



# PROGRAM MANAGEMENT

The Baton Rouge Sanitary Sewer Overflow (SSO) Program has made significant progress in improving infrastructure in East Baton Rouge Parish since the program started in 2006. One of CH2M HILL's first task as Program Manager for the SSO Program was to develop a Program Delivery Plan (PDP) which is a comprehensive plan of 82 projects that will reduce sanitary sewer overflows and improve sewer infrastructure throughout the Parish. The PDP is formally published annually during the fourth quarter; the 2009 update of the PDP was published in November 2009.

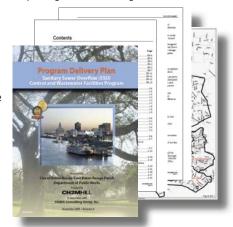
Organized along the same rough geographic basins as the City-Parish collection system basins, the PDP identifies three types of projects:

- Comprehensive Rehabilitation projects which identify areas that require rehabilitation or reconstruction and the piping network is large enough to handle future demand.
- Capacity improvement projects which reduce bottlenecks in the system by installing larger pipes and pump stations, or constructing parallel pipes to increase capacity.
- Wastewater treatment improvement/storage projects which will assist in the treatment of wet weather flows.

As individual projects under the SSO Program are designed and constructed, plans can change to accommodate design refinements such as combining pipeline routing and eliminating or combining pump station locations. In updating and maintaining the PDP, as

an ever-evolving document, the City-Parish realizes significant cost-savings. Additionally, the new PDP is updated to coordinate with other City-Parish projects to reduce construction inconveniences to the residents and business owners.

The 2009 PDP is available on the SSO Program Website: www.brprojects.com.



A copy of the revised Program Delivery Plan can be found on the SSO Program web-site at: http://www.brprojects.com/sewer/pages/programinfo\_PDP.htm

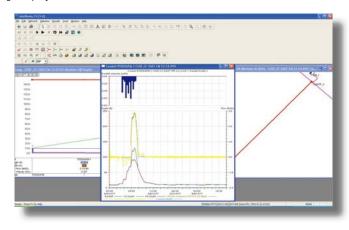


# IT'S TOPICAL

### Hydraulic Modeling Continues to Optimize SSO Planning Efficiency

Using hydraulic modeling systems, several of the sanitary sewer overflow projects were recently re-evaluated to determine if the existing collection transmission systems are adequate to handle future peak wet weather flows appropriately. The final hydraulic analysis indicated that several of the capacity improvement projects identified in the PDP could be combined, thereby reducing the total number of Program projects.

For this analysis, the City-Parish was divided into ten hydraulically independent basins in order to separate the collection and transmission systems for analysis. The initial process that involved a series of planning and design criteria developed and implemented at the onset of the SSO



Program was used to evaluate the hydraulic model and analyze its output.

The team prepared and used a 12-step hydraulic basin analysis method throughout the planning process. The 12-step process included the following components:

- Dynamic model runs for evaluation of the capacity of existing pipes with predicted postrehabilitation flows
- 2. Steady state calculations for evaluation of required pipe capacity
- Dynamic models runs for evaluation of existing pipes with future flows added to postrehabilitation flows
- 4. Steady state calculations for evaluation of required pipe capacity with future flows
- 5. Test of the revised model for its ability to handle future wet weather flows
- Evaluation of the model output for acceptable design criteria and physical evidence of overflows
- 7. Documentation of project list
- DPW endorsement
- 9. Prioritization of projects
- 10. Development of planning level cost estimates
- 11. Determine projects for reduction of existing SSOs
- 12. Definition of projects

# SCHEDULE

						0		A described Com	
#	Project Name	DPW Project #	Design Consultant	Status	Construction Contractor	Construction Bid Amount	Project Start	Advertise for Construction	Project End
1	RMAP1 - Kleinpeter Area Upgrades	03-RMP-S14	Monroe & Corie	Completed	Allen & LeBlanc	\$324,024	2/1/2008	7/14/2008	5/8/2009
2	Jefferson Highway - Hoo Shoo Too	07-AR-US-0049	DPW	Completed	Allen & LeBlanc	\$2,239,396	5/16/2007	6/27/2008	11/21/2009
3	Gurney Road - Joor Road	07-PS-BD-0017	Neel-Schaffer	Construction	Grady Crawford	\$1,396,347	1/18/2008	8/29/2008	10/16/2009
4	Staring Lane Extension (Phl:Burbank-Highland)	06-WC-CP-0036	Monroe & Corie	Construction	James Construction	\$4,615,500	1/11/2008	9/19/2008	8/24/2010
5	RMAP1 - PS136 Area Upgrades	99-RMP-S16	Sigma Consulting	Construction	Nottingham Construction	\$8,811,368	2/1/2008	10/24/2008	5/11/2010
6	RMAP1 - Industriplex Area Upgrades	99-RMP-S08	Forte & Tablada	Construction	BRH Garver	\$9,382,914	3/10/2008	10/31/2008	1/29/2010
7	Gardere Lane - Burbank Road	08-AR-UF-0003	CSRS, Inc.	Construction	Allen & LeBlanc	\$5,957,955	5/16/2007	11/14/2008	5/26/2010
8	Immediate Action Projects Combined	08-TP-BD-0031	CDM / MWH / URS Corp.	Construction	Brasfield & Gorrie	\$25,632,000	11/6/2006	12/12/2008	9/2/2010
9	Foster Road - Hooper Road	07-FM-BD-0046	PEC	Construction	Hemphill Construction	\$8,761,675	2/14/2008	1/9/2009	4/28/2010
10	Comite Drive - Foster Road (PhI)	07-PS-BD-0019	Monroe & Corie	Construction	Hemphill Construction	\$1,921,037	3/3/2008	1/16/2009	1/27/2010
11	Sullivan Rd - Lovett Rd - Wax Rd	07-PS-BD-0018	Hartman Engineering	Construction	Don M. Barron Contractor	\$2,158,346	1/17/2008	1/16/2009	2/25/2010
12	Staring Lane - Boone Drive	08-AR-UF-0004	CSRS, Inc.	Construction	Grady Crawford	\$5,426,575	11/27/2007	1/23/2009	5/10/2010
13	Oak Villa Blvd - Choctaw Street	08-AR-UF-0005	CSRS, Inc.	Construction	Grady Crawford	\$8,997,369	4/14/2008	5/15/2009	7/7/2011
14	Comite Drive - Foster Road (PhII)	02-CS-HC-0001	Monroe & Corie	Construction	JB James Construction	\$895,957	6/23/2008	6/26/2009	6/22/2010
15	Scotland Avenue - Progress Road	09-AR-BD-0011	CSRS, Inc.	Construction	Magnolia Construction	\$9,207,594	9/9/2008	10/20/2009	11/25/2010
16	NWWTP Odor Control	07-WT-TP-0030	Env. Eng Svcs	Construction	SEMS, Inc.	\$2,279,038	6/29/2007	10/30/2009	7/15/2010
17	Elm Grove Garden- Harding Blvd	09-AR-BD-0012	CSRS, Inc.	Construction	Allen & LeBlanc	\$12,989,271	10/1/2008	10/30/2009	1/27/2011
18	South Capacity Group Project 2	08-PS-IF-0046	ABMB Eng.	Design	TBA	TBA	3/10/2008	1/8/2010	8/14/2012
19	Sharp Road - Florida Blvd	09-AR-BD-0013	CSRS, Inc.	Design	TBA	TBA	1/15/2009	4/16/2010	6/1/2011
20	South Boulevard - St. Joseph Street	08-GS-ST-0018	Evans-Graves	Design	TBA	TBA	3/27/2008	1/29/2010	11/1/2011
21	25th Street - North Acadian Thruway	09-GS-UF-0008	Hartman Engineering	Design	TBA	TBA	2/2/2009	1/29/2010	10/27/2011
22	Highland Road - Buchanan Street	08-GS-ST-0021	Burk-Kleinpeter/ Justice & Huang (A JV)	Design	TBA	TBA	3/13/2008	2/5/2010	3/18/2011
23	Kenilworth Drive - Boone Drive	09-AR-BD-0014	CSRS, Inc.	Design	TBA	TBA	3/26/2009	3/26/2010	5/6/2011
24	Downtown Area - PS15,19, 60, 59	08-PS-ST-0056/57	Shaw Environmental & Infrastructure, Inc.	Design	TBA	TBA	3/24/2008	3/1/2010	7/10/2011
25	Capitol Lake - Gayosa Drive	07-PS-BD-0048	Shread-Kuyrkendall & Associates, Inc.	Design	TBA	TBA	1/14/2008	3/1/2011	9/1/2011
26	Staring Lane - PS58 (PhII:Highland-Perkins)	06-WC-CP-0036	Monroe & Corie	Design	TBA	TBA	4/8/2008	3/11/2011	6/1/2012
27	Citiplace/Essen Lane Area - PS119	08-FM-UF-0024	GSA Consulting Engineers, Inc.	Design	TBA	TBA	2/25/2008	5/3/2010	9/1/2011
28	Foster Drive - Government Street	09-AR-BD-0015	CSRS, Inc.	Design	TBA	TBA	5/25/2009	4/16/2010	7/29/2011
29	SWWTP Wet Weather Improve (PhI)	08-TP-BD-0033	CDM	Design	TBA	TBA	6/23/2008	4/1/2010	9/28/2012
30	Brookstown Road - Evangeline Street (PhI)	TBA	CSRS, Inc.	Design	TBA	TBA	7/10/2009	5/10/2010	9/17/2012
31	Highland Road - Burbank Drive	08-FM-ST-0023	GOTECH, Inc.	Design	TBA	TBA	3/31/2008	5/14/2010	7/13/2012
32	Central Pump Station - PS 42	09-PS-UF-0003	MWH	Design	TBA	TBA	10/21/2008	5/21/2010	10/19/2012
33	Hooper Storage	09-PS-UF-0007	TRC Engineers	Design	TBA	TBA	1/19/2009	5/21/2010	12/8/2011
34	Zachary Area Transmission Network	06-WC-IF-0014	SJB/Owen & White	Design	TBA	TBA	3/24/2008	5/28/2010	5/16/2013
35	North Capacity Group Project 1A	08-GS-UF-0053	URS Corp.	Design	TBA	TBA	3/10/2008	6/18/2010	9/27/2013
36	Pump Station 58A Overflow	09-PS-UF-0001	GEC	Design	TBA	TBA	1/5/2009	8/31/2010	6/20/2013
37	North Capacity Group Project 1B	08-PS-UF-0054	Evans-Graves / Burk Kleinpeter	Design	TBA	TBA	3/10/2008	7/30/2010	10/12/2011
38	Staring Lane - PS58 (PhIII:Perkins-PS58)	06-WC-CP-0036	Monroe & Corie	Design	TBA	TBA	4/30/2009	9/10/2010	1/15/2013
39	Choctaw Storage and PS Facility	09-PS-UF-0009	CDM	Design	TBA	TBA	4/14/2008	9/17/2010	7/27/2012
40	Consolidated FM (2,3,5,7,10)	09-FM-MS-0033	Shread-Kuyrkendall & Associates, Inc.	Design	TBA	TBA	11/7/2008	10/22/2010	10/21/2012
41	Perkins/Old Perkins Area - BPS514	09-PS-MS-0034	GEC	Design	TBA	TBA	4/24/2009	10/22/2010	2/25/2013
42	Consolidated Pump Stations (2,3,4,5,6,7,10,91)	09-PS-MS-0035	Burk Kleinpeter / JJG	Design	TBA	TBA	11/7/2008	10/29/2010	10/12/2012
43	Plank Road - Kleinpeter Road	09-GS-UF-0028	Forte & Tablada	Design	TBA	TBA	3/23/2009	12/31/2010	3/13/2013
44	SWWTP Wet Weather Improve (PhII)	08-TP-BD-0055	MWH	Design	TBA	TBA	10/14/2008	12/1/2010	1/22/2014
45	Central Consolidation- PS42 FM	09-FM-MS-0036	SJB/Owen & White	Design	TBA	TBA	11/7/2008	1/28/2011	11/28/2012
46	Multiple PS - Jefferson Hwy - Park Forest Dr	09-PS-MS-0046	CSRS, Inc.	Design	TBA	TBA	6/8/2009	4/15/2011	3/31/2014
47	Multiple PS - Nicholson Dr - Brightside Dr	09-PS-MS-0048	Arcadis	Design	TBA	TBA	9/14/2009	4/15/2011	9/30/2013
48	Bayou Duplantier Area Sewer Upgrades	09-GS-MS-0042	Neel-Schaffer	Design	TBA	TBA	8/31/2009	8/1/2011	1/15/2014
49	Nicholson Dr - Highland Rd - Perkins Rd	09-GS-MS-0047	Buchart - Horn	Design	TBA	TBA	6/29/2009	8/1/2011	1/15/2014
50	Government St - S. Acadian Thruway	09-GS-MS-0043	GSA Consulting Engineers, Inc.	Design	TBA	TBA	8/28/2009	8/1/2011	1/15/2014





# ADVERTISED FOR CONSTRUCTION

As shown on the schedule (page 4 - 5), the SSO Program has successfully completed two projects.

#### **Completed Construction**

RMAP1-Kleinpeter Area Upgrades: Capacity upgrades were completed on two pump stations, including 2,000 linear feet of new 4-inch forcemain.

By increasing the size of the forcemain from 4 to 6 inches the pump station pumping capacity has increased by approximately 40%. The final change order to close this project is being issued.

#### Jefferson Highway-Hoo Shoo

Too Road: This project involves the rehabilitation of the gravity collection system, including approximately 117,110 linear feet of pipe and 553 manholes. Final inspection is being conducted to finalize contract closure.

#### **Under Construction:**

Fourteen projects are under construction and are described as follows:

Gurney Road – Joor Road: One new pump station as well as 14,500 linear feet of forcemain was constructed in the project area. The final change order to close this project is being issued.



Construction work finished in October in the Azalea Lakes Area.



Over 14,500 linear feet of new forcemain was laid in the Gurney-Joor area. Construction completed in November 2009.

#### Staring Lane Extension (Phase I: Burbank to Highland):

Approximately 2,960 linear feet of new forcemain and a new overflow pump station will be installed. The SSO Program and the Green Light Plan are working closely to combine construction efforts to minimize traffic inconveniences. As of November 2009, the project is 35% complete.

RMAP1 – PS136: Four existing pump stations will be demolished and replaced with a new pump station, 27,000 linear feet of associated 4 to 24 inch forcemain. A new gravity system will be constructed routing sewer flow from the four demolished pump stations to one new centralized 4.5 million gallon per day at PS136. The new gravity system includes the construction of approximately 10,300 linear feet of 10 to 12 inch gravity sewer, approximately 6,000 linear feet of 15 to 18 inch gravity sewer. As of November 2009, the project is approximately 35% complete.

RMAP1 – Industriplex: Six pump stations will be demolished and replaced with a new pump station and a 16 inch forcemain. This project will reduce pump station operation and maintenance costs and reduce

any possible odor issues associated with the existing pump stations. As of November 2009, manhole crews are working in the Honore area. The project is 35% complete.

Gardere Lane – Burbank Road: Approximately 168,300 linear feet of pipe and 787 manholes will be cleaned, inspected, and rehabilitated. As of November 2009, manhole rehabilitation and cured-in-place work is underway. The project is approximately 35% complete.

Immediate Action Projects (combined): The project includes a number of improvements including: primary clarifier mechanical replacement, trickling filter pump station and piping/pumping modifications to the digester complex. As of November 2009, the project is 25% complete.

Foster Road – Hooper Road: Pipe capacity will be increased and includes approximately 32,000 feet of pipe. Three construction crews are completing horizontal directional drilling in the area. As of November 2009, the project is 25% complete.

Comite Drive – Foster Road (Phase I): The Comite Drive – Foster Road project involves replacing three pump station and upsizing 19,000 linear feet of forcemain to alleviate SSOs at and near the pump stations. In addition, the new pump stations will meet future peak wet weather flow, avoiding exceedances predicted on recent models. As of November 2009, the project is 25% complete.

Sullivan Road- Lovett Road -Wax Road: Three pump stations will be replaced as well as upsizing approximately 6,300 linear feet of forcemain pipe. Boring crews are currently working in the Morgan Place area. As of November 2009, the project is 15% complete.

Staring Lane – Boone Drive: Approximately 148,000 linear feet of gravity pipe and 657 manholes will be inspected by CCTV and rehabilitated to repair or replace components of the existing sewer system that are defective, thereby significantly reducing the excessive infiltration and inflow that contribute to sanitary sewer overflows. Construction crews are currently conducting point repairs. As of November 2009, the project is 25% complete.

Oak Villa Blvd – Choctaw Street: Approximately 245,000 linear feet of sewer pipe and 982 manholes will be cleaned and inspected by CCTV; and rehabilitated as necessary. Four construction crews are working in the project area. As of November 2009, the project is 10% complete.

Comite Drive – Foster Road (Phase II): This portion of the project (Phase II) will be constructed with the Green Light Program. Construction Notice to Proceed was given on November 16, 2009.

Scotland Avenue – Progress Road: The project involves the cleaning, inspection and rehabilitation of the collection system. The project area consists of approximately 28,000 linear feet of pipe and 793 manholes. Construction Notice to Proceed is anticipated early 1st quarter 2010.

**North WWTP Odor Control:** The project includes a new biotower, blowers, ductwork and liquid phase chemicals. This system will address odor problems in the collection system and will result in a reduction in odor at the receiving treatment plant. DPW selected the construction contractor in November 2009. Notice to proceed for construction is anticipated early 1st quarter 2010.

Elm Grove Garden – Harding Boulevard: This rehabilitation project includes approximately 199,500 linear feet of sewer pipe, 3,216 laterals and 839 to be inspected by closed-circuit television (CCTV) and smoke testing. DPW selected the construction contractor in November 2009. Notice to proceed for construction is anticipated early 1st quarter 2010.



# Looking Ahead...

For detailed information about forthcoming projects, please visit the web-site at:

http://www.brprojects.com/sewer/pages/contractor\_calendar.htm



# BATON ROUGE SSO PROGRAM PROCESS REPORT

NOVEMBER 2009

300 North Boulevard, Room 208 Baton Rouge, LA 70802 (225) 389-3158 DPW@brgov.com



