Volume 2, Issue 1

The Local Coastal Program's Outlook

News from the Assistant Secretary's Office



Louis E. Buatt Assistant Secretary

Louisiana

Department of Natural Resources

Office of Coastal Management

The Department of Natural Resources (DNR) Office of Coastal Management (OCM) has been extremely active over the past several months addressing issues that should be of utmost importance to local coastal managers. As you know, OCM is striving to implement smart public policy and make advancements toward improving coastal management to enhance, protect and conserve the coastal resources of Louisiana while providing for a robust coastal economy. The most noteworthy advancement of late is the recent approval of the revised Coastal Zone Boundary at the May Coastal Protection Restoration Authority (CPRA) meeting which by operation of law results in the inclusion of Ascension Parish into the Coastal Zone.



Contents

Letter from Assistant Secretary, Louis E. Buatt	1
Ascension Parish added to the LA Coastal Zone	3
OCM's Recent Mitigation Initiatives	5
OCM's Beneficial Use of Dredged Material and	
Permit Processing Improvements	6
OCM Implements New Public Notice Process to	
Improve Transparency, Efficiency and Public	
Service	7
Integrated Ecosystem Restoration and Hurricane	
Protection in Coastal Louisiana: OCM's Comments	5
Offered	7
Mississippi Canyon 252/Deep Water Horizon Oil	
Spill Update:	8
Involvement of the Department of Natural	
Resources in the 2011 Flood Response	9
Louisiana's Coast, a Changing Landscape through	
Sea Level Rise and Subsidence	10
Coastal Resiliency in the Face of Sea Level Rise	11
Meet your Louisiana Sea Grant/LSU Ag-Center	
Marine Extension Agent for the Louisiana Coastal	
North Shore	12
Community Risk Resiliency	12
Christmas Trees a Coastal Restoration Go in	
Jefferson Parish	13
The Local Coastal Programs Handbook on the	
DNR/OCM Web Page	13
Greg DuCote's Farewell to the LCPs	14
Increasing Coastal Resiliency in a Katrina	
Devastated Community: A Practical Application of	
Coastal Resiliency Policies	
Coastal Resiliency Policies	15



OCM has been advancing changes in mitigation in Louisiana in order to implement its findings from the mitigation evaluation it completed in 2010 and better align the program with coastal ecosystem restoration efforts. As you are aware from our most recent newsletter and from discussion at recent local coastal program quarterly meetings, OCM has been garnering stakeholder support through ongoing outreach efforts including initiating conversations with mitigation bank sponsors and investors. We have concurrently been actively and directly engaged with other State and Federal agencies seeking programmatic change in the mitigation program since information from the evaluation was presented to the CPRA in December of last year. We have also made progress with the advancement of our in lieu fee program that we believe is a key component of mitigation reforms.

Also of note regarding mitigation, on May 1, 2011 the New Orleans District of the Corps of Engineers (NODCOE) implemented the use of the Modified Charleston Method (MCM) as its primary method of quantifying impacts and determining mitigation needs for projects authorized by Department of the Army permits. While the MCM has the potential to offer real solutions for many issues with regard to compensatory mitigation assessment, OCM has provided comments to the NODCOE requesting modifications to the MCM to better suit mitigation issues in Coastal Louisiana.

The implementation of OCM's new Beneficial Use of Dredged Material Regulation has proved to be quite successful over the course of the past year. These Beneficial Use requirements and processes for coastal use permits have been reformed to improve performance of that program. This initiative has resulted in an increase of beneficial use from 22% of the time to 100% while at the same time reducing permit processing times. Also worth mentioning on the topic of permitting, since 2008 there has been a 45% reduction in OCM's permit review and processing time. These results are attributed to improvements in communications and the overall efforts of staff and management to improve the permitting process.

This newsletter is intended to alert parish coastal resources stakeholders of news and events we believe will be of significant interest to them. This edition will also provide up to date information on establishing a resilient coastal Louisiana focusing on efforts at the local level. Please send in any questions, comments or other information that you would like to see highlighted in future editions of the newsletter to my local program staff. As always my local program staff remains ready to assist you with all of your coastal management needs.

Sincerely,

Louis E. Buatt Assistant Secretary Office of Coastal Management Louisiana Department of Natural Resources

Ascension Parish Becomes 20th Parish to be incorporated into the Louisiana Coastal Zone: By Dr. Terry Howey, Science and Policy Special Advisor to the Office of the Assistant Secretary

As a result of a resolution passed without objection at the Coastal Protection and Restoration Authority (CPRA) meeting held in Baton Rouge on Tuesday May 17th, Ascension Parish joined the Coastal Zone of Louisiana. The resolution accepted a report prepared by the Office of Coastal Management (OCM) for the CPRA at the request of the Louisiana Legislature in Senate Concurrent Resolution No. 60 passed in 2009, requesting that a study be conducted to evaluate the adequacy of Louisiana's current coastal zone inland boundary after more than thirty years of coastal management. Titled "Defining Louisiana's Coastal Zone: A Science-based Evaluation of the Louisiana Coastal Zone Inland Boundary," the report analyzed the adequacy of the boundary based on science and factoring in socioeconomic considerations. To view the entire report, including maps and related documents, please visit the Coastal Zone Boundary page on the OCM website at: http://dnr.louisiana.gov/index.cfm?md=newsroom&tmp=detail&aid=12

One outcome of the study was that a portion of Ascension Parish was found to have a high affinity for coastal processes and was recommended to be added to the coastal zone. The Louisiana Legislature, having considered this potential outcome, passed Act 956 in 2010 which provided for the immediate addition of that part of Ascension Parish to the coastal zone, as recommended by the report, upon its approval by the CPRA.

One of the most important considerations to be undertaken is integrating that portion of Ascension Parish to be added into the coastal zone into the coastal use permit program. Despite the additional regulation that this will entail, there should be no increase in overall regulatory burden to parish residents. Currently, projects that would need a coastal use permit already require a U.S. Army Corps of Engineers Section 404 wetlands permit. Now that Ascension is part of the coastal zone, these permits would be part of the joint permitting process between OCM, the Corps, and DEQ. This should increase the efficiency and can often result in a simplified permitting process that is easier on applicants.

The first step in this process will be to amend Louisiana's federally approved coastal zone management program, the Louisiana Coastal Resources Program (LCRP). This involves going through a Routine Program Change process which is detailed by federal regulations under the Coastal Zone Management Act (CZMA). Even though the legislature has passed state law that allows Ascension Parish to be added to the coastal zone, it is necessary to get National Oceanographic and Atmospheric Administration (NOAA) approval. For example, in order for the state to exercise its Federal Consistency review process on federal activities occurring in Ascension Parish, the parish must be formally approved by NOAA. Then such federal activities as construction of hurricane or flood protection levees would be reviewable by the state and parish which would provide more input and control over location and related matters. Also, federal funds could not be spent on activities of the state program in Ascension without this approval. The CZMA routinely provides about \$2.5 million annually under CZMA authorization to the state to implement its federally approved coastal zone management program. OCM staff has already initiated discussion with NOAA regarding this process and are now compiling the necessary documents to submit the request for the program change to add Ascension to the coastal zone.

Considerable interagency coordination will also be necessary to integrate Ascension into the coastal zone. OCM staff has already scheduled meetings with Ascension Parish government and will be working closely with them to provide a smooth transition into the coastal zone. "I am excited at the prospect of having Ascension Parish added to the coastal zone," said Parish President Tommy Martinez. The parish has been looking forward to the results of the OCM study ever since the state legislature passed Act 956 during the 2010 session, he said. That legislation provided that any portion of Ascension Parish recommended for addition to the coastal zone by the report would be operationally added upon acceptance of the report by the state CPRA. The CPRA accepted the report at its May 17 meeting in a resolution passed without objection. In addition to meeting with representatives of Ascension Parish, it will be necessary for planning and coordination meetings between OCM and parish staff and various state and federal agencies to ensure that the roles and responsibilities of each governmental body are clear and able to serve the public efficiently after this change is made. Article Continues on the Next Page









There will be no immediate changes in the permitting structure of the parish. The area added includes a relatively small percentage of low lying and wetland area that is currently primarily undeveloped. This area will become subject to the coastal use permitting process once full implementation of the addition becomes effective, probably around January 1, 2012. Between now and that time the OCM and Ascension Parish will be coordinating with each other, the Corps of Engineers, and other state and federal agencies to create a seamless transition to inclusion into the coastal zone regulatory process. Because the area of Ascension Parish to be added to the coastal zone will soon be eligible for permit processing under the Corps' "Programmatic General Permit" the permitting process in the affected area may become simpler and faster when the addition is fully implemented. Additionally, the parish may elect to establish a "Local Coastal Program" in which case many projects of local concern would be handled solely by the parish rather than the state and Corps. Should that occur, the parish could actually take over some of the regulatory responsibilities and persons needing permits could deal directly with local officials rather than having to drive to New Orleans or Baton Rouge if it were necessary to consult with a federal or state permitting authorities

For additional information regarding this issue contact Terry Howey 225.342.5007 or terry.howey@la.gov



OCM's Recent Mitigation Initiatives: By Keith Lovell

Evaluation of OCM Mitigation Program

The OCM recently completed a yearlong comprehensive evaluation of the state's entire Coastal Mitigation Program. This evaluation process led to the development of a white paper that provides the research, statistics and other information required to support all recommendations for implementing programmatic change. The OCM formally presented these findings to the Louisiana Coastal Protection and Restoration Authority (CPRA) on Wednesday, December 8, 2010.

The DNR's Coastal Management Program strives to implement sustainable and meaningful mitigation for permitted activities to complement the critical mission and objectives of the Master Plan for a Sustainable Coast (2007). The New Orleans Corps District must be brought to the realization that current federal mitigation rules for Wyoming, Montana and Nebraska are not appropriate for coastal Louisiana.

Mitigation Banks need to locate where they more appropriately compensate for habitat impacts. In addition, there is a strong need for a robust and flexible in lieu fee mitigation option; both are necessary to better complement the goals and objectives of the state's Master Plan for a Sustainable Coast. DNR has been garnering stakeholder support through ongoing outreach efforts by initiating conversations with mitigation bank sponsors and investors and has concurrently been actively and directly engaged with other State and Federal agencies seeking programmatic change since this information was presented to the CPRA in December 2010.

Modified Charleston Method (MCM) Update:

On May 1, 2011, the New Orleans District of the Corps of Engineers (NODCOE) Regulatory Branch began utilizing the Modified Charleston Method (MCM) as its primary method of quantifying impacts and determining mitigation needs for projects authorized by Department of the Army permits. Over the upcoming months, OCM will concurrently utilize the MCM and the Wetland Value Assessment (WVA) habitat evaluation methodology to fully research and document the similarities and differences between these two separate methodologies. OCM's Local Coastal Program staff will comprehensively train Local Coastal Program personnel in any revisions made to state mitigation assessment procedures.

OCM believes the MCM has the potential to offer real solutions for current inadequacies with regard to compensatory mitigation assessment. OCM understands that at a time when our local, state and federal regulatory agencies are being asked to do more with less, the MCM will provide the regulatory community with a habitat assessment tool that is quick, efficient, transparent and predictable. Louisiana administrative procedures require formal rule making processes to be followed in order to implement the use of alternative compensatory mitigation evaluation tools; however, OCM is supportive of the NODCOE's decision to implement the MCM at this time but has offered comments and suggested revisions to the MCM which the NODCOE is currently considering. These suggested revisions and/or adjustments to the MCM that OCM would like for the NODCOE to make would bring mitigation quantities more in line with what OCM feels is appropriate.

Louisiana Coastal In Lieu Fee Program Update:

OCM has been actively and aggressively developing the state's Coastal In Lieu Fee Program Instrument with the cooperation of the NODCOE mitigation staff and the NODCOE's Interagency Review Team (IRT). To fully comply with all requirements of the revised federal mitigation regulations promulgated in 2008, the State must revamp its current in-lieu fee program. Currently, making a contribution to the Louisiana Wetlands Conservation and Restoration Fund serves as the state's in-lieu fee program.

The revised federal regulations also established performance standards and criteria for in-lieu fee programs to improve the quality and success of compensatory mitigation projects. The OCM is in the process of developing, with the cooperation of NODCOE staff, an in-lieu fee program that will comply with these new federal regulations. The In-Lieu Fee Program's Prospectus was placed on public notice on April 26, 2010. Since that time, OCM has been actively developing its Program instrument and responding to IRT agency comments.

On May 19, 2011, OCM submitted its revised In-Lieu Fee Instrument and provided a response to comment document. It is also noteworthy that approximately two-thirds of the time spent developing the program has been devoted to public notice periods and extensive review by the NODCOE and the IRT.

For additional information regarding OCM's mitigation program please contact Keith Lovell at 225.342.9052 or by email <u>keith.lovell@la.gov</u>.

OCM's Beneficial Use of Dredged Material and Permit Processing Improvements Updates: By Karl Morgan

New rules and regulations for Beneficial Use of Dredged Material went into effect on October 10, 2009. Since that time, there have been a total of 19 instances and approximately 975,000 cubic yards of material associated with those 19 projects. In 14 of those 19 projects/instances, the applicant chose to make a beneficial use contribution in lieu of using the material beneficially. Thirteen of those 14 were received during the year 2010, totaling \$412,503. The total amount received since the new rules went into effect is \$415,262.00. These funds will be used to supplement and enlarge coastal restoration projects on the state or local level. This initiative has resulted in an increase of beneficial use from 22% of the time to 100% while at the same time reducing permitting processing times. In fact, permit processing times have improved by 45% since 2008 and these new regulations have contributed to those improvements.



Part of the permit process involves a three step sequencing process of "avoid, minimize, and mitigate" to first reduce impacts to coastal resources and then to mitigate for those unavoidable impacts.

During the review period, for the year 2010, 128 acres of wetland habitat was saved during the permit review process through avoidance and minimization of impacts.



OCM Implements New Public Notice Process to Improve Transparency, Efficiency and Public Service By Karl Morgan, OCM

The Office of Coastal Management (OCM) continues to review its procedures to improve transparency, efficiency and service to the public. Based upon comments and suggestions from user groups and the public, OCM will implement technological improvements including: 1) distribution of our coastal use permit public notices and project plats to interested parties via email and 2) posting public notices on the OCM web page. In order to reduce costs, we will continue to offer hard copy mail outs only to those who request continuation of that service. In addition, public notices of all apparently complete applications for Coastal Use Permits will continue to be published in the official journals of the state and/or parish as appropriate. Notices to adjacent land owners will continue to be mailed in accordance with our partnership with the Corps of Engineers regulatory branch.

The web address to view the OCM public notices and plats is http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=591. This has already been implemented, so please check it out.

Those who wish to receive email distribution of the Coastal Use Permit public notices and project plats should send an email to <u>OCMINFO@la.gov</u> and include the following information: your name, organization, phone number, and the email address where you would like our office to send the notices.

One of the benefits of the electronic system is the use of email transmission of all permit applications to the Local Coastal Programs (LCPs). The moment an application is determined to be complete, a copy is forwarded via email to the local program. Similarly, public notices are forwarded via email to the LCPs as well. Just recently, OCM placed all of the public notices on our web site. Any citizen request for copies of public notices can be directed to the web page for convenience. Use of these electronic means saves both the state and local governments' time and money and is more convenient for the citizens and improves our public notice process.

If you have any questions, please contact Regina Staten at 225-342-7942 or Sara Krupa at 225-342-8917.

2012 State Master Plan Integrated Ecosystem Restoration and Hurricane Protection in Coastal Louisiana: OCM's Comments Offered

The 2012 Master Plan will update and expand upon the 2007 Master Plan by presenting a new approach for considering the future of the Louisiana Coast. The Office of Coastal Management (OCM) has been actively commenting to the Office of Coastal Protection and Restoration (OCPR) on specific topics that are vitally important for the 2012 State Master Plan to address. OCM strongly believes that the State Master Plan must address the following: 1) beneficial use of dredged material, 2) protection and conservation of coastal resources and 3) comprehensive coastal management in a newly defined coastal zone.

The OCM has offered the following comments to the OCPR on the FY 2012 Annual Plan:

<u>OCM's Comment on the Efficient Use of Resources</u> "This plan will promote the efficient use of limited resources through the utilization of sound regulatory policies that ensure public and private resources will work in concert."

OCM feels strongly that regulatory policies play a critical role in ensuring that both public and private resources are utilized as efficiently as possible. It is important that public and private resources be leveraged to the greatest extent practicable. The state must gain as much efficiency that it can with regard to economies of scale as well.

<u>OCM's Comment on Sediment for Restoration</u> "Material that is dredged for navigation and other purposes should be beneficially used to supplement these efforts."

It is of paramount importance that material dredged for navigation and other purposes in coastal Louisiana be put to use beneficially. The issue of beneficially using dredged material is of such high importance that in 2009 OCM promulgated and in 2010 implemented the use of new rules for Beneficial Use of Dredged Material. It is also important to note that Beneficial Use was a significant component of the 2007 Master Plan document. <u>OCM Comment on Regulatory effects</u> "The Master Plan will recognize that Louisiana has a working coast that is critical to the economy of the state and that sound management practices must be utilized on a state and local level to ensure that coastal resources are protected and balance any adverse impact on the economy of the coast. It is recognized that it is much more efficient and cost effective to protect what we have than to rebuild."

This principle is most important of all to OCM. It is absolutely critical that the idea that it is much more efficient and cost effective to protect our existing coastal natural resources than to replace them is understood and implemented by the state and local governments. The state's sound comprehensive management of these resources is important for resource protection and the reduction of adverse impacts to ensure that the coast's economy is not negatively impacted. This idea is not adequately addressed in the current draft document and it is critical that this principle be included in the 2012 plan update.



Deepwater Horizon Oil Spill: \$1 Billion Early Restoration Agreement: By Drue Banta, Governor's Office of Coastal Activities

Natural Resource Damage Assessment (NRDA) is a legal process whereby trustees represent the public interest to ensure that natural resources injured in an oil spill are restored. The trustees assess the injuries to our natural resources from a spill, develop restoration plan(s), and implement those plans in order to compensate the public for the injuries incurred.

Making the environment and public whole includes both restoring injured resources to the condition they would have been in had the spill not occurred as well as compensating for the temporal loss of natural resources, and the ecosystem services they provide, from the time of injury until the time they are fully restored.

Typically in the NRDA process, the trustees will develop a restoration plan or series of plans to compensate for those injuries after the injuries are assessed and the scope and scale of those injuries is determined. However, plans for early restoration projects may be developed prior to the completion of the injury assessment, when opportunities arise, to achieve restoration faster.

On April 21, the State and Federal Deepwater Horizon Natural Resource Trustees announced an agreement under which BP will provide a \$1 billion down payment for early restoration to begin the process of restoring the damage to the Gulf resulting from the Deepwater Horizon oil spill. These funds will be divided among the trustees pursuant to the early restoration allocation agreement. \$500 million will be split equally among the Gulf State Trustees (Louisiana, Mississippi, Alabama, Florida and Texas); \$200 million will be split equally among the Federal Trustees (National Oceanic and Atmospheric Administration and the Department of Interior); and \$300 million will be used to fund state sponsored restoration projects based upon impacts. Louisiana first made the request for BP to fund early restoration in July 2010 and laid the groundwork for this negotiation.



Continues on Page 14





Involvement of the Louisiana Department of Natural Resources in the 2011 Flood Response, by Stephen Chustz, Deputy Assistant Secretary, OCM

The Louisiana Department of Natural Resources (DNR) Office of Coastal Management (OCM) has been and will continue to be involved in several aspects of the response to the 2011 Flood Event. Following is a list of those activities.

DNR Issuance of Emergency Use Authorizations

Louisiana laws, rules and regulations allow authorization of emergency measures to protect life, property or the environment. DNR's OCM is now reviewing and granting emergency use authorization (EUA) requests in the Louisiana Coastal Zone as part of the 2011 Mississippi River flood response. Those requests typically include actions needed to prevent backwater flooding but may also address leaking pipelines or flood-related impacts to other oil and gas facilities, to prevent flooding or storm damage to communities and infrastructure, and to restore power lines. The minimum amount of work necessary to address the emergency situation will be authorized. EUAs are followed with an after-the-fact coastal use permit application. OCM urges applicants to contact us before conducting the work, if possible, to review potential impacts of the activity on other coastal users and protect the workers from potential hazards. Appropriate conditions will be placed in EUAs to protect adjacent coastal resources, habitats and people.

An example of an EUA that has been issued is the Bayou Chene barge project. OCM has worked closely with St. Mary Parish representatives and reviewed information they provided for using a barge to close Bayou Chene near Morgan City to reduce backwater flooding. OCM personnel reviewed all available information sources and determined that the work was justified, identified the affected resources, and provided conditions to minimize adverse impacts. OCM will continue to work with other coastal users to address their EUA requests as part of the 2011 flood response.

DNR's Louisiana Fuel Team Involvement

DNR leads the Louisiana Fuel Team (LFT), which includes representatives of the oil and gas retailers, oil and gas refiners, transporters, and numerous state agencies. The LFT stood up April 27, in preparation for a potential Mississippi River flood. Since then, the LFT has held numerous conference calls, received and processed information on fuel supply, and provided information to its members on the public fuel supply. LFT has worked through problem identification and has addressed several issues for oil and gas retailers, oil and gas refiners, transporters, and state agencies to minimize impacts of this potentially record-breaking flooding event on fuel supply. Some of the issues that the LFT identified and worked through to ensure that an adequate fuel supply remained available to the public include:

- Provided updates on river stage information and summaries of flood fighting efforts to LFT members.
- Discussed how the high water made some docks at terminals and refineries inaccessible to make or to receive deliveries.
- Addressed issues such as: reductions in fuel production due to a lack of storage capacity, monitoring production rates of
 affected refineries, monitoring run-out dates for inaccessible terminals, and assessing impacts of run-outs and developing
 alternatives for affected terminals.
- Monitored and developed solutions for facilities that would be affected and how they would be affected by opening the Morganza Floodway (e.g., potential refinery and pipeline shut-ins, reductions in refinery production, retail facility closures, and road closures).
- Monitored and developed solutions on how restrictions on barge and river traffic affected product and raw material deliveries to and from refineries and terminals.
- Monitored and worked with the Attorney General's office and retailers to address reports of price gouging in areas throughout the state.
- Worked with the regulatory community and private sector representatives to determine needs for environmental waivers based on real-time information.
- Monitored and prepared to react to changing evacuation orders and variances in the demand for fuel supply.

The LFT remains activated, continues to monitor river stages and flood fighting efforts, and has begun preparing for post-event fuel supply issues.

DNR Coordination of Atchafalaya Basin Monitoring Efforts

DNR's Atchafalaya Basin Program has played a leadership role in coordinating and facilitating a multiagency monitoring effort to assess the impacts of the 2011 flood. As part of that effort, DNR is contracting with the Louisiana Geological Survey (LGS) to provide technical, analytical, cartographic and reporting services for the 2011 Atchafalaya Basin Inundation Data Collection, Damage to Assets and Threats to Public Health and Safety Inventory and Mapping Project. That effort will focus on the collection, analysis, mapping and reporting of information relative to the impact of inundation on Atchafalaya Basin assets and public health and safety issues associated with the Mississippi River flood of 2011.



Louisiana's Coast, a Changing Landscape through Sea Level Rise and Subsidence

By Tim Osborne,

NOAA Regional Manager



With interest in the effects of sea level rise and climate change, Louisiana and other coastal states of the northern Gulf, are experiencing the impacts of both. However, the creation of the coastal landscape in Louisiana by the changing courses of the Mississippi River Delta adds another and very important dimension and factor to the changes we see along our coast.

The creation of coastal Louisiana through the massive deposition of sediment from the Mississippi River created a landscape that is now going through the natural abandonment process of a river delta. This process creates a downward movement of the landscape known as subsidence.

The National Oceanographic Atmospheric Administration (NOAA) is responsible for recording and reporting sea level trends of the coastal states of the U.S. With 9.24 millimeters per year of sea level rise in coastal Louisiana, this rate is 4-5 times higher than coastal areas like Pensacola. This very high rate is due to both sea level rise and subsidence working in concert with each other.

Using accurate depictions of the coastal landscape and applying projected relative sea level rise rates to areas of coastal Louisiana, NOAA and the state can look at the growing vulnerability of areas like Grand Isle. An analysis developed and presented at the World's Delta Conference in Rotterdam in November 2010 shows the potential impacts of a storm surge event today and the same event in the year 2050.

As seen in the graphic, the effects of sea level rise and subsidence creates a growing and significant vulnerability each year as land areas move downward and sea levels rise.

With projections of 3-4 feet of relative mean sea level rise by 2100 in coastal Louisiana, the state and each coastal parish will need to use this analysis to put into place now the projects and plans to face increasing coastal inundation.



Grand Isle Louisiana, Sea Level Rise 2010-2060 and Growing Inundation by the same 10 year storm tide event



Coastal Resiliency in the Face of Sea Level Rise and Storm Surge By Melissa Daigle Legal Coordinator, Louisiana Sea Grant Law and Policy Program

Communities across the coast face threats from multiple natural hazards, including inundation due to storm surge and sea level rise. With some estimates predicting a sea level rise of three feet over the next hundred years, some areas along the coast that have not flooded in the past may experience inundation during a storm event. Communities can model for "worst case scenarios" and have a clear picture of where their flood risks are greatest.

Armed with this knowledge, some local governments may choose to increase community resiliency by implementing policies, regulations, or land use plans that reduce the risk of damage to structures from floodwaters. An example of this would be requiring that construction in areas most susceptible to floods to use freeboard in determining required elevation heights. Increasing resiliency is a simple way that local governments may be able to make their communities stronger and more prepared for the next disaster.

One tool available to local governments on how to begin thinking about becoming more resilient is the Louisiana Coastal Hazard Mitigation Guidebook. The Guidebook covers a wide range of natural hazards and the steps throughout the process of addressing known hazards. This process begins with knowledge and information, which will lead to guidance, policy, and industry standards. Sometimes, local governments may have existing authority to rely on to address the natural hazards they face, or they may opt to create new regulations tailored to the situation. This continuum of government implementation results in a light-handed, flexible approach that can be adapted for each parish or municipality. Copies of the Guidebook can be obtained by contacting Jim Wilkins, jwilkins@lsu.edu, or Melissa Daigle, mtrosc2@tigers.lsu.edu

An electronic version is also available online at <u>http://www.lsu.edu/sglegal/projects/completed.htm</u>. or <u>http://dnr.louisiana.gov/assets/docs/coastal/interagencyaff/LaCoastalHazMitGuidebook.pdf</u>

Another tool available through Louisiana Sea Grant is the <u>Coastal Resiliency Index</u>. The Index is a community self-assessment that provides community leaders with a simple and inexpensive method that examines how well their community will reach and maintain an acceptable level of functioning after a disaster. It examines areas such as critical infrastructure and facilities, transportation issues, and community plans and agreements. Several Sea Grant and other agency representatives have been trained in facilitating the use of the Index. If you would like more information, please contact - Jon Truxillo, DNR, contact information on the last page of newsletter, Melissa Daigle, email above, or Carol Franze, <u>cfranze@agcenter.lsu.edu</u>







The <u>Coastal Resilience Index</u> is a tool communities can use to examine how prepared they are for storms and storm recovery. To complete the index,community leaders get together and use the tool to guide discussion about their community's resilience to coastal hazards.

http://www.seagrant.noaa.gov/f ocus/documents/HRCC/resiliency index 7-15-08.pdf

Coastal Resilience Index

Contact information Tracie Sempier Coastal Storms Outreach Coordinator tracie.sempier@usm.edu

Meet your Louisiana Sea Grant/LSU Ag-Center Marine Extension Agent for the Louisiana Coastal North Shore Ms. Carol Franze

Carol Franze is a Louisiana Sea Grant/LSU Ag-Center Marine Extension Program Specialist in Tangipahoa and St. Tammany Parishes. Carol's primary job is to develop education and outreach programs for adults and youth in areas of improving watershed health for marine fisheries and disaster risk resiliency for local, coastal communities. Civic organizations and parish/municipal governments interested in presentations for their groups or the public can contact her directly at the number listed below. Topics and focus for workshops or presentations are tailored to the needs of individual groups. Current education programs include: Equine Water Quality Best Management Practices; Youth Watershed Pollution Education Program; Restoration of Submersed Aquatic Vegetation;

Sea Level Rise: Potential Climate Change Impacts; and Community Resiliency to Disasters. Additional topics include recreational pond management, reducing storm water runoff from yards and neighborhoods, or an explanation of the fate of Mississippi River water diverted into the Pontchartrain Basin through the Bonnet Carre Spillway.

Previously, Carol worked as a researcher at the University of New Orleans and earned a BA and MA in Environmental Geography, with minors in Biology and Coastal Geomorphology. The focus of her research included restoration of coastal habitats (marsh, submersed aquatic vegetation and benthos) and habitat conservation ecology.

Carol Franze can be reached in her office at the LSU Ag-Center Southeast Region Office on the Hammond Research Station; phone: (985) 543-4129; email: <u>cfranze@agcenter.lsu.edu</u>.

Carol Franze

Sea Grant Extension St. Tammany & Tangipahoa Parishes LSU AgCenter/LA Sea Grant Program

Community Risk Resiliency

By Carol Franze, Marine Extension Agent – St. Tammany and Tangipahoa Parishes LA Sea Grant Program/LSU AgCenter

In the wake of Hurricanes Katrina and Rita, communities in our coastal zone became acutely aware of their lack of knowledge regarding proper planning for disaster events. Although most communities had emergency management plans, none were detailed or comprehensive enough to account for the challenges of a full recovery from a large scale event. In response, the Louisiana Sea Grant College Program and LSU AgCenter developed an array of tools to assist communities in improving emergency management planning and implementation. Additional tools assist citizens in preparing for storms, mitigating hazards, and recovering from disaster impacts. Some of these tools include:

LAHouse – better building practices against flooding and wind damage, http://www.lsuagcenter.com/en/family home/home/la http://www.lsuagcenter.com/en/family home/home/la

Interactive Maps – for finding ground elevation and wind speed potential for any location, http://maps.lsuagcenter.com/windspeed_elevation/

Flood Insurance Rate maps - www.LSUAgCenter.com/floodmaps

These tools and others have been presented in ongoing workshops throughout coastal parishes. Citizens gained knowledge about various resources available to them - such as methods to determine property elevations, Flood Zones, and potential impacts from future tropical storms.

Workshops are being planned for citizen engagement in St. Tammany Parish and will likely be expanded to other coastal communities in the near future. Sea level rise and flooding caused by tropical storm surge represent potential hazards that will likely affect most Louisiana coastal communities. Identifying vulnerabilities by community leaders and citizenry, planning and implementing best practices for communities, and mitigating hazards will help to increase resiliency during disaster events. Please contact Carol Franze via the contact information above.

Christmas Trees a Coastal Restoration Go in Jefferson Parish



Jefferson Parish continues coastal restoration utilizing recycled Christmas trees. The events pictured took place over several weekends in January utilizing labor from the parish, local area schools and other private and civic organizations.

In addition, thanks for the support and sponsorship of the following: CDM; Shaw; Coca Cola; Whitney; Louisiana National Guard; Jefferson Parish Department of Environmental Affairs, Streets and Parkways, Sheriffs Office and Fire Department



The Local Coastal Programs (LCP) Handbook on the DNR/OCM Web Page

The Office of Coastal Management of the Louisiana Department of Natural Resources is charged with implementing the Louisiana Coastal Resources Program (LCRP) under authority of the Louisiana State and Local Coastal Resources Management Act of 1978, as amended (Act 361, La. R.S. 49:214.21 et seq).

The purpose of the LCP Handbook is to provide easily accessible and updatable information to the LCPs to assist them in operating an approved Local Coastal Program in the coastal zone of Louisiana. Every parish with an approved Local Coastal Program has assumed responsibility for balancing the use of coastal resources with the protection of the ecological integrity of those same resources. This task requires an awareness of wetland habitats, functions, and values, an understanding of the rules that regulate permitting and compensatory mitigation, and the knowledge and technical capabilities to determine the required compensatory mitigation. This handbook is a valuable tool to accomplish these tasks.

http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=539

Deepwater Horizon Oil Spill: Continues from page 8

This early restoration agreement is the largest of its kind ever reached and represents a first step toward fulfilling BP's (and other responsible parties') obligation to fund the complete restoration of injured natural resources. Early restoration provides an opportunity to implement restoration projects prior to the completion of the NRDA process.

In accordance with the Oil Pollution Act of 1990, applicable federal regulation and the framework agreement, the Trustees will use the money to fund projects such as rebuilding of coastal marshes, replenishment of damaged beaches, conservation of sensitive areas and ocean habitat for injured fish and wildlife, and restoration of barrier islands and wetlands.

The NRDA process will continue until the Trustees have determined the full extent of damages caused by the Deepwater Horizon oil spill. In addition to funding early restoration projects, BP will continue to fund the damage assessment and, together with the other responsible parties, will ultimately be obligated to compensate the public for the entire injury. The agreement will speed needed restoration activities in the Gulf in advance of the completion of the assessment process.

For the past year, Louisiana has worked with coastal stakeholders through a variety of public outreach and coordination efforts to build a master list of potential projects for both early and long-term restoration of the state's natural resources that were injured by the Deepwater Horizon oil spill.

Through the combination of a concerted stakeholder and public outreach effort and the state's Regional Restoration Planning Program, Louisiana has compiled a list of over 300 restoration project candidates. These projects reflect the ideas and input of a variety of coastal stakeholders. Louisiana continues to accept restoration project submittals. Project proposals may be submitted online at http://losco-dwh.com/

Projects received through June 25, 2011 will be analyzed by the state's Natural Resource Trustees for potential inclusion in an early restoration plan. Projects submitted after this date and those not selected for the initial phase of early restoration planning will be considered for future stages of both early and long-term restoration.

The state of Louisiana remains committed to outreach and engagement efforts and will continue in those efforts throughout the NRDA process. In addition to our regularly scheduled monthly coastal stakeholder meetings, we will also hold a public meeting to solicit early restoration projects on Monday, June 20, 2011 from 5:30 p.m. to 8:30 p.m. at Tulane University School of Law in Weinmann Hall, Room 110.



Greg's Farewell

To all of my friends, associates and colleagues in the LCP "family," I wanted to take this opportunity to say thank you for making my career at DNR/OCM such a wonderful and rewarding experience. I have neither the ability to express in words nor the rule by which to measure the profound feeling of thanks I wish to convey to each of you. I am humbled to have been able to work with each of you over these many years. We have seen much, experienced even more, and I will never forget these things. There is talk every day about the coastal wetlands, the losses of this great national treasure and the wonderful folks who occupy this landscape, but each and every one of you know far better than any writer from beyond these bounds, what this means.

I have seen you work night and day, day after day to improve, fix, restore and recover from the vicissitudes of Mother Nature and what we have done in the name of progress even when we knew no better. You, each and every one of you are my heroes. I have been and always will be honored to have known and worked with you. I hope y'all will find it in your hearts to forgive any transgressions, frustrations, or other slights I may have foisted on you. Y'all are truly each and every one, the coastal heroes, protectors, and patrons of this great place. As the Gulla saying goes however "Every shut eye ain't sleep. Every goodbye ain't gone." I hope you will continue to know that I am available if any of you ever need for anything that I can do. My cell phone number will remain 225.772.6793. My home phone is 225.383.6790 and I have set up a new email gregory.ducote@gmail.com that I hope

y'all will make frequent use of. Thank you.

Gregory J. DuCote Administrator Interagency Affairs/Field Services Division Office of Coastal Management





Increasing Coastal Resiliency in a Katrina Devastated Community: A Practical Application of Coastal Resiliency Polices, By Brian K Fortson, Coastal Wetland and Environmental Resource Manager, St. Tammany Parish

Prior to Hurricane Katrina, Lakeview Drive in southeastern St. Tammany existed as a narrow strip of land between 25 and 200 feet wide along the northern shore of Lake Pontchartrain. Developed as a subdivision for homes and camps in the 40's, the area consisted of structures built on piers over the waters of the lake. The camps were densely packed with some camps sharing piers.

Since the bulk of the construction had occurred during an era of very loose control and virtually non-existent regulatory presence, some shoreline was unprotected, some was armored with rip-rap, and some with timber or vinyl bulk heads. Armored land endured and extended further into the lake waters; unprotected shoreline retreated over time. The long term result was a very inconsistent shoreline, with acute angles and hard surfaces reflecting wave energy against adjacent properties, severely accelerating erosion on unprotected shorelines, undermining the stability of camp foundations, and even threatening to erode the land under the single public roadway accessing the area.

Hurricane Katrina destroyed virtually every structure in the area. For the rebuilding efforts, St. Tammany's improved regulatory practices came into play. The State Land Office no longer allowed rebuilding over state water bottoms; therefore, most construction required reclamation of eroded land. The St. Tammany Parish Government used their Local Coastal Program to establish standards governing the methods and limits of reclamation work to implement a long term vision of a consistent, consolidated shoreline, of more uniform configuration. Then the parish used their land use authority to establish setbacks for buildings to prevent structures from being built at or near the water's edge.

The Local Coastal Program is requiring a consistent shoreline over the long term, reducing haphazard erosion and debris accumulation. Additionally, hard surface shoreline modification is required to be buffered by the placement of rip rap or other energy disbursement material to prevent energy reflection and refraction. Before any letter of no objection can be issued to the applicant by the parish for a State Lands reclamation permit, the project must comply with the guidelines laid out in the Local Coastal Program. With building setbacks limiting construction to no further than 135' from the landward property line, a wide buffer has been created between the new shoreline, and the new camp homes. Mixed into the area are lots that have enough land to construct a home, but the new standards will encourage landowners to take advantage of their reclamation right and tie into the new shoreline to avoid creating a shoreline pocket on their lot. As rebuilding continues, the anticipated result of the new guidelines should be a 1.5 mile uniform shoreline +/- 200' from the road (protecting the road as well) with most structures situated far enough landward to avoid intensified surge energy from the modified shoreline. This is intended to increase the storm resistance of the area, and mitigate the potential for catastrophic destruction in future storm events.

Louisiana Department of Natural Resources

Office of Coastal Management Interagency Affairs and Field Services Division 225.342.7591: 800.267.4019 617 North Third Street LaSalle Building, Baton Rouge, Louisiana 70802 Find us on the Web: http://dnr.louisiana.gov/ For additional information about this newsletter or for content submission please contact: Jon A. Truxillo, Coastal Resources Scientist, 225.342.3394, jon.truxillo@la.gov

With Special Appreciation for the wonderful Louisiana coastal photography of Mr. P.J. Hahn, Director of Coastal Restoration and Management, Plaquemines Parish





