



Sewage Disposal System Capital Improvement Program

Fiscal Years 2009 Through 2013
July, 2008

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City of Detroit

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**Sewage Disposal System
Capital Improvement Program
Fiscal Years 2008-09 Through 2012-13
July, 2008**

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Detroit Water and Sewerage Department
Capital Improvement Program
Fiscal Years 2008-09 through 2012-13
July, 2008

Executive Management Team

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Sewage Disposal System Detroit Water and Sewerage Department Capital Improvement Programs

OVERVIEW

The attached report summarizes the capital planning agenda for the DWSD Sewage Disposal System. This should be considered a planning document – the CIP is a dynamic and evolving plan that requires continual review and modification during the course of each year. The estimates indicated in the early years of the attached report are likely more precise than those in the later years. The project descriptions represent brief synopses of the entire project scope; these descriptions are generally more precise for ongoing active projects than for planned new projects, where specific project activities may have yet to be determined.

DEFINITIONS

Funded Portion of the Programs

The Water System and Sewerage System capital improvement programs cover a five fiscal year planning horizon. However, only the first year or two of the programs are actually funded. The department uses the pay as you go method of capital project funding rather than financing projects 100% in advance. The department uses maximum debt financing to pay for the capital programs. This means that the programs are paid for primarily through the sale of revenue bonds, with only a small amount of capital financing provided directly from annual revenues. These fiscal policies allow the department to minimize the impact of the capital programs on water and sewage rates.

Projected Expenditures Spread by Fiscal Year

In the Water System and Sewerage System capital improvement programs, when project funding requirements are displayed spread by fiscal year, the dollar amount shown for the projects is the estimated expenditures for each fiscal year throughout the life of the projects. This type of presentation identifies what the financial requirements would be, using the pay as you go method of financing, which is the method currently in use by DWSD.

Project Types

The typical capital project consists of three distinct phases: study, design and construction. In some cases, phases are combined, such as study/design or design/construction. For capital program purposes, each phase is considered a separate project. Financing is committed only for the current project phase, and not for any subsequent phase until that phase has been authorized to start. Project identified as ongoing have been authorized to start by the director and the work is underway. Project identified as new have not yet started.

Project Detail Sections

Active Project: is a project that has an assigned DRMS number, been issued the Notice to Start Work, had expenditures in the last fiscal year and has projected expenditures of more than \$100,000 in the current fiscal year.

Project On Hold: is a project that has an assigned DRMS number, experienced expenditures prior to the last fiscal year, and experienced no expenditures in the last fiscal year, and/or no projected expenditures in the current fiscal year.

Sewage Disposal System Detroit Water and Sewerage Department Capital Improvement Programs

Projects Under Procurement: is a project that has an assigned DRMS number and has not been issued Notice to Start Work.

Projects Pending Close-out: is a project that has an assigned DRMS number, been issued the Notice to Start Work, has projected expenditures for the current fiscal year equal to \$100,000 or less – with no further projected expenditures, and has been substantially completed.

New Project: is a project that does not have an assigned DRMS number, has a proposal, and has never had expenditures charged to it.

Primary Project Purpose

- 1 – Directly mandated projects (Specific projects mandated by regulatory agencies or court ordered)
- 2 – Projects mandated by regulatory requirements to maintain compliance
- 3 – Projects required to maintain or improve system reliability and/or capacity
- 4 – Projects that utilize technological advances to improve operational efficiency, worker productivity and/or managerial effectiveness
- 5 – Projects required for new service

Allocation Status

- D – Detroit Only
- S – Suburban Only
- M – Macomb Only
- C/O – Clinton/Oakland Only
- C/O & M – Clinton/Oakland and Macomb
- 83/17 – New Wet Weather Facility
- CTA - Common To All

Project Types

- S – Study; S/D – Study and Design; S/D/C – Study, Design and Construction;
- S/D/CA – Study, Design and Construction Assistance
- D – Design; DB – Design Build; DBA – Design Build Assistance;
- D/C – Design and Construction; D/CA – Design and Construction Assistance
- C – Construction; CA – Construction Assistance;
- CM – Construction Management
- C/CA – Construction and Construction Assistance
- IT – Information Technology Systems
- LS – Legal Services
- PO – Purchase Order

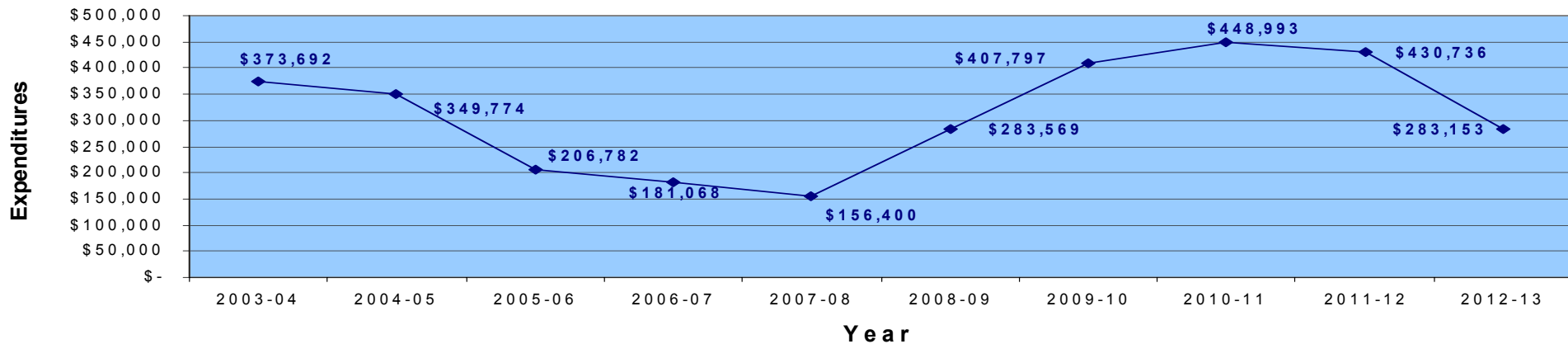
Legend

(1) Costs shown represent the Sewage Disposal System’s portion of the project. Refer to the Water CIP for project costs financed by the Water Supply System.

**Sewage Disposal System
Capital Improvement Program
CIP Executive Summary
(000)**

	<u>2008 - 09</u>	<u># of Projects</u>	<u>2009 - 10</u>	<u>2010 - 11</u>	<u>2011 - 12</u>	<u>2012 - 13</u>	<u>Remaining</u>	<u>Total</u>
Ongoing								
Active	183,220	50	134,310	44,730	15,950	10,578	12,279	401,067
Under Procurement	96,666	17	215,191	297,450	276,493	163,863	128,128	1,177,791
Pending Close-out	175	7	0	0	0	0	0	175
Ongoing Total	<u>280,061</u>	<u>74</u>	<u>349,501</u>	<u>342,180</u>	<u>292,443</u>	<u>174,441</u>	<u>140,407</u>	<u>1,579,033</u>
New Projects Total	<u>3,508</u>	<u>16</u>	<u>58,296</u>	<u>106,813</u>	<u>138,293</u>	<u>108,712</u>	<u>117,613</u>	<u>533,235</u>
Total CIP	<u>\$ 283,569</u>	<u>90</u>	<u>\$ 407,797</u>	<u>\$ 448,993</u>	<u>\$ 430,736</u>	<u>\$ 283,153</u>	<u>\$ 258,020</u>	<u>\$ 2,112,268</u>

Actual and Projected Expenditures by Fiscal Year



Notations: 2003-04 thru 2007-08 totals are actual expenditures
2008-09 thru 2012-13 are projected expenditures

Summary of Projected Expenditures Spread by Fiscal Year

**Sewage Disposal System
Capital Improvement Program**

Summary of Projected Expenditures Spread by Fiscal Year for Ongoing and New Projects

(000)

	<u>2008 - 09</u>	<u>2009 - 10</u>	<u>2010 - 11</u>	<u>2011 - 12</u>	<u>2012 - 13</u>	<u>Remaining</u>	<u>Total</u>
Plant							
Primary Treatment	1,206	8,967	16,102	26,690	17,240	1,095	71,300
Secondary Treatment	1,047	5,351	12,435	18,450	11,416	1,500	50,199
Solids Handling	635	7,600	14,250	11,421	100		34,006
Disinfection	52,100	73,000	73,000	72,000	36,100	9,482	315,682
General Purpose	27,435	20,471	21,382	21,045	6,555	15,300	112,188
	<u>\$82,423</u>	<u>\$115,389</u>	<u>\$137,169</u>	<u>\$149,606</u>	<u>\$71,411</u>	<u>\$27,377</u>	<u>\$583,375</u>
Facilities							
Sewer Interceptor System	550	5,077	10,930	22,256	29,000	94,000	161,813
Combined Sewer System	130,366	212,325	255,411	235,674	159,418	135,481	1,128,675
Lateral Sewer Replacement	44,750	47,981	35,018	20,000	20,000		167,749
Planning and Administration	25,480	27,025	10,465	3,200	3,324	1,162	70,656
	<u>\$201,146</u>	<u>\$292,408</u>	<u>\$311,824</u>	<u>\$281,130</u>	<u>\$211,742</u>	<u>\$230,643</u>	<u>\$1,528,893</u>
Ongoing Projects	280,061	349,501	342,180	292,443	174,441	140,407	1,579,033
New Projects	3,508	58,296	106,813	138,293	108,712	117,613	533,235
TOTAL CAPITAL COSTS	<u>\$283,569</u>	<u>\$407,797</u>	<u>\$448,993</u>	<u>\$430,736</u>	<u>\$283,153</u>	<u>\$258,020</u>	<u>\$2,112,268</u>

Projected Expenditures Spread by Fiscal Year

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
(000)**

	<u>2008 - 09</u>	<u>2009 - 10</u>	<u>2010 - 11</u>	<u>2011 - 12</u>	<u>2012 - 13</u>	<u>Remaining</u>	<u>Total</u>
Combined Sewer System							
Ongoing	129,826	193,238	229,258	210,714	137,418	120,635	1,021,089
New	540	19,087	26,153	24,960	22,000	14,846	107,586
	<u>\$130,366</u>	<u>\$212,325</u>	<u>\$255,411</u>	<u>\$235,674</u>	<u>\$159,418</u>	<u>\$135,481</u>	<u>\$1,128,675</u>
Lateral Sewer Replacement							
Ongoing	43,750	27,981	15,018				86,749
New	1,000	20,000	20,000	20,000	20,000		81,000
	<u>\$44,750</u>	<u>\$47,981</u>	<u>\$35,018</u>	<u>\$20,000</u>	<u>\$20,000</u>		<u>\$167,749</u>
Planning and Administration							
Ongoing	24,730	25,625	8,465	200	200	1,010	60,230
New	750	1,400	2,000	3,000	3,124	152	10,426
	<u>\$25,480</u>	<u>\$27,025</u>	<u>\$10,465</u>	<u>\$3,200</u>	<u>\$3,324</u>	<u>\$1,162</u>	<u>\$70,656</u>
<u>Facilities Total</u>							
Ongoing Projects	198,756	248,321	253,971	211,064	137,618	121,645	1,171,375
New Projects	2,390	44,087	57,853	70,066	74,124	108,998	357,518
	<u>\$201,146</u>	<u>\$292,408</u>	<u>\$311,824</u>	<u>\$281,130</u>	<u>\$211,742</u>	<u>\$230,643</u>	<u>\$1,528,893</u>
Summary - Total Costs							
Ongoing Projects	280,061	349,501	342,180	292,443	174,441	140,407	1,579,033
New Projects	3,508	58,296	106,813	138,293	108,712	117,613	533,235
TOTAL CAPITAL COSTS	<u>\$283,569</u>	<u>\$407,797</u>	<u>\$448,993</u>	<u>\$430,736</u>	<u>\$283,153</u>	<u>\$258,020</u>	<u>\$2,112,268</u>

Summary of Mandate and Allocation Status by Fiscal Year

**Sewage Disposal System
Capital Improvement Program
Summary of Primary Project Purpose & Allocation Status
Projected Expenditures Spread by Fiscal Year
(000)**

SUMMARY BY PRIMARY PROJECT PURPOSE AND ALLOCATION	2008 - 09	2009 - 10	Funded	2010 - 11	2011 - 12	2012 - 13	Remaining	Total
Directly Mandated Projects								
Detroit Only	421	1,000	1,421	413	0	0	0	1,834
New Wet Weather Facility	106,655	181,048	287,703	225,375	209,714	137,418	120,635	980,845
Common to All	55,648	73,000	128,648	73,000	72,000	36,100	4,162	313,910
Projects Mandated by Regulatory Requirements to Maintain Compliance								
Detroit Only	21,281	25,527	46,808	20,601	1,450	0	0	68,859
Macomb Only	362	8,382	8,744	6,022	0	0	0	14,766
Clinton/Oakland & Macomb Only	0	100	100	0	0	0	0	100
New Wet Weather Facility	1,950	2,832	4,782	11,000	2,510	0	0	18,292
Common to All	13,827	29,150	42,977	52,720	76,083	42,796	34,561	249,137
Projects Required to Maintain or Improve System Reliability and/or Capacity								
Detroit Only	36,150	33,273	69,423	21,518	20,600	20,600	0	132,141
Suburban Only	50	1,154	1,204	1,030	0	0	0	2,234
Macomb Only	50	2,250	2,300	1,100	6,000	6,000	3,300	18,700
Clinton/Oakland & Macomb Only	100	1,500	1,600	6,000	22,000	29,000	94,000	152,600
Common to All	20,116	19,208	39,324	13,844	15,392	8,039	352	76,951
Projects that Utilize Technological Advances to Improve Operational Efficiency, Worker Productivity and/or Management Effectiveness								
Detroit Only	22,970	22,670	45,640	6,460	0	0	0	52,100
Common to All	3,989	6,703	10,692	9,910	4,987	3,200	1,010	29,799
TOTAL	\$283,569	\$407,797	\$691,366	\$448,993	\$430,736	\$283,153	\$258,020	\$2,112,268

**Sewage Disposal System
Capital Improvement Program
Summary of Primary Project Purpose & Allocation Status
Projected Expenditures Spread by Fiscal Year
(000)**

SUMMARY BY ALLOCATION STATUS	2008 - 09	2009 - 10	Funded	2010 - 11	2011 - 12	2012 - 13	Remaining	Total
Detroit Only	80,822	82,470	163,292	48,992	22,050	20,600	0	254,934
Suburban Only	50	1,154	1,204	1,030	0	0	0	2,234
Macomb Only	412	10,632	11,044	7,122	6,000	6,000	3,300	33,466
Clinton/Oakland & Macomb Only	100	1,600	1,700	6,000	22,000	29,000	94,000	152,700
New Wet Weather Facility	108,605	183,880	292,485	236,375	212,224	137,418	120,635	999,137
Common to All	93,580	128,061	221,641	149,474	168,462	90,135	40,085	669,797
TOTAL	\$283,569	\$407,797	\$691,366	\$448,993	\$430,736	\$283,153	\$258,020	\$2,112,268
Detroit Only	29%	20%	24%	11%	5%	7%	0%	12%
Suburban Only	<1%	<1%	<1%	<1%	0%	0%	0%	<1%
Macomb Only	<1%	3%	2%	2%	1%	2%	1%	2%
Clinton/Oakland & Macomb Only	<1%	<1%	<1%	1%	5%	10%	36%	7%
New Wet Weather Facility	38%	45%	42%	53%	49%	49%	47%	47%
Common to All	33%	31%	32%	33%	39%	32%	16%	32%

**Sewage Disposal System
Capital Improvement Program
Summary of Primary Project Purpose & Allocation Status
Projected Expenditures Spread by Fiscal Year
(000)**

SUMMARY BY PRIMARY PROJECT PURPOSE	2008 - 09	2009 - 10	Funded	2010 - 11	2011 - 12	2012 - 13	Remaining	Total
Directly Mandated Projects	162,724	255,048	417,772	298,788	281,714	173,518	124,797	1,296,589
Projects Mandated by Regulatory Requirements to Maintain Compliance	37,420	65,991	103,411	90,343	80,043	42,796	34,561	351,154
Projects Required to Maintain or Improve System Reliability and/or Capacity	56,466	57,385	113,851	43,492	63,992	63,639	97,652	382,626
Projects that Utilize Technological Advances to Improve Operational Efficiency, Worker Productivity and/or Management Effectiveness	26,959	29,373	56,332	16,370	4,987	3,200	1,010	81,899
TOTAL	\$283,569	\$407,797	691,366	\$448,993	\$430,736	\$283,153	\$258,020	\$2,112,268
RELATIVE PERCENTAGE								
Directly Mandated Projects	57%	63%	60%	67%	65%	61%	48%	61%
Projects Mandated by Regulatory Requirements to Maintain Compliance	13%	16%	15%	20%	19%	15%	13%	17%
Projects Required to Maintain or Improve System Reliability and/or Capacity	20%	14%	16%	10%	15%	22%	38%	18%
Projects that Utilize Technological Advances to Improve Operational Efficiency, Worker Productivity and/or Management Effectiveness	10%	7%	8%	4%	1%	1%	<1%	4%

A - Active Projects

An Active Project is a project that has:

1. an assigned DRMS number
2. been issued the Notice to Start Work
3. had expenditures in the last fiscal year
4. expenditures of more than \$100,000 in the current fiscal year

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Primary Treatment													
1 New Troughs and Weirs for Primary Clarifiers 13-16	004173	962	IH-100	S/D	200	68					268	2	CTA
<i>This project involves in-house study and design services for either replacing or rehabilitating existing troughs, weirs, and baffles for Primary Circular Clarifiers.</i>													
2 Improvements to Rectangular Primary Clarifier Pipe Gallery and Rehabilitation of Scum Cross Collectors	004227	291	IH-104	S/D	500	585					1,085	2	CTA
<i>The work to be completed under this project will include the study and design work for designing ventilation and atmospheric control for the rectangular primary pipe gallery; providing new lights and emergency lights; replacement of main collectors, cross collectors in rectangular primary clarifier nos. 5, 6, 7, & 8 and its associated mechanical and electrical items.</i>													
Secondary Treatment													
3 Secondary Clarifiers, RAS Pumps and MCCs Improvements	004211	1100	CS-1451	S/D/CA	413	300	150	150	116		1,129	2	CTA
<i>This project involves providing the necessary study, design, and construction assistance services for a new power supply cable to/from the secondary clarifiers and substation MCCs, provide new MCCs at each secondary clarifier, provide short-circuit analysis and fault rating, provide detailed hydraulic analysis and sizing of the pumps related to secondary clarifiers RAS pumping, provide 25 RAS pumps at the secondary clarifiers and complete all miscellaneous electrical work such as replacement of cables, conduit, pull boxes, panels and junction boxes, etc.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
4 Improvements to the Influent Mixed Liquor System of Secondary Clarifiers	004288	1145	IH-105	S/D	184						184	2	CTA
<i>The work will include the replacement of 48' mixed liquor motor operated butterfly valves, 48" mixed liquor manual isolation valves and rehabilitation/ replacement of defective mixed liquor pipes for all the 25 secondary clarifiers.</i>													

Disinfection

5 Study, Design, & Construction Management Services for Modified Detroit River Outfall No. 2 - WWTP	004178	1117	CS-1448	S/D/CA	1,750	2,500	2,500	1,500	500	62	8,812	1	CTA
<i>This project will involved limited study, detailed design, preparation of construction plans, and construction management services necessary to implement the modified Detroit River Outfall No. 2 in accordance with NPDES Permit requirements.</i>													

General Purpose

6 Oversight Technical Support for Department-wide Instrumentation, Control and Computer System Program Phase II (1)	003423	49	CS-1294	DBA	274						274	1	CTA
<i>This project involves the oversight and technical assistance for department-wide instrumentation and computers to be used for data acquisition and control of DWSD systems.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
7 Department-wide Instrumentation, Control and Computer System Program Phase II (1)	003423	49	PC-713	DB	2,324						2,324	1	CTA
<i>This project provides for department-wide instrumentation and computers to be used for data acquisition and control of DWSD systems. PC-713 will be designed, built and maintained by the contractor.</i>													
8 As-needed Engineering Services (1)	003446	52	CS-1340	D	125	55					180	3	CTA
<i>This project provides rapid design turn-around for a variety of small scale projects which have not been initiated due to lack of in-house engineering staff.</i>													
9 As-needed Engineering Services (1)	003453	55	CS-1346	D	1,546						1,546	3	CTA
<i>This project provides rapid design turn-around for a variety of small scale projects which have not been initiated due to lack of in-house engineering staff.</i>													
10 As-needed Engineering Services For Concrete Testing, Geotechnical Soil Borings and Other Related Services (1)	003511	395	CS-1347	D/C	185						185	3	CTA
<i>The purpose of this project is to provide field investigation, testing, monitoring and inspection services on an as-needed basis for a variety of small scale projects.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.												
11 Geotechnical Engineering Services on an As-needed Basis (1)	003778	571	CS-1372	S/D	9,151	6,710	500				16,361	3	CTA
<i>This project provides geotechnical and related consulting services on an as-needed basis as requested by DWSD. This work consists of reviewing designs impacting DWSD facilities and responding to geotechnical emergencies. This project will also provide necessary services for field investigations to determine the geotechnical parameters affecting project feasibility, design, construction phasing, and the potential impact of construction on adjacent DWSD structures and DWSD operations.</i>													
12 As-needed Aerial Photography, Related Aerial Survey, Ground Survey and Related Services (1)	003780	409	CS-1343	C	1,000						1,000	3	CTA
<i>This project is being performed to procure professional services, on an as-needed basis, for aerial photography, strip and area topographic mapping using Global Positioning System or on an equivalent system.</i>													
13 Consultant Contract for Instrumentation & Control System Repair and Engineering Services at WWTP	003928	610	CS-1392	S/D/C	2,203	2,203	2,201				6,607	2	CTA
<i>Procurement, acquisition and installation of new instrumentation for control system and training in the new system.</i>													
14 Facilities As-built Documentation Development and Maintenance Services (1)	003951	380	CS-1333	D	535	535	534	534			2,138	4	CTA
<i>This project involves compiling & updating existing "as-built" drawings for DWSD facilities, creating "as-built" drawings where none exist, procuring & installing equipment to implement a network database system for storage, and retrieving the "as-built drawings and subjected facility manuals.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
15 Power Enhancement - Primary Service Conversion and PCB Disposal (1)	004144	1082	DWS-837C	DB	846	200					1,046	2	CTA
<i>This project involves the replacement of existing PLD primary power feed system with DTE at Fairview Sewage Pumping Station, Central Service Facility and the Water Board Building.</i>													
16 Emergency Generators at the Wastewater Treatment Plant	004161	1086	PC-754	DB	220						220	2	CTA
<i>This project will involve providing various size generators throughout the WWTP, portable generators and their connection points, enhanced training, additional O&M procedures, fuel storage facilities, a storage recording system, and full maintenance and inspection; revising the power interlock scheme as necessary; and other ongoing contracts throughout the WWTP.</i>													
17 Department-wide Roof Replacement and Repair III (1)	004166	1027	DWS-857	D/C	1,020	543					1,563	3	CTA
<i>This project involves repairing, removing or replacing existing built-up and shingle type roofs on an as-needed basis.</i>													
18 Plant-wide Fire Alarm Systems Upgrade/ Integration and Fire Protection Improvements	004180	1028	CS-1443	S/D/CA	500	491	100	100	50		1,241	3	CTA
<i>This project involves the necessary study, design, and construction assistance for the installation of an Integrated Plant Wide Fire Alarm System in the approximately 100 buildings (of which 50 + have a standalone fire alarm system) at the WWTP in order to facilitate centralized monitoring and assure faster corrective action. The new system will be interfaced with the existing WWTP Control System so that signals associated with this system can be transmitted over the existing fiber optic cables as a physical media for interconnection of the standalone systems.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.				2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
19 Underground Electrical Duct Bank Repair and EB-1, EB-2, and EB-10 Primary Power Service Improvements - WWTP <i>This project involves the necessary study, design, and construction assistance work for repairing the 15kv Primary Switch Gears A & B, unit substation EB-1, EB-2, and EB-10, unit 5kv substation and switchgear DE-1, and two outdoor 3-phase primary transformers; and repair of building structure and associated components. The work will also include site preparation, installation of new ducts, placement of new electrical cable, coordination of system shut-down, and coordination of system reconnection with new cables.</i>	004181	366	CS-1449	S/D/CA	570	570	370	320	207	100	2,137	2	CTA
20 General Engineering Services (1) <i>This project will involve the study, design and construction assistance services for a variety of disciplines including, but not limited to, civil, architectural, structural, geotechnical, hydraulics, mechanical, piping, electrical, and instrumentation in a variety of tasks on an as-needed basis. Further tasks may involve one or more DWSD facilities including, but not limited to water treatment plants, water distribution system including booster stations, wastewater treatment plant, wastewater collection systems including pumping stations, combined sewer overflow facilities, and administrative and logistical support facilities.</i>	004207	1031	CS-1432A	D	875	750	625	625			2,875	3	CTA
21 Low Voltage Wiring Contract (1) <i>This project involves a vendor providing assistance with installing and maintaining the Department's low voltage wiring, telephone wiring and cable, data connections, antenna mounting and connections, instrument wiring, fiber networks, speaker, paging systems and code call system. It also includes system improvements and planning, system configuration and material procurement in support of the activities required completing each task.</i>	004210	1058	DWS-866	IT	966	967	220				2,153	4	CTA

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Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary	Allocation
	No.											Project	Status
22 As-needed CIP Implementation Assistance and Related Services (1)	004218	956	CS-1433	S/D/CM	2,400	1,800					4,200	3	CTA
<i>This project provides for multi-discipline Engineering services on an "as-needed basis" to support DWSD's Water & Sewer Systems.</i>													
23 Asbestos and Lead Based Paint Abatement for All DWSD Facilities on an As-needed Basis II (1)	004223	968	DWS-854	C	372						372	2	CTA
<i>This project involves the removal and disposal of asbestos containing materials and lead based paint coating some of the piping, ceilings, floors, equipment, and other items at various DWSD owned and operated facilities throughout southeastern Michigan; it also involves training for DWSD staff to identify asbestos.</i>													
24 General Engineering Services (1)	004293	1182	CS-1481	D	875	850	850	300			2,875	3	CTA
<i>This project provides for rapid design turn-around for a variety of small scale projects on an as needed basis providing multi disciplinary professional services.</i>													

Sewer Interceptor System

25 Sewage Metering - Primary Measuring Device Improvements - Group No. 1	001770	61	CS-1225	D	50	54	30				134	3	S
<i>This project involves design modifications for various Suburban Sewage Meter Pits and construction assistance during construction phases.</i>													

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(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Combined Sewer System													
26 Conner Creek & Fox Creek Stations Rehabilitation	001736	75	PC-674	C	900						900	1	CTA
<i>Rehabilitate and modernize the Conner Creek Station and Fox Creek Backwater Gate Building.</i>													
27 Long Term CSO Control Plan - Phase III	001796	85	CS-1281	S/D	1,500	251					1,751	2	83/17
<i>The objective of this project is the development and implementation of DWSD's Long Term CSO program. The scope of services includes, but may not be limited to, the following tasks: evaluate the performance and effectiveness of the Phase II CSO control facilities; perform pilot projects for source controls, rapid disinfection and screening, a retention/treatment facility at Conner Creek; design and construct improvements at Baby Creek; assist with land acquisition for future CSO facilities; modify and incorporate demonstration facilities performance and evaluations of the CSO pilot projects into Detroit's Long Term CSO Control Plan; coordinate with MDEQ on CSO issues; partner with suburban tier 1 customers; provide technical assistance and monitoring work currently being performed by other consultants on various CSO related projects.</i>													
28 Conner Creek CSO Pilot Facility	001799	87	CS-1284	S/D/CA	95						95	1	83/17
<i>This project consists of study, design and construction assistance services for the construction of a pile supported reinforced concrete combined sewer overflow detention facility.</i>													

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(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.				2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
29 Baby Creek CSO Pilot Control Facility	003250	101	PC-748	C	1,100						1,100	1	83/17
<i>Construction of a screening/ disinfecting/ regulating facility at the Baby Creek enclosure discharge point. Major elements of the work include deep excavation and temporary earth retention systems, new influent and effluent/ dewatering hydraulic structures, modification/ rehabilitation to existing interconnected hydraulic structures and erection of a Control and Screening Building and related site work..</i>													
30 Belle Isle Pump Station (Outfall 083) Improvements and CSO Control	003509	424	CS-1363	S/D/CA	151						151	1	D
<i>The purpose of this project is to provide engineering services for Study, Design, and Construction Management, for improvements to the Belle Isle Pump Station and CSO Basin.</i>													
31 Overhaul of Major Electrical Power Distribution Equipment (1)	003872	636	PO 2588491	C	769						769	3	CTA
<i>This project involves performing monthly equipment surveys, testing and calibration of equipment, and if necessary, overhaul or replacement of major electrical power distribution equipment at water and sewage pumping stations.</i>													
32 Inspection & In-Place Rehabilitation of Outfalls	003883	945	DWS-849	DB	6,478	1,297					7,775	2	CTA
<i>This project involves furnishing all labor, materials, and equipment to perform television inspection, cleaning, and rehabilitation/ lining of outfall sewers.</i>													

**Sewage Disposal System
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Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.				2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
33 Oakwood CSO Control Facility and Pump Station	004063	420	CS-1364	S/D/CA	3,300	3,300	1,097				7,697	1	83/17
<i>This project involves the necessary study, design and construction assistance for retrofitting the Oakwood Pump Station with screening devices to remove "floatables" and construct a disinfection system to demonstrate that the CSO discharges comply with MDNR requirements of adequate treatment.</i>													
34 CSO Control for Oakwood Pumping Station	004063	420	PC-755	C	61,000	56,000	9,572				126,572	1	83/17
<i>Retrofit Oakwood Pump Station with screening devices to remove "floatables" and construct a disinfection system to demonstrate that the CSO discharges comply with MDNR requirements of adequate treatment.</i>													
35 Bluehill Pumping Station Rehabilitation	004067	637	PC-685	C	4,400	568					4,968	2	D
<i>The work to be completed under this project includes: a new 120 MGD stormwater pump with VFD; replacement of three existing stormwater pumps of 250 MGD capacity each; replacement of stormwater dewatering pump; replacement of two 75 HP sanitary pumps; and replacement of switchgear. This project also includes structural, architectural, mechanical, electrical, and I/C modifications.</i>													
36 Consultant Services for Land Acquisition for Long Term CSO Control Program	004110	1078	CS-1407	S	969	954	954				2,877	1	83/17
<i>The consultant will initiate acquisition rights in private property and for rights in several properties under the administrative control of several Departments of the City of Detroit. They will also provide environmental site assessments, property appraisals, cost estimates, property surveys, property legal descriptions, and property acquisition negotiation assistance as needed.</i>													

**Sewage Disposal System
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Projected Expenditures Spread by Fiscal Year
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(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.												
37 Land Acquisition for Long Term CSO Control Program	004110	1078		C	3,459	3,459	3,459				10,377	1	83/17
<i>Long term CSO control program land acquisition allowance.</i>													
38 Belle Isle Main Pumping Station and CSO Control Improvements	004111	424	PC-753	C	180						180	1	D
<i>This project involves constructing new sewers on Belle Isle to create a single combined sewer district on the island in order to reduce or eliminate overflows of combined sewage to the Detroit river from Outfall No. 083, constructing new screening and disinfection facilities to provide treatment of combined sewer overflows in accordance with the City's Long-Term CSO Control Plan, increasing capacity to meet Belle Isle Park Master Plan flow projection, upgrading and repairing existing facility components to provide increased reliability of pumping station operations and reducing maintenance costs. This project also involves replacing Package Sanitary Pumping Stations on Belle Isle as well as rehabilitating 3 Control Structures on the DRI.</i>													
39 Detailed Design, Bidding, Construction Management, and Related Services for Upper Rouge Tunnel	004112	434	CS-1431	D/CM	9,922	12,369	14,002	12,221	9,505	11,107	69,126	1	83/17
<i>This project involves the design and construction management necessary to prepare a basis of design report and geotechnical baseline report for the intended, NPDES Permit mandated, Upper Rouge CSO Tunnel.</i>													
40 Clintondale and Fischer Pumping Station Improvements	004174	1093	CS-1421	S/D/CA	362	382	382				1,126	2	M
<i>This project involves study, design, and construction assistance services for the rehabilitation of the Clintondale Pumping Station.</i>													

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Projected Expenditures Spread by Fiscal Year
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(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
41 Clintondale and Fischer Pumping Station Improvements	004174	1093	CS-1421	S/D/CA 2	181	201	201				583	2	D
<i>This project involves study, design, and construction assistance services for the rehabilitation of the Fischer Pumping Station.</i>													
Lateral Sewer Replacement													
42 Department-wide Engineering Services II (1)	001772	107	CS-1240	D	800	800	318				1,918	3	D
<i>This project provides general engineering services for project-specific tasks for smaller scale projects, on an as-needed basis, as authorized by the general superintendent of Engineering.</i>													
43 Herman Gardens Hope VI Revitalization Housing Development (1)	004157	1095	PO 2669573	C	1,503						1,503	3	D
<i>This project involves installing approximately 29,250 feet of sewers and storm sewers of various sizes varying from 10-inches thru 36-inches in the development area, including all appurtenances and related structures in the City of Detroit.</i>													
44 East-side Existing Sewer Repair in the City of Detroit for In-place Rehabilitation of Existing Circular and Non-circular Sewers	004182	1129	DWS-865	DB	16,221	6,110					22,331	3	D
<i>In-place rehabilitation of existing sewers using the construction process, procedures, methods and equipment of the trenchless pipeline rehabilitation techniques for circular and non circular sewers on the East-side of Detroit.</i>													

Sewage Disposal System
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Projected Expenditures Spread by Fiscal Year
Active Projects
(000)

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
45 West-side Existing Sewer Repair in the City of Detroit for In-place Rehabilitation of Existing Circular and Non-circular Sewers	004183	1128	DWS-864	DB	16,626	6,313					22,939	3	D
<i>In-place rehabilitation of existing sewers using the construction process, procedures, methods and equipment of the trenchless pipeline rehabilitation techniques for circular and non circular sewers on the West-side of Detroit.</i>													

Planning and Administration

46 Study and Evaluation of DWSD Electric Utility Rates (1)	001792	120	CS-1272	S	500						500	3	CTA
<i>Engineering services for performing an electric energy audit, evaluating existing utility rates, studying alternative rates, addressing possible cost-saving methods and negotiating a new rate structure with the Detroit Edison Company.</i>													
47 Water Meter Replacement and Automatic Meter Reading Equipment Installation (1)	002003	131	CM-2007	DB	22,970	22,670	6,460				52,100	4	D
<i>This project involves replacing existing 5/8-inch through 12-inch residential and commercial water meters, within the City of Detroit, with new water meters and an automatic reading system.</i>													
48 Department-wide Furniture Acquisition/Purchase (1)	003348	136		PO	150	250					400	4	CTA
<i>This project is intended as a mechanism by which to purchase all furniture needs of the department.</i>													

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Projected Expenditures Spread by Fiscal Year
Active Projects
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
49 Document Control Improvement Program (DCIP) (1) <i>Implement computer-based facilities into a single database system including system design, installation and data entry; make existing documents to plant standard; include existing information in CAD or paper format.</i>	003878	948		S/D	200	205	205	200	200	1,010	2,020	4	CTA
50 Telecommunications System and Related Computer Network Upgrade and Replacement (1) <i>This project will study, design and implement LAN infrastructure changes in the Department's system and provide professional services to ensure work is consistent with industry standard practices.</i>	004176	553	CS-1381	IT	400						400	4	CTA
					<u>\$183,220</u>	<u>\$134,310</u>	<u>\$44,730</u>	<u>\$15,950</u>	<u>\$10,578</u>	<u>\$12,279</u>	<u>\$401,067</u>		

UP - Projects Under Procurement

A Project Under Procurement has:

1. an assigned DRMS number
2. not been issued the Notice to Start Work

**Sewage Disposal System
Capital Improvement Program
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Projects Under Procurement
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Primary Treatment													
1 Pump Station No. 2 Pumping Improvements	004215	961	CS-1444	S/D/CA	200	650	492	100			1,442	2	CTA
<i>This project involves evaluating and recommending alternatives for providing more reliable pumping capacity at Pump Station No. 2.</i>													
2 Rehabilitation of Primary Clarifiers, Drain Lines, Hot Water, and Scum Lines	004290	1141	CS-1484	S/D/CA	206	614	394	300	250		1,764	2	CTA
<i>The work will include rehabilitation of 12" drain lines from rectangular clarifiers Nos. 3-12, and replacement of hot water and scum pipe lines between the primary scum buildings and scum incinerator building. The scope of work will also include concrete repair work and replacement of main collectors in the primary rectangular clarifiers #5 thru 8, and other related work.</i>													
Solids Handling													
3 Complex I and Complex II Incinerator Improvements	004169	965	PC-774	DB	150	6,250	5,200	5,000			16,600	2	CTA
<i>This project involves study, design and construction for the short term (immediate needs) improvements of the complex I and complex II incinerators and conveyance system improvements.</i>													
4 Rehabilitate Sludge Pump Stations 1 and 2	004225	607	CS-1467	D/CA	285	515	250	100			1,150	2	CTA
<i>This project will provide for general rehabilitation of the Sludge Pump Station Nos. 1 and 2, including sludge pump improvements to meet future sludge loads, heating and ventilation improvements and other miscellaneous building and utility improvements.</i>													

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(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.												
5 Rehabilitation of Upper Level Belt Filter Presses for Complex II Dewatering	004284	1144	CS-1483	S/D/CA	200	650	450	300	100		1,700	2	CTA
<i>The work will consist of rehabilitation of 12 Upper Level Belt Filter Presses for Complex II Dewatering, SFE booster pumps, and all related supportive equipment including control panels and associated wiring.</i>													

Disinfection

6 Modified Detroit River Outfall No. 2 - WWTP	004178	1117	PC-771	C	50,350	70,500	70,500	70,500	35,600	4,100	301,550	1	CTA
<i>This project will modify the Detroit River Outfall No. 2 dewatering and plugging the as built flooded tunnel and build a new 23 feet diameter tunnel and connect to existing shaft, access shaft and diffusers, and commission the tunnel.</i>													

General Purpose

7 Consolidated Process Control System and Standardization for Construction Contracts (1)	003423	1153	PC-773	C	300	750	750	550			2,350	3	CTA
<i>This project will involve integrating the control and monitoring network throughout all of the DWSD facilities with the new SCADA system installed under PC-713. The work will include control system hardware, software, and firmware upgrade or replacement, also troubleshooting, installation, start-up, testing, and repair services. The scope of work will also include preparation of a DWSD Ovation Standards Manual to establish guidelines for incorporating processes into Ovation System through future design and construction contracts.</i>													

**Sewage Disposal System
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(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
8 Relocation of the Wastewater Treatment Plant Analytical Lab	004108	609	PC-760	C						14,500	14,500	2	CTA
<i>This project involves constructing a new Wastewater Treatment Plant Analytical Laboratory and relocating the staff and equipment from the existing MCHT Lag to the newly constructed lab.</i>													
9 As-needed Engineering Services for Concrete Testing, Geotechnical Soil Borings, other Testing Services, and Related Services (1)	004295	1147	CS-1488	D/C	125	1,000	1,000	700			2,825	3	CTA
<i>The scope of work will include as-needed engineering services for concrete testing, geotechnical soil borings, and other testing and related services.</i>													
10 Geotechnical and Related Services on an As-Needed Basis (1)	004307	1164	CS-1490	D	300	1,124	1,123	300			2,847	3	CTA
<i>The work includes consultant services for geotechnical work on as needed basis. The work may also include providing additional engineering/ technical services as requested by DWSD.</i>													

Sewer Interceptor System

11 Primary Measuring Device Improvements - Group No. 3	001715	60	PC-721	C		1,100	1,000				2,100	3	S
<i>Modifications to sewage metering facility No. OC-S-2 (Oakland County), which include changes to primary devices and appurtenances, cleaning and water-proofing the facilities, ventilating permanent light, and installing flushing water vaults.</i>													

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Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary	Allocation
	No.											Purpose	Status
12 Sewer Meter Replacement	004291	1167	CS-1485	S/D/CA	400	323	200	150			1,073	4	CTA

The work will provide for the study, design and implementation of the best sewer metering technology at 17 metering locations. This includes developing detailed design of abandoning, replacement or removal of existing sewer meters. The work will also include developing control system configuration diagrams which will define the system components, communication structure, operational interface, electrical interface, process flow diagrams, and process and instrumentation diagrams.

Combined Sewer System

13 Woodmere Pumping Station Rehabilitation	004093	958	PC-752A	C	7,900	7,900	3,300	1,000			20,100	2	D
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This project includes civil, architectural, mechanical, electrical rehabilitation work including but not limited to the rehabilitation of 3 storm water pumps of 165 mgd capacity each, 2 sanitary pumps of 7 mgd capacity each, replacement of switchgear, and related electrical and mechanical work.

14 Replacement of CSO Basins Control Systems	004275	1036	PC-761	C	350	1,591					1,941	2	83/17
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This project includes replacement of the existing INFI 90 Bailey Controls with improved and dependable controls at Fenkell/Puritan and Hubbell/Southfield CSO Basins.

**Sewage Disposal System
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(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.												
15 Upper Rouge CSO Control Project - South Tunnel	004299	434	PC-764	C 1	26,600	80,800	123,000	80,800	11,000	3,500	325,700	1	83/17
<p><i>The work involves constructing the South Tunnel and associated elements for the Upper Rouge Tunnel CSO Control Project. This includes approximately 3.5 miles of 30 ft finished inside diameter (ID) hard rock tunnel, 160 ft below ground, and 80 ft ID pump station shaft. This project will also provide for deaeration chambers and adits which will connect to the South Tunnel for the following sites: 1.) DS-2 Tireman (Outfall #060), 2.) DS-3 W. Chicago Collection Facility, 3.) DS-3A W. Chicago (Outfall #062/063), 4.) DS-4 Glendale (Outfall #064), 5.) DS-5 Lahser/Dolson (Outfall #065), and DS-6 Schoolcraft (Outfall #066).</i></p>													
16 Upper Rouge CSO Control Project - Near Surface Contract 1 - Warren, Tireman, W. Chicago	004300	434	PC-765	C 2		8,293	10,243	14,345	8,344		41,225	1	83/17
<p><i>The work will provide for Diversion Chambers, Surface Collectors, Surge Conduits, Surge Control Structures (SCS), and Surge Control Volumes (SCV). This also includes Drop Shafts down to de-aerations chambers, as needed modifications of existing Outfall Sewers and In-system Storage Devices and associated site/civil work for the following facilities: 1.) Drop Shaft No. DS-1 at Warren Collection Facility (Outfall ID No. 059), 2.) Drop Shaft No. DS-2 at Tireman Collection Facility (Outfall ID No. 060), and 3.) Drop Shaft No. DS-3 at W. Chicago Collection Facility (Outfall ID No. 061).</i></p>													

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Projects Under Procurement
(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.												
17 Upper Rouge CSO Control Project - Near Surface Contract 2 - Glendale, Lahser-Dolson, Lyndon, 7-Mile Road, Pembroke <i>The work will provide for Diversion Chambers, Surface Collectors, Surge Conduits, Surge Control Structures (SCS), and Surge Control Volumes (SCV). This also includes Drop Shafts down to de-aerations chambers, as needed modifications of existing Outfall Sewers and In-system Storage Devices and associated site/civil work for the following facilities: 1.) Drop Shaft No. DS-4 at Glendale Collection Facility (Outfall ID No. 064), 2.) Drop Shaft No. DS-5 at Lahser Dolson Collection Facility (Outfall ID No. 065), 3.) Drop Shaft No. DS-7A at Lyndon Collection Facility (Outfall ID No. 069), and 4.) Drop Shaft No. DS-10 at Seven Mile Collection Facility (Outfall ID No. 077).</i>	004301	434	PC-766	C 3		2,520	10,923	20,220	10,923	2,520	47,106	1	83/17
18 Upper Rouge CSO Control Project - Near Surface Contract 3 - W Chicago, Siphon, W Parkway, Schoolcraft, Puritan, Glenhurst <i>The work will provide for Diversion Chambers, Surface Collectors, and Surge Conduits, Surface Control Structures (SCS), and Surface Control Volumes (SCV). This also includes Drop Shafts down to de-aerations chambers, as needed modifications of existing Outfall Sewers and In-system Storage Devices and associated site/civil work for the following facilities: 1.) Drop Shaft No. DS-3A at W. Chicago Siphon Collection Facility (Outfall ID No. 061), 2.) Drop Shaft No. DS-6 at W Parkway Collection Facility (Outfall ID No. 066) and Schoolcraft Collection Facility (Outfall ID No. 067), 3.) Drop Shaft No. DS-8 at Puritan Collection Facility (Outfall ID No. 072), and 4.) Drop Shaft No. DS-10A at Glenhurst Collection Facility (Outfall ID No. 075).</i>	004302	434	PC-767	C 4		1,415	11,759	11,737	1,315		26,226	1	83/17

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Projects Under Procurement
(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary	Allocation
	No.											Project Purpose	Status
19 Upper Rouge CSO Control Project - Near Surface Contract 4 - Six Mile Road @ Beaverland <i>The work consists of Diversion Chambers, Surface Collectors, Surge Conduits, Surge Control Structures (SCS), Surge Control Volumes (SCV), Drop Shafts down to de-aeration chambers, as needed modifications of existing Outfall and In-system Storage Devices and associated site/civil work at Drop Shaft No. DS-9 at Six Mile Collection Facility (Outfall ID No. 074).</i>	004303	434	PC-768	C 5		1,100	9,789	9,789	1,100		21,778	1	83/17
20 Upper Rouge CSO Control Project - Near Surface Contract 5 - Sewers <i>The work provides for bore and jack and other open cut sewers at the following locations: 1.) 5'-0" diameter bore and jack Plymouth consolidation sewer from Plymouth Outfall (ID #063) to W. Chicago Siphon Outfall (ID #062), 2.) 2'-0" diameter open-cut Riverdale/Florence consolidation sewer from Riverdale/Florence Outfall (ID #073) to Puritan Outfall (ID #072), 3.) 2'-0" diameter open-cut Bramell consolidation sewer from Bramell Outfall (ID #068) to Lyndon Outfall (ID# 069), and 6'-0" diameter bore and jack dewatering sewer from Pumping Station to Northwest Interceptor (NWI).</i>	004304	434	PC-769	C 6			538	4,591	4,064	538	9,731	1	83/17

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(000)**

Project Title	DRMS	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
	No.												
21 Upper Rouge CSO Control Project - Pumping Station	004305	434	PC-770	C 7			4,643	20,615	30,771	25,263	81,292	1	83/17
<p><i>The work provides for clearing and grubbing the site as required; construction of a new operations building; construction of a new on-site diesel fueled emergency power generation facility; construction of a new 8-ft diameter sewer pipe from the DS-1 flap gate structure (by Contract No. PC-"NS-1") to an existing 80-ft diameter 200-ft deep shaft structure (by Contract No. PC-"ST"); construction of a 6-ft diameter pressure sewer (coordinate with Contract No. PC-"Sewer"); construction and connection of new internal pumping station shaft features to existing 80-ft diameter shaft (coordinate with Contract No. PC-"ST").</i></p>													
22 Upper Rouge CSO Control Project - North Tunnel	004309	434	PC-763	C	200	10,838	25,396	35,396	60,396	77,707	209,933	1	83/17
<p><i>The work involves constructing the North Tunnel and associated elements for the Upper Rouge Tunnel CSO Control Project. This includes approximately 3.5 miles of 30 ft finished inside diameter (ID) hard rock tunnel, 150 ft below ground, 37 ft ID TBM launching shaft (DS-7), and 52 ft ID TBM exit shaft (DS-11). This work will also provide deaeration chambers and adits, which will connect to the North Tunnel, for the following sites: 1.) DS-7A Lyndon (Outfall #068/069), 2.) DS-8 Puritan (Outfall #072/075), 3.) DS-9 Six Mile (Outfall #074), 4.) DS-10A Glenhurst, and 5.) DS-10 Seven Mile (Outfall #077).</i></p>													

Lateral Sewer Replacement

23 Sewer System Improvement: Oakwood District Sewers Phase I	004238	449	PCS-79	C	8,500	8,558	8,500				25,558	2	D
<p><i>This project involves improving the sewer system of Oakwood District by replacing and constructing approximately 31,230 L. Ft of 12" to 24" Diameter Sewer.</i></p>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Projects Under Procurement
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
24 Sewer System Improvement: Oakwood District Sewers Phase II	004239	449	PCS-80	C 2	100	6,200	6,200				12,500	2	D
<i>Improving the sewer of Oakwood District by replacing and approximately 38,790 L Ft of 12" to 24" Diameter Sewer.</i>													
Planning and Administration													
25 Consolidated Critical Systems Project (1)	004313	1184	CS-1491	IT	500	2,500	1,800				4,800	4	CTA
<i>This project will provide for consolidation of critical systems (EMPAC, CBMS, etc) to improve business efficiency with enhanced data integration and improved application functions.</i>													
					<u>\$96,666</u>	<u>\$215,191</u>	<u>\$297,450</u>	<u>\$276,493</u>	<u>\$163,863</u>	<u>\$128,128</u>	<u>\$1,177,791</u>		

PC - Projects Pending Close-Out

A Project Pending Close-Out is a project that has:

1. an assigned DRMS number
2. been issued the Notice to Start Work
3. been substantially completed
4. project expenditures for the current fiscal year equal to \$100,000 or less - with no projected expenditures

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Projects Pending Close-out
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Secondary Treatment													
1 Secondary Clarifier Improvements	001714	12	PC-720	C	50						50	1	CTA
<i>Improvements on all 25 final clarifiers, including the following major items: replacement of troughs & weirs, influent & effluent magmeters, valves, RAS Pumps & VFDs; modification & replacement of scum collection system, new center drives, HVDUs, and SBLDUS; and performing paint work, electrical work, and other civil and mechanical work.</i>													
General Purpose													
2 As-needed Engineering Services (1)	003451	54	CS-1345	D	5						5	3	CTA
<i>This project provides rapid design turn-around for a variety of small scale projects which have not been initiated due to lack of in-house engineering staff.</i>													
3 Program Management for Wastewater Treatment Plant Rehabilitation and Upgrade	003468	56	PC-744	S/D/C	100						100	2	CTA
<i>Perform study, design, construction, maintenance and other services necessary to bring the WWTP into sustained long term compliance with regulatory requirements and to correct the causes of NPDES permit non-compliance.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Projects Pending Close-out
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Combined Sewer System													
4 Conner Creek CSO Pilot Facility	001799	87	PC-739	C	5						5	1	83/17
<i>Construction of a pile supported, approximately 30,000,000 gallon, reinforced concrete combined sewer overflow detention facility and related ancillary and appurtenant work generally located in Detroit in the vicinity south of the Conner Creek Pump Station and west of Clairpointe Avenue to the Detroit River. Major elements of the work, include: deep excavations and temporary earth retention systems; new influent and effluent/dewatering hydraulic structures; modification/rehabilitation to existing interconnected hydraulic structures; erection of a Control and Screening Building; and related site work; installation of mechanical, electrical, and control equipment; and training and startup of extensive process. The work also includes constructing a nominally 1.75 acre fish habitat mitigation pond at nearby Maheras Park, including, site work and other amenities at the park.</i>													
5 Baby Creek CSO Pilot Control Facility	003250	101	CS-1286	S/D/CA	5						5	1	83/17
<i>This project involves study, design, and construction phase assistance services by the consultant to support construction of a combined sewer overflow rapid mix disinfection, screening and flow regulation facility near the Rouge River discharge for the Baby Creek Enclosure (Outfall Number 057).</i>													
Planning and Administration													
6 Expanded GIS Services & Implementation (1)	003768	569	CS-1367	D	5						5	4	CTA
<i>This project provides for the development and implementation of a Geographical Information System and related tools for use by DWSD.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
Projects Pending Close-out
(000)**

Project Title	DRMS No.	CIP No.	Contract No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
7 Information Systems Wide Area Infrastructure Improvements (1)	004159	559	CS-1422	IT	5						5	4	CTA
<i>This project will study, design, and install a WAN infrastructure for future department needs as the system is updated and provide required WAN infrastructure changes in the system and professional services to assure that work is consistent with industry standard practices.</i>													
					<u>\$175</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$175</u>		

N - New Projects

A New Project is a project that:

1. does not have an assigned DRMS number
2. has a proposal
3. has never had expenditures charged against it

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Primary Treatment													
1 Improvements to Rectangular Primary Clarifier Pipe Gallery and Rehabilitation of Scum Cross Collectors		1999	291	C			3,000	5,100	2,000		10,100	2	CTA
<i>The work to be completed under this project will include installing ventilation and atmospheric control for the rectangular primary pipe gallery; providing new lights and emergency lights; replacement of main collectors, cross collectors in rectangular primary clarifier nos. 5, 6, 7, & 8 and its associated mechanical and electrical items.</i>													
2 Sampling Station Improvements		2001	605	D/C			125	200			325	2	CTA
<i>This project would provide new sampling facilities for the primary rectangular and circular clarifiers near primary effluent shaft no. 1. This project would also rehabilitate and provide other sampling facilities such as the one needed at the Zug Island.</i>													
3 Pump Station No. 2 Pumping Improvements		2003	961	C			3,000	2,690			5,690	2	CTA
<i>This project will either add VFDs to the three constant speed pumps to allow for restoring the pumping capacity during wet weather events; repair existing VFD on existing pump, if feasible; install new, larger VFDs on existing pumps; or install larger VFDs and larger pumps for three or more pumps.</i>													
4 New Troughs and Weirs for Primary Clarifiers 13-16	PC-756	2003	962	C		6,000	6,000	4,000			16,000	2	CTA
<i>This project will involve rehabilitating or replacing troughs and weirs for Circular Primary Clarifiers (PCs) 13-16. If new troughs are determined to be required, the material used on PCs 17 and 18 (stainless steel) will be used on PCs 13-16.</i>													

Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
5 Rehabilitation of Primary Clarifiers, Drain Lines, Hot Water, and Scum Lines		2006	1141	C			2,586	8,000	5,000		15,586	2	CTA
<p><i>This project will include rehabilitation of 12" drain lines from rectangular clarifiers Nos. 3-12, and replacement of how water and scum pipe lines between the primary scum buildings and scum incinerator building.</i></p> <p><i>The scope of work will also include concrete repair work in the primary rectangular clarifiers, disconnecting a drain line from the manhole to the interceptor, installing a large manhole with sump pumps to collect drainage and discharge to clarifiers or the interceptor.</i></p>													
6 New Maintenance Work and Storage Area for Pump Station No. 1 and Rehabilitation of Existing Chain Storage Building in Primary Treatment Area		2006	1142	S/D/C		50	100	500	790		1,440	3	CTA
<p><i>This work will include providing a new maintenance work and storage area for Pump Station No. 1 and rehabilitation of existing chain storage building in the primary treatment area, rehabilitation of existing basement area in the rack and grit building, installation of an overhead door leading to C-1 incinerator.</i></p>													
7 Grit and Screening System Improvements for Pump Station # 1 and # 2		2008	1189	S/D/C	100	1,000	405	5,800	9,200	1,095	17,600	2	CTA
<p><i>The scope of work includes modifications and improvements of the existing grit and screening handling system at pump stations 1 and 2.</i></p>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Secondary Treatment													
8 Secondary Clarifiers, RAS Pumps and MCCs Improvements		2005	1100	C		2,500	5,000	5,000	3,435	1,000	16,935	2	CTA
<i>This project will provide new power supply cable to/from the secondary clarifiers and substation MCCs, provide new MCCs at each secondary clarifier, provide short-circuit analysis and fault rating, provide detailed hydraulic analysis and sizing of the pumps related to secondary clarifiers RAS pumping, provide 25 RAS pumps at the secondary clarifiers and complete all miscellaneous electrical work such as replacement of cables, conduit, pull boxes, panels and junction boxes, etc.</i>													
9 Improvements to the Influent Mixed Liquor System of Secondary Clarifiers		2006	1145	C		116	2,000	1,500	1,000	500	5,116	2	CTA
<i>The work will include the replacement of 25 mixed liquor motor operated butterfly valves, mixed liquor manual isolation valves and rehabilitation/ replacement of defective mixed liquor pipes.</i>													
10 Aeration System Improvements		2008	1194	S/D/C	200	1,335	5,000	11,800	6,865		25,200	2	CTA
<i>The scope of work includes study, design, and installation of oxygen baffle on Bay 10 of A1 & A2 decks, replacement of influent, RAS piping, isolation gate and valves for decks nos. 3 & 4, replace RAS & influent magmeters for ILP nos. 3,4, & 7. The work will also include replacement of influent gates and operators on aeration deck no. 1 & 2.</i>													

Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
11 Process Improvements for the Secondary Treatment at WWTP		2008	1195	S/D/C	200	1,100	285				1,585	2	CTA
<i>The scope of work includes study, design, and installation of chlorination distribution system at Complex B, procure on-line instrumentation with the ability to determine Phosphorus and Ammonia levels and Biochemical Oxygen demand in real time, and a ferric chloride addition to the secondary system.</i>													
Solids Handling													
12 Rehabilitate Sludge Pump Stations 1 and 2		2001	607	C			3,000	2,144			5,144	2	CTA
<i>This project will provide for general rehabilitation of the Sludge Pump Station Nos. 1 and 2, including sludge pump improvements to meet future sludge loads, heating and ventilation improvements and other miscellaneous building and utility improvements.</i>													
13 Renovation of Operation Spaces		2004	1039	S/D/C		185	500	27			712	3	CTA
<i>This project will involve demolishing existing operator booths in Incineration Complex I, providing new booths in compliance with all relevant codes and standards, and meeting minimum requirements for continuous occupancy.</i>													
14 Rehabilitation of Upper Level Belt Filter Presses for Complex II Dewatering		2006	1144	C			4,850	3,850			8,700	2	CTA
<i>The work will consist of rehabilitation of 12 Upper Level Belt Filter Presses for Complex II Dewatering, SFE booster pumps, and all related supportive equipment including control panels and associated wiring.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
Disinfection													
15 Repair of Detroit River Outfall 1		2001	608	S/D/C						1,700	1,700	2	CTA
<i>This project includes inspection and rehabilitation of Detroit River Outfall 1 (DRO-1).</i>													
16 Toxicity Study of DRO-2 Effluent		2004	1041	S/D/C						3,620	3,620	2	CTA
<i>This project will involve determining potential precursors of toxic by-product formation; developing a database of WET analysis of chlorinated primary effluent samples; analyzing primary effluent samples to determine concentrations of precursors and determine potential industrial or domestic sources; and using bench scale studies to develop treatment methodology to reduce acute toxicity in chlorinate/dechlorinated primary effluent.</i>													
General Purpose													
17 Underground Electrical Duct Bank Repair and EB-1, EB-2, and EB-10 Primary Power Service Improvements - WWTP		1998	366	C			4,248	6,329	1,500	500	12,577	2	CTA
<i>This project will include replacement of 15kv Primary Switch Gears A & B, unit substation EB-1, EB-2, and EB-10, unit 5kv substation and switchgear DE-1, and two outdoor 3-phase primary transformers; and repair of building structure and associated components. The work will also include site preparation, installation of new ducts, placement of new electrical cable, coordination of system shut-down, and coordination of system reconnection with new cables.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
18 Roof and Pavement Asset Management Program and As-needed Engineering Services (1)	CS-1349A	2000	396	D	50	650	950	950	125		2,725	3	CTA
<i>This project will provide a Roof Asset Management Program that will include documentation and review, roof evaluation, repair/ replacement recommendations, priority rating, a roof management budget, a roof management computerized database, and preparation of roof bid documents. The project will also include pavement asset management and as-needed engineering services.</i>													
19 Potable Water Backflow Prevention Improvements		2001	620	D/C		100	487	900	100		1,587	3	CTA
<i>The overall goal of this project is to ensure safe drinking water on site at WWTP through providing adequate backflow prevention and eliminating cross connections.</i>													
20 WWTP Work Environment Improvement		2003	972	S/D		100	400	190	100		790	3	CTA
<i>The work to be completed under this contract includes the study and design work for implementing plant-wide lighting, changing site access, improving Jefferson Frontage, improving vehicle and pedestrian routing, and enhancing the landscape.</i>													
21 WWTP Work Environment Improvement		2003	972	C				3,500	1,000		4,500	3	CTA
<i>The work to be completed under this contract includes implementing plant-wide lighting, changing site access, improving Jefferson Frontage, improving vehicle and pedestrian routing, and enhancing the landscape.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
22 Department-wide General Engineering Services on an As-needed Basis (1)		2004	1026	D		50	1,200	600	600		2,450	3	D
<i>This project involves designing water main and lateral sewer replacement projects for aging and dysfunctional water mains and sewers throughout Detroit under different tasks on an as-needed basis. The tasks to be performed may involve civil, structural, architectural, hydraulics, mechanical, electrical, surveying, instrumentation and piping design services.</i>													
23 Plant-wide Fire Alarm Systems Upgrade/ Integration and Fire Protection Improvements		2004	1028	C			1,709	2,000	1,000		4,709	3	CTA
<i>This project involves the installation of an Integrated Plant Wide Fire Alarm System in the approximately 100 buildings (of which 50 + have a stand-alone fire alarm system) at the WWTP in order to facilitate centralized monitoring and assure faster corrective action. The new system will be interfaced with the existing WWTP Control System so that signals associated with this system can be transmitted over the existing fiber optic cables as a physical media for interconnection of the standalone systems.</i>													
24 Electrical Optimization and Reliability Study at Wastewater Treatment Plant		2005	1101	S	390						390	3	CTA
<i>This project will study the various operational alternatives of pumps and other equipment in order to determine the necessary operational modifications to get the optimum operational cost. This will be determined with a thorough study of historical electrical usage, electrical rates, possible capital improvements, process and equipment operations and power distribution systems.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
25 Study/ Repair Potable Water, Screened Final Effluent, Natural Gas and Compressed Air Pipe Lines at the WWTP		2006	1140	S/D/C		50	114	1,000	1,123		2,287	2	CTA
<i>This project will include the repair or replacement of the aging and corroded pipes, valves, and fittings for the potable water supply system, natural gas system, SFE system, and compressed air system. It also includes installation of a compressed air system to supply air to the pneumatic tools in the PS 2 facility.</i>													
26 As-needed Survey Services (1)		2006	1146	D		50	750	750	750	200	2,500	3	CTA
<i>The work will include aerial photography, related aerial survey, ground survey, and related services on an as-needed basis.</i>													
27 DWSD Main Office Building Improvements (1)		2008	1187	S/D/C	40	310	251				601	4	CTA
<i>The scope of work includes study, design, and construction services for replacing existing temperature controls and rebuilding chiller compressors and its accessories at the DWSD main office building.</i>													
28 Central Services Facility (CSF) Improvements (1)		2008	1188	S/D/C	38	113	1,000	997			2,148	4	CTA
<i>The scope of work includes HVAC system improvements, security improvements, improvements for salt barn, overhead doors and other rehabilitative work at CSF.</i>													

Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
29 Arc Flash Implementation for all DWSD Facilities - Waste Water		2008	1198	S/D/C	100	500	2,000	400			3,000	2	CTA
<i>This project will provide for generating a single riser diagram for each facility, perform an Arc Flash study for all voltage levels of electrical equipment, collect necessary information to complete task, and specify flash boundary distances with radiated heat, recommend safety clothing, and provide labels in compliance with Federal, State, and local agencies codes and regulations.</i>													

Sewer Interceptor System

30 Clinton Township and City of Fraser Control Facilities: 15 Mile Rd & Hayes (NE & SE Corners), and 15 Mile Rd. & Little Mack Ave	PC-687	2000	410	C		2,000					2,000	3	M
<i>This project will consist of constructing a reinforced concrete metering chamber at each of the above locations complete with a precast concrete manhole and installing a Parshall Flume with a sonic level sensor and transmitter inside the metering chamber including all mechanical and electrical work.</i>													
31 Sewer Meter Replacement		2007	1167	C		100	3,700	106			3,906	4	CTA
<i>This project will provide for the implementation of the best sewer metering technology at several sewer metering locations. It will develop a control system configuration diagrams which will define the system components, communication structure, and operational interface, electrical interface, process flow diagrams, and process and instrumentation diagrams.</i>													

Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
32 Oakland Arm and Corridor Prioritized Repairs with bypass		2008	1192	S/D/C	100	1,500	6,000	22,000	29,000	94,000	152,600	3	C/O & M
<i>The scope of work includes study, design, and construction services for rehabilitation of the Corridor Gate, repairing PCI 5 through PCI 11 gates, grout and bypass, and the construction of the Access or Stop Gate, gate upstream of Plumbrook, and the new gate structure of PCI 6.</i>													

Combined Sewer System

33 Outfall Improvements Allowance			440	D/C		4,000	4,000	4,000	4,000		16,000	3	CTA
<i>This project will provide an annual allowance for outfall improvements.</i>													
34 Northeast Sewer Pump Station Alternatives		2004	1043	S		100					100	2	C/O & M
<i>This study is to determine how consequences of a NESPS outage could be mitigated short range and long range, and/or what emergency measure might be instituted to bypass station should a catastrophe or other unforeseen event(s) severely cripple this key hub. It will develop alternative temporary means of moving sewage around this hub. This study will determine the impact in the short term and long term of a NESPS outage for both dry weather and wet weather, determine hours in both dry and wet weather before bad consequences could occur, determine pumping capacity of DECO Power and Emergency Generators, estimate the costs of said impacts, quantify amount of sewage to bypass NESPS, list bypass alternatives and determine estimate of costs of alternatives.</i>													

Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
35 Clintondale Pumping Station Improvements <i>This project will involve the construction for the Clintondale Pumping Station Improvements.</i>		2004	1093	C		8,000	5,640				13,640	2	M
36 Fischer Pumping Station Improvements <i>This project will involve the construction for the Fischer Pumping Station Improvements.</i>		2004	1093	C 2	200	2,100	2,400	450			5,150	2	D
37 8 Foot Gravity Sewer from Clintondale Pump Station to Garfield Road along 15 Mile Road <i>The work includes study, design, and construction along 15 Mile Road of an 8' diameter, 23050' long gravity sewer between Clintondale Pump Station and Garfield Road.</i>		2007	1178	S/D/C	50	250	1,100	6,000	6,000	3,300	16,700	3	M
38 Lower Main Rouge River Outfalls Improvements <i>The scope of work includes improvements at five CSO outfalls located at the Lower Main Rouge River (LMRR). The five outfalls are Carbon Outfall (B46), Flora Outfall (B47), Fort St-East Shore Outfall (B48), Fort St-West Shore Outfall (B49), and Fort St-Northwest Interceptor Outfall (B50).</i>		2008	1185	S/D/C	100	2,647	1,600	12,000	12,000	11,546	39,893	2	CTA
39 Modifications/Improvements in Effluent Conduit of St. Aubin Screening and Disinfection Facility <i>The scope of work includes installation of equipment and necessary instrumentation and other ancillary work for the removal of recurring sludge build up in St. Aubin Outfall Sewer.</i>		2008	1186	DB	90	1,000	413				1,503	1	D

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
40 CSO Basins - Mechanical, Electrical, and Structural Improvements		2008	1190	S/D/C	100	990	11,000	2,510			14,600	2	83/17
<i>The scope of work includes mechanical, electrical, instrumentation, structural , and other rehabilitative or new work at the six CSO facilities namely Hubbell/Southfield, Leib, St. Aubin, Puritan, Seven Mile, and Conner Creek.</i>													

Lateral Sewer Replacement

41 Lateral Sewer Replacement Allowance			448	D/C	1,000	20,000	20,000	20,000	20,000		81,000	3	D
<i>Yearly allowance to replace aging lateral sewer lines in the City.</i>													

Planning and Administration

42 Water Board Building Emergency Waterproofing (1)		2004	1023	D/C					124	152	276	3	CTA
<i>This project involves developing repair specifications, moving two lighting power transformers (to facilitate wall lock repairs) after connection of portable generators to power building, improving the leak seal "umbrella" over PLD vault area, returning and reconnecting the transformers to their existing locations, and repairing a spalled area of concrete where rebars are exposed and repair leaks on the walls facing Bates and Randolph streets.</i>													

**Sewage Disposal System
Capital Improvement Program
Projected Expenditures Spread by Fiscal Year
New Projects
(000)**

Project Title	Contract No.	Year	CIP No.	Type	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13	Remaining	Total	Primary Project Purpose	Allocation Status
43 Information Systems Allowance (1)			1126	IT	750	1,400	2,000	3,000	3,000		10,150	4	CTA
<i>This project provides for a yearly allowance enabling IS to issue purchase requisitions for change orders to the ITS department's computer contracts. The requisitions are based on a schedule for the replacement and upgrading of departmental computer systems, software licensing and as related computer items.</i>													
					<u>\$3,508</u>	<u>\$58,296</u>	<u>\$106,813</u>	<u>\$138,293</u>	<u>\$108,712</u>	<u>\$117,613</u>	<u>\$533,235</u>		