LAKE PONTCHARTRAIN BASIN FOUNDATION

SAVE OUR COAST SAVE OUR LAKE

Mardi Gras Pass Threatened by Proposed Project

Background

In 2012, Mardi Gras Pass (MGP) became the most recent distributary of the Lower Mississippi River (**Figure 1**). It was created by natural erosion processes initiated by the high-water event of 2011, while LPBF was conducting a spillway-wide hydrologic survey. A proposed private project under permit review by the Corps would severely limit Mardi Gras pass, and reduce the ecologic benefits.

MGP has great significance to coastal restoration. First, it is a remarkable scientific opportunity to study a significant deltaic process. Secondly, MGP itself could evolve into a managed diversion with large cost savings to the state and the country (**Figure 2**). Mardi Gras Pass has continued to evolve since breaching to the river in early March of 2012. LPBF has been documenting deltaic processes in the Bohemia Spillway where MGP is located since 2007 (see SaveOurLake.org for more information). We expect Mardi Gras Pass to continue to expand over time during future high water events, increasing its importance as a restoration feature in the region. LPBF will continue to monitor the changes to Mardi Gras Pass dimensions (width and depth) and expect it to enlarge over time.

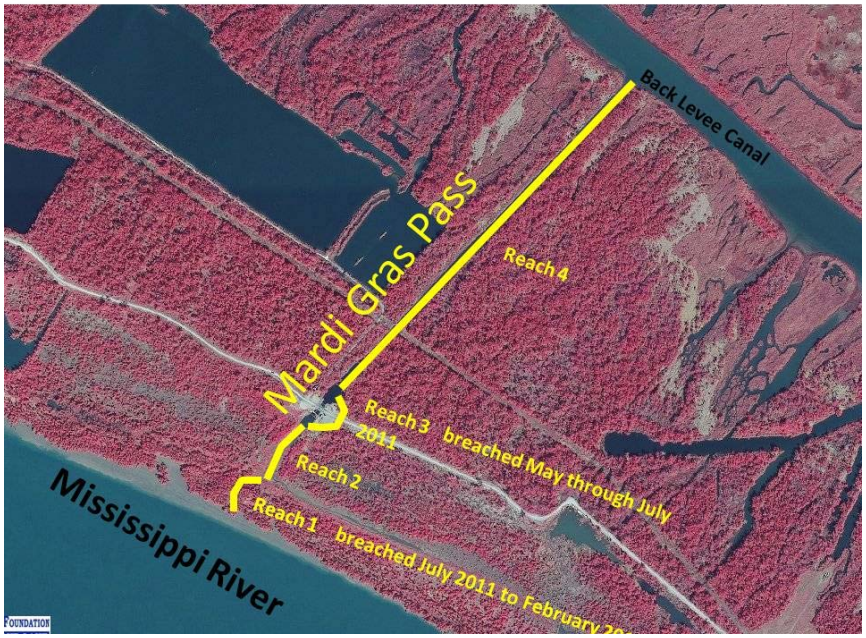

Figure 1: Location of Mardi Gras Pass at the top of the Bohemia Spillway showing reaches 1 through 4. Reaches 1 and 3 were newly formed in 2011 and 2012 and reaches 2 and 4 are the conveyance canals for the defunct diversion structure built in 1979.

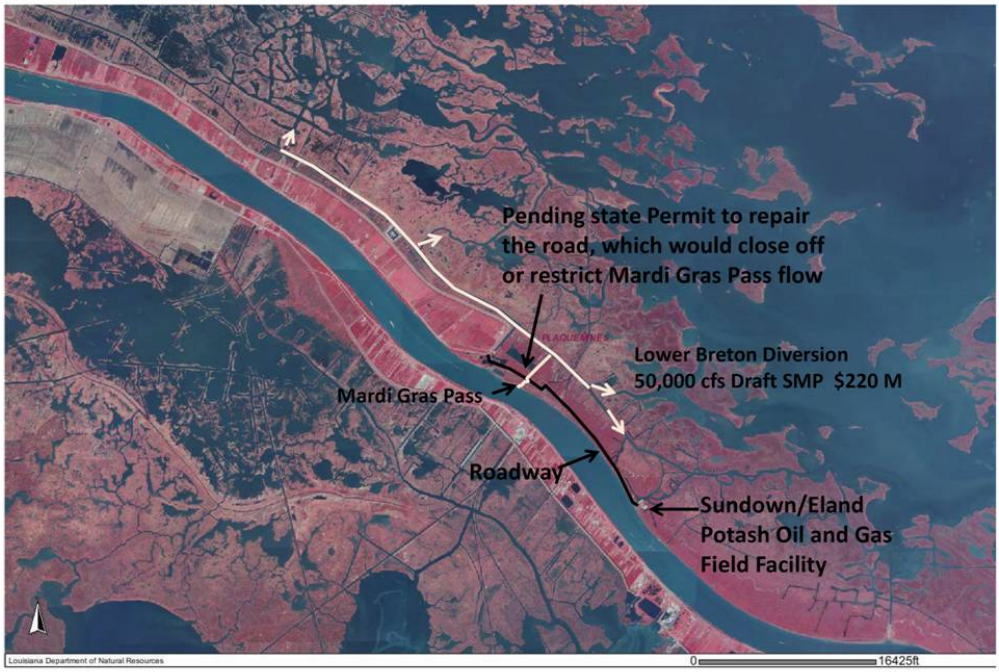

Figure 2: Location of Mardi Gras Pass in context with where the proposed road repair will occur, location of the Sundown/Eland Potash oil and gas facility and location of the 50,000 cfs Lower Breton Sound Diversion proposed in the State Master Plan at a cost of $220 million.

Since the early 1990's, the intense coastal planning that was in response to the coastal collapse due to wetland loss, there has been a succession a comprehensive planning efforts with a consistent theme to re-establish connections of the Mississippi river to the deltaic plain. The goals of such proposal were to resurrect deltaic processes that would help sustain or re-build precious wetlands. The Louisiana Coastal Area study authorized in 2003, and the Louisiana Coastal Protection and Restoration studies in 2009, proposed major outlets along the Mississippi River. Foremost now, is the recently approved Louisiana State Master Plan which calls of multiple land-building type diversion, including a 50,000 cfs diversion just a mile from the location of Mardi Gras Pass. The estimated cost of the Lower Breton Diversion approved within the State Master Plan is $220,000,000 which would not be necessary to spend if Mardi Gras Pass were allowed to continue to develop.

Permit information

MVN-2011-2607-EQ	Public Notice	Drawings	Melissa Ellis	504-862-2543	sundown MGPass road

Coastal Use Permit # 2011 1629

http://ucmwww.dnr.state.la.us/ucmsearch/FindDocuments.aspx?idx=xrefnum&val=P20111629

http://ucmwww.dnr.state.la.us/ucmsearch/UCMRedir.aspx?url=http%3a%2f%2fdnrucm%2fucm%2fgroups%2fcoastalmanagement%2fdocuments%2focm%2f4344145.pdf

Technical Conclusions:

Mardi Gras Pass is a free-flowing distributary of the Mississippi River within the Bohemia Spillway.

Mardi Gras Pass has already developed a riverine ecology including at least otter, beaver and fish.

Fish species of Mardi Gras Pass are both fresh and salt water species and demonstrate the pass is an important migratory path between the Mississippi River and the Gulf of Mexico.

Turbidity measured in Mardi Gras Pass at the Mississippi River inflow is relatively high (3 to 4 times greater than turbidity of discharge through the Caernarvon Diversion).

Sediment transport through Mardi Gras pass is indicated by newly created, vegetated shoals, and by aggrading and degrading channel bathymetry.

Recreational Fishers are successfully utilizing Mardi Gras Pass.

Mardi Gras Pass is physically navigable and complete passage through the pass was made from the marsh to the Mississippi in October of 2012.

Mardi Gras Pass dimensions are similar to oil and gas navigation canals, and exceed criteria normally assumed to legally determine navigability.

Mardi Gras Pass is an exceptionally rare, and highly valuable opportunity to scientifically document the deltaic process utilizing the river's capacity to reconnect itself to the marsh and the related ecologic benefits.

Mardi Gras Pass is 1.3 miles from the proposed 50,000 cfs diversion within the State master Plan, and could eventually provide comparable benefits of 13,000 acres of wetland creation as predicted in the State Master Plan.

Mardi Gras Pass has modestly enlarged since February 2012, and if unaltered would continue to enlarge.

The highest discharge documented in Mardi Gras Pass is 2,400 cfs, but could be as great as 5000 cfs with high water in the Mississippi River.

If the proposed culverts were constructed, the peak discharge through Mardi Gras Pass would be reduced by at least 80%, i.e. approximately 800 cfs.

The proposed culverts would prevent vessel navigation by boats to Mississippi River and to Reaches 1, 2 and 3.

The proposed culverts would limit fish migrations.