unable to meet their defined level of service. This project is necessary to cost effectively extend asset life while protecting and preserving public health and the environment.	Impact to Operating Budget
	Description and Location MSDGC evaluates assets throughout the entire District using standardized condition assessment tools and methodologies. Defective assets, or defective portions of assets that may impair the system's ability to meet defined levels of service are identified, prioritized based upon comprehensive risk, and renewed using the most cost effective methodology to extend the asset's useful life.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$150,000	\$0	\$75,000	\$75,000	\$150,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$5,000,000	\$0	\$2,500,000	\$2,500,000	\$5,000,000
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$5,150,000	\$0	\$2,575,000	\$2,575,000	\$5,150,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$2,575,000	\$0	\$0	\$0	\$0	\$2,575,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$5,150,000	\$0	\$0	\$0	\$0	\$5,150,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Land Acquisition		
Project ID	10280002	CIP Number	
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification This appropriation will be utilized to strategically acquire property in MSD's service area for future use in locating infrastructure assets.	Impact to Operating Budget
	Description and Location This appropriation is intended to be utilized to strategically acquire property in MSD's service area that will allow MSD to locate sewer and source control infrastructure assets in the future. These properties will be acquired as opportunities arise due to property availability in sale or foreclosure situations.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$7,500,000	\$1,500,000	\$1,000,000	\$14,000,000	\$16,500,000
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$7,500,000	\$1,500,000	\$1,000,000	\$14,000,000	\$16,500,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$1,500,000	\$1,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$14,500,000

Prior Legislation Action	
Dec 2009	

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$400,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Little Miami WWTP-Four Mile Pump Station Improvements		
Project ID	10270060	CIP Number	2008-53
CIP Subtype	Treatment	Sewer Number	6092

Purpose and Justification

The wastewater treatment plant must maintain its influent structure in order to treat incoming wastewater. Part of maintaining this asset is to manage flow into the plant. In order to do that, influent gates must operate properly. Failure to maintain our assets may result in Consent Decree stipulated penalties.

Impact to Operating Budget

Description and Location

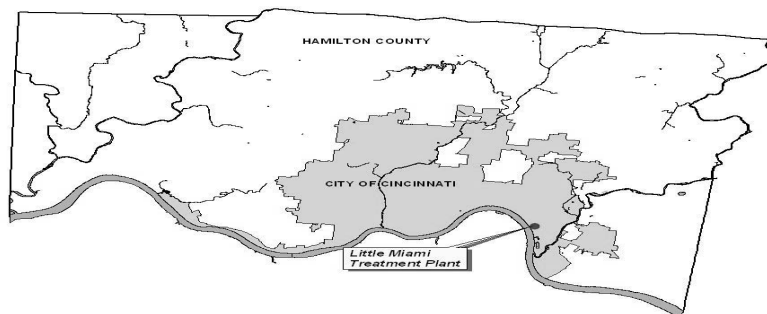
The current equipment does not provide the level of reliability needed to operate the process efficiently. The influent gates have been flooded a number of times and they leak. Wet well cleaning will recover lost storage capacity as well as remove material that may damage pumps. This project includes: 1. Replace two influent gates, 2. Replace one discharge header isolation gate, 3. Repack ten pump valves, 4. Repack two main header valves, 5. Add operators to two main header valves, 6. Add and maintain process control signals, as needed, 7. Add process control logic as needed to monitor and operate valves remotely.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$3,000	\$3,000	\$0	\$0	\$3,000
Design	\$121,000	\$168,600	\$0	\$0	\$168,600
Project Administration	\$12,100	\$48,400	\$86,400	\$0	\$134,800
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,210,000	\$0	\$0	\$1,641,900	\$1,641,900
Contingency	\$121,000	\$0	\$0	\$164,200	\$164,200
Field Eng & Inspection	\$211,300	\$0	\$0	\$92,800	\$92,800
Interest / Financing	\$31,800	\$0	\$0	\$50,500	\$50,500
Total	\$1,710,200	\$220,000	\$86,400	\$1,949,400	\$2,255,800

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$220,000	\$86,400	\$0	\$0	\$0	\$0	\$306,400

Prior Legislation Action	
Dec 2007, Oct 2010	

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$771,000	\$790,000	\$0	\$0	\$0	\$1,561,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Lower Mill Creek HW/DW Protection		
Project ID	10240271	CIP Number	
CIP Subtype	CSO	Sewer Number	

Purpose and Justification

This planning effort will result in the identification of maintenance tasks, operational strategies, and projects that will greatly reduce or eliminate Ohio River and Mill Creek water inflow into the Lower Mill Creek system. The study area includes multiple City of Cincinnati neighborhoods along the Ohio River and the Lower Mill Creek Valley.

Impact to Operating Budget

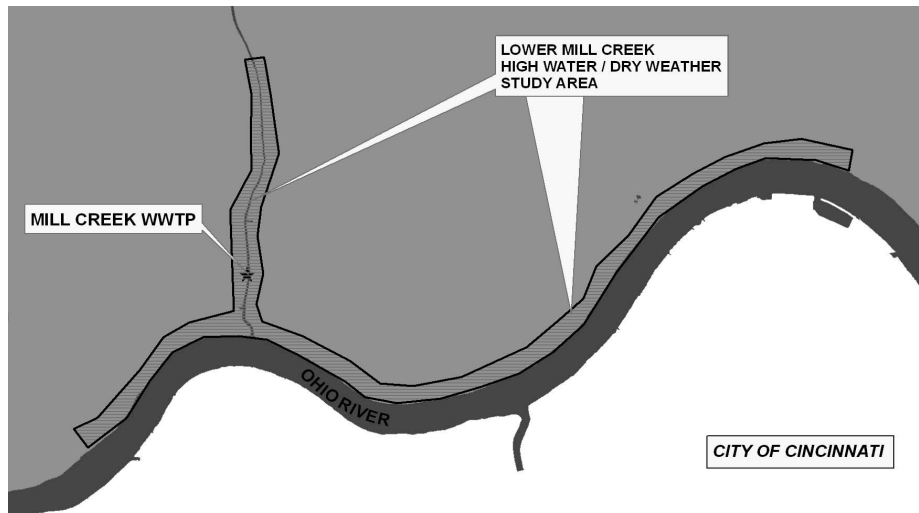
Description and Location

This planning effort will result in the identification of maintenance tasks, operational strategies, and projects that will greatly reduce or eliminate Ohio River and Mill Creek water inflow into the Lower Mill Creek system. The study area includes multiple City of Cincinnati neighborhoods along the Ohio River and the Lower Mill Creek Valley.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$375,000	\$0	\$375,000	\$0	\$375,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$375,000	\$0	\$375,000	\$0	\$375,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$375,000	\$0	\$0	\$0	\$0	\$375,000

Prior Legislation Action



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	MSD-Duke Energy Sewer Televising Partnership	
Project ID	10280500	CIP Number
CIP Subtype	Allowances	Sewer Number

Purpose and Justification
 Duke Energy is replacing the majority of its natural gas lines and services throughout Hamilton County. Their method of installation uses the trenchless technology of directional drilling. Use of this technology may unknowingly breach MSD sewers and privately owned sewer laterals. MSD is negotiating with Duke Energy, for a public private cost-sharing partnership to perform pre and post gas main installation televising of the public sewers and private laterals to identify conflicts.

Impact to Operating Budget

Description and Location
 The estimated annual scope of work will include the inspection, GPS location, and as-needed cleaning of approximately 160 miles of main public sewer and 650 miles of building sewer within MSD's service area. Under a proposed partnership, MSD will administer the contracted sewer inspection and cleaning work in conjunction with Duke's gas main installation contractors, and will share the cost of these inspection services with Duke. The proposed monetary value of the CIP project represents a best current estimate of MSD's annual portion of the cost-sharing with Duke to support this program. This work will occur throughout the MSD service area.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$2,750,000	\$1,000,000	\$125,000	\$1,625,000	\$2,750,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$52,250,000	\$4,750,000	\$2,375,000	\$31,000,000	\$38,125,000
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$55,000,000	\$5,750,000	\$2,500,000	\$32,625,000	\$40,875,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$5,750,000	\$2,500,000	\$10,000,000	\$10,000,000	\$10,000,000	\$0
						\$38,250,000

Prior Legislation Action
 Jan 2009, Dec 2009, Mar 2010

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$5,750,000	\$5,750,000	\$5,750,000	\$5,750,000	\$0	\$23,000,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	Macauley Street Sewer Replacement	
Project ID	10240142	CIP Number
CIP Subtype	Sewer	Sewer Number

Purpose and Justification

This project will replace a 24-inch brick combined sewer that was installed in 1908 and has reached the end of its useful life. This segment of sewer is badly deteriorated and has serious structural problems. It has caused no backups or overflows but it is a significant risk due to its depth of 40 feet.

Impact to Operating Budget

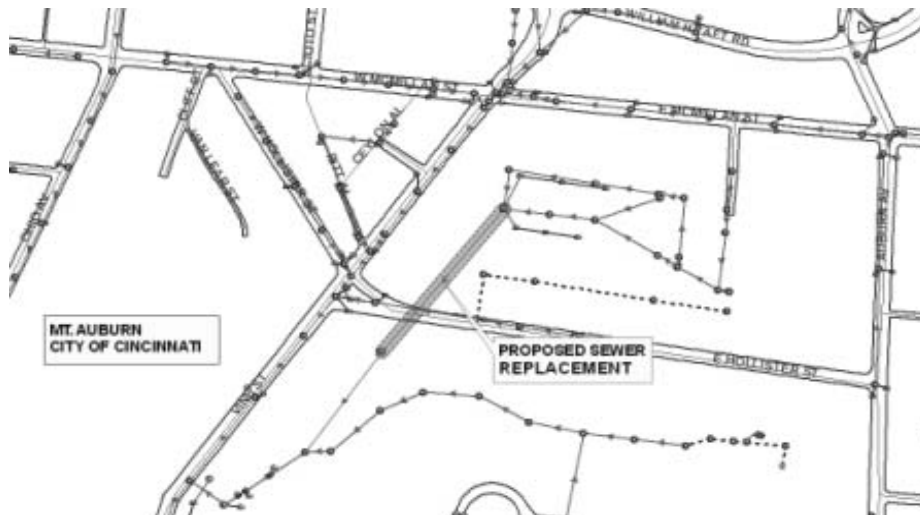
Description and Location

This project will replace 460' of 24-inch sewer that is badly deteriorated with serious structural problems. This project will also install two new manholes and rehab an existing manhole. This project is located in the Mt. Auburn neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$32,900	\$0	\$32,900	\$0	\$32,900
Project Administration	\$12,800	\$0	\$12,800	\$0	\$12,800
Miscellaneous Expense	\$13,300	\$0	\$13,300	\$0	\$13,300
Right-of-Way	\$39,800	\$0	\$39,800	\$0	\$39,800
Construction	\$212,800	\$0	\$0	\$212,800	\$212,800
Contingency	\$42,600	\$0	\$0	\$42,600	\$42,600
Field Eng & Inspection	\$42,800	\$0	\$0	\$42,800	\$42,800
Interest / Financing	\$2,700	\$0	\$0	\$2,700	\$2,700
Total	\$399,700	\$0	\$98,800	\$300,900	\$399,700

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$98,800	\$0	\$300,900	\$0	\$0	\$399,700

Prior Legislation Action



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Mill Creek WWTP Anaerobic Digester Conversion to Mixing/Holding Tanks		
Project ID	10240290	CIP Number	2008-24
CIP Subtype	Treatment	Sewer Number	

Purpose and Justification

This project will convert two digesters for mixing primary and secondary thickened sludge. The mixing Holding tanks will have solid fixed covers. The remaining 10 digestors will be cleaned, the floating covers removed and the structure demolished to ensure no sewage solids or gases can be trapped that allow a hazardous condition. The dewatering sludge feed wells will be expanded and a new PLC I and C system will control sludge feed process.

Impact to Operating Budget

Description and Location

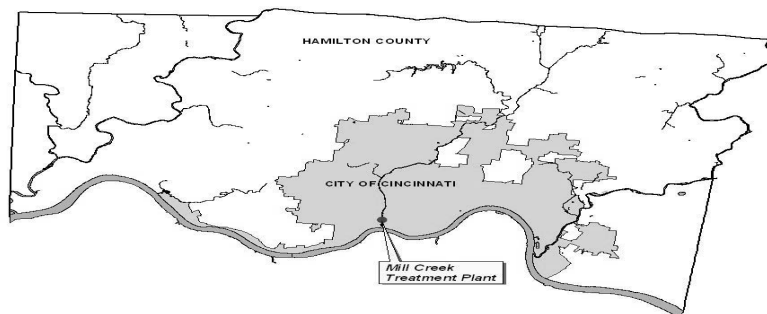
This project will eliminate the anaerobic digestion process, convert two (2) digesters to mixing holding tanks, demolish ten (10) digesters and five (5) control rooms, and expand sludge feed wells to provide thickened sludge (undigested) for incineration. This project also includes improvements on HVAC, odor control, modifications to process piping, and appropriate controls to provide sludge feed to new Fluid Bed Incinerators (FBI). The project is located in the Lower price Hill neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$58,700	\$58,700	\$0	\$0	\$58,700
Design	\$381,400	\$883,400	\$0	\$0	\$883,400
Project Administration	\$234,800	\$234,800	\$373,100	\$0	\$607,900
Miscellaneous Expense	\$0	\$50,000	\$0	\$0	\$50,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$11,735,000	\$0	\$0	\$15,485,000	\$15,485,000
Contingency	\$1,173,500	\$0	\$0	\$1,500,000	\$1,500,000
Field Eng & Inspection	\$465,200	\$0	\$0	\$700,000	\$700,000
Interest / Financing	\$440,100	\$0	\$0	\$745,000	\$745,000
Total	\$14,488,700	\$1,226,900	\$373,100	\$18,430,000	\$20,030,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$1,226,900	\$373,100	\$0	\$0	\$0	\$1,600,000

Prior Legislation Action
Jan 2008, Jul 2010

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$200,000	\$14,975,000	\$3,175,000	\$20,000	\$0	\$18,370,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Moeller Avenue Sewer Replacement		
Project ID	10270090	CIP Number	2008-48
CIP Subtype	Sewer	Sewer Number	5930

Purpose and Justification

The purpose of this project is to replace an 8" deteriorated sewer in a new alignment to reduce maintenance costs.

Impact to Operating Budget

Description and Location

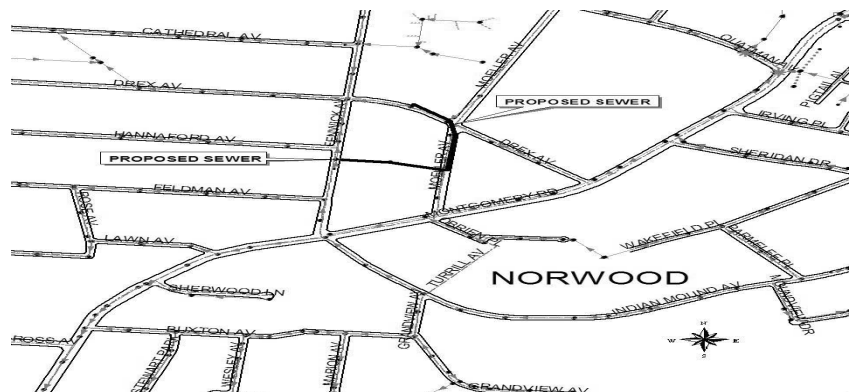
This project is located on Moeller Avenue, Drex Avenue, and Fenwick Avenue in Norwood. This project consists of installation of 693 feet of 8 inch sanitary sewer and abandonment of an existing sewer that passes beneath 3 houses.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$110,100	\$110,100	\$0	\$0	\$110,100
Project Administration	\$29,400	\$29,400	\$12,500	\$0	\$41,900
Miscellaneous Expense	\$5,200	\$5,200	\$0	\$0	\$5,200
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$734,000	\$0	\$0	\$828,700	\$828,700
Contingency	\$146,800	\$0	\$0	\$82,800	\$82,800
Field Eng & Inspection	\$35,800	\$0	\$0	\$35,800	\$35,800
Interest / Financing	\$8,500	\$0	\$0	\$30,000	\$30,000
Total	\$1,069,800	\$144,700	\$12,500	\$977,300	\$1,134,500

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$144,700	\$0	\$0	\$0	\$0	\$144,700
	\$12,500	\$0	\$0	\$0	\$0	\$12,500
						\$157,200

Prior Legislation Action
Dec 2007

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$738,000	\$0	\$0	\$0	\$0	\$738,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Muddy Creek WWTP Electrical Upgrades		
Project ID	10230065	CIP Number	
CIP Subtype	Treatment	Sewer Number	

Purpose and Justification

An evaluation of the Muddy Creek WWTP electrical system resulted in recommendations for upgrades or replacement of very old equipment. Some components are over 30 years old and were manufactured by a company no longer in business. At several locations in the plant replacement parts are no longer manufactured and will become increasingly difficult to obtain.

Impact to Operating Budget

Description and Location

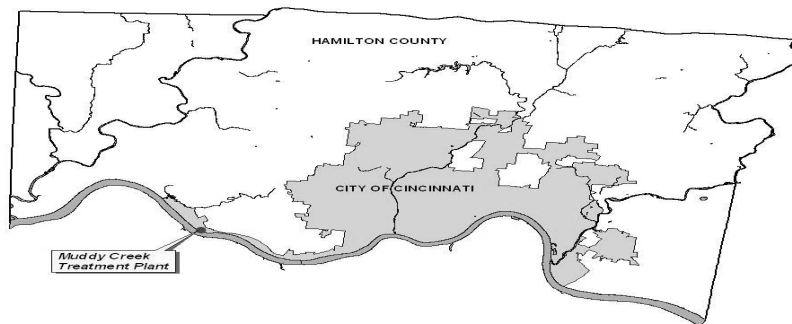
This project includes replacement and relocation of significant electrical components that are old and in poor condition including switchgear, panel boards and motor control centers. The components are located throughout the plant and opportunities exist for consolidation of equipment. Isolation of components and conditioning of air space along with use of modern equipment can improve power distribution and equipment life spans. Infrared windows are included in the upgrades to facilitate the electrical thermography program. The plant is located in the Cincinnati neighborhood of Saylor Park.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$407,700	\$407,700	\$80,000	\$0	\$487,700
Project Administration	\$108,800	\$108,800	\$85,000	\$0	\$193,800
Miscellaneous Expense	\$0	\$0	\$25,000	\$0	\$25,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$2,717,700	\$0	\$5,300,000	\$0	\$5,300,000
Contingency	\$679,500	\$0	\$530,000	\$0	\$530,000
Field Eng & Inspection	\$183,200	\$0	\$650,000	\$0	\$650,000
Interest / Financing	\$135,900	\$0	\$397,500	\$0	\$397,500
Total	\$4,232,800	\$516,500	\$7,067,500	\$0	\$7,584,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$516,500	\$7,067,500	\$0	\$0	\$0	\$7,584,000

Prior Legislation Action
Dec 2008

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$1,265,000	\$1,710,000	\$4,000	\$0	\$0	\$2,979,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	North Avondale Basin Study		
Project ID	10240028	CIP Number	
CIP Subtype	CSO	Sewer Number	

Purpose and Justification The North Avondale basin sees frequent surcharging and water in basement claims. A basin study will look into existing conditions and help complete active projects and long term planning by possibly separating some of the storm flow in order to develop the best long term solutions for projects in the basin.	Impact to Operating Budget
	Description and Location This project will study the North Avondale basin which drains to CSO 482 and CSO 487. The study will review models and look into feasibility of partial separation of storm and sanitary. This project is in the North Avondale neighborhood of the City of Cincinnati

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$698,000	\$0	\$698,000	\$0	\$698,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$698,000	\$0	\$698,000	\$0	\$698,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$698,000	\$0	\$0	\$0	\$0	\$698,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$698,000	\$0	\$0	\$0	\$0	\$698,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	SCADA System Installs and Upgrades		
Project ID	10280114	CIP Number	2008-46
CIP Subtype	Treatment	Sewer Number	5950

Purpose and Justification

The purpose of this project is to upgrade the existing SCADA system at each treatment plant and new installations where it is non-existent. Also, the scope will include the electrical and control upgrades and removal of existing obsolete equipment. SCADA is a tool that MSD uses to comply with operating permit, as well as, monitor performance.

Impact to Operating Budget

Description and Location

This project will install SCADA system for monitoring and control of variety of wastewater treatment processes. SCADA installations must be routinely upgraded and reviewed. SCADA improvements will help reduce permit exceedances by making adjustment or alarming situations before they result in a problem. An assessment of the current SCADA system was reviewed by Consultants in June 2007. Construction Costs for this project include \$1,668,600 for SCADA configuration costs, \$250,000 for existing equipment upgrade, and \$650,000 for P&ID drawings for all treatment plants except Sycamore.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$715,000	\$2,015,000	\$0	\$0	\$2,015,000
Project Administration	\$27,600	\$227,600	\$101,500	\$0	\$329,100
Miscellaneous Expense	\$0	\$50,000	\$1,350,000	\$0	\$1,400,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$4,375,000	\$0	\$0	\$8,228,300	\$8,228,300
Contingency	\$275,500	\$0	\$0	\$822,800	\$822,800
Field Eng & Inspection	\$150,800	\$0	\$0	\$900,000	\$900,000
Interest / Financing	\$96,500	\$0	\$0	\$400,000	\$400,000
Total	\$5,640,400	\$2,292,600	\$1,451,500	\$10,351,100	\$14,095,200

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$2,292,600	\$1,451,500	\$0	\$0	\$0	\$3,744,100

Prior Legislation Action
Dec 2007, Dec 2009, Jan 2010

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$2,773,000	\$6,470,000	\$279,000	\$0	\$0	\$9,522,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Value Engineering		
Project ID	10290030	CIP Number	
CIP Subtype	Allowances	Sewer Number	

Purpose and Justification Value Engineering will identify and creatively solve problems. It is an organized process that achieves the best balance among function, cost and performance. This process offers alternatives while assuring that quality, reliability, life cycle costs, and other critical factors are met.	Impact to Operating Budget This process should help reduce Life Cycle Cost, including the operating budget.
	Description and Location Value Engineering is a systematic approach to manage value through innovative change. It will confirm design direction and guide in making difficult choices.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$2,750,000	\$875,000	\$375,000	\$1,500,000	\$2,750,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$2,750,000	\$875,000	\$375,000	\$1,500,000	\$2,750,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$875,000	\$375,000	\$375,000	\$375,000	\$375,000	\$375,000	\$2,750,000

Prior Legislation Action	
Dec 2008, Dec 2009	

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$400,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	WWT Roofing and Paving Rehab/Replacement		
Project ID	10280150	CIP Number	2008-07
CIP Subtype	Treatment	Sewer Number	5970

Purpose and Justification The WWT Division is responsible for structures throughout the MSD service area. The purpose of the assessment by KZF in 2006 was to provide a guideline which MSD can follow to maintain its infrastructure in an organized fashion. The scope for this project is to request an adjusted annual cost for the next 20 years.	Impact to Operating Budget
	Description and Location This project will replace or repair multiple roofs at the Sycamore and Mill Creek Treatment Plants in 2011. The facilities at Mill Creek include: Gravity Thickener Building, RAS Building, and Compressor Building. The facilities at Sycamore include: Sludge Storage Building 1 and 2, Storage Building, Primary Control Building, and West Pump Building.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$100,000	\$15,000	\$5,000	\$80,000	\$100,000
Project Administration	\$84,000	\$12,600	\$4,200	\$67,200	\$84,000
Miscellaneous Expense	\$0	\$1,300	\$0	\$0	\$1,300
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$4,000,000	\$457,000	\$710,000	\$3,200,000	\$4,367,000
Contingency	\$0	\$45,700	\$0	\$0	\$45,700
Field Eng & Inspection	\$0	\$41,000	\$0	\$0	\$41,000
Interest / Financing	\$0	\$2,500	\$0	\$0	\$2,500
Total	\$4,184,000	\$575,100	\$719,200	\$3,347,200	\$4,641,500

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$575,100	\$719,200	\$209,200	\$209,200	\$209,200	\$209,200	\$2,131,100

Prior Legislation Action	
Dec 2007, Dec 2008, Dec 2009, Mar 2010, Sep 2010	

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$419,000	\$0	\$0	\$0	\$0	\$419,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	WWT System Asset Renewal	
Project ID	10280180	CIP Number
CIP Subtype	Treatment	Sewer Number

Purpose and Justification This project will allow MSDGC to replace entire assets or portions of assets within the treatment facilities that are currently unable, or anticipated to be unable to meet their defined levels of service. This project is necessary to cost-effectively extend asset life while protecting and preserving public health and the environment.	Impact to Operating Budget
	Description and Location This project will evaluate wastewater treatment facility assets throughout the District using standardized condition assessment and reliability tools and methodologies. Defective assets, or portions of assets, will be discovered throughout the year either through preventive maintenance and the above mentioned condition assessment activities or after a failure. Sub-projects within this parent project estimated at less than \$50,000 can be constructed without further legislation.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$3,475,000	\$0	\$347,500	\$3,127,500	\$3,475,000
Project Administration	\$1,150,000	\$0	\$115,000	\$1,035,000	\$1,150,000
Miscellaneous Expense	\$1,650,000	\$0	\$165,000	\$1,485,000	\$1,650,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$15,000,000	\$0	\$1,500,000	\$13,500,000	\$15,000,000
Contingency	\$1,650,000	\$0	\$150,000	\$1,350,000	\$1,500,000
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$22,925,000	\$0	\$2,277,500	\$20,497,500	\$22,775,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$2,277,500	\$4,555,000	\$4,555,000	\$4,555,000	\$4,555,000	\$20,497,500

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$5,280,000	\$5,544,000	\$5,821,000	\$6,112,000	\$6,418,000	\$29,175,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Walnut Hills Basin Study		
Project ID	10240032	CIP Number	
CIP Subtype	CSO	Sewer Number	

Purpose and Justification

The study area encompasses intensely developed areas of the City of Cincinnati, from which the runoff of stormwater has surpassed the capacity of the existing combined trunk sewers to convey wet weather flows without significant surcharging. Most of the combined trunk sewers within the area date to the 1890's, and will need replacement or rehabilitation within the next 2-3 decades. This study will include examining opportunities to remove stormwater from the combined sewer system by means of renewable source-control strategies.

Impact to Operating Budget

Description and Location

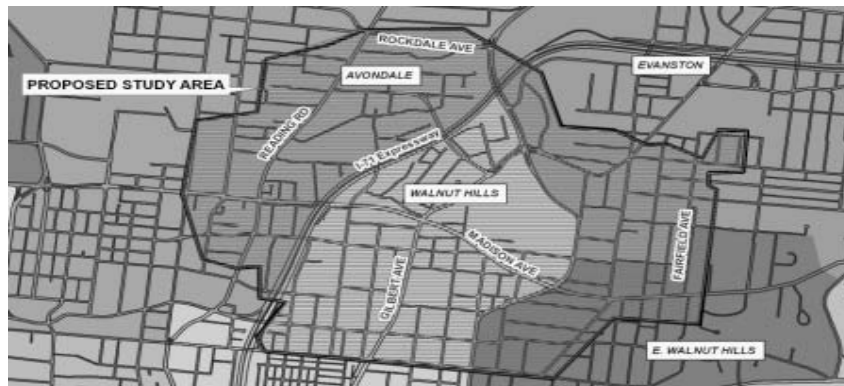
This basin study will establish a comprehensive plan needed for the sizing of replacement of the combined trunk sewer network within the study area, taking into consideration the long-term opportunities for source-control of stormwater utilizing both sustainable and traditional "grey" infrastructure strategies. This study encompasses 1000 acres of the Walnut Hills, Evanston, Avondale and East Walnut Hills neighborhoods of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$800,000	\$0	\$800,000	\$0	\$800,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$800,000	\$0	\$800,000	\$0	\$800,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000

Prior Legislation Action

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$800,000	\$0	\$0	\$0	\$0	\$800,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Water Quality Program		
Project ID	10290015	CIP Number	
CIP Subtype	Treatment	Sewer Number	

Purpose and Justification

This project will develop and implement a MSD-wide water quality program which includes the creation of a water quality model. This will incorporate the work of internal (WWT, WWC, DIW) and external stakeholders (i.e. Hamilton County Health District). The results of this work will ultimately aid MSD in developing watershed based levels of service.

Impact to Operating Budget

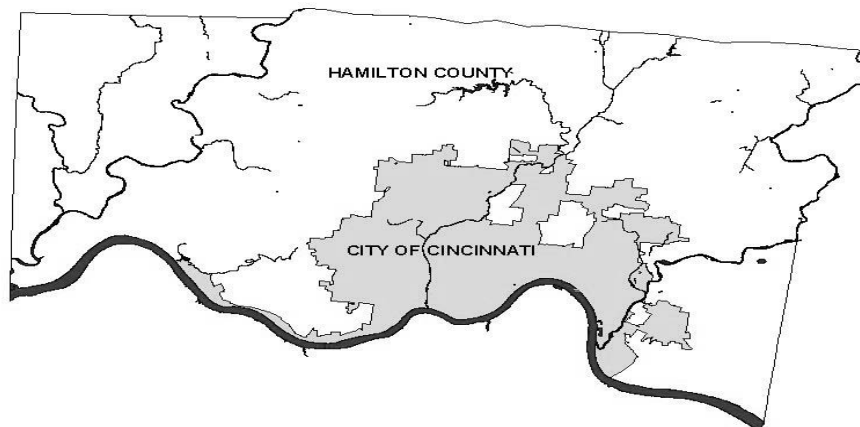
Description and Location

This project will develop and implement a MSD-wide water quality program which includes the creation of a water quality model.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$2,536,000	\$0	\$268,000	\$2,268,000	\$2,536,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$2,536,000	\$0	\$268,000	\$2,268,000	\$2,536,000

Projected Legislation Dates						
Prior Legislation	2011 Phase 1	2012	2013	2014	2015	Project Total
\$0	\$268,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,268,000

Prior Legislation Action



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	Wesselman Road Sewer Phase 2-A	
Project ID	10221220	CIP Number
CIP Subtype	Sewer	Sewer Number

Purpose and Justification

This project will allow for the elimination of the following: Hampton Pointe Pump Station, Diamond Oaks private treatment plant, septage holding tank serving the Nathaniel Greene Lodge, private pump station for Clearwater Crossing, and provide a viable option to eliminate the Glenview Pump Station at a later date.

Impact to Operating Budget

Description and Location

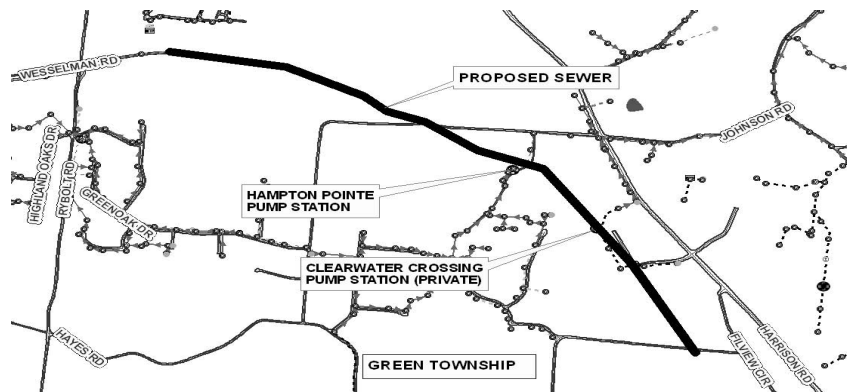
This project will install approximately 7,220 feet of 12-24 inch sewer to enable elimination of the Hampton Pointe Pump Station, activate existing dry line sewers serving approximately 45 homes in the Glens of Hutchinson subdivision, provide public sewer to the Diamond Oaks Career Development Center campus, to enable the elimination of a septage holding tank serving the Nathanael Green Lodge, and to enable the elimination of a private pump station for Clearwater Crossing. This project is located in Green Township.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$550,000	\$550,000	\$0	\$0	\$550,000
Project Administration	\$190,000	\$120,000	\$70,000	\$0	\$190,000
Miscellaneous Expense	\$50,000	\$50,000	\$0	\$0	\$50,000
Right-of-Way	\$575,000	\$575,000	\$0	\$0	\$575,000
Construction	\$3,200,000	\$0	\$3,200,000	\$0	\$3,200,000
Contingency	\$470,000	\$0	\$470,000	\$0	\$470,000
Field Eng & Inspection	\$145,000	\$0	\$145,000	\$0	\$145,000
Interest / Financing	\$52,500	\$0	\$52,500	\$0	\$52,500
Total	\$5,232,500	\$1,295,000	\$3,937,500	\$0	\$5,232,500

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$1,295,000	\$3,937,500	\$0	\$0	\$0	\$5,232,500

Prior Legislation Action
Jan 2010

Cashflow	2011	2012	2013	2014	2015	5 Year Cashflow
	\$1,250,000	\$250,000	\$1,200,000	\$1,000,000	\$100,000	\$3,800,000



2011 Capital Budget and Capital Improvement Program

Friday, December 03, 2010

Department	Metropolitan Sewer District of Greater Cincinnati	
Project Title	West Fork Basin Regional Strategy Development	
Project ID	10200005	CIP Number
CIP Subtype	Sewer	Sewer Number

Purpose and Justification

The upper portions of the West Fork Basin contain multiple pump stations. The costs associated with continuing to operate, maintain, and replace these pump stations in conjunction with the development that is occurring in this area, warrants the development of a regional basin strategy that will evaluate alternatives to the current management of this region of the West Fork Basin.

Impact to Operating Budget

Description and Location

This project will result in a strategy for the management of this region of the West Fork Basin. The study area includes portions of Green Township and the Mt. Airy, Westwood, and Northside neighborhoods of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$500,000	\$0	\$500,000	\$0	\$500,000
Design	\$0	\$0	\$0	\$0	\$0
Project Administration	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0
Field Eng & Inspection	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
Total	\$500,000	\$0	\$500,000	\$0	\$500,000

Projected Legislation Dates	2011 Phase 1	2012	2013	2014	2015	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$500,000	\$0	\$0	\$0	\$0	\$500,000

Prior Legislation Action

