Message from the President

The May 2 meeting in Corpus Christi was a real success with good attendance. This year the Texas coast has been inundated with massive amounts of seaweed and guest speaker Derek Herzog, Beach and Aquatics Superintendent for the City, discussed the City’s approach using a location-specific and adaptive basis to manage the seaweed that washes up on the Gulf beach.

The Technical Committee had two presentations with Cameron Perry of HDR describing a history of beach improvements at North Beach and a current beach nourishment project being designed for GLO and the City of Corpus Christi. Chris Weber with Atkins described the Port Alto Beach Restoration and Conservation Project in Calhoun County.

The Legislative Committee, John Lee and Cameron Perry, encouraged the members to start thinking about the Texas Chapter’s next legislative agenda for the annual Coastal Summit in Washington, D.C. and one that needs to be developed for the upcoming state legislative session in Austin. It was emphasized that based on recent political challenges in Louisiana, Texas needs to be prepared for competing, non-coastal interests to attempt allocation of Restore Act funds for non-coastal applications. The Chapter needs to develop a strategy and/or increase awareness to help ensure the Restore Act funds are used for coastal projects as originally intended. This should include emphasizing the economic benefits of coastal projects.

We then had a general discussion on the potential benefits of establishing more interaction between the Texas Chapter and the Galveston District of the U.S. Army Corps of Engineers, which involves all the members. The more the item was discussed, the members recommended we have a meeting that would be strictly devoted for the Galveston District since the Corps really impacts the Texas coast. The Texas Chapter members have a lot of interaction with the Corps, and a meeting will continue to foster and develop a true working relationship and develop a solid partnership. The Colonel and other section leaders from the Galveston District have accepted to address the next Texas ASBPA Chapter meeting, which is scheduled for a luncheon at the Galveston Island Convention Center on August 8. We expect this meeting to be the largest for the Texas Chapter since our formation in May of 2005. The Corps plans to discuss shore protection and restoration projects along the Texas Coast and how we can also collaborate and increase efficiencies for the ongoing dredging, Beneficial Use Dredge Material (BUDM), and other projects.

We were pleased to announce at the meeting that Dr. Richard “Skip” Davis, (Continued page 7)
Sundown/Chester Colonial Bird Island — Success Story

By Dave Buzan, Freese and Nichols, Inc.

Sundown Island is located along the mid-coast of Texas in Matagorda Bay, Texas, approximately 1.3 miles west of the Matagorda Peninsula. The 65 acre island is north of the Matagorda Ship Channel and southeast of the Gulf Intracoastal Waterway (GIWW). The Island is leased from the General Land Office and managed by the National Audubon Society's Texas Coastal Sanctuaries program, as part of the Society's 13,000-acre network of 33 islands that stretch from Mexico to Louisiana.

Sundown Island, formed from dredge material placed in Matagorda Bay in 1962 as the Matagorda Ship Channel was dredged, became the recovery hotspot for brown pelicans along the Texas coast. During breeding season, now there may be 25,000 nesting pairs of birds from 18 species. The island is leased from the Texas General Land Office and managed by Audubon Texas as part of the National Audubon Society's Texas Coastal Sanctuary Program. In 1984 there were less than 10 pairs of breeding brown pelicans on the island and in 2013, 3,375 pairs of brown pelican were counted. Sundown Island’s role in helping brown pelicans recovery has been a key step in removing the species from the nation’s list of endangered species.

This ecological success story did not develop without a fight. With the Matagorda Shipping Channel passing less than half a mile from the west shore and the Gulf Intracoastal Waterway (GIWW) passing the same distance from the north shore, the islands shorelines were exposed to ship and barge wakes from two sides. Wind-generated waves from the prevailing south winds and winter storm waves from the north and east buffeted the islands shorelines. The island has varied in size over the intervening 50 years, ranging from 55 acres in 1979 to 81 acres in 2001. Over the years geotubes have been placed on the southeast and northwest sides of the island and concrete mats were placed along much of the southeast shore. The island is a permitted placement area and has continued to receive dredged material along its shores. Around 2001, the GIWW was rerouted to a more northerly route and passes about 2 miles north of the island.

Recognizing the ongoing threats to the stability of the island, Audubon Texas started pursuit of a long-term plan to protect the island from erosion and restore it to about 100 acres in size. U.S. Fish and Wildlife Service and the Texas Commission on Environmental Quality (through its Supplemental Environmental Protection program) are helping Audubon Texas fund development of a project to accomplish Audubon’s goal. Atkins North America and Freese and Nichols, Inc.’s Coastal Restoration team are partnering to develop a conceptual design to protect and restore the island. Audubon will use the conceptual plan to initiate the permitting process with the U.S. Army Corps of Engineers and to seek funding to implement the plan.

A unique aspect of the design process will be balancing features that not only protect the island but also enhance its ability to support breeding birds.
New Beach Survey At Galveston Island

By Paul Jensen, Ph.D., PE, Jesus Lajara, RPLS, PSM (Atkins)
Tim Dellapenna, Ph.D. (TAMUG)

Conventional beach and nearshore surveys have used 1,000-foot interval transects to meet study and monitoring needs for beaches. This framework provides a generalized look at changes in beach contours but has limited utility when trying to calculate volumes of sand lost or placed. The potential for dramatic changes between the 1,000-foot intervals has always been recognized as a flaw in this technique. Atkins, teaming with Dr. Tim Dellapenna from Texas A&M University Galveston (TAMUG), proposed a different and more technically sophisticated and accurate approach that will provide significantly more accurate information that can be used for all of the needs for beach maintenance, project planning, studies, and design. This approach combined state-of-the-art laser scanning technology from the Atkins Geomatics Group and linked this data to the extensive TAMUG hydrographic surveying capabilities using a Benthos C3D® ultra high-resolution swath bathymetry system.

The combined approach allows the two data sets to be merged into a seamless, continuous data set, which can be developed into a beach and nearshore Digital Terrain Model (DTM). The DTM can be filtered to average different densities of the point cloud resulting in appropriate resolution of the three dimensional features of the survey area. These data can be saved in different forms including traditional 1,000-foot transects and used as appropriate for the specific need. Data collection for the first of four years is now complete. One of the challenges faced by the team is an unprecedented amount of sargassum encountered this year. Both survey groups have made arrangements to work around and block out false returns.

Above on the left, is an Atkins geomaticist collecting survey data with the Leica C-10 scanners at the west end of the Galveston Seawall. On the right is a screenshot of high definition surveying (HDS) point cloud data, generated with the Leica C-10 laser scanner and utilizing Leica Cyclone software for processing.

To the left is a 2014 sidescan sonar mosaic showing offshore data coverage, associated with swath bathymetry data still being processed. Water depths of this survey are from 10-35 feet, with an additional survey from ~5-10 feet was also conducted.
Howdy, coastal community. Welcome to the Summer 2014 edition of The Strand Line, the Texas Shore and Beach Preservation Association newsletter. We want to thank our contributing authors for the service they provide to the community. We greatly appreciate the work and effort everyone puts into publishing the newsletter.

Please remember that we want all members to consider volunteering for one of the many committees that make the Texas Chapter of the ASBPA a valuable resource for everyone. There are many roles to play and much work required to make this a great organization.

To find out what committees are available, read through the Meeting Agenda, look through the website, read past editions of The Strand Line, and/or speak with any committee member or board member. Find an area that interests you (membership, legislature, technical, communications, etc.), and then contact someone on the committee. Many hands make quick work.

As always, we want to encourage everyone to submit articles to the newsletter relating to your personal interests, professional projects, or general commentary regarding the coastal community. The more articles that we receive, will provide for a more robust newsletter.

If you have ideas for an article, please submit them. It is a group effort to provide content necessary to make the newsletter interesting and relevant. We look forward to reading your submissions.

Regards-

Cris Weber, Newsletter Committee Co-Chair
cris.weber@freese.com

Jayne McClure, Newsletter Committee Co-Chair
jdmclure@gba-inc.com

BE HEARD, BE PUBLISHED!
The Texas ASBPA Newsletter staff challenge our readers to submit articles for publication.

GUIDELINES:
• 500 to 1000 word articles (pictures welcomed)
• Word format (Garamond @ 10 font)
• Ensure permission to publish is granted.
Nueces Bay, Portland Causeway Marsh Restoration

By Coastal Resources Division, Texas General Land Office

The Portland Causeway supports the section of U.S. Highway 181 that crosses the mouth of Nueces Bay between Corpus Christi and Portland. Historically, this area consisted of significant amounts of Spartina alterniflora (smooth cordgrass) marsh habitat. Approximately 180 acres of marsh were lost directly to dredging and construction of the causeway in the late 1940s, and another 160 acres were lost to subsequent erosion and subsidence. Since the project began in 2005, the Coastal Bend Bays and Estuaries Program (CBBEP) has worked with General Land Office to:

1) complete a feasibility study, alternatives analysis, and environmental assessment,
2) obtain a U.S. Army Corps of Engineers permit,
3) obtain a General Land Office (GLO) lease,
4) complete construction of a 72 acre marsh complex consisting of terraces protected by an earthen berm,
5) complete construction of an outermost berm that encloses and protects another 80 acres,
6) plant smooth cordgrass on all terraces and berms,
7) complete construction of three large marsh cells between the inner terraces and the outermost berm, and
8) place 4,220 linear feet of rock on the outermost protective berm. CBBEP has also made minor public access improvements to an adjacent oilfield dock to allow public access and use.

CBBEP plans to continue planting efforts and access improvements at the project site in October 2014. CBBEP owns a 33-acre strip of land along the southbound side of Highway 181 bordering the northeast portion of Nueces Bay, which includes an old oilfield dock. The oilfield dock, which has been converted into a parking area, will be dedicated for public access to Nueces Bay. CBBEP will create a parking and staging area for fisherman and paddle craft users and install a bollard and cable perimeter to keep vehicles in the designated parking areas and out of sensitive wetland habitat. An ADA-accessible elevated platform and informational kiosk will also be constructed overlooking the adjacent CBBEP Marsh Restoration Site.

Many project partners have made this project possible. Through a variety of funding sources, the General Land Office has contributed almost $3 million to complete this project. A notable investment for a very worthy cause. The marsh complex supports a variety of fisheries, including crucial nursery habitat, and provides foraging and loafing opportunities for migratory colonial waterbirds.

These opportunities provided to colonial waterbirds contribute to the success of nearby rookery islands that exhibit increasing nesting populations of crucial species of concern, including Black Skimmers, Brown Pelicans, Great Blue Herons, Great Egrets, Snowy Egrets, Tri-Colored Herons, and a variety of Terns. Low-marsh communities, dominated by smooth cordgrass, are much more ecologically productive than mid-marsh communities and adjacent uplands.
The Texas Legislature Joint Interim Committee on Coastal Barrier Systems (Committee) convened a public hearing on August 4, 2014 at the Texas A&M Galveston campus. The Committee heard invited testimony from the Texas General Land Office; the United States Army Corps of Engineers (USACE); Severe Storm Prediction, Education, and Evacuation from Disasters (SSPEED) Center at Rice University; Texas A&M Galveston (TAMUG); and the Economic Alliance Houston Port Region.

The hearing briefly discussed the USACE research effort of the upper Texas coastal counties, but focused primarily on competing alternatives from SSPEED and TAMUG for proposed alternatives for a coastal barrier system in and around Galveston Bay. Each of the academic studies are funded independently through their own endowments and research grants, and as a result, have presented two separate approaches for addressing potential impacts in Galveston Bay from storm conditions similar to those experienced during Hurricane Ike in September 2008. The SSPEED proposed project initially analyzed specific locations for storm protection solutions in the Houston Shipping Channel, but expanded the research to encompass a bay-wide approach for the project. The TAMUG proposal describes a “coastal spine” that extends from northeast Bolivar Island to south of San Luis Pass. Conceptually, each of the proposed plans provide high-level protection alternatives for the bay region, but currently lack the specificity and consensus to provide detailed assessment of possible design elements.

The common theme from the hearing was cooperation, partnership, collaboration, and urgency, with a healthy dose of how much money, how long will it take, what does it look like, and what’s next. The proposed costs for possible solutions ranged from $4-5 Billion to $12+ Billion, depending on the size and scope of the proposed projects, which was put in context of estimated post-storm damage costs upwards of $150-200 Billion (under the most extreme hypothetical storm conditions impacting the most sensitive locations).

One of the most important issues (and possibly the most controversial) raised during the hearing related to who exactly are the beneficiaries of any proposed coastal barrier system. Is it the threatened infrastructure of the 2nd largest petro-chemical complex or is it the threatened work force comprised of coastal residents that live and work within the petro-chemical complex?

### Upcoming Events, 2014

- **Texas Chapter of the ASBPA. City of Corpus Christi.** Friday, August 8, 2014. Galveston Island, TX.
- **Floodplain Management Annual Conference.** Sep. 2-5. Santa Clara, CA.
- **Northeast Shore and Beach Preservation Association Conference.** Sep. 17-18, 2014. Tauton, MA.
- **America’s Watershed Initiative Summit.** Sep. 30–Oct. 2. Louisville, KY.
- **ASBPA National Coastal Conference. Promoting Healthy Coasts.** October 15-17, 2014. Virginia Beach, VA.
- **Restore America's Estuaries, 7th National Summit on Coastal and Estuarine Restoration.** Nov. 1-5, 2014. Washington, DC.
Message from the President (cont’d)

who recently retired from the Texas A&M Harte Research Institute in Corpus Christi, was recognized as the recipient of the prestigious ASBPA Morrough P. O’Brien award, and Eleanor Taylor for the student award, at the 2013 ASBPA Technical Conference meeting in South Padre Island.

In addition, since the Corpus Christi meeting, Skip Davis is coordinating and planning a Texas Chapter ASBPA “First Annual” Symposium at the Harte Research Institute on March 20, 2015. More on this meeting will be forthcoming but abstracts are due December 15 on only Texas projects. These can be submitted to: rrdavis@usf.edu

The ASBPA Fall Technical Conference will be held in Virginia Beach, Virginia from October 14 to 17, 2014. There will also be a student short course at the conference to include technical writing and transitioning to a professional career. More information on the conference is available at: www.asbpa.org

Thank you again for your membership and participation, and we hope to see you August 8 in Galveston at the luncheon meeting with the U.S. Army Corp of Engineers Galveston District.

Jerry Mohn
President

New Beach Survey (cont’d)

Examples of the comparison of beach profile results conducted by Dr. Dellapenna in 2006 and 2011 in different areas of Galveston Island. The data represents the changes generated by shoreline erosion and the impacts of Hurricane Ike on the wet and dry beach.
Texas Department of Transportation, Maritime Division

By Matthew Mahoney, TXDOT Maritime Division

The Texas Department of Transportation Maritime Division is proud to announce several organizational and staff enhancements since its inception in November 2012 in order to better serve the maritime stakeholders of Texas.

The Maritime Division of TxDOT, under the direction of Dan Harmon, Dan.Harmon@txdot.gov, Director of Maritime, is responsible for coordinating with Texas ports, the Gulf Intracoastal Waterway, marine-intermodal related projects and representing TxDOT’s interests with maritime stakeholders.

Sarah Bagwell, Sarah.Bagwell@txdot.gov, one of the founding members of the team, is the Director of Planning and Strategy. She will focus on strategic planning, stakeholder outreach and innovative opportunities for technology and funding. Sarah has a Government Degree and 10 years of experience working on transportation policy.

Matthew Mahoney, PG, Matthew.Mahoney@txdot.gov, is the new Waterways Program Coordinator. In this position, Matt will be the point of contact for the USACE and issues related to the Gulf Intracoastal Waterway and other state waterways. Matt is a coastal geologist with 30+ years of professional experience. He has been actively working on the Texas coast for the BEG-Coastal Studies, TGLO-Coastal Resources, and in private consulting conducting coastal planning, coastal restoration projects, waterways dredging projects beneficially using dredged material, regional sediment management analysis, and waterways protection/enhancement.

Michael Perez, Michael.Perez8@txdot.gov, was chosen to fill the position of Port Coordinator, where he will serve as the point of contact for Texas’s ports and manage the Port Authority Advisory Committee. He has 30 years of total maritime experience, including serving as the Assistant Director of Trade Development for the Port of Tampa, Director of Maritime Marketing for the Port of Manatee-Florida, Director of Business Development for the Port of Corpus Christi-Texas, Port Director at the Port of St. Petersburg-Florida and Port Director for the Port of Harlingen, Texas.

Stephanie Cribbs, Stephanie.Cribbs@txdot.gov, the other founding member of the team, has transitioned from her role as Executive Assistant to Special Projects Coordinator, and will be working from the Houston Office. Stephanie began her career with TxDOT 17 years ago.

As the maritime industry continues to grow, TxDOT-Maritime will also to meet all of the challenges ahead.

Annual Symposium—Texas Chapter ASBPA

ANNOUNCEMENT

Texas Chapter of ASBPA will have a technical symposium on March 20, 2015 at the Harte Research Institute auditorium at Texas A&M-Corpus Christi from 8am-5pm. We will have lunch and two refreshment breaks.

We have room on the oral program for 19 papers of 15 minutes duration. We will also have a poster session.

The deadline for submission of abstracts is December 15 with detail coming later. All presentation, oral and poster, must by on the Texas coast but the presenter can come from anywhere. Mark your calendar.

Texas Chapter ASBPA • Preservation Through Cooperation • http://www.texasasbpa.org
Best Pictures of Texas

BREAK OUT YOUR DIGITAL CAMERAS! It's time to tap into your inner Picasso and find the picture that is worth a thousand words and share it with our friends that read The Strand Line. We would like to start including pictures from our members in the newsletter of places and faces on our Texas Beaches. You may send your pictures via email to any of the newsletter committee members. We look forward to the individual perspectives that make our coastline beautiful and show our readers the diversity that makes our beaches special. Please enjoy these recently submitted photographs of the Texas coast.

Photograph by Carol Latham. Sunset at Sargent. Sargent Beach, TX (March 2012)

Photograph by Dr. Yu-Chun Su. Fourth of July Fireworks. Galveston Island, TX (July 2014)
Submit Your Best Picture of Texas

Are you a birder, avid surfer, expert angler, or champion sunbather? The Texas ASBPA Newsletter Committee wants to know why you love the Texas Coast, so get out your camera and share your favorite sights with us in the new “Best Picture of Texas” section of The Strand Line!

Guidelines for Submission:
Please submit photos electronically to Cris Weber (cweber@freese.com) or Jayne McClure (jdmclure@gba-inc.com). For each photo submission, provide the first and last name of the photographer, the location of the picture, and the date the picture was taken. To ensure that The Strand Line has permission to print, please only submit your own photography. We look forward to seeing your Texas Coast at its best!
Texas Chapter of the ASBPA, Meeting Agenda

Date: August 8, 2014  Time: 11:30 AM

Location: Galveston Island Convention Center, 5222 Seawall Blvd, Ball Room A, Third Floor

Meeting Host: City of Galveston

Lunch Sponsors:
Atkins Engineering: http://www.atkinsglobal.com/
Callan Marine: http://www.callanmarineltd.com/
Great Lakes Dredge & Dock: http://www.gldd.com/
LAN Engineering: http://www.lan-in.com/
Shelmark Engineering: http://www.shelmark.net/

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Agenda

Meeting begins 12:15 AM

Jerry Mohn - Call meeting to order.

- Introduce Board, Officers, and corporate sponsors
- Introduce Elected Officials – Jerry Mohn
- Welcome – Galveston Mayor, Jim Yarbrough
- Introduce Colonel Richard Pannell, Galveston District U.S. Army Corp of Engineers plus four section leaders. Topics of discussion include:
  - Hydraulics and Hydrology
  - Operations & Maintenance (dredging)
  - Evaluation (permitting & compliance)
- Presentations:
  - Colonel Pannell - Supporting the Texas Coastal Vision
  - Kim McLaughlin - Galveston District Regulatory Program
  - Sharon Tirpak - USACE Galveston Texas Coastal Projects (Feasibility and Recon)
  - Rob Thomas - USACE Texas Coastal Projects (other Programs)
  - Paula Wise - Galveston District Operations and Maintenance Update

Legislative Committee: John Lee and Cameron Perry – Chairs
- Legislative Agenda – Washington DC and Austin

Newsletter: Cris Weber and Jayne McClure – Chairs

Texas ASBPA Symposium: March 20, 2015, Harte Research Institute, Corpus Christi

ASBPA Fall Conference – “Promoting Healthy Beaches”
- October 15 – 17, 2014, Virginia Beach, VA; Visit www.asbpa.org

Joe Moseley Memoriam – Jerry Mohn

Next Texas Chapter Meeting: November/December?

Adjournment
The American Shore & Beach Preservation Association recognizes that the shores, beaches and other coastal resources of America provide important quality-of-life assets within the reach of the largest possible number of people in accordance with the ideals of a democratic nation. This Association is dedicated to preserving, protecting and enhancing the beaches, shores and other coastal resources of America.

The Texas Chapter of ASBPA is dedicated to fulfilling this mission in the State of Texas. We are a member based advocacy organization. For more information on becoming a member, becoming a corporate sponsor, or becoming more active with the organization, please contact Jerry Mohn at the address to the left.

Please remember to visit our website at www.texasasbpa.org for more frequent updates on coastal happenings and the Texas Chapter of ASBPA. If you have information to submit for the website or newsletter please contact Jerry Mohn.

Corporate Sponsorship costs $500 and provides for recognition on Chapter website and all publications & events.

Corporate Sponsors

Visit us online at: www.texasasbpa.org