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FEATURE:

East Marsh Island Marsh
Creation Project

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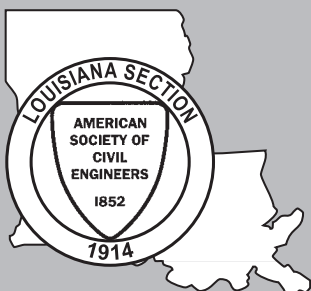
Louisiana Section Installation
& Awards Luncheon

Leadership Development for
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Louisiana Report Card on
Infrastructure



Patrick J. Landry, PE
2010-2011 ASCE LA Section President



NOVEMBER 2010
VOLUME 19 • NO 1

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President's Message

By Patrick J. Landry, PE

It is an honor and privilege to serve as the 2010-2011 President of the Louisiana Section of ASCE. I look forward to working with an outstanding group of men and women who have agreed to serve with me as officers and board members of the Section. I am honored to follow E. Ray DesOrmeaux, PE, Ali Mustapha, PE and Christopher Knotts, PE, DWRE who served admirably as Louisiana Section Presidents preceding my term. As a Past President of the Acadiana Branch, I am also proud to follow in the footsteps of five Acadiana Branch Presidents who have served as Louisiana Section President. All five individuals are highly respected leaders in the Acadiana engineering community. Those former Section Presidents are: Paul Miers, PE (1991), Dr. Kam Movassaghi, PE (1993), Mark Dubroc, PE (1997), Todd Vincent, PE (1998) and E. Ray DesOrmeaux, PE (2008).

On September 17, 2010, the Acadiana Branch hosted the annual Section Officers Installation Banquet and Section Awards Program at A La Carte Restaurant in Lafayette. Approximately 65 people attended the banquet which annually honors some of the outstanding civil engineers across the state. In the last few years, the Section has made an extra effort to seek out and identify the most deserving award recipients and honor them at the annual banquet. Civil engineers are, for the most part, a conservative group of individuals who tend to avoid the spotlight, if at all possible. This awards ceremony is the Section's way of saying "Thank you" for all of their efforts throughout the years. Many thanks are extended to Section Awards Chairman Ronald Schumann for presenting the awards and to the branches for nominating an outstanding slate of candidates. Look for more information about the installation of officers and the Section award recipients on pages 12-15.

The Louisiana Section has always prided itself in publishing the Louisiana Civil Engineer Journal, a quarterly publication that has garnered several national awards. In fact, since ASCE National instituted the National Outstanding Newsletter Award for large sections and branches, our Section has won six times in the fourteen year history of the award. The only other multiple year award winners were the Texas and San Diego Sections, both having won the award twice. The Louisiana Section won the award in 2001, 2002, 2005, 2006, 2008 and 2009 and is once again nominated for the 2010 award. As last year's Publication Chairman, I had the opportunity to work with our editor, Ms. Nedra Davis, who is beginning her third year with the Section, and am proud to report that size-wise, we published the largest collection of journals in the Section's history. Three of the journals featured some of the largest, most costly and highly technical civil engineering projects in our state's rich history. Our February issue featured the John James Audubon Bridge, which will be the longest cable stay span in the United States once completed in 2011. The widening of the Huey P. Long Bridge in New Orleans was featured in our May issue and has been nominated for a National Historic Landmark designation. Our August issue fea-

tured the construction of the Inner Harbor Navigation Canal Surge Barrier, one of the largest hurricane protection projects ever constructed in the New Orleans area. Look for more interesting articles this year as Ronald Schumann takes over as Publication Chairman.



Patrick J. Landry, PE

The Section's website, which can be located at www.lasce.org, underwent significant upgrades over the last two years and is another source of valuable information for members. Kurt Nixon will be the website chairman for the upcoming year and will be making periodic updates.

The major emphasis of our administration will be the development of the Louisiana Section Report Card. ASCE National released a national report card in 1988 and another in 2005 which graded significant infrastructure categories across the country. The report card was updated in 2009 and thus far, over 30 state sections and branches have produced their own report cards. During the summer, the Louisiana Section initiated discussion to begin preparations for our report card to be published sometime in the late summer or early fall of 2011. To date, over forty civil engineers across our state have volunteered to be a part of this huge endeavor which will produce grades in nine infrastructure categories. The goal of this project is to increase public awareness of the critical needs of our state's infrastructure and to provide guidance to local and state policymakers regarding funding priorities. The report card effort is being led by our Executive Director, Dr. Kam Movassaghi, PE and Deputy Director, Mr. Joey Coco, PE. For more information regarding the Louisiana Section Report Card, see page 6.

The annual Spring Conference will be hosted by the Acadiana Branch on April 14-15, 2011 at the Cajundome Convention Center in Lafayette. ASCE National President Kathy Caldwell, PE has agreed to be the keynote speaker. More information regarding the event will be forthcoming.

In closing, I am excited about the important and unique challenges the Louisiana Section has undertaken for the upcoming year. We will strive to update you on the progress of the report card and continue to inform our membership through the Louisiana Civil Engineer Journal and our website. If you have comments or suggestions on how the Section Board can better serve you, please feel free to contact any board member.

Making the Grade

By Russell J. "Joey" Coco, Jr., MBA, PE

The Louisiana Section of ASCE is moving forward to join only 22 other states that have published infrastructure report cards. The report card is intended to raise the public's awareness on Louisiana's infrastructure. The Louisiana Report Card Committee is comprised of over 40 volunteers from both public and private sectors with many different technical and administrative backgrounds. Kam Movassaghi, PhD, PE, will serve as the executive director of the report card.

There are 9 major infrastructure categories that will be considered in the Louisiana Report Card: Roads, Bridges, Dams, Hazardous and Solid Waste, Drinking Water, Wastewater, Levees, Aviation, and Ports. Data on each of these topics will be collected over the upcoming months and grades assigned to each area based on factors such as the infrastructure's overall condition, capacity, funding, operation and maintenance, public safety, and resilience. Recommendations will be made, where applicable, to advise key decision makers on ways to sustain positive grades or ways to improve upon poor grades.

It is anticipated that the Report Card for Louisiana's Infrastructure will be completed in the summer of 2011. We ask for your support of the volunteers who are working diligently on this important ASCE project for Louisiana.

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East Marsh Island Marsh Creation Project

By Dain Gillen, PE

Introduction

Louisiana contains one of the largest coastal wetland areas in the world. Because of a variety of mostly man-made alterations to the natural system, the Louisiana wetlands are also one of the most rapidly deteriorating ecological systems in the world.

A variety of practices to combat the problem have been utilized under the Coastal Wetlands Planning Protection and Restoration Act of 1990 (CWPPRA) and other funding mechanisms. The East Marsh Island Project (TV-21) was selected for engineering and design in 2004 as part of CWPPRA's 14th Project Priority List.

Site Description

Marsh Island is an island of approximately 70,000 acres located off the coast of Iberia Parish between Vermilion Bay and the Gulf of Mexico. The island is a remnant of one of the first delta lobes of the Mississippi River formed after the Pleistocene era 5,000 – 7,500 years ago. The island has suffered interior wetland loss due to excess tidal exchange through oil and gas canals and scour from hurricanes, particularly Hurricane Lili. The northeastern tip of the island is particularly in peril because of the risk of becoming hydrologically disconnected from the rest of the island.

The goal of the project is to restore the northeastern tip of the island with hydraulically dredged material from East Cote Blanche Bay, filling in open water areas and eliminating the mechanism of excess tidal exchange.



Figure 1. Project location map.

Project Design

Approval of the project as part of the 14th Project Priority List was followed by a kickoff meeting and site visit in 2006. Based on that meeting, a plan was developed to proceed with engineering and design.

Tides and Water Levels

Determining typical tide ranges and water level elevations is one of the first steps in determining placement heights of fill material in a

marsh creation project. It is preferred to create marsh platforms that are in the intertidal range for the support of native marsh plant species such as *Spartina* that exist in this habitat.

Tides were calculated using 6½ years of data from a nearby gauge and correlated to a gauge at Grand Isle to

cover an entire 19-year tidal epoch, as recommended by the NOAA Range-Ratio method. The following water levels were calculated:

CALCULATED VARIABLES	ELEV (FT)
MEAN HIGH WATER	1.29
MEAN TIDE LEVEL	0.54
MEAN LOW WATER	-0.22
MEAN TIDE RANGE	1.51

Table 1. Calculated tidal values.

Surveys

Topographic, bathymetric, and magnetometer surveys were performed within the marsh fill area to facilitate the design of the project. In addition, geophysical, bathymetric, and magnetometer surveys were performed offshore to delineate a suitable borrow area.

C.H. Fenstermaker and Associates performed topographic and bathymetric surveys of the fill area, shooting transects on a 500 foot spacing to be used for volume requirement calculations. As typical with most projects requiring excavation in the marsh and other areas with a large network of underground oil and gas pipelines, a magnetometer survey was performed. No unexpected anomalies were found.

Fenstermaker also took "healthy marsh elevation" shots in the surrounding marsh. These elevations were taken in nearby areas of the marsh that were determined by project biologists to be healthy, and were used along with the tidal levels to determine target marsh fill height.

Surrounding healthy marsh was determined to be +1.72' on average*. Although this elevation was above the calculated mean high water level, healthy vegetation existed in these locations. This

* All elevations listed are referenced to the North American Vertical Datum of 1988 (NAVD 88).



Dain Gillen, PE

observation, along with the knowledge that the project was in a deteriorating state, led to the selection of +1.8' as the target marsh elevation.

An investigation to determine the location and characteristics of the borrow area was completed by Coastal Planning and Engineering, Inc. (CP&E). Unlike inland marsh creation projects, TV-21 had a large area to choose from to dredge material. Because of this, a tiered sediment search was completed to obtain the best available sediment, free of any dredging impediments, within a reasonable distance of the island.

A search area, shown below, was delineated and magnetometer, bathymetry, and side scan sonar were utilized to identify 2 potential borrow areas. Each of the potential borrow areas were further investigated with the above techniques as well as vibracore soil borings and sub-bottom profiling. Based on this information, the northernmost of the two potential borrow areas was selected.

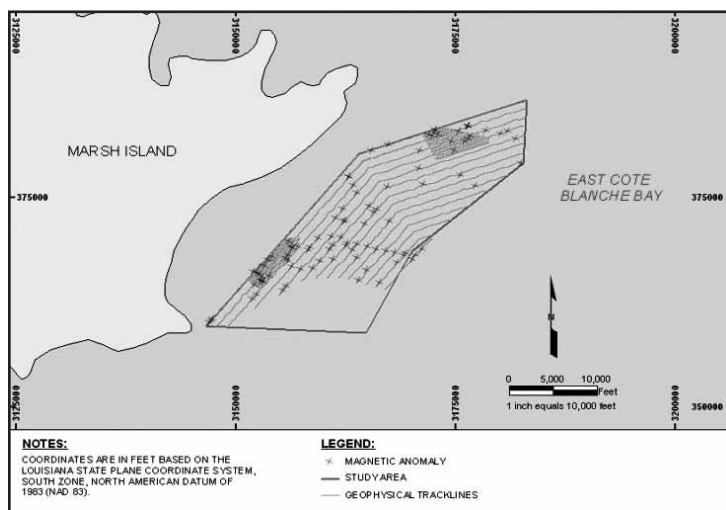


Figure 2. Geophysical Investigation map.

Geotechnical Investigation

Upon selection of a borrow area, further geotechnical investigation was necessary to characterize the sediments in the borrow and fill areas and predict settlement of dredged material placed in the fill area.

Aquaterra Engineering, LLC collected eight (8) onshore borings in the vicinity of the fill area and obtained ten (10) vibracore samples from CP&E that were taken from the borrow area for testing and analysis. The soil samples were tested in the laboratory for classification, strength, and compressibility. Testing included: field or miniature vane, unconfined compression, unconsolidated undrained triaxial compression, Atterberg limits, grain size distribution, and consolidation. In addition to these standard laboratory tests, settling column tests and self-weight consolidation tests were completed to further analyze material behavior.

Marsh Fill Settlement Analysis

Marsh fill settlement analysis was necessary to determine the construction fill height required to achieve the final target marsh elevation of +1.8'. To determine the construction fill height, settlement and self-weight consolidation tests were performed using samples collected from the marsh fill and borrow areas. Total settlement of the marsh fill was calculated using the Army Corps of Engineers

(USACE) program, Primary Consolidation, Secondary Compression, and Desiccation of Dredged Fill (PSDDF). To accurately quantify cumulative settlement, the program considers settlement of the underlying soils from placement of the fill material above it and the self weight consolidation that occurs within the fill material itself. Properties of the underlying soils were obtained from the results of the laboratory tests conducted on the borings taken by Aquaterra. Properties of the fill material were obtained from self-weight consolidation testing and index testing on the vibracores collected by CP&E. In addition, climatic data was considered and input into PSDDF.

Time rate of settlement was analyzed for fill heights of +2.0', +2.5', +3.0', +3.5', and +4.0'. These settlement curves are shown on the following figure. Based on these analyses, a target fill elevation of +3.5' was selected. At this fill elevation, 1.8 feet of total settlement is estimated over the 20 year life of the project. Of this total settlement, approximately 0.5 feet is foundation settlement, with the remaining 1.3 feet of settlement due to self weight consolidation. The majority of this settlement occurs within the first one to two years after construction, resulting in a marsh that is at or near the target marsh elevation during the project life.

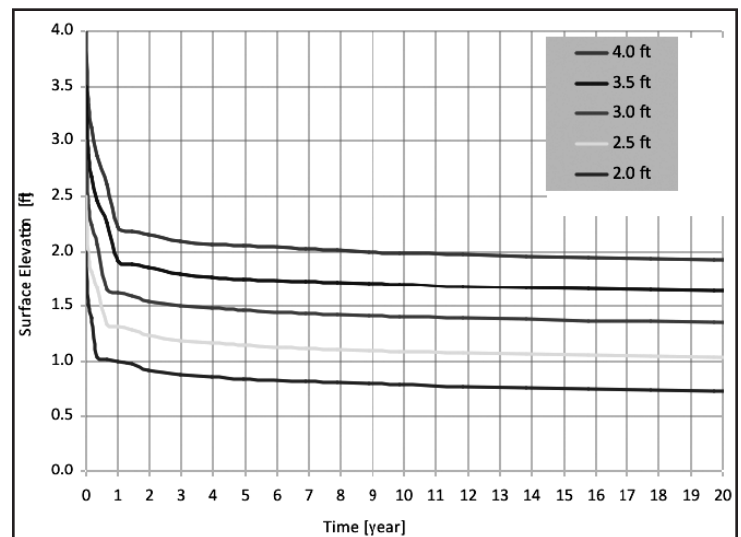


Figure 3. Marsh fill settlement curves.

Containment Dike Design

Aquaterra performed global slope stability analyses for the earthen containment dikes using the Modified Bishop Method with the program STEDwin© Release 2.8. Circular arcs were divided into vertical slices to delineate the failure planes, and the factor of safety was determined by summing forces and moments. A minimum safety factor of 1.3 was used for the analyses.

For the containment dikes, engineering soil properties from borings taken in the alignment of the containment dikes were used to conduct the slope stability analyses. For the analyses, each levee section began with a crest height of +6.0' NAVD88. If the minimum factor of safety could not be achieved, the embankment height was reduced by one foot. It was determined that a crest height of +4.0' NAVD88, a crown width of five (5) feet and side slopes of 1(V):5(H) were required for a containment dike with a factor of safety of 1.3.

To prevent losses of dredged material, OCPR typically designs one foot of freeboard above the anticipated marsh fill elevation. In this

case, +3.5' NAVD88 was used as the fill elevation. Because of this, OCPD requested a stability analysis be run on a crest height of +4.5' NAVD88 with side slopes of 1(V):5(H) and 1(V):4(H). These analyses resulted in factors of safety ranging from 1.14 to 1.21. For the purposes of containment of marsh fill, a value of 1.1 or above was determined to be adequate because dikes can be continually maintained during construction. Because of this, a final side slope of 1(V):4(H) was selected. A containment dike typical section is shown in the following figure.

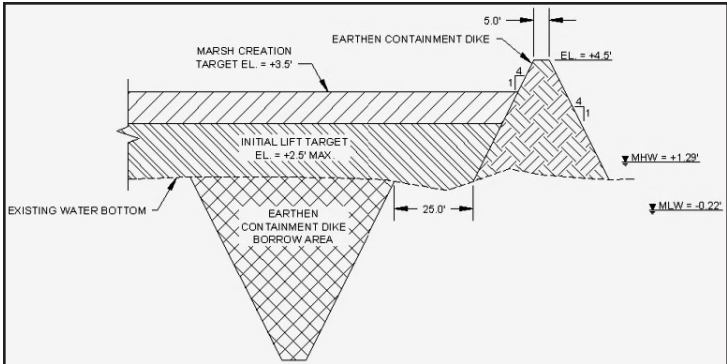


Figure 4 Typical marsh creation section.

Marsh Creation Design

Once the target fill elevation was determined, the marsh fill volume was calculated. Cross-sectional areas of the transects in each fill site were calculated using the data produced by the Fill Area Survey. Fill site volumes were then computed using these areas. Following these computations, the results were verified in AutoCAD. The results of the volume calculations are shown below.

Area (acres)	Volume (calculated)	Volume (CAD)	Difference
362	1,880,039 yd ³	1,744,097 yd ³	7.2%

Table 2. Fill quantities.

The project was specified to be constructed in a minimum of two lifts. This determination was made based on the success of recent OCPD projects that have been constructed using this method. The project area was split into two cells, as illustrated in Figure 1, so that the fill material from one cell can dewater while the other cell is being pumped to the required height. This construction method allows the bulk of the initial consolidation to occur and allows a “firmer” foundation on which to pump subsequent lifts. This, in turn, allows the contractor to observe the settling properties of the material and more easily reach the final target elevation. A 28-day dewatering period was specified between lifts. This time period is long enough to allow significant consolidation but not so long as to prevent the contractor from pumping adjacent cells.

It must be noted that the settlement curves are based on one lift construction and some variation to the curves may occur for a two lift scenario. Because most of the settlement that occurs within the first 28 days is self-weight consolidation, it can be anticipated that the previously illustrated curve will be slightly higher for up to a year before slowly approaching the initial (single lift) curve.

The final step in calculating necessary volumes was to determine an estimated cut to fill ratio for the quantity of material necessary to be dredged hydraulically and placed in the fill areas to meet the target elevation. The cut to fill ratio depends on a variety of factors that are difficult to quantify including expected transport losses, “bulking” of material immediately after placement, foundation and consolidation settlement, and construction losses. Considering these factors, Aquaterra’s recommendation was from 2:1 to 3.3:1. Based on a review of previous projects, a cut to fill in this range seemed excessive. A final cut to fill of 1.5:1 was selected by observing soil properties, cut to fill ratios, and performance of recently designed and constructed projects. Two-lift construction sequencing was also considered when selecting the cut to fill. At the time of this writing, preliminary numbers from construction are indicating a cut to fill just above 1:1, indicating the inherent difficulty in predicting this parameter.

Borrow Area Design

OCPD requested that the borrow area be at least 3,000,000 cubic yards, the initial estimate of fill required. The borrow site selection and design for TV-21 was conducted by CP&E as part of the sediment search discussed previously. From these results, CP&E delineated the recommended borrow area, including boundaries and cut depths, shown in the figure below. The CP&E recommended borrow area, which was approximately 4,000,000 cubic yards, was ultimately adopted by OCPD, but with a uniform bottom depth of -20.0'. This was more than the necessary quantity of 2,821,000 cubic yards (determined by simply multiplying the CAD fill volume by the selected cut to fill ratio of 1.5). The additional volume was included as a factor of safety for permitting and to ensure adequate material would be available in the event of any unforeseen circumstances.

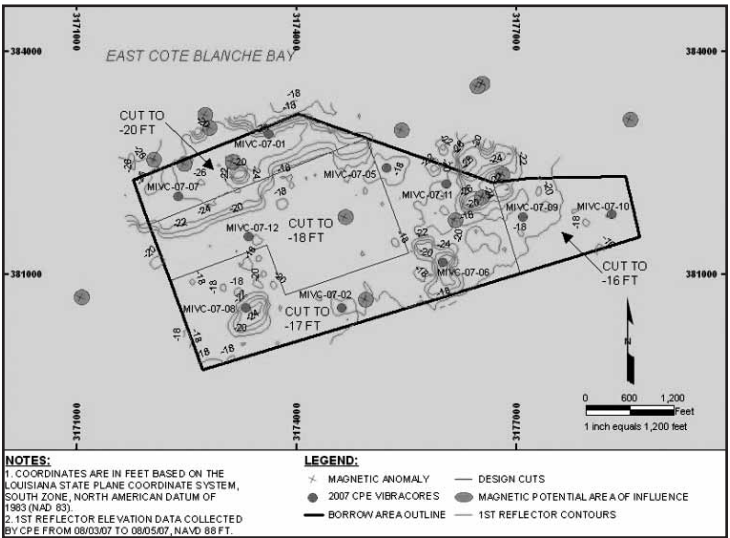


Figure 5. Borrow area delineated by CP&E.

Wave Analysis

A SWAN two-dimensional wave model was run to determine the impact of the borrow area on the local wave climate. The bathymetry of the Gulf of Mexico and East Cote Blanche Bay were represented by a grid system. Offshore wave data was input using historical data from USACE Wave Information Studies (WIS) data. A Gumbel analysis was completed on the data to determine the wave height associated with a 100 year storm event. Once this was deter-

mined, runs were made using this wave height from three different directions with and without additional wind inputs. Model output was visually analyzed using the Surface water Modeling System (SMA) software to determine if any focusing of energy has occurred on the shore. After reviewing the SMS results, it was concluded that the borrow area would have a minimal effect on the wave heights. No wave height changes were found at the shoreline and the maximum observed change in wave height was inside of the borrow area and was approximately 6 inches.

Construction Progress

The project was advertised in December 2009. The low bid of \$13,164,375 was placed by Weeks Marine of Covington, LA. The Notice to Proceed was issued in March 2010 and mobilization of equipment began shortly thereafter.

The first item under construction was containment dikes. Marsh buggy mounted backhoes were used to place several “lifts” of material until the cross section of the dike met the required specification. Several lifts were necessary to allow for settlement and desiccation of the dike and its foundation.



Figure 6. Marsh buggy constructing containment dikes.

Of the 23,000 linear feet of containment dike constructed, there was trouble getting the dikes to the required grade in two locations. This is not uncommon in marsh creation jobs and is indicative of soils that are of poorer quality than shown by any of the borings. At these locations, the contractor was allowed to use an alternative containment method, which in this case consisted of hay bales bound together and placed as a “core” to the dike, and then capped with material to reach the required dimensions.



Figure 7. Using hay bales to bring a containment dike up to grade.

In one location, the hay bale core worked well and held up throughout construction. In the other location, the hay bales failed when a low tide created a large head difference between the inside and outside of the fill area. In this location, another alternative method was used consisting of driving timber mats into the soil and supporting both sides with spoil. This method held up well throughout construction.



Figure 8. Using timber mats to close a containment dike breach.

Placement of Dredged Material

After completion of containment dikes, placement of material began. Fill was placed in an alternating sequence. It was first placed in the northern area to the maximum first lift height of +2.5' and then to the same height in the southern fill area while the northern area underwent the required 28-day dewatering period.

The plan was to repeat the process after completion of the first lift in both cells, but after placement of the first lift of material in the northern cell, it became clear that the necessary 2,821,000 cubic yards of material estimated was well in excess of what was actually needed to fill the cells. In addition, pumping was complete in the southern cell prior to the end of the 28-day dewatering period in the northern cell. At this point, it was decided to discharge material south of the southern cell into the broken marsh outside of the project area using only limited containment in locations where it appeared dredge material may enter historic ponds or bayous. This was continued until there was adequate time to begin pumping back into the project fill cells without having to wait on the dewatering periods for the respective cells. Both project fill



Figure 9. Additional fill areas added to the original project.

cells were pumped to a final fill elevation of +3.5' with a tolerance of $\pm 0.3'$.

As an added bonus to the project, the project bids came in approximately \$5 million under budget. During construction, the CWPPRA program approved use of these surplus funds to expand the project. In anticipation of this, and to accommodate the excess material discussed previously, additional fill areas totaling 665 acres were included in a permit modification.

Status

As of October 15, 2010, both lifts have been completed for the original project area. Approximately 832,000 cubic yards were placed in Fill Area 1 and 796,000 cubic yards placed in Fill Area 2.

Approximately 1,369,000 cubic yards have been placed in the additional fill areas for a total to date of 2,966,000 cubic yards. The 800,000 cubic yards of dredging remaining is expected to be complete by December 2010. A total of 1,027 acres will be either created or nourished by the project.



Figure 10. Project area during containment dike construction and prior to fill operations (April 2010).



Figure 11. Project area during construction (August 2010).

Dain Gillen, PE is a recent addition to the design staff of the United States Department of Agriculture – Natural Resources Conservation Service (NRCS). Mr. Gillen earned a B.S. degree in Biological Engineering from Louisiana State University in 2000 and a M.E. degree in Biological and Agricultural Engineering from Texas A&M University in 2002. Prior to working with NRCS he was employed with the State of Louisiana's Office of Coastal Protection and Restoration. He has seven years of experience in coastal restoration including marsh creation, shoreline protection, hydrologic restoration, hydrodynamic modeling, and freshwater diversions.

Future Work

Vegetative Plantings

Vegetative plantings will be included as part of the project and will take place in two phases. The first phase will take place immediately following construction and will consist of planting up to 60,000 units of smooth cordgrass (*Spartina alterniflora*) and approximately 9,600 units each of marshhay cordgrass (*Spartina patens*) and salt grass (*Distichlis spicata*) around the perimeter and other high need areas of the project. This planting will help control loss of the newly placed material. An evaluation will be made of the project area approximately six months after the first planting to assess the results and to observe natural recruitment of native vegetation. Following this evaluation, a second planting will be conducted to address areas of critical need or large interior areas that have not yet vegetated.

Dike Degradation

Approximately six months after project construction is complete, the exterior containment dikes will be degraded to an elevation of +1.8' to be consistent with the rest of the newly created marsh.

Engineering Monitoring

Project funds have been allocated to engineering monitoring of the project. Surveys are planned for the marsh fill area and the borrow area for years 1, 3, and 5 post-construction. The fill area topographic/bathymetric surveys will help assess actual settlement versus predicted settlement over the life of the project. The borrow area surveys will assess the refill rate of the borrow area. Dissolved oxygen in the borrow area will also be monitored at the same interval to ensure anoxic conditions do not exist.

Acknowledgements

Although the names of individuals are too numerous to list, the guidance of the project teams at OCPR, EPA, NRCS, and LDWF made the project possible.

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2010-2011 ASCE Louisiana Section Installation Luncheon

The 2010 Louisiana Section Awards and Officers Installation Luncheon was held on September 17, 2010, at A La Carte Restaurant in Lafayette, Louisiana and was hosted by the Acadiana Branch. Acadiana Branch President, Shaun Simon, called the meeting to order and welcomed everyone to the luncheon. Acadiana Branch member, Joshua Stutes led the invocation which was followed by opening remarks from Section President Christopher Knotts. President Knotts cited the many accomplishments during the past year and thanked the Section Board for their hard work and support.

President Knotts then called upon Louisiana's Region 5 Governor, E. Ray DesOrmeaux, standing in for Region 5 Director Norma Jean Mattei, to update the luncheon attendees on the latest news regarding the ASCE region which is comprised of Louisiana, Mississippi, Alabama, Georgia and Florida. The Region 5 Board of Governors reports directly to the ASCE National Board of Directors. After Mr. DesOrmeaux's remarks, Section Awards Committee Chairman, Ronald Schumann, opened the awards ceremony and resumed the presentation of the Section Awards after an excellent lunch enjoyed by all.

The ASCE Louisiana Section Awards were instituted to recognize the outstanding contributions of Louisiana civil engineers for service to their profession and ASCE. Section Awards Chairman, Ronald Schumann, thanked the branches for nominating an outstanding slate of candidates for consideration for each award. The quality of the nominees for the various awards made the awards committee's task to determine this year's award recipients very difficult. Ronald Schumann thanked the awards committee which included Pat Landry, Luke LeBas and Kurt Nixon for their efforts in reviewing the numerous nominations and selecting this year's recipients.

This year's Section Award recipients were:

E. Raymond DesOrmeaux, PE, PLS	Outstanding Civil Engineer
Nathan Junius, PE, PLS	Outstanding Young Civil Engineer
Bijan Sharafkhani, PE	Outstanding Government Engineer
Chris Carroll, PhD, EI	Outstanding Young Government Engineer
Russell J. Coco, Jr., MBA, PE	Outreach Award
Aziz Saber, PhD, PE	Educator of the Year Award
David S. Huval, PE, PLS	Lifetime Achievement Award

This year's award recipients representing every region in the state and with work experiences varying from consulting to government to academia were honored during the ceremony. Each of these award recipients shares a common bond – they are all dedicated to

their civil engineering profession, ASCE, their communities and their families.

The highlight of the ceremony was the presentation of the 2010 Wall of Fame inductees. Each branch can select up to one nominee for inclusion to the Wall. It is the highest honor that can be bestowed upon a Louisiana Civil Engineer by the Louisiana Section.

This year's four inductees include:

Eugene Sellers, PE, PLS	Acadiana Branch
Charles W. Hair, Jr., PE, (posthumously)	Baton Rouge Branch
G. Joseph Sullivan, PE, PLS	New Orleans Branch
Robert R. Aillet, PE	Shreveport Branch

After Ronald Schumann presented the first eleven Section Awards, Section President Christopher Knotts announced the final award of the ceremony, the President's Medal, to Norma Jean Mattei, PhD, PE for her dedicated service to ASCE both on the National and Section level. She serves on the National Board of Directors of ASCE and as Chair for Region 5 Board of Governors. Dr Mattei also serves on the Louisiana Professional Engineering and Land Surveying Board and continues to support the Louisiana Section supporting ASCE and the civil engineering profession.

E. Ray DesOrmeaux was called upon to install the incoming Section Officers and Board of Directors for the Louisiana Section for the 2010-2011 administrative year.

The 2010-2011 Section Officers are:

Patrick J. Landry, PE	President
Ronald L. Schumann, Jr., PE	President-Elect
Kurt M. Nixon, PE	Vice-President
Robert Jacobsen, PE	Secretary-Treasurer
Christopher P. Knotts, PE	Past President

The Board of Directors are:

R. J. (Joey) Coco Jr., MBA, PE	C. Eric Hudson, PE
Christopher G. Humphreys, PE	Kimberly Landry, EI
Shaun R. Simon, PE	Adam M. Smith, PE
Margaret S. Adams, PE	Christopher L. Sanchez, PE
Luke E. LeBas, PE	Matt D. Redmon, EI

The meeting concluded with outgoing President Knotts presenting incoming President Landry with his President's Plaque followed by his closing remarks.



Journal Chairman Patrick Landry, Editor Nedra Davis, and Section President Christopher Knotts.



Patrick Landry accepts the Presidential gavel from Christopher Knotts.

2010-2011 ASCE Louisiana Section Officers



Patrick J. Landry, PE
President



Ronald L. Schumann, Jr., PE
President-Elect



Kurt M. Nixon, PE
Vice-President



Robert Jacobsen, PE
Secretary-Treasurer



Christopher P. Knotts, PE
Past President



2010-11 ASCE Louisiana Section Leadership

Left to right top row: Christopher P. Knotts, Patrick J. Landry, Adam M. Smith, Luke E. LeBas, Shaun R. Simon, and Christopher L. Sanchez.

Left to right bottom row: Ronald L. Schumann, Robert Jacobsen, Kurt M. Nixon, R.J. (Joey) Coco Jr., Kimberly Landry, Christopher G. Humphreys, and Matthew D. Redmon.

2010-2011 ASCE Louisiana Section Board of Directors



Christopher G. Humphreys, PE
Director-at-Large



R.J. (Joey) Coco, Jr., PE
Director-at-Large



Kimberly Landry, EI
Director-at-Large



C. Eric Hudson, PE
Director-at-Large



Shaun R. Simon, PE
Branch Director



Adam M. Smith, PE
Branch Director



Matt D. Redmon, EI
Branch Director



Margaret (Meg) Adams, PE
Branch Director



Luke E. LeBas, PE
Assigned Branch Director



Christopher L. Sanchez, PE
Assigned Branch Director

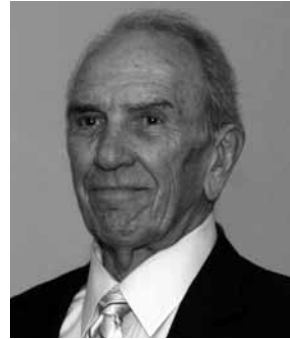
2010 Louisiana Section Awards



Eugene Sellers, PE
Wall of Fame



G. Joseph Sullivan, PE
Wall of Fame



Robert Aillet, PE
Wall of Fame



Charles Hair, PE (1919 - 2009)
Wall of Fame



David Huval, PE
Lifetime Achievement



E.R. DesOrmeaux, PE
Outstanding Civil Engineer



Nathan Junius, PE
Outstanding Young Civil Engineer



Aziz Saber, PhD, PE
Educator of the Year



Bijan Sharafkhani, PE
Outstanding Government Civil Engineer



Chris Carroll, EI
Outstanding Young Government Civil Engineer



R.J. (Joey) Coco, Jr., PE
Outreach



Norma Jean Mattei, PhD, PE
President's Medal

Who Knew?

Editorial By Deborah Ducote Keller, PE

Once again, among the top news stories in Louisiana this year were the numerous violations of state and local laws regarding ethical business practices, conflicts of interest, and improper use of public assets by elected officials and heads of public entities. Whether discovered by internal auditors, external investigators, or whistleblowers, the reaction of the offenders was often one of surprise that there was any wrongdoing. The old adage, "Ignorance of the law is no excuse," certainly holds true, both for those incriminated, as well as those who may have benefitted from the impropriety. As professionals, we civil engineers can't hide behind, "Who knew?"

Members of the American Society of Civil Engineers are held to the ASCE Code of Ethics to preserve the standards of the profession. ASCE seeks to educate both its members and the public on ethical issues, and provides enforcement, too. Details are provided at www.asce.org under Ethics.

Although those who are licensed by the Louisiana Professional Engineering and Land Surveyors Board (LAPELS) are required to earn at least one professional development hour in ethics training every two years, one would benefit from reviewing the rules more often. Among the many binding regulations are the restrictions regarding gifts, both giving and receiving, as stated in the Louisiana Administrative Code Title 46 Part LXI (Rules of the Board) under La R.S. 37:681-703 (Licensure Law). Go to www.lapels.com under Regulations for a review. Test your knowledge by downloading and completing the "Professionalism and Ethics Presentation and Quiz" and send your test sheet to LAPELS for scoring.

What you may not be aware of is the Louisiana Code of Governmental Ethics (LA Code of Ethics) for public servants (elected and appointed officials and public employees) and their immediate family members, as well as companies and businesses that do business with them. Engineers, whether employed by a state entity or who have state entities for clients, should visit www.ethics.state.la.us/training for a tutorial of these ethics rules. An on-line test can be taken, which will generate a certificate of completion for obtaining a passing score.

Some of the more noteworthy rules are:

- Public servants and their immediate family members cannot receive any thing of economic value from the public or even a private source for the performance of the public servants' job duties and responsibilities. It is prohibited whether received directly or indirectly, and whether it was solicited or not. It also applies to anyone who is seeking to obtain any business or financial relationship with the public servant's state entity. This also applies to any business that the public servant and spouse exercise control over or own more than 25 percent interest. The definition of immediate family is wider than you may think.

- A thing of economic value can be tangible or intangible, regardless of how little its value. A promotional item has no value if it is

imprinted with the logo of a business or organization and has minimal value. Recipients are required to return things of economic value to the sender.

- A public servant may receive food and drink if consumed in the presence of the provider, but it must not exceed the current allowable dollar value.

- There are rules regarding public servants receiving complimentary admission, lodging, and transportation to educational and professional development seminars related to the public servant's job duties. When it doubt, check the website.

Federal laws apply to federal agencies and their employees. It will differ from state regulations, so federal employees and those who do business with the federal government should know those regulations, as well.

Another saying is, "Ignorance is bliss." But ignorance of codes of conduct and ethics can cost engineers their jobs, their professional licenses, and their reputations.



Deborah Ducote Keller, PE

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"Without Flood Control, Nothing Else Matters."

Steve Wilson - President, ALBL

Leadership Development for Engineers

By Christel Slaughter, PhD

Here's a disconcerting fact of life for all engineers to contemplate – many of the natural aptitudes and skills that make the field of engineering attractive to aspiring professionals are not the same skills needed to successfully move into organizational leadership roles. While this seems unfair, it is also true. Scientists, physicians, engineers and accountants typically like assignments that involve detail, precision, and facts; which can then produce data-based decisions. In these occupations, formulas are essential to success. However, as individuals move up the career ladder into project management and leadership roles, new skill sets are needed to remain successful.

At the lowest levels of an organization, people often utilize technical skills. As they move into middle management interpersonal and conceptual skills become increasingly important. At the highest level of an organization, conceptual and strategic skills are paramount. It is these skills (more so than technical skills) that make and sometimes break the promising careers of those who move into leadership positions.

ARE LEADERS BORN OR MADE?

Although many of us can think of individuals who appear to be born leaders, the reality is that leadership skills can actually be learned. Leadership is the ability to build and maintain a team over a sustained period of time to accomplish business results. Through our work in developing leaders across many private and public organizations we have noticed that the main barrier to personal development is lack of feedback focused on what elements of leadership need to be learned and developed.

Often, firms will not see the need to encourage leadership development until it is too late. As an example based upon our experience, our client's executive team had been in place for over 20 years. Young engineers would be hired into the firm and after working there for seven to 10 years would be lured away by a competitor. This "churn" at the lower level eventually took its toll. As top and middle management began to look for the next leaders within the firm, they realized that they had few candidates who were ready to step up into the organization's now-available leadership roles.

The loss of good leaders coupled with the lack of leadership bench strength has the potential to quickly devastate an organization. Most studies that focus on predicting turnover due to ineffective leadership utilize the following model (Figure 1).

A privately-held consulting engineering firm recently experienced such a situation. SSA Consultants was called in when a concrete foundation for a fast-food client was partially poured on the wrong property. The founder/owner was appalled and asked the consultants to determine how such an error in quality assurance could have occurred. After some interviews and process observations, it was discovered that three senior PE's had left in a three-month period, taking 75 years of experience with them. Since they had previously been the reviewers of final plans and the organization had not substituted a new process, several other smaller quality problems had also occurred with less visible problematic outcomes.

It was discovered that these three experienced PE's had left due to the promotion of an inexperienced manager with poor leadership skills. This manager's inability to communicate and lack of interest in allowing or encouraging employee input created significant frustrations within that department. The firm absorbed significant expenses in order to address the issues and are still dealing with a damaged reputation.



Christel Slaughter, PhD

BARRIERS TO LEADERSHIP DEVELOPMENT: LACK OF MOTIVATION AND LACK OF FEEDBACK

Human nature pushes us toward the projects and tasks that offer us the best chances for success, and away from areas where our skills are weak and our fears of failure are high. As a result, we often lack the motivation to stretch our skill sets.

Good leaders are able to motivate their workgroup to work as a team to achieve goals. According to Red Auerbach, the legendary coach of the Boston Celtics, one motivates a team by engaging one player at a time until the whole team has "bought in." Understanding motivation requires an understanding of human needs, and leaders must learn to identify their own personal motivators while exploring techniques to motivate others.

A 2005 report by the Corporate Leadership Council shows two things – the retention of high potential leaders is crucial for the future and engagement is essential to this process. Smart organizations realize that their fortunes rise and fall with the quality of their teams and team leaders; therefore, invest in leadership development to help secure the future.

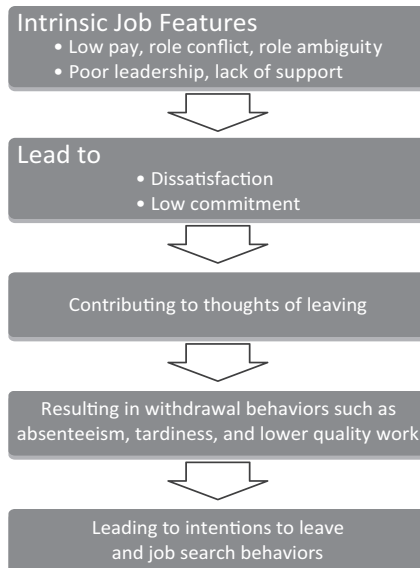


Figure 1. Predicting turnover due to ineffective leadership.

Even the most introverted, pocket-protector-wearing stereotype of an engineer can develop good communication and leadership skills if he or she is motivated to change. The transformation takes "will" and "skill" – and both can be developed. In the recent bestselling book *Outliers*, Malcolm Gladwell says the best way to achieve international stardom is to spend 10,000 hours honing your skills. In fact, the greatest athletes, entrepreneurs, musicians, and scientists emerge only after spending at least three hours a day for a decade mastering their chosen field. Excellent leadership is no different.

Probably the most significant barrier to leadership development is the lack of quality feedback. Think of the managers that you have observed in your career and how they view themselves as leaders. Are many unaware of the lack of skills or leadership "derailers" that inhibit their ability to be more successful at building a team and

achieving excellent results through others? That scenario is typical.

The Hogan Leadership Forecast Series is a relatively new tool for leaders to “see themselves as others see them.” Participants who complete the series are given feedback on their ability to handle adversity in work situations, communicate with others, handle decisions that involve risk, and many other key leadership skills and themes.

On a leadership scale such as “prudence,” which is an area measured by the Hogan Leadership Forecast Series, engineers tend score high. Prudence is regarded as a natural strength of engineers. As high-prudence employees, strong engineers are typically well-organized and oriented towards planning. Those same individuals at times, however, tend to micro-manage and get bogged down unproductively in the details. As managers, when those very successful, technical engineers are micromanaging their employees, they are not providing the developmental opportunities for employee empowerment and autonomy that we look for in effective leaders. As the old saying goes, “what got you to where you are today may not get you to where you want to be tomorrow.”

According to research, the base rate of bad managers in the corporate world is estimated to be between a whopping 50% and 75%. The effects are clear – the hiring and promotion of bad managers means alienated employees and negative business outcomes. Bad managers typically interview well and are hired based on technical skill and business knowledge – not for leadership talent. Top-quality leadership development is a key strategy that differentiates organizations from their competition.

Recently, a large, publicly-traded engineering company utilized these leadership assessments to provide leadership development and executive coaching for the top 35 engineers within one division. Collectively, these senior-level managers were responsible for the management of several subdivisions and over 12,000 employees.

The results were astounding as key staff members realized that their behaviors had such incredible impact (positive and negative) on the results of their team. For this group of senior-level engineers, many of the behaviors that had contributed to their rapid rise in the organization were the same behaviors that were now creating the most serious problems for them in their new leadership positions. For this group, it was not just about developing an understanding and awareness of their personalities and behavioral tendencies. They learned to target problem tendencies and internalize change – ultimately improving their reputations as effective and successful leaders.

Dr. Christel Slaughter joined SSA Consultants in 1983 after spending seven years as a faculty member at Louisiana State University. Since then, she has been instrumental in guiding and implementing strategic direction for hundreds of organizations, both regionally and nationwide.

Christel’s expertise is rooted in change management, performance improvement, strategic planning, training design and delivery, facilitation services, and executive coaching and counseling. Additionally, she has helped numerous Boards of Directors, executive management teams, and nonprofit leadership committees with training and facilitated group sessions involving leadership training, team building, problem solving, and conflict resolution.

Some of her work includes guiding the cultural and organizational transformation of a publicly-traded community bank, designing and implementing an award-winning customer service program for a large healthcare institution, developing and conducting a diversity awareness program for a multinational chemical plant, and designing integration strategies for the state of Louisiana’s multi-billion dollar coastal protection and restoration efforts.

She currently serves as a Board member (and former Chairman) of the New Orleans Branch Board of Directors of the Federal Reserve Bank, a Board member of the Baton Rouge Area Foundation, Chairman of Advance Baton Rouge, member of the Forever LSU campaign, and a Board member of the Pennington Medical Foundation. She is also a past-President of the Rotary Club of Baton Rouge, former Chairman of the Baton Rouge Area Chamber, and the former Chairman of Swine Palace.

Christel earned a Bachelor’s degree in Marketing, and received her doctorate from Louisiana State University in Systems Management and Organizational Design.

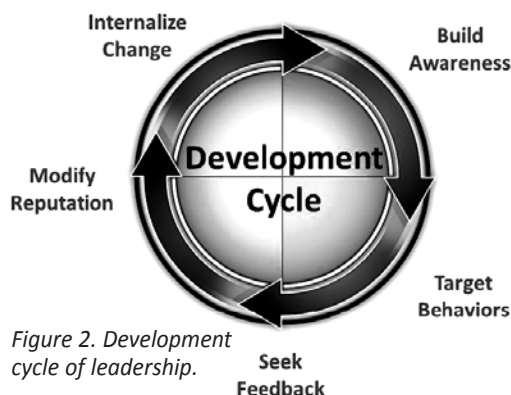


Figure 2. Development cycle of leadership.

The concept of leadership development is based upon developing a sense of strategic self-awareness. This is a process best demonstrated by the following model (Figure 2).

Successful leaders build teams that beat the competition, and a leader’s behavior is directly tied to the overall performance of his or her team.

Leadership matters – the person (or people) in charge of an organization can make or break it. Good leadership is a function of personality, and so is bad leadership. What is

important is to recognize personality tendencies, and target those derailing behaviors for positive change. When under pressure, most people will display certain tendencies, or “risk factors”, that are counterproductive to leading effectively. For example, an individual who tends to score high in a derailing behavior such as “cautious” means that he or she, under pressure, may fear being criticized, shamed, blamed, or somehow disgraced. From the outside looking in, this same individual may be an unpopular manager because he or she is so cautious, indecisive, and controlling. For another individual whose personality traits indicate he or she responds to these same situations with diligence, it may seem as though this individual is concerned with doing a good job, being good citizens, and pleasing authority (all traits generally viewed as good things). Privately, however, they live by these rules of being careful, planful, meticulous, and having high standards of performance for themselves and others. The behavior of these individuals may exude professionalism, and they are often regarded as highly dependable by their bosses. However, in a leadership role, the same individual can become fussy, micro-managing, nit-picky, and run the risk of alienating staff and team members. Stressful environments become compounded by this behavior, and autonomy is often absent from the mindset of subordinates because of the individual’s inability to delegate. Like many personality traits, the strengths represented by a high diligence score can turn into a weakness, impeding productivity all the way from poor delegation skills to a desire to serve as the judge for each team member having met performance standards (expectations that are sometimes unfairly high).

Derailing behaviors exist in everyone – they are a fundamental component to how each of us is wired and are a direct result of our distorted beliefs about how others will treat us during periods of stress. How one recognizes these challenging behaviors and is able to consciously manage them determines how effective he or she can ultimately lead.

There are two key principles to remember about leadership development: you own it, and it is a process, not an event.

Branch News

NEW ORLEANS BRANCH

By Meg Adams, PE, Branch President

On September 22-23, the New Orleans Branch co-hosted the 20th Annual Louisiana Civil Engineering Conference and Show with the New Orleans Chapter of ACI. The keynote speaker, Garret Graves, the Executive Assistant to the Governor on Coastal Activities, gave a very interesting overview of the current state of the coast, and the recent efforts to alleviate the oil spill damage and coastal erosion. Over 550 professionals from around the state attended the show, enjoying presentations on subjects including structures, geotechnical, transportation, project management, water resources, materials, and ethics. Almost sixty exhibitors also participated.

The following members will serve for the ASCE New Orleans Branch Board for the 2010/ 2011 year:

President - **Meg Adams, PE**

President Elect - **Malay Ghose Hajra, PhD, PE**

Vice President - **Jim Martin, PhD, PE**

Treasurer - **Steve Johns, PE**

Secretary - **Lee Alexander, PE**

Directors - **Reid Dennis, PE, Nathan Junius, PE, and Benjamin Cody, PE**

SHREVEPORT BRANCH

By Matt Redmon, EI, Branch President

After an enjoyable summer, the Shreveport Branch began the 2010-2011 year with our September membership meeting. Wes Wyche with the City of Shreveport explained the city's new Energy Management Program. The presentation was well presented and produced a lot of questions from our members. In addition to the presentation, we held our officer installation. The officers of the Shreveport Branch for the 2010-11 year are:

President - **Matthew Redmon, EI**

President Elect - **Scott Hughes, PE**

Vice President - **Dave Rambaran, PE**

Secretary/Treasurer - **Patrick Furlong, PE**

Additionally, I would like to congratulate the 2010 ASCE Louisiana Section Award Recipients from the Shreveport Branch. Aziz Saber, PhD, PE of Louisiana Tech was presented the Educator of the Year Award and Robert Aillet, PE was inducted into the Louisiana Section Wall of Fame.

We held a joint October meeting with the Shreveport LES chapter. Our speakers were Donna Sentell and Victoria Hatton from the LAPELS office in Baton Rouge. They work in the enforcement branch of LAPELS and spoke to our group about ethics.

The New Orleans Branch Structures Committee hosted a seminar on Codes for Wood Construction and Upcoming Changes in Wood Frames Standards and Specifications. The speaker was Vijaya Gopu, PhD, PE, Professor and Endowed Chair at UNO, and Catherine Kaake, PE, CFM, of the Southern Forest Products Association. The Herb Roussel Marine Seminar was hosted by the SEI October 14th at UNO.

Our most recent Younger Members event was held at Zephyr Field where the group enjoyed a baseball game, hosted by the Younger Member Chair, Jenna Addis.

Please visit www.asceneworleans.org for upcoming events and news.

As always the board is interested in hearing from our members and encourages your input. You can always contact me at megadams@cox.net with any questions, comments or ideas how we can better serve our members.

In addition to our monthly meetings, we have several events planned for this year. Our annual younger member food drive is underway. Donations will be given to the Providence House in Shreveport to support the less fortunate around the holidays. We look forward to a great year and if you are in the Shreveport/Bossier area, please join us for our monthly meetings held on the third Thursday each month at the University Club.



Left to right: Dave Rambaran, PE, Patrick Furlong PE, Matt Redmon, EI, and Scott Hughes, PE.

ACADIANA BRANCH

By Shaun R. Simon, PE, Branch President

The Branch began the 2010-2011 term with our installation of officers on August 18th, 2010 at Don's Seafood & Steakhouse in Lafayette, LA. The installation was performed by E. Ray Desormeaux, PE. The Board of Directors for the 2010 – 2011 term are:

President – **Shaun R. Simon, PE**
President Elect – **Luke Hebert, PE**
Treasurer – **Randel Badeaux, PE**
Secretary – **Eric T. McClanahan, PE**
Director at Large – **Kimberly Landry, EI**

Branch awards were also presented during the luncheon. Award Recipients were:

Outstanding Civil Engineer – **E. R. DesOrmeaux, PE, PLS**
Outstanding Young Civil Engineer – **Shaun R. Simon, PE**
Outstanding Young Government Civil Engineer – **Chris Carroll, PhD, EI**
Wall of Fame Award – **Eugene M. Sellers, PE, PLS**
Lifetime Achievement Award – **David S. Huval, PE, PLS**
Educator of the Year – **Donald Hayes, PhD**



Left to right: Randel Badeaux, PE, Luke Hebert, PE, Eric T. McClanahan, PE, and Shaun R. Simon, PE.

BATON ROUGE BRANCH

By Jeffrey L. Duplantis, PE, Branch President

Let me start out by saying – GO TIGERS! – GO SAINTS! Now that I got that out of the way let's see what's been going on around the Baton Rouge Branch. I guess of most significance to me is that this is unfortunately my last President's Message. In September the Baton Rouge Branch installed the new Board of Directors for the 2010-2011 term. Our new Board is as follows:

Board of Directors for 2010-2011

President – **Adam Smith, PE**
President Elect – **Clint Willson, PhD, PE**
Vice President – **Rudy Simoneaux, PE**
Secretary Treasurer – **Joey Coco, PE**
Director – **Jason Manning, PE**
Director – **Sam Amoroso, PhD, PE**

Committee/Advisory Chairs

LSU Practioner Advisor – **Sam Amoroso, PhD, PE**

The Acadiana Branch was honored to host the State Section Installation and Awards meeting on September 17th, 2010 at A la Carte restaurant in Lafayette, Louisiana. We would like to extend our appreciation to the Acadiana Branch and State Section for your great attendance.

We have begun to plan the Spring Conference to be hosted April 14 and 15, 2011 at the Cajundome Convention Center in Lafayette, Louisiana. We will forward information to the Section as it becomes available. We are currently updating our website with the new board, looking to add pictures of events, and a schedule of our proposed yearly luncheon layout with locations, dates, speakers, and topics. We are in the process of preparing our 2010-11 budget and our Annual Report.

We met with the UL Lafayette Student Chapter on September 7th. They prepared and presented a budget for their needs this Fiscal Year and we are currently in discussion on how we can best assist them. The student chapter held their annual "Welcome Back BBQ" on September 13th for the students and alumni which was well attended.

The ULL student chapter intends on attending the Deep South Conference next spring at Mississippi State University to participate in the steel bridge competition and other activities. They have developed a detailed plan for renovation of the "ASCE" room on campus and have begun those renovations.

We are going to meet with the McNeese Student Chapter in October or November to review their budget and offer our assistance in the upcoming year. We would like to be more involved with McNeese and find a way to bridge the distance between us.

Finally, we look forward to awarding well-deserving Junior and Senior students from both the University of Louisiana at Lafayette and McNeese State University for our ASCE Acadiana Branch Academic Scholastic Award & Scholarship.

SU Practioner Advisor – **Alison Ford, PE**
Younger Member Chair – **Danielle Welborn, EI**
Membership Chair – **Kirk Lowrey, PE**

I would like to thank all of the Branch officers that have come before me, especially Brant Richard, Bob Jacobsen and Billy Wall. Their tutelage and guidance were definitely helpful during my years on the board. I would obviously like to thank the members of the board that have served with me over the past several years. Without the dedicated support of each of them this past year definitely wouldn't have been so successful.

Here are just a few highlights:

- We hosted the first field trip to the John James Audubon Bridge near St. Francisville, LA
- The Branch received a SPAG grant to help support the Scotlandville

continued on next page

BATON ROUGE BRANCH *continued*

- Middle Pre-Engineering Program Engineering Design Challenge
- Our very own Younger Member Chair, Danielle Welborn, made it into the 2010 Engineer's Week national advertisement (see page 24 of the February 2010 issue of Civil Engineering magazine)
- The Branch revised the Constitution and Bylaws (thanks again to Billy Wall for heading up this effort)

In conclusion, I want to thank all of the Baton Rouge membership for attending our monthly luncheons. Your interest, interaction and feedback are always greatly appreciated. For those of you who are interested in serving your profession, a great first step is participation on your local ASCE Board. I would like to encourage everyone to get involved and participate in the activities we have planned and to become active in the engineering community. Thanks again for everyone who supported me over the past year, it was a fantastic experience.



Left to right back: Jeff Duplantis, Sam Amoroso, Jason Manning, Clint Willson, and Adam Smith.

Left to right front: Charlie Eustis, Rudy Simoneaux, and Joey Coco.

Student Chapter News

MCNEESE STATE UNIVERSITY

By Ben Clark, Student Chapter Vice President

The 2009-2010 academic year was a busy one for the McNeese State University ASCE chapter. After participating in campus



The McNeese ASCE chapter at the 2010 Deep South conference in New Orleans.

homecoming activities and preparing for the FE exam in the fall, members started to focus on conference in New Orleans and other spring events. In addition to constructing the annual concrete canoe, the chapter also competed in the steel bridge competition for the first time in chapter history. McNeese was also represented in the surveying, environmental, and mystery events. Senior Jennifer Hobbs also won first place in the mead paper competition. In all, the conference was an enjoyable experience and members look forward to participating again next spring.

The McNeese Chapter also participated in the annual Engineering Week open house in February. Chapter members demonstrated several civil engineering concepts as people of the community, including hundreds of area high school students, came to learn more about the department and engineering in general. Demonstrations included a presentation of various surveying instruments, fluid flow over weirs, soil liquefaction, and design concepts for the steel bridge.

New officers were also elected for the 2010-2011 year. Officers include:

President - **Jada O'Blanc**
Vice President - **Ben Clark**
Secretary - **Bridget Vasquez**
Treasurer - **Kris Kelly**
Senator - **Milo Correa**

LOUISIANA STATE UNIVERSITY

By Melissa Young, Student Chapter President

The Louisiana State University Student Chapter of American Society of Civil Engineers has been very busy holding bi-monthly meetings. They will be participating in a food drive for their community service project for the year. The food drive is part of LSU homecoming week November 8th-11th. They will construct a structure with all of the donated items. All of the donated goods will go to the Greater Baton

Rouge Food Bank. ASCE at LSU is also planning a field trip to the John James Audubon Bridge before the end of the semester. Elections for the new officers of 2011 will be held on November 11th at the last bi-monthly meeting.

The Concrete Canoe and Steel Bridge teams are hard at work doing preliminary designs. The Concrete Canoe is working with the

Louisiana Transportation Research Center to develop a more workable mixture. The Steel Bridge is hard at work designing their bridge to meet the new rules and regulations. ASCE at LSU would like to thank our supporters and sponsors.

UNIVERSITY OF NEW ORLEANS

By Donald Jerolleman, Student Chapter President

This year our chapter is excited to have an large increase in student enrollment. Two of the main areas in which we are focusing are community service, and guest speakers. Currently we have a guest speaker set for each school month and thus far they have provided us with very insightful and practical information. Some of the criteria we are asking of our speakers is to ensure that the information will not be "over the heads" of the students, if they could include a little information on how to find a job/internship, advice on the FE and PE, and what to expect when working as an engineer.

Hosting last year's Deep South regional conference was a great experience for our chapter and everyone involved had a lot of fun doing it. This year we are looking forward to being able to invest all of our time on the steel bridge and concrete canoe competitions and of course setting the bar high for our competition.

The 2010 - 2001 Officers and Staff members are as follows:

President - **Donald Jerolleman**
Vice President - **Amy Robards**
Secretary - **Meagan Williams**

Treasurer - **Matt Zeringue**
Director of Student Affairs - **Jessica Titus**
Webmaster - **Derek A. Woods**
SGA rep - **Kadidia Diane Emmanuelle Dayato**
Steel Bridge Co-captain - **Dustin Richards**
Steel Bridge Co-captain - **Chad Larkins**
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For more information, please visit: <http://orgs.uno.edu/asce/> or contact Donald Jerolleman at (504) 606-5599 or via email: asce504@gmail.com.

UNIVERSITY OF LOUISIANA AT LAFAYETTE

By Alison Lognion, Student Chapter President

The University of Louisiana at Lafayette's Student Chapter kicked off its 2010-2011 school year with the annual fall barbeque by welcoming 45 new members and announcing its newly elected officers:

President - **Alison Lognion**
Vice President - **Garrett Noel**
Secretary - **Mallory Comeaux**
Treasurer - **Heath Michel**
Fundraising Chair - **Andrew Juneau**
Outreach Coordinator - **Harrison Hymel**

There was a great turnout with over 110 students, faculty, alumni, and local professionals coming together to meet and socialize. A 50/50 raffle was held to raise funds for the spring Deep South Conference.

The chapter hosts biweekly meetings inviting local professionals, who recently received their professional license, to give presentations on their experience in the civil sub-disciplines. For the second meet-



Alison Lognion, Student Chapter President and Colby Guidry.

ing, Colby Guidry, PE, Huval & Associates, Inc. presented his work on numerous of Louisiana bridges. Both Randel Badeaux, PE, WHC Incorporated Contractors, and Shaun Simon, PE, Eustis Engineering, plan to speak on construction methods and management and geotechnical engineering, respectively. On November 8th, the chapter welcomed Chris Ursery, PE, FIGG

Engineering Group, who presented his work on the John James Audubon Bridge Project.

With community service as a main goal for this semester, a group of ASCE students have been visiting local middle schools to help with maintenance and repairs, as well as constructing balsa wood bridges to be used in demonstrations for the high school and middle school Outreach Program, which is aimed at promoting the choice of college after high school and the field civil engineering.

Additional efforts of the chapter include the undergoing ASCE on-campus lounge renovations of freshly painted and additional lockers, a set of new chairs, and a new conference table and the focusing its preparations for the spring Deep South Conference, especially with the diligent work of the steel bridge team, and a new fundraising endeavor of an on-campus bake sale.



A 50/50 raffle was held to raise funds for the spring Deep South Conference.



Annual fall barbeque.

ASCE-T&DI Louisiana Chapter News

By Karen Holden, PE

September 30, 2010 marked the end of the first year of operation for the ASCE-T&DI Louisiana Chapter. The Chapter would like to thank our 2009-2010 officers: Mr. Om Dixit who served as Chairman, Ms. Gay Knipper who served as Vice Chairman, Mr. Miles Bingham who served as Treasurer, and Ms. Karen Holden who served as our Newsletter Editor.

Officers for the 2010-2011 year will be: Ms. Karen Holden who will serve as Chairman, Ms. Gay Knipper who will serve as Vice Chairman, Mr. Miles Bingham who will serve as Treasurer, and Mr. Dan Aucutt who will serve as our Newsletter Editor.

The intent of the institute is to provide training and networking opportunities for all professionals involved in transportation projects. Training seminars are two hours in length and are typically presented from 5:30-7:30 pm in either the New Orleans or Baton Rouge area. We are open to hosting seminars in additional cities in the State if requested.

Accomplishments in our first year included planning and presentation of ten professional development seminars covering the following topics:

- Design – Build Delivery
- NEPA: What Do I Wish I had Known Sooner?
- DOTD Project Delivery Stages: Highway Construction from Start to Finish
- New Orleans Transportation Center and ITS
- DOTD Traffic Impact Study Policies
- Green Highways and Green Streets: America's 21st Century Infrastructure
- Linking Rail Systems in SE Louisiana
- Accelerated Construction Project Delivery Methods
- Huey P. Long Bridge Widening Project
- Roundabout Intersection Safety and Design

ASCE T&DI Louisiana Chapter is planning the following future seminars:

- Toll Road Feasibility for the LA1/I-10 Connector in West Baton Rouge Parish
- Hurricane Evacuation
- I-10 Twin Span Structure – Elevation Determination

If you would like a seminar on any special topic, please contact Karen Holden at karenholden@providenceeng.com or Gay Knipper at Knipper@pbworld.com.

ASCE-SEI New Orleans Chapter News

By Om Dixit, PE, FASCE

Since our report in September 2010 issue of this magazine, ASCE SEI New Orleans Chapter hosted one seminar and has planned the following future seminars in New Orleans:

August 26, 2010 - ASD AND LRFD CODE FOR WOOD CONSTRUCTION AND UPCOMING CHANGES IN WOOD-FRAME CONSTRUCTION STANDARDS/SPECIFICATIONS, *Dr. Vijaya Gopu, PE and Catherine Marx Kaake, PE* presented the wood design seminar. Dr. Gopu started the seminar with giving the brief description of each chapter of LRFD and ASD Wood Design Code (National Design Specifications for Wood Construction) code.

Future Seminars:

The following dates are the projected seminar dates for 2010. The exact dates may change due to the availability of the speakers and UNO Lecture room.

- November 18 - Marine Design Seminar (Speaker and Title to be decided)
- December 9 - Masonry Code for Wind Design (Tentative)
- January 20 - Bridge Design (John Kulicki, Modjeski & Masters)

ASCE SEI New Orleans Chapter had a change of officers for 2010-10. Mr. Pawan Gupta, PE (URS Corporation) has been elected as Chairman and Zolan Prucz, PE (Modjeski & Masters) is appointed as Vice Chairman for 2010-11. James Danner, PE continues to serve as Treasurer and Om Dixit, PE continues to serve as Newsletter Editor. The outgoing Chairman Bill rushing, Jr., PE did great job of leading the Chapter during the past year. The chapter hosted 6 seminars and provided partial funding to University of New Orleans (UNO) Students for hosting the Steel Bridge Competition. ASCE SEI New Orleans Chapter also sponsored the ACI 2009 Fall Convention in New Orleans (Nov. 8-12, 2009). Among other activities of the chapter sponsored awards at the Regional Science Fair, provided volunteer support to the ASCE Sponsored Kid Tent at New Orleans Jazz Fest.

The Chapter also sponsored New Orleans Regional Math Count competition hosted by Louisiana Engineering Society every year.

More details about these seminars will be posted on the ASCE New Orleans Branch website as soon as they are finalized. The committee is looking for good topics and speakers for future presentations. Members with expertise in above areas would be welcome to join the Executive Committee. For any suggestion and information on joining the Executive Committee, contact Chairman Pawan Gupta, PE, at Pawan_Gupta@URSCorp.com.

All seminars are held at the University of New Orleans. Seminar dates, pertinent information, and registration can be found on the New Orleans Branch website at www.asceneworleans.org. To add your name to our mailing list, e-mail Om P. Dixit at om@fenstermaker.com.



Speakers Dr. Vijaya (V.J.) Gopu (left), Catherine Marx Kaake (center) and the moderator Mike Choudhry at the SEI New Orleans Chapter seminar on Wood Design.

— Calendar of Events —

DECEMBER 2010

December 3, 2010	Notification of status of SPAG applications
December 3, 2010	Louisiana Section Board Meeting; 10:30am; Baton Rouge - Location TBA
December 3, 2010	Baton Rouge Branch Christmas Party; Bocage Country Club; TBA
December 31, 2010	ASCE National Dues payment deadline

JANUARY 2011

January 3, 2011	Article deadline for February issue of Louisiana Civil Engineer Journal
January 14-15, 2011	Region 5 Leadership Conference; Portland, Maine
January 20-21, 2011	Joint Engineers Societies Conference; Holidome; Lafayette

FEBRUARY 2011

February 4, 2011	Louisiana Section Board Meeting; New Orleans; Location - TBA
February 20-25, 2011	Engineer's Week

<http://www.lasce.org/calendar.aspx>

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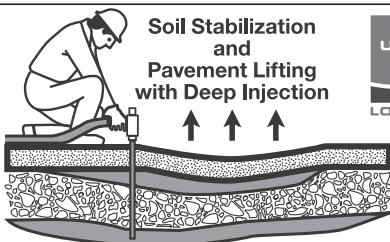


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