

#### Task Force Hope Status Report

# - A PHASED APPROACH -Permanent Pumps at Outfall Canals

• ver the past two years, there has been extensive discussion about the best way to provide protection from storm surges at the three outfall canals – 17<sup>th</sup> Street, Orleans Ave. and London Ave. – and to improve interior drainage from the areas that feed into the outfall canals. Below, this Newsletter outlines the chronology of the permanent pump stations that will provide this protection and the path forward.

#### By Susan Spaht

f f ollowing Hurricane Katrina, interim closure structures and pump stations were installed on all three outfall canals that work in series with the city's existing local drainage pump stations. The replacement of these interim structures with similarly



configured permanent perimeter protection, 'Option 1' (see definition below), is the basis of the programmatic cost estimate provided to



The locations of the three outfall canals - 17th Street, Orleans Ave. and London Ave. - are shown in the above illustration. (USACE Illustration)

Congress. We are fully confident in the technical feasibility and effectiveness of this solution to fulfill the requirements for the 100-year system, as evidenced by recent operations of the interim pumps during Hurricanes Gustav and Ike, and of our ability to implement Option 1 within the cost estimates we provided to Congress."

Lt. Gen. Robert Van Antwerp, Commander, Corps of Engineers (In testimony before Congress, March 2009) "By law, the Corps of Engineers receives its authority and appropriations for all construction projects from the U.S. Congress. Additionally, we work very closely with, and listen

```
Continued on page 2
```

#### Also in this issue:

Corps sponsoring new round of Public Meetings.....Page 5

Lt. Gen. Van Antwerp

April 14, 2009

#### Page 2 Continued from page 1

to, our stakeholders and partners who share our number one priority – public safety. The Corps is committed to provide a solution for robust



tion for robust Durham-Aguilera perimeter protection at the three Out-

fall Canals. A phased approach for design-construction of permanent gated pumping stations and the engineering study of other options will provide a path that would allow future implementation of other options, if fully authorized and funded."

> - Karen Durham-Aguilera Director, Task Force Hope

## Chronology of Pumps & Gates at the Outfall Canals:

Much of the storm water from the New Orleans Metro Area is pumped into the 17<sup>th</sup> Street, Orleans Avenue and London Avenue Outfall Canals. The three outfall canals convey drainage from the Sewerage & Water Board of New Orleans (S&WB) pump stations, located in the interior of the metro area, to Lake Pontchartrain.

In the aftermath of Hurricane Katrina, the Corps of Engineers built interim closure structures and pump stations (temporary pumps and gates) at the mouths of the three outfall canals in time for the 2006 Hurricane Season. These structures provide 100-year level risk reduction but have only a five- to seven-year project life.

In June 2006, Congress passed

April 14, 2009



"The temporary pump stations are designed for a 5- to 7-year service life because they will be replaced with permanent pump stations by 2013..." - Quoted from the Parson's Report, an "Independent Engineering Assessment of the New Orleans Temporary Outfall Canal Pumps" for the Department of Defense Inspector General, Feb. 27, 2009.

Public Law 109-234 giving the Corps authorization and appropriations to design and construct **Permanent Pumps** for the outfall canals – specifically, to "…modify the 17<sup>th</sup> Street, Orleans Avenue, and London Avenue drainage canals and install pumps and closure structures at or near the lakefront…"

Also in June 2006, the Corps of Engineers entered into a collaborative process with local stakeholders to evaluate different permanent options, culminating in a formal Partnering Session in January 2007. In May 2007, Congress passed Public Law 110-28 directing the Corps to evaluate the **technical advantages and disadvantages** of four options for storm surge reduction at the three outfall canals.

The following summarizes that Congressional directive: **Option 1**: "...operating the new pumping stations (Permanent Pumps) at the mouths of the 17<sup>th</sup> Street, Orleans Avenue and London Avenue canals in the New Orleans area directed for construction in Public Law 109-234 concurrently or in series with existing (S&WB) pumping stations serving these canals."

**Option 2**: "...removing the existing (S&WB) pumping stations and configuring the new pumping stations (Permanent Pumps) and associated canals to handle all needed discharges to the lakefront..."

**Option 2a:** "...or in combination with discharges directly to the Mississippi River in Jefferson Parish..."

**Option 3:** "...replacing or improving the floodwalls and levees adjacent to the three outfall canals..."

Continued on page 3



#### Page 3 Continued from page 2

In response to Congress, the Corps of Engineers developed a process for evaluating the technical advantages, disadvantages and operational effectiveness of the options described in Public Law 110-28.

In June 2007, the Corps and its stakeholder group met to propose and evaluate potential solutions for the three outfall canals that would (a) reduce the risk of flooding in the area from storm surge, and (b) maintain the ability of the area's internal drainage system to function.

The Corps completed the **Outfall Canal Technical** Evaluation Report on August 30, 2007 - 90 days after receiving the Congressional directive. Projection of cost (operational, program and construction), general

public perception and consideration of impacts to the human environment, as required by the National Environmental Policy Act (NEPA), were not considered in the Technical Evaluation Report. Neither cost nor general public perception were considered technical criteria for determining technical advantages, disadvantages and operational effectiveness.

On June 30, 2008 Congress passed Public Law 110-252, directing the Corps to provide cost estimates for three options (Options 1, 2 and 2a) listed in the Outfall Canal Technical Evaluation Report. The Hon. John Paul Woodley Jr., Assistant Secretary of the Army (Civil Works), submitted the Corps' cost estimates re-

orp

port to Congress on February 26, 2009. Option 1 was estimated to cost approximately \$800 million; Option 2 was estimated to cost approximately \$3.4 billion; and Option 2a was estimated to cost approximately \$3.5 billion. (Note: Option 3 was rejected because the other Options provide a greater level of surge risk reduction.)

**Orleans Ave. Outfall Canal** 

# Lake Pontchartrain ent Impacts Temporary Construction Easement 1,000

This enhanced photo illustrates one of the possible location areas for the permanent solution for the Orleans Ave. Outfall Canal. (USACE Enhanced Photo)

#### Which option is the Corps going to proceed with, and why?

Option 1, the permanent replacement of interim structures, is the only option the Corps is both authorized and funded to build. In the interest of public safety and to complete the perimeter risk reduction system to protect the Greater New Orleans area, the Corps is moving forward with plans for Option 1.

Options 2 and 2a are not funded for construction, and exceed the current authorization because they go beyond measures to reduce hurricane and storm surge risk to include significant modifications of the city's interior drainage system that deal with routine rain events.

lumicane Res

#### April 14, 2009

A phased approach for the designconstruction of permanent gated pumping stations and the engineering study of other options will provide a path that would allow future implementation of other options if authorization and funding is provided.

#### Does the Corps have authorization to study Options 2 and 2a?

Yes, the Corps is authorized to conduct an engineering feasibility study of Options 2 and 2a, but additional funding would be required to undertake this analysis. This study would require an Environmental Impact Statement for compliance with the National **Environmental Policy Act** (NEPA), a two- to threeyear process.

Construction of Options 2 or 2a, massive and complex

construction projects, is neither authorized nor funded.

#### Which option provides greater hurricane and storm surge risk reduction?

Options 1, 2 and 2a provide the same level of hurricane and storm surge risk reduction.

#### Since the Corps is proceeding with Option 1, does that preclude the future possibility of Option 2 or 2a?

No. The Chief of Engineers will provide an estimate of the cost of modifications to Option 1 so that no large element of work would have to be



Continued on page 3

### Page 4

Continued from page 3

removed and replaced if Option 2 or 2a were authorized and funded in the future. The Chief will also state if the Corps is authorized and funded for these modifications, depending upon the required scope of work and the cost estimate.

#### **Bottom Line:**

- Public Safety is the Corps' No.1 priority. The temporary pump stations must be replaced by the end of their 5- to 7-year project life.
- The Corps is authorized and funded to proceed with Option 1.
- The Corps is authorized to further study Option 2 and 2a, but additional funding would be required to proceed.
- Construction of Option 2 or 2a, massive and complex construction projects, is neither authorized nor funded.
- Option 2 or 2a would require an Engineering Feasibility Study, including an Environmental Impact Statement, a 2- to 3-year process.
- Continued implementation of a modified Option 1 (i.e. deep sill) would not preclude future implementation of Option 2 or 2a if construction is later authorized and funded.
- Local stakeholders prefer an improved outfall canals interior drainage system that will also provide storm surge protection.
- A phased approach can achieve all objectives

17th Street temporary pump station



London Ave. temporary pump station

#### Proposed Schedule for Permanent Pump Stations:

**April 2009** - Individual Environmental Report out for 30-day public review period, as required by the National Environmental Policy Act (NEPA).

June 2009 - NEPA approval expected

Corps Hurricane

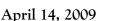
August 2009 - Issue Phase 1 Request for Proposals

September 2009 – Stakeholder Review, Phase II of RFP

November 2009 – Issue Phase II Request For Proposal

June 2010 - Award Design-Build contract

September 2013 - Estimated construction completion





Keeping stakeholders informed

## **Corps sponsoring Public Meetings**

an on-going effort to keep the public and its stakeholders informed, the Corps of Engineers holds public meetings. These meetings are usually part of the National Environmental Policy Act (NEPA) requirements. At the meetings, Corps project managers and experts present construction plans and give the public an opportunity to comment on those plans.

The next scheduled meetings are:

Wednesday, April 29, 2009 IER 13 - Eastern Tie-In St. Paul's Benevolent Association Hall 128 E. St. Peter Street Oakville, LA 70037 Open House 6:00 p.m. Wednesday, May 13, 2009 Bonnet Carre Spillway Master Plan Update La Maison Magnolia Reception Hall 950 First Street Norco, LA 70079 Open House 6:00 p.m. Presentation 7:00 p.m.

Sunday, May 17, 2009 Bonnet Carre Spillway Master Plan Update St. Charles Recreation Center/ Pavilion Norco, LA 70079 Open House 1:00 to 4:00 p.m.

For more information on Corps projects and NEPA compliance, go to: http://www.nolaenvironmental.gov/ **Contact Information** 

#### **U.S. Army Corps of Engineers**

**Task Force Hope** (504) 862-1836

New Orleans District (504) 862-2201

Hurricane Protection Office (504) 862-1708

The Status Report Newsletter supports the information program for Task Force Hope and its stakeholders. It also serves as the primary tool for accurately transmitting the Corps' hurricane recovery work to stakeholders.

This is an online publication that is open to public distribution.

This issue and past issues can be found at: <u>http://www.mvn.usace.army.mil/hps</u>

Comments and questions may be sent to the Status Report Newsletter editor at: b2fwdpao@usace.army.mil

The Status Report Newsletter is an unofficial publication authorized under the provisions of AR 360-1. Views and opinions expressed are not necessarily those of the Corps of Engineers or the Department of the Army.



Status Report Newsletter Task Force Hope Strategic Communications 7400 Leake Ave., Room #388 New Orleans, LA 70118 (504) 862-1949