LOUISIANA CIVIL ENGINEER

Journal of the Louisiana Section

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Construction of the Bayou Chene Floodgate helping protect 30,000 coastal residents

FEATURES:

2023 Spring Conference Registration & Sponsorship

Bayou Chene Flood Protection Structure: Long-Awaited Flood Resilience





FEBRUARY 2023 VOLUME 31 • NO 2

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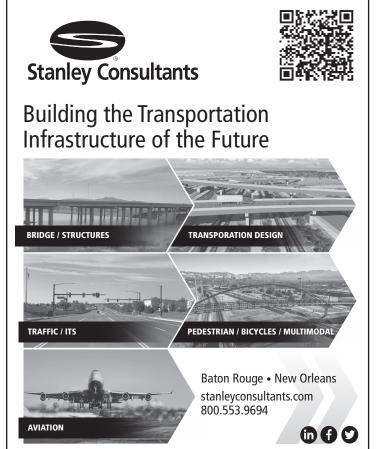
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The Louisiana Section of the American Society of Civil Engineers was founded in 1914 and has since been in continuous operation. The Section consists of the entire state of Louisiana and is divided into four branches that directly serve over 2000 members. They are the Acadiana Branch centered in Lafayette, the Baton Rouge Branch, the New Orleans Branch, and the Shreveport Branch.

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The Louisiana Section is located in ASCE Region 5 that consists of the Louisiana, Mississippi, Alabama, Georgia, Florida Sections, and Puerto Rico.

President's Message

By Kirk Lowery, PE, D.GE

Even though it is February, welcome to 2023. This year ASCE will provide better events and opportunities than the last few as we will gather together more and enjoy each other's company. In the coming month, ASCE will be participating in Engineer's Week, the Legislative Fly-in and the annual Louisiana Spring Conference. Please join the Louisiana Engineering Society with ASCE to honor Engineer's Week, February 27th through March 3rd. This year in association with Engineer's Week, ASCE has moved the date of the Legislative Fly-in to March 1st through March 3rd. Nedra Hains and Marcus Taylor plan on meeting with Louisiana's Congressman and Senators to advocate along with the representatives from all 50 states for infrastructure rehabilitation and spending. Please plan on joining me April 27th and 28th for the Spring Conference at the City Club at River Ranch in Lafayette. (See pages 12 & 13)

The Louisiana Infrastructure Report Card is proceeding for distribution this year with updates to the Aviation, Bridges, Dams, Drink Water, Coastal Protection, Levees, Ports, Inland Waterways, Roads and Wastewater sections. Additionally, a new Broadband section is being evaluated and will be added as part of the Report Card. Jan Evans and the volunteers working on the Report Card are planning to roll it out in late summer.

ASCE will dedicate Louisiana's latest ASCE National Historic Civil Engineering Landmark this spring. The New Orleans Drainage System is the 5th ASCE Landmark in Louisiana and was to be dedicated last year but Covid delayed the ceremony. We know more projects in Louisiana qualify for landmark status. If you are interested in preparing an application for a potential landmark in your Branch, please Tonja Koob Marking.

In this coming year, please get involved with various institutes within ASCE. I am partial to the Louisiana Geo-Institute (LA-GI), and we are working on having an in-person national speaker present in the Baton Rouge Area this year. Louisiana's Coasts, Oceans, Ports and Rivers Institute (LCOPRI) had their annual all-day fall event in October of 2022 and are on track for another all-day event for this fall. The Louisiana Transportation and Development Institute (LT & DI) recently had an ethics presentation and bicycle path design presentation. The Louisiana Utility Engineering and Survey Institute (LUESI) are planning new presentations.

When I think of LUESI, I think of Ali Mustafa. I want to say thank you to him and may the Lord heal this man I highly respect, who has been a stalwart for ASCE.

In this month's journal, Dr. Paul Tschirky and Nicole Buranzon of APTIM layout the closure history along the Bayou Chene waterway

and the installation of the Bayou Chene Flood Protection Structure. Over the years, the waterway has had to be closed by emergency order using sunken barges to protect the people in and around Morgan City from high water events. The completed over 400-



Kirk Lowery, PE, D.GE

foot barge floodgate, considered the largest of its kind, was funded by the Coastal Protection and Restoration Authority (CPRA).

Thank you again for this opportunity to serve as your president. I look forward to seeing you at the Spring Conference and save me a few crawfish.



SAVE THE DATE!

Call for Potential Speakers and Exhibitors!

We are proud to announce the dates for the 33rd Annual Louisiana Civil Engineering Conference and Show. This event, a joint effort from the New Orleans Branches of ASCE and ACI, is the premiere gathering for the Civil Engineering community in the Greater New Orleans Area. We are in the process of soliciting sponsors and exhibitors and establishing the technical program for the fall conference which will be held on October 4-5, 2023, at the Pontchartrain Center in Kenner, Louisiana. Note, this is a few weeks later than years past!



For additional information on the conference, please visit our web site at www.LCECS.org

Bayou Chene Flood Protection Structure: Long-Awaited Flood Resilience

by Paul Tschirky, PhD, P.Eng, D.CE, M.ASCE and Nicole Buranzon, CFM

INTRODUCTION

Much of Southeast Louisiana faces the dual challenges of river flooding from high water in the Mississippi and/or Atchafalaya Rivers, as well as the threat of storm-induced coastal surges from tropical storms and hurricanes. A fundamental component of the resilience and even survival of these communities is control of floodwaters, reduction of flood risk, and minimizing flood impacts. The resilience and existence of many of the homes and businesses in these regions requires measures to protect against flooding. These include levees, wetland restoration, floodwalls, pump stations, and

Flood control structures help prevent flooding of the communities by creating barriers and preventing floodwaters from entering waterways and surrounding areas. The Bayou Chene Flood Control Project, which includes a steel barge floodgate, provides a critical piece in combating these risks, which have for decades confronted the residents in the Morgan City region. The floodgate structure and associated levees represent a means to close off the Bayou during high water events, preventing water from flowing back into the neighboring lands.

The recent completion of the \$80M, Bayou Chene Flood Protection Structure and 446-foot barge floodgate, the largest of its kind in the world, is a significant moment for the communities, protecting them from flooding, reducing both their flood risk, and building resilience to storms and the changing climate. It will help protect approximately 30,000 residents in the Morgan City region from flooding due to high-river events, Atchafalaya River backwater flooding, intense storms, and tropical systems.

On April 29, 2022, a ribbon-cutting ceremony with Louisiana Governor, John Bel Edwards, was held to signify the completion of the Bayou Chene Flood Control Project. This finally provides a permanent flood control structure to protect the people of St. Mary and the five surrounding parishes of Terrebonne, Lafourche, St. Martin, Assumption, and Iberville.

SITE DESCRIPTION

Bayou Chene runs south of Morgan City and connects to the Avoca Island Cutoff between the Gulf Intracoastal Waterway (GIWW) and the Atchafalaya River. The Bayou Chene Flood Protection Structure and associated levees are located in St. Mary and Terrebonne Parishes just south of Amelia, Louisiana.

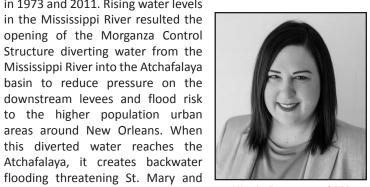
HISTORY

Like much of low-lying Southeast Louisiana the region is susceptible to storm surges pushing water from the Gulf through waterways and onto the land. Additionally high water in the Mississippi and Atchafalaya Rivers can flood into neighboring lands, homes, businesses, and communities. In this region, there is the added risk of excess water when the Morganza Control Structure is opened.

The Morganza Control Structure and Floodway is located approximately 280 river miles above Head of Passes on the west bank of the Mississippi River in Pointe Coupee Parish, upriver from Baton Rouge. It was built in 1954 and operated only twice in 1973 and 2011. Rising water levels in the Mississippi River resulted the opening of the Morganza Control Structure diverting water from the Mississippi River into the Atchafalaya basin to reduce pressure on the downstream levees and flood risk to the higher population urban areas around New Orleans. When this diverted water reaches the Atchafalaya, it creates backwater



Paul Tschirky, PhD, P.Eng, D.CE, M.ASCE



Nicole Buranzon, CFM

During extreme high-water events on the Mississippi and Atchafalaya Rivers, Morgan City and communities in neighboring parishes are susceptible to flooding as water backs up and moves north up Bayou Chene. During these high-river periods, the resulting backwater flooding threatens thousands of homes and businesses in St. Mary, Terrebonne, Lafourche, St. Martin, Assumption, and Iberville Parishes. For decades, the region has constructed various temporary measures to prevent backwater flooding from the Atchafalaya River.

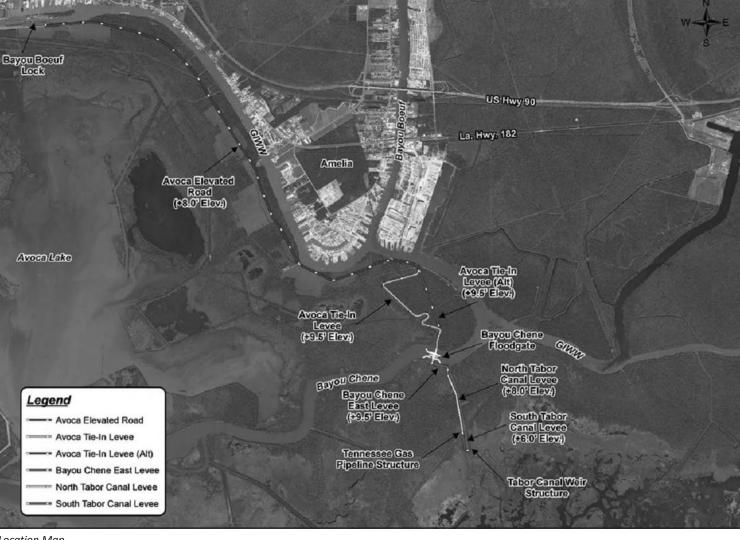
Emergency Projects

surrounding parishes.

Temporary emergency structures have been installed on four occasions. As early as the flood of 1973, temporarily sinking a barge in the Bayou Chene was used for emergency flood control to prevent a rising Atchafalaya River from moving up Bayou Chene and causing backwater flooding. This corresponded with the first opening of the Morganza Control Structure and Floodway. Once the flood waters had subsided, the temporary barge floodgate was removed to allow for normal drainage and vessel traffic.

In May of 2011, rising water levels in the Mississippi River threatened the heavily populated cities of Baton Rouge and New Orleans, Louisiana, and the surrounding communities. To alleviate downriver mainline levee stress and to lower risks of levee overtopping, the U.S. Army Corps of Engineers (USACE) opened the gates of the Morganza Flood Control Structure. This was only the second time since its constructure that it was operated.

While diverting a sizable volume of water from the Mississippi River into the Atchafalaya Basin assisted in preventing flooding



Location Map

downriver, the additional water in the Atchafalaya Basin threatened St. Mary, Terrebonne, Lafourche, St. Martin, Assumption, and Iberville Parishes. The St. Mary Levee District (SMLD) was faced with unprecedented high water elevation predictions. To combat this threat, SMLD constructed a temporary flood protection structure in Bayou Chene consisting of a barge floodgate flanked by sheet pile floodwalls with riprap armoring and Hesco basket "levees" to prevent flooding. The temporary effort prevented approximately 5 feet of water from flooding the affected parishes. The barge was removed, but some of the rock and sheet pile was left in place to accommodate another temporary barge floodgate in anticipation of future flooding fights.

2016

In 2016, another high-water event in the Atchafalaya River threatened the surrounding six-parish area. Once again, SMLD constructed a temporary flood protection structure to prevent backwater flooding consisting of a barge floodgate, sheet pile floodwalls, rip rap, and Hesco baskets to prevent flooding. At the time, the structure prevented potentially 3 feet of water from flooding these parishes.

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2011Emergency Structure Construction

The emergency structure was designed, bid, constructed, and the temporary barge installed in 15 days, utilizing existing wing walls from the previous 2011 flood fight. The emergency structure was again successful in holding back approximately 2 feet of flood water. The emergency structure was left in place until its removal in July 2016 due to a greater than 1-foot water differential between the protected and unprotected sides.



Temporary Flood Structure Barge Installation in 2016

In 2019, a high-water event in the Atchafalaya River paired with the proposed imminent opening of the Morganza Control Structure again threated the six-parish area. At the request of Governor John Bell Edwards and officials at the Coastal Protection and Restoration Authority (CPRA), SMLD installed the emergency structure again. The structure was installed utilizing material from the 2016 closure and was completed in seven days. Within a matter of days of completion, areas that were already flooding experienced relief from the high river. While the Morganza was never opened, in July. Hurricane Barry pushed additional water up Bayou Chene and the structure prevented 4-5 feet of water from entering the region protecting residents, homes, assets, and infrastructure.

Long-term Need

The 1973 flood and more recent highwater events in 2011, 2016, and 2019 necessitated the use of temporary emergency solutions to prevent Atchafalaya River backwater flooding from impacting local communities. This highlighted the need for a more permanent solution. While sinking a large barge across Bayou Chene was effective in preventing flood damage on these occasions of dangerous high-water and during hurricanes and storm events, it was also risky, costly, and temporary. The temporary structures performed as intended but had to be removed after the flood threat passed because they blocked navigation. Having a permanent structure that can open and close was a more efficient long-term

A PERMANENT STRUCTURE

The success of the 2011 emergency structure led the SMLD to seek a more permanent solution and contract engineers to begin designing and permitting the structure in 2012. This consisted of a permanent floodwall, gate structure, and levees in and surrounding Bayou Chene that can be closed to stop the backwater flooding that travels northeast from the Atchafalaya River during high water

events in the Mississippi River and Tributaries system. The need for a flood control structure, a permanent floodgate, at Bayou Chene was recognized in the State of Louisiana's Coastal Master Plan with its inclusion in the 2012 and 2017 plans. Project 03b.HP.13 called for structural protection through the construction of a structure/ floodgate across Bayou Chene, near Amelia and associated levees.

The Floodgate

The purpose of a floodgate is to prevent the intrusion of flood or storm surge waters into the surrounding area. Floodgates are only operated infrequently, as the need arises. Floodgates need to close entirely blocking flows and preventing disastrous flooding. The gate must be designed to be moved into position with flows occurring and to withstand the loads from the surge against it. The Bayou Chene Flood Protection Structure accomplishes this through its substantial size and strength. The floodgate portion of the structure is effectively a large, reinforced barge that can be rotated into position blocking the bayou prior to a flood event.



Installation of the permanent floodgate

Project Design

Design, permitting, and construction of the project required a multidisciplinary effort. For example, the design of the permanent structure required braced sheet pile floodwalls, and the barge gate receiving structure required rigorous structural analysis. The adjacent levee embankments required civil and geotechnical engineering and design, and the barge gate operation required electrical and mechanical engineering.

Data Collection and Modeling

A feasibility study was performed with various project alternatives in 2011 during and after the Atchafalaya River high water event to help formulate the permanent structure solution. As part of the design process, hydrographic and topographic surveying, geotechnical engineering, design reports and plans, and permitting were completed. For design of the permanent structure, geotechnical investigations, and analyses were performed to support structural and civil designs. Soil borings and cone penetrometer tests were conducted to acquire data necessary to perform seepage analyses, assess strength lines, and support overall design. Extensive topographic surveys of the project area, as well as hydrographic surveys utilizing sidescan sonar to map the bathymetry of Bayou Chene and Tabor Canal to ensure accurate design parameters for the Bayou Chene Flood Protection Structure, were conducted.

Due to the potentially significant hydrologic strains of reducing the cross section of a waterway from nearly 900 feet to 400 feet wide, extensive hydrodynamic modeling analysis was performed not only to satisfy USACE permitting requirements but also to ensure that installation of the structure would not negatively impact adjacent landowners and neighboring wetland habitat areas. A hydrologic study and floodplain modeling was conducted during the preliminary design using a system-wide regional model and a near-field model. Both were 2D, vertically averaged hydrodynamic RMA-2 models.

The models helped assess flood damage and risk reduction analysis on whether the floodgate had any system-wide impacts. The nearfield model provided information on circulation patterns and velocity variations at a finer scale to help answer navigation and sediment transport questions. To ensure environmental compliance, 404 permits and mitigation purchases were acquired by the SMLD. Real estate plat maps were created and property appraisals conducted to establish of rights of entry and negotiate rights of way needed for project construction.

Permitting

The project is in the Louisiana Coastal Zone and required a Louisiana Department of Natural Resources Coastal Use Permit, a Louisiana Department of Environmental Quality Water Quality Certification, and a USACE 10/404 Permit. Permitting coordination was completed through the Joint Permit Application submitted through the USACE and Louisiana's Department of Natural Resources. As part of the environmental and ecological assessment of the project, a Phase 1 Cultural Resources Survey was performed in 2019.

As compensatory mitigation for the unavoidable impacts associated with the project, SMLD purchased 6.4 acres worth of cypress swamp mitigation credits and 16.8 acres worth of bottomland hardwood mitigation credits from the Cypremort-Teche Mitigation Bank. Additionally, 1.4 acres worth of fresh marsh mitigation credits from the Lake Long Coastal Mitigation Bank was purchased in August 2015 to obtain a Coastal Use Permit for the project from the Louisiana Department of Natural resources. In July 2018, SMLD purchased additional mitigation credits to satisfy impacts determined by USACE, beyond what was required for the Coastal Use Permit. To mitigate for unavoidable impacts, SMLD purchased 8.9 acres of bottomland hardwood mitigation credits and 2.3 acres of non-coastal Cypress Swamp credits at Cedar Grove Mitigation Bank and 0.7 acres of fresh marsh mitigation credits at Cypremort Teche Mitigation Bank.

Features

The flood control project consists of the following features:

- Steel receiving structure (to EL. 10.0 feet) consisting of braced steel frames on vertical pipe piles, cutoff walls and landing piles to provide lateral and vertical support of the gate in the closed position
 - A clear opening of 403 feet is provided.
- Swing barge gate that is 446 feet, 6 inches long by 80 feet wide by 29 feet high with a 5-foot high wall to EL. 10.0 feet in the closed position
 - This is the largest gate of its kind in the world, with the barge gate being longer than endzone to endzone in Tiger Stadium.

- Braced steel sheet pile floodwalls (to EL. 10.0 feet) with one waler braced by vertical and battered piles
- Avoca Road raised to EL. 8.0 feet
- An earthen levee to EL. 8.0 feet from Avoca Road to the north side of the closure structure along the existing
- An earthen levee to EL. 8.0 feet from the south side of the closure structure to Tabor Canal
- Earthen levees to EL. 8.0 feet along Tabor Canal utilizing the existing berm
- A sheet pile wall to EL. 8.0 feet at the end of Tabor Canal

Note: All elevations (EL.) referenced herein are North American Vertical Datum of 1988 (NAVD88).



Transport of the Bayou Chene Flood Protection Jacket Structure (1.2 million pounds)

Phases

The project was divided into five primary phases. Due to the emergency structure being in place upon initiation of Phase 1 construction, Phase 1 was split into two phases: Phase 1A and 1B. Phase 1A consisted of the clearing and grubbing along Tabor Canal, and Phase 1B consisted of dredging of Bayou Chene. Phase 4 was also split into two phases: Phase 4A and 4B. Phase 4A consisted of surveying, clearing, and grubbing along Avoca Road, and Phase 4B consisted of elevating the Tabor Canal Levee to EL. 8.0 feet.

- Phase 1A: Clearing and Grubbing along Tabor Canal
- Phase 1B: Dredging, first lift of South Levee Tie-in and Tabor Canal Levee, and a Shoreline Protection Dike
- Phase 2: Receiving Structure, Floodwalls, North Levee Tie-In, Guidewalls, and Demolition of the Existing
- Phase 3: Floodgate, Pivot Pile, and Mooring Structures
- Phase 4A: Avoca Roadway
- Phase 4B: Tabor Levee & Weir
- Phase 5: Shore Power

Operation of the Floodgate

The closure of the structure will follow the criteria approved by the USACE as part of the permitting process. When the USACE gauge near Morgan City, Louisiana, measures 6 feet (MLG) a Notice of Intent will be issued to the USACE, U.S. Coast Guard, and local stakeholders. When the water level at the gauge reaches 7 feet (MLG) and is anticipated to climb, the closure of the Bayou Chene Barge Gate will be initiated under slack or flood tide conditions. Closure time is approximately five hours.

After the flood crest and the USGS Bayou Penchant Gauge measure 4 feet or lower and the difference in water surface elevation between the flood side and protected side of the floodgate is less than 1 foot, the opening of the barge gate will be initiated under slack or ebb tide conditions with an approximate opening time of five hours.

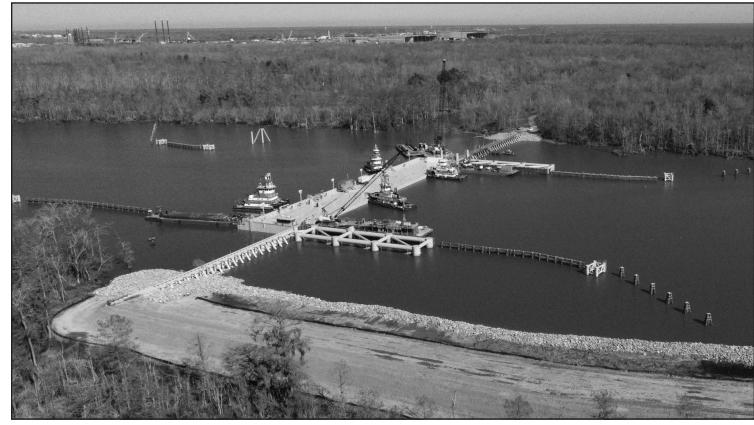
Funding

The previous temporary barges and structures needed to protect against backwater flooding cost between \$5.5M and \$8M per event. The permanent floodgate was funded by CPRA and built in partnership with the SMLD. The \$80M cost of the Bayou Chene Flood Protection Structure was provided through Gulf of Mexico Energy Security Act (GOMESA) funds. GOMESA, a sharing of oil and gas leasing revenues, represents a key tool in the implementation of the Coastal Master Plan through the CPRA's trust fund that is legislated to be spent exclusively on coastal protection and restoration activities. This included the construction of a permanent

structure across Bayou Chene that can be opened and closed during emergencies rather than relying on temporary fixes.

CONCLUSION

The construction of the permanent floodgate is a long-awaited protection for approximately 6,000 homes, 1,000 businesses, and 30,000 residents of the region. Bayou Chene can now be closed in a predictable and timely manner with minimal impacts on navigation and risk to personnel. Instead of scrambling for days or weeks, a button can be pushed moving the largest barge gate in the world into place preventing backwater flooding from the Atchafalaya River or blocking storm surge from the Gulf. The Bayou Chene Flood Protection Structure is a true accomplishment of the State of Louisiana working together with the local levee district and Louisiana engineering expertise to improve the resilience of coastal Louisiana communities.



Bayou Chene Flood Protection Structure

Paul Tschirky, PhD, P.Eng, D.CE, M.ASCE

Paul Tschirky, PhD, P.Eng, D.CE, M.ASCE, is a senior director at APTIM leading the resilience practice. He has more than 25 years' experience in coastal/ hydraulic engineering, resiliency, and water management, working on projects for both public and private sector clients. Tschirky has led multidisciplinary teams developing guidance for coastal infrastructure, as well as design and construction of restoration and resilience projects.

Nicole Buranzon. CFM

Nicole Buranzon, CFM, is a senior project manager and flood control market sector director at APTIM. Buranzon has managed experienced teams of professionals to perform design, construction administration, and construction management for flood protection projects in Louisiana for more than 16 years, including the Bayou Chene Flood Control Project and the Houma Navigation Canal Lock Complex Project.

APTIM, a leader in environmental, resilience, and sustainability solutions, as well as critical infrastructure, relocated its corporate headquarters to The Water Campus in Baton Rouge in December 2022.

ASCE

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Workshop for section and branch leaders

On January 20, 2023, I attended the Multi-Region Leadership Conference in Charlotte, NC. Regions 1, 2, 4 and 5 were represented at the workshop and it was well-attended by the Louisiana Section and Branches. The workshop kicked off with an update on ASCE and an introduction to ASCE National President, Maria Lehman, PE and Executive Director for ASCE. Tom Smith.

We had seminars throughout day on many topics including Future World Vision: Mega City 2070 and Floating City. This presentation described what cities would look and feel like in 50 years in the future and what roll civil engineering will future infrastructure. They use virtual reality to immerse users into these future cities to help show how civil engineers can reimagine infrastructure. The Future World Vision application can be downloaded onto your desktop from the ASCE website. Other seminars included breakout session to discuss how to engage student chapters into Section, Brand and Younger Member Group activities. We also broke out into groups per Region to meet and introduce ourselves to each other. This was also great opportunity to meet the newest Section member of Region 5, Puerto Rico!

The rest of day one was filled with networking events and time to meet with the national leadership. There was a great turnout of section, branch and student and younger members from across the regions. There also included workshops for leadership development and member retention and I encourage our Section, Branches and student chapters future conferences.

On day two, I attended two focus sessions, "Member Recruitment Strategies/Succession Planning" and "How to Reinvigorate



Region 5 Leadership from Left to Right: Rudy Simoneaux, (Governor), Joshua Olivier (Secretary, Baton Rouge), Robert Nodier (Contact of Younger Members, Baton Rouge), Linsey Olivier (Director, Shreveport), Ayan Mehrotra (Branch President, New Orleans), Marcus Taylor (President-Elect, Louisiana Section), Emily Adoue (Director, New Orleans) Ronnie Schuman, (Governor)

LOUISIANA CIVIL ENGINEER – FEBRUARY 2023

Struggling Section/Branches." These were sessions where we openly discussed methods to attract and retain members and how engage our current membership with new activities on the Section and Branch levels. In regards to membership, several methods that were well received included emphasizing good communication with student chapters, branches sponsor events with student chapters (tailgates, parties, job fair, sports activities like golf tournaments).

Overall, I thought the workshops were informative and well organized. The North Carolina Section and YMG hosted a great conference and would encourage leaders within the society to attend the next conference which will be hosted in Miami, FL.





City of Charlotte. NC



Speaker Jane Howell, Presentation on Future World Vision: Mega City 2070 and Floating City



REGISTRATION FORM

2023 ASCE Louisiana Section Spring Conference April 27 - 28, 2023

City Club at River Ranch, 1100 Camellia Blvd #202, Lafayette, LA 70508

Part 1. Registrant Information	(*Required)			
a. First Name*		b. Last Name*		
c. First Name as to Appear on Name Tag*		d. Class P.E P.L.S Ph.D E.I		
e. ASCE Member Number* (If Applic	eable)			
f. Company Name				
g. Street	h. City	i. State	j. Zip	
k. Telephone*	1. Email*			
Part 2. Individual Registration	(Check all that apply)			
Registration includes breakfast, lunch, and admission to all technical sessions and events on specified day(s).		Postmarked ON or BEFORE March 10, 2023	Postmarked AFTER March 10, 2023	
STUDENT TWO-DAY/FULI	REGISTRATION:			
ASCE Student Member / Non-Member		\$40	\$50	
TWO-DAY/FULL REG	GISTRATION:			
ASCE Member (Indicate member)	ber number in Part 1)	\$275	\$325	
Non-Member		\$325	\$375	
THURSDAY REGISTRATION	N (Networking Event):			
ASCE Member (Indicate member number in Part 1)		\$200	\$250	
Non-Member		\$225	\$275	
FRIDAY REGIST	RATION:			
ASCE Member (Indicate member number in Part 1)		\$150	\$200	
Non-Member		\$175	\$225	
	Total :			
Please make checks payable to: Mail form with payment to:	ASCE Acadiana Bran ASCE Spring Confere P.O. Box 60805 Lafayette, LA, 70596	contact: as	ons concerning the conference, ceacadiana@outlook.com or apman at 337-278-6090	

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LOUISIANA CIVIL ENGINEER - FEBRUARY 2023



GENERAL CONFERENCE SPONSOR & EXHIBITOR FORM

2023 ASCE Louisiana Section Spring Conference April 27 - 28, 2023

City Club at River Ranch, 1100 Camellia Blvd #202, Lafayette, LA 70508

SPONSORSHIP TYP	$\underline{\pmb{E}}$	COST	<u>SELECTION</u>
Platinum NETWORKING EVENT SPO Includes two full registration and networking event.	ONSOR s with recognition as a sponsor at the con	nference \$1000	
Gold BADGE SPONSOR Includes one full registration and on all badges.	with recognition as a sponsor at the conf	ference \$750	
Silver MEAL SPONSOR Includes recognition as a spo both days.	nsor at the conference and breakfast and	lunch on \$600	
	hairs for the entire conference. Package i ay & Friday) and networking event admi aximum capacity		
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NAME:	PHONE: ()	EMAIL:	
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Mail this form & payment to: ASCE Spring Conference P.O. Box 60805 Lafayette, LA 70596 For questions concerning sponsorship or exhibits contact: asceacadiana@outlook.comor Carolyn Chapman at 337-278-6090

ASCE-COPRI Louisiana Chapter News

By William Gohres, PE, Director - Communications





William Gohres. PE **Director – Communications**

The Louisiana Chapter of the Coasts, Oceans, Ports, and Rivers Institute (L.COPRI) of the American Society of Civil Engineers (ASCE) promotes membership, professional development, and visibility throughout the State of Louisiana by conducting virtual webinars and in-person events.

YPG and Student Chapter Updates

On February 4th, COPRI YPG volunteered for the Jefferson Parish Ecosystem and Coastal Management annual "Coastal Tree-Cycling" event. Each year thousands of Christmas trees are 27th in Jacksonville, FL. For more information please visit www. donated by local residents and diverted from landfills to protect wetland habitat within the Barataria Basin. These recycled trees are used to build wave dampening fences located off the shore, helping to reduce coastal erosion. Thank you to all who participated in this

It has been a great start to the year and the group is excited to continue with more events and lectures in the spring! Please reach out to Julia Mudd (LSU COPRI Student Chapter President, mjulia1@ Isu.edu) and Kiara Horton (YPG Director, kiara.horton@freese.com) for information on how to get involved as an LSU Student or Younger

Scholarship Announcement

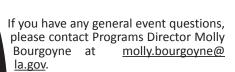
L.COPRI is collecting scholarship applications for students studying Civil, Coastal, Ocean or Environmental Engineering, or a Coasts, Oceans, Ports, or Rivers related field. L.COPRI intends to award a \$1000 scholarship (one time) to one undergraduate and one graduate student. The application deadline is March 3, 2023. Scholarship winners will be presented during the L.COPRI Spring

For application inquires please contact Brett McMann, Scholarship Director at bmcmann@thewaterinstitute.org.

Upcoming Events

Be on the lookout for a webinar featuring Eric England, Executive Director of Caddo-Bossier Port. The topic of the webinar will be on Port Management, detailing the Caddo-Bossier Port Master Plan and upcoming projects. The webinar will be held in February and registration information will be available soon via the L.COPRI email list.

Our traditional half-day Spring Seminar is currently being planned and updates will be coming soon. Keep a look out for future event announcements via email and LinkedIn.



Offshore Technology Conference (OTC) 2023

OTC is a global event that connects offshore energy professionals from more than 90 countries to collaborate and discuss the challenges, solutions, and changing energy landscape of the offshore energy sector. The 2023 Offshore Technology Conference will take place beginning May 1st through the 4th in Houston, TX. For more information please visit https://2023.otcnet.org/.

PIANC America 2023 Conference

PIANC America 2023 will be an opportunity for our navigation community to enable safe and efficient **ASCE** 21st-century freight movement in the Americas. The technical conference will showcase the latest advances in maritime, riverine, and recreational navigation. The conference will take place beginning April 24th through the piancamerica2023.org.

Port Engineering Certificate Program

ASCE's Port Engineering Certificate Program is a series of careerfocused courses taught by practicing engineers and university professors providing professional engineers in-demand skills used in the field of port engineering. You will learn the fundamental concepts of port engineering, the design, construction, and management of port facilities, types of seismic design classifications, and how to interpret geotechnical data.

Other Information

The activities of L.COPRI includes seminars, workshops, and other activities to benefit all ASCE and COPRI members. Members do not have to be an engineer to join COPRI. The Institutes of ASCE are formed for the benefit of ASCE and non-ASCE members to participate and interact with other professionals interested in coastal, oceans, ports, and riverine efforts in Louisiana. We would like to extend an invitation to our members to submit feedback and ideas for upcoming webinars and events. Please submit these ideas to williamgohres@matrixpdm.com, and stay-tuned for a meeting invite if you are a member of our L.COPRI email list.

Also, please don't forget to follow us on LinkedIn! We have a new L.COPRI page!!

Professional Achievement Awards

National COPRI offers several opportunities to recognize our colleagues for their professional achievements. For more information on individual, project, research, and younger member award opportunities, please visit https://www.asce.org/ communities/institutes-and-technical-groups/coasts-oceans-portsrivers-institute/awards.

ASCE-G-I Louisiana Chapter News By Gwen Sanders, Chapter Chair





Gwen Sanders, PE, D.GE G-I Chair

The GI-LA Chapter was formed in late 2020 and held two webinars in 2021. Continuing in this tradition, they held three webinars in 2022 on geotechnical topics in the region, averaging about 75 attendees each. These included:

- 8 March 2022 with Ricardo C. de Abreu, PhD, PE, D.GE., F.ASCE and principal at Fourrier & de Abreu Engineers, LLC who presented "Geotechnics of Solid Waste Landfills."
- 21 June 2022 with Chris Marshall, PE, Senior Design Engineer and Jonathan Dwight, P.E., Vice President both with Menard USA who presented on "Goo to Good Ground Improvement Applications in South Louisiana,"

13 September 2022 with Robert Holtz, Ph.D., PE, D.GE., Professor Emeritus of Civil Engineering at the University of Washington who presented "Lessons Learned from Three Geosynthetic Failures."

They also assisted the LCECS Speaker Committee in identifying geotechnical presenters for their fall 2022 conference.

After taking on the leadership role as LA Section President, Kirk Lowery transitioned to Past Chairman; and the 2023 board now also includes:

- Gwendolyn P. Sanders Chairman, George F. Segré Quilichini - Vice-Chairman, and
- Ricardo C. de Abreu Secretary-Treasurer

They plan to host at least one webinar per guarter in 2023 and also add in-person meetings once they secure funding.

They have recently been approved to host the GI Cross-USA Lecture and are working on setting an April event, be on the lookout for these announcements.

If you would like to join the group or sponsor a lecture, please contact Gwen Sanders at gsanders@eustieng.com for opportunities.

Free On-Demand Webinars

Welcome to your source for free ASCE on-demand webinars!



To start, login to your ASCE.org account. https://sa360.asce.org/ASCEWebApp/Benefits/Membership/Freeondemandwebinars.aspx

As an ASCE member, you may choose up to 10 out of 200+ on-demand webinars from the comprehensive continuing education librarylisted below. It's FREE—just for being a professional ASCE member!

Credit Calculation: 1.0 CEU = 10 PDHs (Example: 0.1 CEU = 1 PDH)

Eligible Courses:

Architectural Engineering | Coasts, Oceans, Ports and Waterways Engineering | Construction Engineering and Management | Environmental Engineering | Geotechnical Engineering | Profession and Practice | Structural Engineering | Sustainability and Resilience | Transportation | Water and Water Resources

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ASCE Government Relations





Janet L. Evans, PE Government Relations Chair

Corps seeking comments on implementing Water Resources Development Act of 2022

On January 20th, the <u>U.S. Army Corps of Engineers (USACE)</u>¹ announced a public comment period for provisions in the Water Resources Development Act (WRDA) of 2022. In addition, USACE will host three stakeholder sessions to allow public input on any provisions in WRDA. These sessions take place on February 15th, February 22nd, and March 1st, with all sessions scheduled from 2:00 to 4:00 p.m. ET.

The public comment period closes on March 21st, 2023.

ASCE strongly supported the passage of WRDA², which President Biden signed into law late last year. The law contains several provisions which will allow USACE to improve the resilience of water infrastructure systems nationwide. It also includes several provisions which were priorities for ASCE in 2022. Specifically, the agreement includes a five-year reauthorization of the National Levee Safety Program, which was set to expire at the end of FY 2023, the establishment of a National Low Head Dam Inventory, and makes permanent the current cost share formula for Inland Waterways Trust Fund (IWTF) projects.

Please read <u>ASCE's policy memorandum on the 2022 WRDA law for more information.</u>³

EPA announces guidelines for regulating wastewater discharges

The Environmental Protection Agency (EPA) announced on January 20th the release of its most recent report⁴ outlining planned steps to regulate and monitor industrial wastewater discharges. The Effluent Guidelines Program Plan 15 (Plan 15) ⁵ details EPA's upcoming activities to address industrial wastewater pollution and water contamination caused by discharges of pre- and polyfluoroalkyl substances (PFAS) through rulemaking.

- 1 https://www.federalregister.gov/documents/2023/01/20/2023-01043/water-resources-development-act-of-2022-comment-period-and-stakeholder-sessions
- 2 https://www.asce.org/-/media/asce-images-and-files/advocacy/documents/2022-12-07-asce-letter-congressional-leadership-support-wrda.pdf
- 3 https://www.asce.org/-/media/asce-images-and-files/advocacy/documents/2022-12-19-wrda-2022-bipartisan-agreement-memo.pdf
- 4 https://www.epa.gov/newsreleases/epa-announces-plans-wastewater-regulations-and-studies-including-limits-pfas-new-study
- 5 https://www.epa.gov/system/files/documents/2023-01/11143_ELG%20Plan%2015_508.pdf

Plan 15 also details upcoming studies on industrial discharge and treatment of PFAS. Under the Clean Water Act, EPA must publish Effluent Limitations Guidelines and Standards (ELGs) which regulate industrial wastewater discharges into water bodies. ELGs are written based on the performance of current wastewater treatment technologies. The Clean Water Act also requires that EPA publish a biennial plan for reviewing and promulgating upcoming rulemaking, reviews or guidelines which have not been previously published.

Plan 15 is the most recent EPA plan published under Clean Water Act requirements. An EPA fact sheet on Plan 15 can be found here.⁶

MARAD issues funding opportunity for Port Infrastructure Development Program

The Maritime Administration (MARAD) has published a <u>Notice of Funding Opportunity</u>⁷ making up to \$662 million available through the <u>Port Infrastructure Development Program (PIDP)</u>. The program provides funding to ports for projects that are intended to improve safety, efficiency, and reliability. The total amount available reflects a boost from the Infrastructure Investment and <u>Jobs Act</u>, which appropriated \$450 million to the PIDP for Fiscal Year (FY) 2023. <u>Applications are due April 28th</u>. ¹⁰

MARAD announces funding opportunity for Small Shipyard Grant Program

The Maritime Administration (MARAD) on January 19th announced ¹¹ the availability of \$20.8 million in Fiscal Year (FY) 2023 funding for grants to modernize small shipyards. The Small Shipyard Grant Program ¹² provides funds that can be used to purchase equipment or offer employee training. The grants are available to U.S. shipyards with fewer than 1,200 production employees. According to MARAD, small shipyards employ approximately 100,000 Americans. Grant applications are due February 27th.

Since 2008, MARAD has awarded 323 grants through the Small Shipyard Grant Program. Ports received a 'B-' on ASCE's 2021 Report

- 6 https://www.epa.gov/system/files/documents/2023-01/ ELG%20Plan%2015%20Fact%20Sheet.pdf
- 7 https://www.maritime.dot.gov/sites/marad.dot.gov/files/2023-01/FY%202023%20PIDP%20Short%20Form%20Notice%20of%20Funding%20Opportunity.pdf
- 8 https://maritime.dot.gov/PIDPgrants
- 9 https://www.congress.gov/bill/117th-congress/house-bill/3684
- 10 https://www.grants.gov/web/grants/view-opportunity.html
- 11 https://www.transportation.gov/briefing-room/marad-announces-nearly-20-million-funding-available-small-shipyard-grants-0
- 12 https://www.maritime.dot.gov/grants-finances/small-shipyard-grants

<u>Card for America's Infrastructure</u>, ¹³ which recommends ensuring smaller ports can compete in competitive grant programs.

ASCE leadership opportunities in public policy committees now available

ASCE is looking for volunteers to apply to participate in our public policy committees and help shape our public policy outreach. Each year, thousands of civil engineering professionals participate in ASCE's activities by volunteering their technical and professional expertise in support of the Society's vision mission to advance the practice of civil engineering.

13 https://infrastructurereportcard.org/cat-item/ports-infrastructure/

Check out opportunities¹⁴ with the Public Policy and Practice Committee and varied and critical constituent committees. To apply, select "Public Policy and Practice" under "Society Standing Committees" and apply to which committees best suit your interests. We are accepting volunteer applications through March 15, 2023, for the 2023 - 2024 fiscal year.

Louisiana in the news

Louisiana legislators approve final \$54 million in sewer and water projects. 15

- 14 https://www.asce.org/communities/committees
- 15 https://lailluminator.com/briefs/louisiana-legislators-approve-final-54-million-in-sewer-and-water-projects/

5 things you didn't know about James Eads and his South Pass Navigation Works

By Tonja Koob Marking, PhD, PE, D.WRE, F.ASCE



James Eads

Since 1966, ASCE has designated more than 285 projects as National or International Historic Civil Engineering Landmarks as part of its Historic Civil Engineering Landmark program. ¹ While some of these landmarks, such as the Brooklyn Bridge, ² Eiffel Tower, ³ and Hoover Dam, ⁴ are well known, others are less prominent.

The South Pass Jetties, at the mouth of the

Mississippi River, was designated an ASCE landmark in 1982. Designer James Buchanan Eads is also an ASCE Notable Civil Engineer. Here are five things you didn't know about Eads and his Navigation Works:

1-James Eads was a self-taught civil engineer. He learned physics, mechanics, and civil engineering as a teenager by reading borrowed

- 1 https://www.asce.org/about-civil-engineering/history-and-heritage/historic-landmarks
- 2 https://www.asce.org/about-civil-engineering/history-and-heritage/historic-landmarks/brooklyn-bridge
- 3 https://www.asce.org/about-civil-engineering/history-and-heritage/historic-landmarks/eiffel-tower
- 4 https://www.asce.org/about-civil-engineering/history-and-heritage/historic-landmarks/hoover-dam

books when he was not working to help support his family.

2-Eads offered to construct the South Pass Jetties at no cost to the U.S. government; he would be paid only if it successfully opened the mouth of the Mississippi River for navigation. It worked, and he received \$8 million for the resulting 6



Tonja Koob Marking, PhD, PE

million for the resulting 30-foot-deep channel.

3-Eads created mattresses of interwoven young willow trees to build the jetty walls. Sand and mud gradually filled the crevices, forming a semi-permanent dike.

4-With his successful road-and-rail bridge across the Mississippi River in St. Louis (ASCE Landmark, 1971), design and construction of ironclad ships for the Union Army, and opening of the Mississippi River for navigation, Eads was so revered and respected that *Scientific American* proposed he run for president of the United States.

5-Eads died a few years after the completion of the jetties without knowing he had changed the course of the Mississippi River's history.

This article is one in a series of recurring features that the ASCE History and Heritage Committee offers on topics related to the history and heritage of civil engineering. Email chair Tonja Koob Marking at tonja.k.marking@gaeaconsultants.com for more information about their work.

- ASCE

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ASCE-T&DI Louisiana Chapter News

By Michael Paul, PE - Newsletter Editor





Mike Paul T&DI Chair Looking Ahead

The intent of T&DI is to promote transportation and development as a career path, and to provide training and networking opportunities for all professionals involved in the transportation industry. We are providing a mix of in-person (New Orleans or Baton Rouge area) and virtual seminars.

The next upcoming seminar will be "Inside the New Orleans Bicycle Network: Planning and Design Approaches." The City of New Orleans recently created the Mobility and Safety Division within the Department of Public Works. This newly formed division is managed by Ms. Jennifer Ruley, PE Her focus is to ensure multimodal design in street projects that improve mobility options and increases safety

for people walking, bicycling, accessing transit, and driving. The new division leads highly collaborative projects including Moving New Orleans Bikes, which will result in the accelerated build-out of connected high quality bikeways.

Please be on the lookout for the email with the location, date and time which are still being finalized but is expected to be held at the UNO Engineering Building Auditorium (EN-101) in March or April.

The Chapter is planning the following future seminars:

- Green Infrastructure: Integrating Infrastructure Needs
- New Mississippi River Bridge P3 Financing and Tolling
- New Orleans Convention Center
- New Orleans Convention Center Beautification
- Surface Transportation Resiliency
- Hydraulics of Small Crossings in Louisiana
- I-12 Widening over Tchefuncte River
- I-10 / College Dr flyover
- Laser Scanning / Advanced Measurements
- The MOVEBR Program
- Benefit Cost Analysis

Job Postings

Position: Civil Engineer

Location: Lafayette, New Orleans, or Baton Rouge

Position: Civil Engineer Intern

Location: Lafayette, New Orleans, or Baton Rouge

How to Apply

Send your resume to dclause@royalengineering.net

About Us

Royal Engineers and Consultants is a Louisiana based engineering and consultant firm with offices in New Orleans, Lafayette, and Baton Rouge. Royal Engineers and Consultants specializes in civil, coastal, and environmental engineering, construction management, inspection services, and disaster recovery. Royal Engineers and Consultants' vision is to set the standard for engineering and consulting services in South Louisiana while expanding to be a positive force in the industry and communities across the nation. We achieve our vision by providing the highest quality service with honesty and integrity, cultivating strong relationships with our clients, enhancing the communities where we work, and maintaining small business service with large business resources.

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Branch News

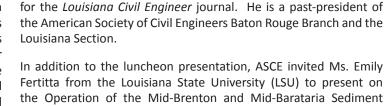
BATON ROUGE BRANCH By Venu Tammineni, PE, LEED AP, Branch President

ASCE Baton Rouge branch organized the Christmas Party on December 19, 2022 at the Bocage Racquet Club. With more than 135 members and guests registered, the Christmas Party was very well attended. Thank you to all our sponsors that made the event possible and to Mr. Russ Joffrion for the delightful music. The after party social continued

at the Hayride Scandal. We had a successful food drive with more than \$1,000 in donations that was eventually donated to the Baton Rouge food bank.

In January, Josh Olivier and Robert Nodier attended the Multi Region Leadership Conference held in Charlotte, North Carolina. The purpose of the conference was to provide a venue for upcoming leaders to gain knowledge of the Society and their Region, interact with students, younger members, section, branch, and institute leaders, while gaining personal leadership skills and learning the importance of networking.

ASCE January Luncheon was hosted at the Drusilla Seafood restaurant. Mr. Bob Jacobsen, PE provided an update on the High-Definition Flood Inundation Map for the August 2016 Flood for the Amite River Basin. Mr. Jacobsen has worked extensively since 2004 in burgeoning the application of High Performance Computing/High-Resolution hydrodynamic modeling to coastal hydrologic



Diversions. Ms. Fertitta is pursuing her Master's degree in Coastal

and Ecological Engineering at LSU. She is working alongside Dr.

restoration and hurricane storm surge protection. In 2022 he

authored a two-part article on Property-Specific Flood Resiliency,

Clinton Willson at the LSU Center for River Studies.

ASCE also teamed with The Southeast Society for Trenchless Technology (SESTT) for a one day "Trenchless Technology, SSES and Buried Asset Management" seminar held at the Embassy Suites in Baton Rouge on Wednesday, January 25th. The event was well

Our upcoming events include presenting the ASCE annual scholarship awards at the LES annual E-Week Gala. ASCE will also be giving out the Melissa Young Doucet, PE Memorial Scholarship to four students at the ASCE luncheon. The March luncheon is scheduled to be an ethics presentation.

Sincerely, Venu Tammineni, PE, LEED AP

attended.



Branch Leadership enjoy the Christmas party at Bocage



Russ Joffrian provides entertainment for the December Christmas party



Emily Fertitta presents on Operation of the Mid-Brenton and Mid-Barataria Sediment Diversions



Matt Salmon giving the donation to Baton Rouge Food Bank



January speaker Bob Jacobsen



ACADIANA BRANCH By Carolyn Chapman, El, Branch President

Happy New Year! We hope the holiday season brought you cheer and lots of food!

ASCE Acadiana is entering 2023 feeling renewed and eager for this year's events. We will be hosting this year's Louisiana Section Conference on Thursday, April

27th and Friday the 28th at City Club in River Ranch (Lafayette). This two-day conference is a great opportunity to further your professional development as well as grow your social network! Attendees that register for both days of fun will be able to receive up to 10 Professional Development Hours. Single day attendance is also available for those busy bees who can only slip away for one

On the evenings of our events, Lafayette has much to offer. If you like live music and good food, Rhythms on the River will be just a short

walk away in River Ranch on Thursday night. Festival International will also have live music on both Thursday and Friday, as well as into the weekend, should you choose to make a weekend trip of it. Festival International will be held in Downtown Lafayette (just follow the crowds!).

There are still exhibitor and presenter spots to fill for the conference. If you or anyone you know is eager to present on a topic, or represent your company, please contact anyone on the ASCE Acadiana team for further information and details. Registration for early birds will open soon, so check your emails from ASCE Acadiana. If you are not on our distribution list, please send an email to asceacadiana@ outlook.com, so we can get you set up.

Finally, if you would like to submit technical spotlight articles for the Branch Newsletter or present at one of our upcoming luncheons, we are always looking for new faces, so don't be shy! Email Carolyn



NEW ORLEANS BRANCH By Kyle Galloway, PE, Branch President

The New Orleans Branch continued to deliver great programming for our members this winter. We have had outstanding attendance at our monthly luncheons thanks to a stellar list of speakers – we have hosted Jefferson Parish Councilwoman Jennifer Van Vrancken, Charles Sutcliffe, Louisiana's Chief Resilience Officer, and Mark Drewes,

Jefferson Parish Director of Public Works. Our members also attended several social events such as our Open House, where members learned more about how they can get involved, the bi-annual Joint

Societies Social, and our annual Holiday Party, co-hosted with the SAME Louisiana Post.

February and March

are full of ASCE activities in New Orleans. In addition to our monthly luncheons, our members will participate in outreach events such as MathCounts, the Greater New Orleans Science and Engineering Fair, and Engineers' Week at the Louisiana Children's Museum. We are also hosting our annual Younger Members' Forum on March 2. Over the past several years, this event has been an invaluable professional development opportunity for our younger members.

Finally, the Branch Board welcomed a new member, Emily Adoue, EI, A.M.ASCE. The Board had a vacant Director-at-Large position, and we expect some turnover next year, so we thought it wise to fill the position. Ms. Adoue has been managing the Branch's communications and awards selection, both vital contributions to our operations. We are confident that she will continue her great work for the Branch as a Director!

You can keep up with the Branch by following ASCE New Orleans on facebook and LinkedIn or checking our website at www.asceneworleans.org. You can also reach out to us at ASCEneworleans@gmail.com. We hope to see you at our events!



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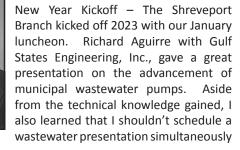








By Joshua Walker, PE, President of Shreveport Branch



with food consumption.

Winter Came – It was short lived and fierce. But our SHV members did not let that keep them from coming to pass a good time! The night of our Christmas party in Bossier City with LES the wind chill dropped to 2 degrees. TWO. If you took a deep breath, your nose hairs would freeze. At least that's what Marcus Taylor said.

The other officers and I are so thankful for our SHV members and truly appreciate all who attended.

A Different Approach (PENDING) – In the last newsletter, I mentioned our goal of simulcasting our monthly meetings to other areas like Ruston, Monroe and Natchitoches in order to reach more of our current members and gain new ones. It is a large task to undertake, but I believe it will be well worth it. To date, I have not found a champion in those areas. We will push our simulcast idea to April while I continue the search.

Call to Service ANSWERED! – I am proud to announce that Mr. Varun Nagelli of Dave Rambaran Geosciences, LLC, has filled the vacancy of Secretary! (cue cannon fire and confetti!!) We will have our first full officer meeting in a couple of weeks in Shreveport and officially welcome Varun into the fold.

Student News

LOUISIANA TECH

By Mallory Mankins, Student Chapter President

The American Society of Civil Engineers Student Chapter at Louisiana Tech has had a busy Winter Quarter! We have hosted several recruitment events and participated in other Engineering and Science Association events to help promote our ASCE chapter. These events have brought many new members and the student involvement so far this year has been unlike any other year. All of our new members are eager to see what we, as an organization, have to offer.

The concrete canoe was poured at the beginning of the winter quarter and has cured as planned. The team set up a 28 day curing system where a perforated hose is snaked along the length of the canoe and outputs water in consistent time intervals to keep the canoe wet. Once the cure was finished the canoe was air dried for a few days and then the team worked on sanding the outside of the canoe to get it to the desired smoothness. The styrofoam mold has also been cut out of the middle of the canoe to allow the team to finish working on the inside of it and start staining. Since the canoe has been poured, the team has upped its paddling practices to twice a weekend to ensure that the students that will be competing are ready! In the upcoming months, the team will be finalizing everything that goes into the competition (canoe, report, and aesthetics) in order to perform well at the regional competition.

Our steel bridge team has started fabricating pieces for the designed bridge throughout this guarter and will continue to do so in the upcoming weeks. The sustainable solutions team has continued

LOUISIANA CIVIL ENGINEER – FEBRUARY 2023

their weekly meetings to continue their design of a refurbished downtown area. The surveying team has been practicing on Friday and Saturday afternoons to establish/ better their skills for the field tasks and calculations that go into the surveying competition. The transportation leadership council has assembled two different competition teams that will be traveling to Buda, Texas in late March for their Asphalt Road-eo competition.

In the past few months our student chapter has done several community service projects. One that our chapter does regularly is help the Montessori School of Ruston which is where our faculty advisor's children go to school. Some of the latest projects have been replacing a gate, redoing picnic tables, and pressure washing the concrete walkways. Another service project that our chapter participated in was cleaning up the bottom floor of the older of the engineering buildings that most of our civil engineering classes are held in. The floors were swept and mopped and the windows of the classrooms were cleaned. We also cleaned out, rebuilt, and reorganized the trophy case that displays all of the trophies that ASCE has won since the 1990s.

If there are any questions or if anyone wants to join that isn't already a member, please reach out to louisianatechasce@gmail.com and we will be sure to get back to you!

ASCE President 2022-2023 Mallory Mankins

LOUISIANA STATE UNIVERSITY

By Madalyn Mouton, Student Chapter President

The Louisiana State University ASCE Student Chapter has a new set of officer to lead the charge for 2023. They are as listed below:

President - Matthew DeRouen **Vice President** - Jonathan Gallagher

Secretary - Colin Shortess
Treasurer - Joseph Lamendola
Webmaster - Sergio Garcia-Orozco
Social Media Chair - Colin Martin
Merchandise Chair - Maelei Nguyen
Volunteer Chair - Maya McGrath

Alumni Chair - Brandon Bergeron Career Fair Chair - Morgan Domingue

They started off the year holding Enercon January 26th. They held Nucor February 9th. Both well attended by eager new members ready to start the year off right!

The regional conference teams; Steel Bridge, Concrete Canoe, and Surveying, are preparing to go to Southern Alabama March 9th through 11th. The Concrete Canoe team has poured their boat January 29th.



ASCE@LSU Chapter Meeting with Nucor February 9th

UNIVERSITY OF MCNEESE

By Connor Broussard, McNeese Student Chapter President

McNeese ASCE is eager to start the new year off strong and get back to work! Since the start of last semester, we have been reaching out to sponsors, actively recruiting members, and going to McNeese civil engineering alumni for guidance as we prepare for the 2023 Gulf Coast Student Symposium, which will be held at The University of Southern Alabama in March.

McNeese ASCE plans to be very active at the 2023 Gulf Coast Student Symposium. We plan on competing in the concrete canoe competition, mini concrete beam competition, Hank Aaron smash competition, bead ring competition, and the concrete cornhole competition. Using McNeese's concrete canoe in 2022 as a building block, we plan to bring a new and improved canoe design to the 2023 symposium.

McNeese ASCE is excited to continue to partner with other McNeese engineering organizations and faculty for STEM outreach in and around Lake Charles. We will begin to meet regularly to plan the 2023 E-Week at McNeese. E-week is a yearly event put on at McNeese that allows surrounding schools to bring their students to tour McNeese's engineering facilities and engage in engineering-based activities and competitions. ASCE is planning on hosting a toothpick bridge competition. This is a competition where students

will build bridges out of toothpicks and bring them to McNeese during E-week and compete head to head with other students to see who can build the strongest toothpick bridge.



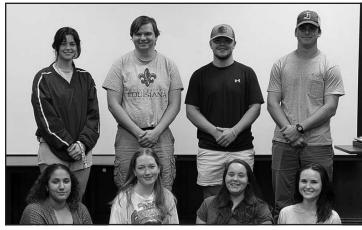
Figure 1: McNeese ASCE at Student Organization Fair

UNIVERSITY OF LOUISIANA AT LAFAYETTE By Jeanne Vidrine, Student Chapter President

This academic year has been quite busy. Our school prepared for and competed in the regional Gulf Coast Symposium conference at the University of South Alabama this March. For this competition year, we participated in Sustainable Solutions, Professional Mead Paper, and Surveying competitions as well as some of the fun events at the conference, Mystery Design and Tug of War. Our Sustainable Solutions team placed 3rd place, Professional Paper placed 4th place, Mystery Design placed 2nd place, and our Tug-of-War team placed 4th place. Our goal for the next symposium is to come back with more participation and with competition winning designs.

The chapter has been involved in fundraising and helping our community any way we can. We recently helped our ACI community host their Pet-A-Pup fundraiser and have met with other engineering chapters to help spread fundraising events through the different colleges. This week we will be helping one of our members' families annual Turkey Trot run on Thanksgiving morning.

Since the start of the semester in August, we have had guest speakers from Gainey's and Neel Schafer come out and talk to our members about life after college and how we can apply ourselves to better our communities after graduation. The last meeting of this semester with Neel Schafer was hosted on November 16th as a joint meeting to bring light to another smaller civil engineering society in our college, ITE. The goals and hopes of this academic and competition year are set around getting more involved with our engineering communities while also bettering our applied engineering through our competition year.



The 2022-2023 ASCE Leadership as pictured:

Left to right, Top Row:

McKenzie Leon: Public Relations & Concrete Canoe Captain

<u>Charlie Stauder</u>: E&T Week Coordinator

Evan Sauvage: Treasurer & Timber Strong Captain

Stephan Cormier: Events & Sports Coordinator, and Steel Bridge Captain

Left to right, Bottom Row:

Madonna Saad: Vice President & Concrete Canoe Captain

<u>Clarissa Ellinger</u>: Fundraising Chair & Sustainable Solutions Captain

<u>Jeanne Vidrine</u>: President

Natalia Tooraen: Secretary & Gulf Coast Coordinator

ot Pictured:

Carl Peltier: Steel Bridge Captain & Jace Herbert: Surveying Captain

SOUTHERN UNIVERSITY

By Courtlynn E. Thomas, Student Chapter President

Southern University ASCE 2022-2023 Executive Board

President – Courtlynn E. Thomas **Vice President** – Breshonki Jones

Recording Secretary – Spencer Williams

Corresponding Secretary – Kamryn Leblanc

Treasurer – Tyrick Jones

Membership Chair – Jammie McCastle

Fundraising Chair - Nicholas Miggin

Community Service Chair – Jacob O'Conner

Public Relations – Zuri Watts

Purpose of the group is the advancement of the science and profession of Civil engineering and the enhancement of human welfare through the activities of society members.



Congratulations!

Patrick J. Landry, PE

on your retirement from

state government engineering!

2010-2011 President of the Louisiana Section of ASCE

ASCE

UNIVERSITY OF NEW ORLEANS

By Gennie Claros, Student Chapter Recording Secretary

The 2023 Spring semester started with great excitement for the ASCE community, since the Gulf Coast Regional ASCE Conference is just around the corner. Both the Steel Bridge Team and the Concrete Canoe Team are working exhaustively to make sure that everything is perfect. Taking into account that the competition is taking place in less than a month, the teams are in their last preparations, with hearts filled with excitement knowing they will be competing soon.



UNO Concrete Canoe Team are working exhaustively



General Body Meeting

The first General Body Meeting of this semester was held on Thursday, February 9th. They started by making a recap of all the fun activities that took place last Fall 2022, including: Swampball, the Paper Bridge Competition, and the amazing Social ASCE organized. The board also invited everyone in the public to join them and cheer for the teams in the Conference in South Alabama. The deadline for attending is February 24th. If you are interested in joining us, please contact asce@uno.edu. We hope to see you there!



ACI/ASCE First General Body Meeting



Steel Bridge Team are working exhaustively

ASCE

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— CALENDAR OF EVENTS —

March 26-29, 2023, Geo-Congress 2023, Los Angeles, California https://www.geocongress.org/

May 1-4, 2023, Offshore Technology Conference, Houston, Texas https://2023.otcnet.org/welcome

June 14-17, 2023, International Conference on Transportation & Development, Austin, Texas https://www.asce-ictd.org/

November 16-18, 2023, ASCE INSPIRE Conference 2023, Arlington, Virgina

Events are constantly being updated online:

For ASCE Society events please see online: https://www.asce.org/conferences_events/ https://www.asce.org/student conferences/

For ASCE Acadian events please see online: http://branches.asce.org/acadiana/events

For ASCE Baton Rouge events please see online: http://branches.asce.org/baton-rouge/events

For ASCE Shreveport events please see online: https://www.facebook.com/ASCEShreveport/

For ASCE NOLA events please see online: http://asceneworleans.org/events/

For more events visit the ASCE Events Calendar: http://www.lasce.org/calendar.html

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