# BATON ROUGE SSO PROGRAM PROGRESS REPORT

May 2009

City of Baton Rouge/
East Baton Rouge Parish
Department of Public Works

Prepared by

CH2MHILL

In association with

SIGMA Consulting Group, Inc.





# Program Management

Most projects included as a part of the Baton Rouge SSO Control and Wastewater Facilities Program fit into the three major categories: Capacity Improvements, Sewer Rehabilitation, and Wastewater Treatment and Storage Projects.

Capacity improvement projects will reduce hydraulic bottlenecks in the system and convey wet weather flows to new upstream storage facilities or the Wastewater Treatment Plants (WWTPs).

 There are 57 Capacity Improvement Projects totaling approximately \$603M

Sewer rehabilitation projects are often referred to as "Find and Fix". Rehabilitation or reconstruction work is performed on those areas where flow monitoring has indicated the highest levels of stormwater inflow and groundwater infiltration (I/I) in sewer pipes.

There are 26 Rehabilitation Projects totaling approximately \$297M

Wastewater treatment and storage projects consist of expanding treatment plants to accommodate peak flow, as well as make improvements to screening, trickling filters, effluent pumping, and sludge handling.

■ There are nine Wastewater treatment and storage projects totaling approximately \$300M

As of May 2009, there are 42 projects under design and/or construction. The total construction value of these 42 projects is \$613M.

# Communication with the Community is a Priority

May 12, 2009 marked the start of construction for the Immediate Action Plan (IAP) Combined projects at the South Wastewater Treatment Plant (SWWTP). Mayor-President Melvin L. "Kip" Holden hosted the groundbreaking ceremony commemorating the 12th project to start construction under the SSO Program. "The start of the IAP Combined Projects signifies an important step in the direction of progress and compliance for our city-parish," said Mayor-President Holden. "Once complete, the South Wastewater Treatment

Plant will not only meet the EPA Consent Decree requirements, but will help put our city-parish on track in making major improvements to improve the quality of life in South Baton Rouge."



On May 20th, the Louisiana Water Environment Federation (LWEF) held their 2009 spring technical conference at the Lod Cook Alumni Center on the LSU campus. At the request of LWEF, both DPW and CH2M HILL presented the history and status of the SSO Program as well as a technical discussion about managing wet-weather flows and meeting permitted effluent water quality standards with a reliable, robust, and easy to operate workhorse: the Trickling Filter/Solids Contact Process.



Mayor-President Kip Holden announces the start of the 12th project to start construction under the SSO Program.

David Humphreys - Photographer

# IN THE SPOTLIGHT

# South Wastewater Treatment Plant (SWWTP) Immediate Action Projects (IAPs)

The SWWTP is under consent decree due to NPDES permit violations related to total suspended solids (TSS) and biochemical oxygen (BOD). May 12, 2009 marked the construction groundbreaking for a number of improvement projects that will bring the SWWTP into compliance. The IAPs improvements include:

- New chemical addition facilities and rehabilitation of existing primary settling tanks to increase removal of solids:
- A new trickling filter recycle pump station to improve performance of the existing trickling filters, resulting in increased removal of dissolved organics; and
- Rehabilitation of existing solids handling systems to improve the handling and treatment of solids removed from the wastewater.

Total construction cost of the IAPs is \$25M. Construction is scheduled to continue through August 2010.

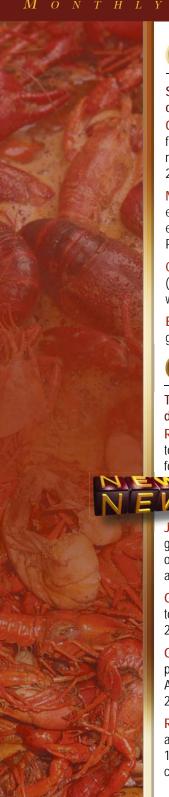
The Sanitary Sewer
Overflow (SSO) Control
and Wastewater Facilities
Program addresses the
existing EPA Consent
Decree while planning for
the future sewer needs of
East Baton Rouge Parish.
When complete, the SSO
Program will help the cityparish meet Clean Water Act
requirements and ensure
a higher quality of life for
East Baton Rouge Parish
residents.



# Program

# SCHEDULE

2 Jeffe 3 Gurn 4 Stari 5 RMA 6 Gard	Project Name					Construction	Project	Advertise for Construction	
2 Jeffe 3 Gurn 4 Stari 5 RMA 6 Gard		DPW Project #	Design Consultant	Construction Contractor	Phase	Value	Start	Bid	Project End
3 Gurr 4 Stari 5 RMA 6 Gard	AP1 - Kleinpeter Area Upgrades	03-RMP-S14	Monroe & Corie	Allen & LeBlanc	Construction	\$324,024	2/1/2008	7/14/2008	5/8/2009
4 Stari 5 RMA 6 Gard	erson Highway-Hoo Shoo Too	07-AR-US-0049	DPW	Allen & LeBlanc	Construction	\$2,239,396	5/16/2007	6/27/2008	9/22/2009
5 RMA 6 Gard	ney Road - Joor Road	07-PS-BD-0017	Neel-Schaffer	Grady Crawford	Construction	\$1,396,347	1/18/2008	8/29/2008	10/16/2009
6 Gard	ing Lane Extension (Ph1: Burbank to Highland)	06-WC-CP-0036	Monroe & Corie	James Construction	Construction	\$4,615,500	1/11/2008	9/19/2008	8/3/2010
-	AP1 - PS136 Area Upgrades	99-RMP-S16	Sigma Consulting	Nottingham Construction	Construction	\$8,811,368	2/1/2008	10/24/2008	5/11/2010
	dere Lane - Burbank Road	08-AR-UF-0003	CSRS, Inc.	Allen & LeBlanc	Construction	\$5,957,955	5/16/2007	11/14/2008	5/26/2010
7 RMA	AP1 - Industriplex Area Upgrades	99-RMP-S08	Forte & Tablada	BRH Garver	Construction	\$9,382,914	3/10/2008	10/31/2008	1/29/2010
8 Imm	ediate Action Projects (combined)	06-WT-TP-0060	CDM / MWH / URS Corp.	Brasfield & Gorrie	Construction	\$25,632,000	11/6/2006	12/12/2008	8/2/2010
9 Com	nite Drive - Foster Road (Ph1)	07-PS-BD-0019	Monroe & Corie	Hemphill Construction	Construction	\$1,921,037	3/3/2008	1/16/2009	1/27/2010
10 Fost	ter Road - Hooper Road	07-FM-BD-0046	PEC	Hemphill Construction	Construction	\$8,761,675	2/14/2008	1/9/2009	4/28/2010
11 Multi	iple PS - Lovett Road Area	07-PS-BD-0018	Hartman Engineering	Don M. Barron Contractor	Construction	\$2,158,346	1/17/2008	1/16/2009	2/25/2010
12 Stari	ing Lane - Boone Drive	08-AR-UF-0004	CSRS, Inc.	Grady Crawford	Construction	\$5,426,575	11/27/2007	1/23/2009	5/10/2010
13 Com	nite Drive - Foster Road (Phase 2)	-	Monroe & Corie	TBA	Construction	\$2,000,000	6/23/2008	6/26/2009	6/22/2010
14 Oak	Villa Blvd - Choctaw Street	08-AR-UF-0005	CSRS, Inc.	TBA	Construction	\$11,701,000	4/14/2008	5/15/2009	9/21/2010
15 NWV	WTP Odor Control	07-WT-TP-0030	Env. Eng Svcs	TBA	Construction	\$2,756,120	6/29/2007	5/29/2009	4/19/2010
16 High	nland Road - Buchanan Street	08-GS-ST-0021	Burk-Kleinpeter/ Justice & Huang (a JV)	TBA	Design	\$2,800,000	3/13/2008	7/17/2009	10/29/2010
17 Scot	tland Avenue - Progress Road	09-AR-BD-0011	CSRS, Inc.	TBA	Design	\$7,400,000	9/9/2008	7/24/2009	11/4/2010
18 Citip	olace/Essen Lane Area - PS119	08-FM-UF-0024	GSA Consulting Engineers, Inc.	TBA	Design	\$2,800,000	2/25/2008	8/21/2009	5/5/2011
19 Sout	th Boulevard - St. Joseph Street	08-GS-ST-0018	Evans-Graves	TBA	Design	\$4,500,000	3/27/2008	9/18/2009	7/12/2011
	nland Road - Burbank Drive	08-FM-ST-0023	GOTECH, Inc.	TBA	Design	\$13,400,000	3/31/2008	10/1/2009	2/23/2012
21 Elm	Grove Garden- Harding Blvd	09-AR-BD-0012	CSRS, Inc.	TBA	Design	\$8,600,000	10/1/2008	10/2/2009	1/13/2011
22 Shar	rp Road - Florida Blvd	09-AR-BD-0013	CSRS, Inc.	TBA	Design	\$8,000,000	1/15/2009	11/27/2009	3/10/2011
23 SWV	NTP Wet Weather Improve (Ph1)	08-TP-BD-0033	CDM	TBA	Design	\$90,000,000	6/23/2008	1/13/2010	9/12/2012
24 Keni	ilworth Drive - Boone Drive	09-AR-BD-0014	CSRS, Inc.	TBA	Design	\$5,400,000	3/26/2009	1/22/2010	5/6/2011
25 25th	Street - North Acadian Thruway	09-GS-UF-0008	Hartman Engineering	TBA	Design	\$4,600,000	2/2/2009	1/28/2010	11/16/2011
26 Capi	itol Lake - Gayosa Drive	07-PS-BD-0048	Shread-Kuyrkendall & Associates, Inc.	TBA	Design	\$3,396,632	1/14/2008	1/29/2010	2/6/2011
27 Dow	ntown Area - PS15,19, 60, 59	08-PS-ST-0056 08-PS-ST-0057	Shaw Environmental & Infrastructure, Inc.	TBA	Design	\$10,600,000	3/24/2008	1/29/2010	11/15/2011
28 Sout	th Capacity Group Project 2	08-PS-IF-0046	ABMB Eng.	TBA	Design	\$5,900,000	3/10/2008	2/19/2010	6/8/2011
29 Stari	ing Lane Extension (Ph2: Highland to Perkins)	TBA	Monroe & Corie	TBA	Design	\$14,000,000	4/8/2008	2/26/2010	6/1/2012
30 Cent	tral Pump Station - PS 42	09-PS-UF-0003	MWH	TBA	Design	\$6,900,000	10/21/2008	3/23/2010	9/21/2012
31 Nortl	h Capacity Group Project 1B	08-PS-UF-0054	Evans-Graves / Burk Kleinpeter	TBA	Design	\$13,600,000	3/10/2008	4/30/2010	10/12/2011
32 Zach	nary Area Transmission Network	06-WC-IF-0014	SJB/Owen & White	TBA	Design	\$58,000,000	3/24/2008	5/7/2010	4/25/2013
33 Cons	solidated Pump Stations	09-PS-UF-0035	TBA	TBA	Design	\$15,400,000	11/7/2008	5/14/2010	3/20/2013
34 Choo	ctaw Storage and PS Facility	09-PS-UF-0009	CDM	TBA	Design	\$51,518,720	4/14/2008	5/28/2010	8/13/2012
35 North	h Capacity Group Project 1A	08-GS-UF-0053	URS Corp.	TBA	Design	\$35,100,000	3/10/2008	5/28/2010	11/1/2013
36 Cons	solidated FM	09-FM-UF-0033	TBA	TBA	Design	\$6,800,000	11/7/2008	6/25/2010	9/21/2012
37 Hoop	per Storage	09-PS-UF-0007	TRC Engineers	TBA	Design	\$16,300,000	1/19/2009	7/1/2010	1/18/2012
38 Pum	np Station 58A Overflow	09-PS-UF-0001	GEC	TBA	Design	\$10,900,000	1/5/2009	8/20/2010	7/18/2013
$\vdash$	WTP Wet Weather Improve (Ph2)	08-TP-BD-0055	MWH	TBA	Design	\$90,000,000	10/14/2008	10/1/2010	2/5/2014
-	tral Consolidation- PS42 FM	09-FM-UF-0036	TBA	TBA	Design	\$16,700,000	11/7/2008	10/8/2010	9/21/2012
41 Boos	ster PS514 Improvements	09-PS-UF-0034	ТВА	TBA	Design	\$11,000,000	4/24/2009	10/29/2010	9/6/2013
$\vdash$	ık Road - Kleinpeter Road	09-GS-UF-0028	Forte & Tablada	TBA	Design	\$7,800,000	3/23/2009	4/22/2011	8/28/2013



# ADVERTISED FOR CONSTRUCTION

Summaries of the four projects that were recently advertised or will be advertised for construction are:

Oak Villa Blvd – Choctaw Street: Approximately 247,000 linear feet of pipe and 990 manholes have been cleaned, inspected, and rehabilitated. Project advertised for construction bids on May 15, 2009.

**North WWTP Odor Control:** The project includes demolition of existing odor control equipment and installation of new odor control equipment (including biotowers, odor control fans and ductwork). Project advertised for bid on May 29th, 2009.

Comite Drive – Foster Road (Phase II): This portion of the project (Phase II) will be constructed with the Green Light Program. Project will advertise for construction bids in June 2009.

Emergency/Standby Generators: Purchasing and Installation of generators at all pump stations. Advertise for bid on June 8, 2009.

# CONSTRUCTION

Twelve projects are under construction and are described as follows:

RMAP1-Kleinpeter Area Upgrades: Conducting capacity upgrades to two pump stations, including 2,000 linear feet of new 4 inch forcemain. As of May 2009, the project is 99% complete.

June 2009 will mark the completion of this project – the FIRST to finish under the SSO Program.

**Jefferson Highway-Hoo Shoo Too Road**: Rehabilitation of the gravity collection system, including approximately 117,110 linear feet of pipe and 553 manholes. Construction continues in the Barrett Lane area. As of May 2009, the project is 99% complete.

**Gurney Road – Joor Road:** Upsizing a pump station and forcemains to meet future peak wet weather flows and alleviate SSOs. As of May 2009, the project is 70% complete.

Gardere Lane – Burbank Road: Approximately 200,500 linear feet of pipe and 787 manholes will be cleaned, inspected, and rehabilitated. As of May 2009, the project continues in the Hermitage area and is 22% complete.

RMAP1 – PS136: Nine existing pump stations will be demolished and replaced with a new pump station, 2000 feet of forcemain, and 12,500 linear feet of gravity pipe. As of May 2009, the project is 21% complete.

**Staring Lane Forcemain-PS58 Phase I**: A new forcemain will be installed. Phase I of the project is in the Burbank Road – Highland Road area. As of May 2009, the project is 15% complete. Construction on this project is being worked in conjunction with the Greenlight Plan roadwork project.



The Staring Lane FM-PS58 Phase I project includes the largest pipe installation (65 inches diameter) by HDD in the US.

RMAP1 – Industriplex: Six pump stations will be demolished and replaced with a new pump station and a 16 inch forcemain. As of May 2009, the project is 10% complete.

Immediate Action Projects (combined): Primary treatment, trickling filter, and sludge handling improvements to the SWWTP. As of May 2009, the project is 5% complete.

Comite Drive – Foster Road (Phase I): Three pump stations will be replaced as well as 2,000 linear feet of gravity pipe. Construction Notice to Proceed issued on May 4, 2009.

Foster Road – Hooper Road: Pipe capacity will be increased and includes approximately 32,000 feet of pipe. Construction Notice to Proceed issued on May 4, 2009.

Multiple PS – Lovett Road Area: Three pump stations and a portion of the gravity main upstream will be replaced to alleviate SSOs. Construction Notice to Proceed issued on May 4, 2009.

Staring Lane – Boone Drive: Approximately 148,000 linear feet of pipe and 657 manholes have been cleaned, inspected, and rehabilitated. Construction Notice to Proceed issued on May 4, 2009.

# IT'S TOPICAL

### Why use GIS?

Geographical Information Systems (GIS) is the combination of hardware and software that allows for the collection, storage, manipulation, analysis, and display of geographical information in a comprehensive map format.

In the Baton Rouge sewer program, GIS provides a graphical representation of the location of the manholes, sewer pipe, pump stations, pump station service areas, and rehab and capacity areas.

In addition to that, GIS is also used to:

- Provide elevation profiles to determine pumping and flow requirements;
- Locate wetland areas:
- Identify land acquisition for capacity improvements;
- Report documentation; and
- Model and web-page mapping.



Sewer collection system map



3-D GIS map showing location of proposed storage tanks.



# Looking Ahead...

### Design:

### Statement of Qualifications (SOQs) due to DPW

- Central Consolidation East Forcemain: June 4, 2009
- Central Consolidation PS42 Forcemain: June 4, 2009
- Booster Pump Station 514: June 4, 2009
- Central Consolidation Pump Stations: June 4, 2009

### **Project Informational Meetings**

- Central Consolidation East Forcemain: June 11, 2009
- Central Consolidation PS42 Forcemain: June 11, 2009
- Booster Pump Station 514: June 11, 2009
- Central Consolidation Pump Stations: June 11, 2009

### Select Design Consultant (SOQs)

- Central Consolidation East Forcemain: June 18, 2009
- Central Consolidation PS42 Forcemain: June 18, 2009
- Booster Pump Station 514: June 18, 2009
- Central Consolidation Pump Stations: June 18, 2009

### Construction:

### **Pre-Bid Conferences**

- Oak Villa Blvd Choctaw Street: June 2, 2009
- NWWTP Odor Control: June 16, 2009

### Construction Bids Due to DPW/Bid Opening

- Oak Villa Blvd Choctaw Street: June 16, 2009
- NWWTP Odor Control: June 30, 2009

### Advertise for Bids

- Emergency Generators: June 8, 2009
- Comite Drive Foster Road (Phase 2): June 26, 2009

For detailed information on the projects above, please visit the web-site at http://www.brprojects.com/sewer/pages/contractor\_calendar.htm



BATON ROUGE SSO PROGRAM PROCESS REPORT

May 2009

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