Natural Hazards Handbook for Homeowners

Even with hurricane season here, it's not too late for homeowners to make necessary preparations to protect their homes and loved ones. Through the new Louisiana Homeowners Handbook to Prepare for Natural Hazards, residents of Louisiana have a useful resource at their fingertips as they begin readying their families for natural disasters.

The handbook explains the forces of nature that act on structures during storms, including the dangers associated with high winds, heavy rain and storm surge. It further lays out ways to gird a home against these forces to minimize or negate their effects, as well as information on how to reduce the human toll exacted by dangerous storms.

"There are tips and information specific to Louisiana residents for preparing evacuation plans and kits, construction practices, retrofitting, shutter styles, insurance information and emergency contact numbers. Basically everything a homeowner needs to know in coastal Louisiana to be best prepared for coastal hazards," said Melissa Daigle, resiliency specialist with Louisiana Sea Grant. The handbook is available in PDF format at www.lsu.edu/sglegal/pubs/handbook.htm as a free download. Free hard copies are available at

various locations throughout coastal parishes, or the book can be ordered for \$5 – to cover postage and handling – by emailing Jessica Schexnayder at jsche15@lsu.edu.

Louisiana Sea Grant produced the handbook with the help of other state, regional and national organizations. The handbook was funded through a program of the Gulf of Mexico Alliance (GOMA), which aims to see each Gulf state prepare its own guidelines for coastal residents. With recent storms – including Hurricanes Katrina and Rita in 2005, Hurricane Gustav in 2008, and the

Mississippi River flooding in 2011 – being among the worst in memory, preparing beforehand for a natural hazard has become even more important for residents of vulnerable areas.

CERA Reorganized in 2013 Storm Season

To provide enhanced data to federal, state and local emergency response teams during the 2013 hurricane season, Louisiana Sea Grant (LSG) reorganized the Coastal Emergency Risks Assessment (CERA) group at Louisiana State University (LSU).

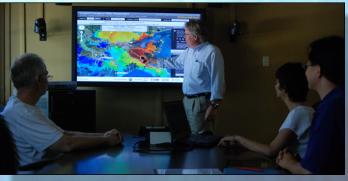
CERA operates a forecasting model known as the Advanced Circulation (ADCIRC) Surge Guidance System (ASGS) that predicts wind, wave and storm surge impacts to Louisiana's coastline during a storm's approach and landfall – based on National Weather Service hurricane track and wind field projections.

"ASGS forecasts are provided to the Governor's Office of

Homeland Security and Emergency Preparedness and the National Weather Service offices in Slidell and Lake Charles, and also on request to parish and municipal leaders," said Robert Twilley, LSG executive director and one of the program's principal investigators.

"These forecasts provide emergency responders with information they need about potential hot spots of coastal inundation and where they may need to conduct search and rescue missions. Planners can use it to determine where they need to stage relief operations. It also can be used for damage assessments following the storm," Twilley added.

Members of the CERA team review a storm surge forecase on the program's website.





Louisiana Fisheries Forward Education and Training Program



A partnership between the Louisiana Department of Wildlife and Fisheries and the Louisiana Sea Grant College Program aims to further raise the bar on the quality and sustainability of Louisiana seafood.

Louisiana Fisheries Forward (LFF) is a voluntary educational program for members of the commercial seafood community. LFF was established with the goal of improving the economic success of Louisiana's commercial fishing industry.

LFF provides a structured mechanism to develop and deliver, over a three-year period, relevant and timely information to the seafood industry. Content is presented via the Internet, using training videos and fact sheets, and directly to communities with hands-on workshops, training days and demonstration projects that showcase new technology and best practice methods.

LFF enhances the current outreach programs of Sea Grant, including the two-day Fisheries Summit in Houma and Dock Days along the coast. Working with LDWF and seafood industry leaders, these training days present a wider range of diverse and challenging topics and reach a greater number of people.

Four, 30- to 45-minute training videos are in production, that address:

- How to be a commercial fisherman
- How to be a seafood dealer/processor
- Seafood business finance and management
- How to be a crab fisherman

Another six videos are planned over the next two-and-a-half years. Fact sheets, available online, will complement the videos with more detailed, time-sensitive information. Three demonstration projects, over the course of three years, will study gear efficiency and product quality, research findings will be presented at training and industry events.

Leaders at LDWF and Sea Grant are confident that the Louisiana Fisheries Forward program will help those in the seafood business to thrive in a constantly changing marketplace.

Workshops, Seminars Assist Fishermen

In an effort to support new and existing commercial fisheries businesses, Louisiana Sea Grant, the LSU AgCenter and the Louisiana Department of Wildlife and Fisheries continue to work together providing educational events targeting the state's commercial fisherman. Since February, the three, working with additional partners, have held several workshops including: the Louisiana Fisheries Summit, Delcambre Dock Day, St. Bernard Dock Day and Crab Industry Workshop 2 and 3.

The 2014 Louisiana Fisheries Summit, held March 12-13 in Houma, attracted close to 300 commercial fishermen, seafood dealers and processors. The summit consisted of a seminar, trade show and "dock day," which served as both an educational and networking opportunity for participants.

With more than 50 attendees, Delcambre Dock Day was held a week later at the Shrimp Festival Building in Delcambre, and featured U.S. Coast Guard technology displays and a direct marketing/ micro-processing demonstration.

Louisiana Sea Grant and the LSU AgCenter took the lead in organizing St. Bernard Dock Day and Crab Industry Workshops 2 and 3. Those events focused on direct marketing, eco/agri-tourism and business plan development.

Extension Exchange Offers Storm Recovery Insights

More than a year and a half after Hurricane Sandy made landfall in the northeast, the Sea Grant programs in New Jersey, New York and Connecticut are still dealing with storm recovery issues – ranging from community resilience and flood insurance to impacts on recreational fisheries and marina reconstruction. In the nearly nine years since Hurricanes Katrina and Rita, Louisiana Sea Grant has addressed many of the issues Sandy survivors continue to face and may have to manage for years to come.

"Although we offered assistance immediately after Sandy made landfall in October 2012, we realized there's more we could do for our sister programs as they trek down the long recovery road," said Rex Caffey, Louisiana Sea Grant and LSU AgCenter Marine Extension leader. "We not only have experience with recovery from Katrina and Rita in 2005, we also had Hurricanes Gustav and Ike in 2008, as well as Hurricane Isaac in 2012. issues at a New Orleans recreational marina now shared with commercial fishermen and when they called on another New Orleans yacht harbor still struggling to recover from Katrina. The visitors also heard of the dramatic demographic shift experienced in St. Bernard Parish and met with academics and other Extension professionals about additional recovery resources that may be available.

"There were several central themes, including the need for organic and bottom-up approaches; the need for patience; and the need for effective communication among agencies, the states and communities," said Orgera. "The need to foster local approaches resonated with me most acutely."

"We saw an opportunity to do some recovery 'inreach' with the Sea Grant programs hardest hit by Sandy, and we opened our doors to them," Caffey said. "It was a chance for them to not only learn from what went right, but what didn't go as planned and make them aware of potential pitfalls and issues."



Peter Rowe (NJSG), Mark Schexnayder (LDWF), Ryan Orgera (NJSG), and Jay Tanski (NYSG).

In May, Pete Rowe, New Jersey Sea Grant Extension leader; Jon Miller, N.J. coastal process specialist; Ryan Orgera, N.J. coastal community resilience project manager; and Jay Tanski, New York Sea Grant costal processes and facilities specialist, flew into New Orleans for a week-long storm recovery learning experience.

"We drove nearly 500 miles and met with about 40 people who shared their Katrina and Rita recovery experiences and perspectives," said Roy Kron, Louisiana Sea Grant communications director. The group saw first-hand how the town of Delcambre has rebounded, learned that only 60 percent of Cameron Parish's population has returned, and met with Houma-based engineers about hazard mitigation. They also learned about marina and harbor "I wasn't sure what to expect," said Rowe. "But I came away with a philosophy that includes a lot of 'patience and perseverance' to achieve your goals ... Individuals and communities must be patient and persistent, with the squeaky wheel getting some grease. A vision is needed to get buy-in and funding to reach the goal of returning a community to its character, while at the same time making it more resilient and

forward thinking in the process."

"One of the things that struck me most was the consistency of the message we received from those impacted regarding the difficulties and, especially, the problems associated with dealing with the various federal agencies involved in relief efforts," said Tanski. "The situations encountered at the New Orleans Yacht Club and with the owner of the oyster business in St. Bernard were particularly bleak, in my opinion. The fact that no work has been done at the yacht club and that the oysterman's business was only 30 percent of what it was pre-hurricane – almost 10 years after Katrina and Rita – was shocking, as was the condition of the Ninth Ward.

"I've already used the information gained from this trip to brief state officials and marina owners who are members of the New York Rising (NY's version of Louisiana's Road Home Program) marina subcommittee," added Tanski. "For the state people it was a cautionary tale that elicited the response of 'We cannot let that happen here.""

LaDIA Fellows Moving Forward

Louisiana Sea Grant is creating stronger connections between researchers and community members in coastal Louisiana through LaDIA (Discovery-Integration-Application) fellowships.

Activities focus

heavily on science communication, and Fellows receive communication training while also being paired with an LSG Extension agent as an outreach mentor. At the end of the nine-month program, fellows submit a portfolio of communication products that should clearly and easily



Herrington; and Emily Powell, who is working with Alan Matherne. Science communication advisors are Bill Dennison, Bill Nuttle and Amy Clipp. A LaDIA kickoff meeting was held in July, and a number of workshops are scheduled through March 2015.

Student Oral History Project Drawing to a Close

After nearly two and a half years, Louisiana Sea Grant's Coastal Change Oral History Project is coming to a close.

"Overall, the project was a success for Sea Grant, as we now have 19 interviews archived with the T. Harry Williams Center for Oral History at LSU, where they can be referenced and used by researchers for generations to come," said Darcy Wilkins, the LSG research associate on the project. "Although it's less tangible than the materials now in the library, the students involved learned more about their own family heritage as well as the cultural history of their hometowns," added Wilkins. "They also came

> away more confident in speaking with their elders and the general public."

Approximately 40 students at Holy Cross School, South Cameron High School, Thibodaux High School and West St. Mary High School participated in the project. Teachers involved were Sue Ellen Lyons, Tina Savoie, David Sneed and Vanessa West.

Wilkins is in the process of producing a short video documenting the project.

To reach the collection, visit <u>www.lib.lsu.edu/special/</u> williams/collections/lasg.html.

High school students from Orleans, LaFourche, St. Mary and Cameron parishes collected the

interviews, transcribed their recordings, and even created an art piece and original music composition as a result of the project. The objective was to gather oral histories from people living in at-risk parts of southern Louisiana while simultaneously involving students of those communities. and results.

explain their

research's scope

LaDIA fellows are Katrina Durbak, who is working with Extension agent Carol Franze; Patrick Michaels, who is working with Rusty Gaude; Jacob Mitchell and Leanna Heffner, who are working with Twyla