



Thursday, July 30th

Weathering the Storm: Lessons from a Complex Marina and Seawall Project *(FES Track)*

Danielle Irwin, CFM, WEDG, PWS, LEED AP | Marie Guyer – Cummins Cederberg, Inc.

Some of the earliest marinas developed in Miami-Dade County are reaching the end of their useful life, including the seawalls that embrace them. This presentation will highlight a case study of a major marina renovation project involving replacing fixed docks with floating docks to achieve greater resilience in a sensitive aquatic environment, the Biscayne Bay Aquatic Preserve. **1 PDH**

Enhancing Resilience in Florida Port's Intermodal and Supply Chain Systems *(ACEC Florida Track)*

Mark Valenti, PE, CGC - WSP | Helga Sommer, PE, PPM, ENV-SP – Port Miami | Ricard Charlton – Port Everglades Department

Panel Discussion:

1. Introduction: Florida's growth challenges and resilience in transportation.
2. Integration: Current intermodal infrastructure, tech innovations, and case studies.
3. Safeguarding Supply Chains: Risk management, route diversification, and partnerships.
4. Disruptions: Natural disasters, cybersecurity, and pandemics.
5. Policy: Government initiatives and regulatory reforms.
6. Future: Sustainability and emerging trends. **1 PDH**

Becoming a Professional Engineer *(FEE Track)*

Zana Raybon – FBPE

How does one become a licensed Professional Engineer in Florida? Zana Raybon, highlights the benefits of becoming a PE, and discusses the steps — education, exams, and experience — required to earn a PE license in Florida, how to maintain your PE license, and mobility of licensure between states. **0 PDH**

10:30am – 11:30am

1:30pm – 2:30pm	Anticipating and Building Enhanced Resiliencies of Florida Airports <i>(FES Track)</i> Eric Caplan – Hillsborough County Aviation Authority Tony Cugno – Jacksonville Aviation Authority Airports face various risks and regulatory that will require more resilient airport management. The proposed track will discuss several risks and approaches to help Airport executives handle potential disruptions and better prepare for the future. <u>1 PDH</u>
	Building Resilience: Technology-Enhanced Disaster Recovery and Preparedness <i>(ACEC Florida Track)</i> Michael Helm, MSM – Infotech Integrating asset management, GPS, and GIS technology empowers owners to make quicker, more informed decisions, improve efficiency, and ensure compliance with regulatory and funding requirements. This presentation will explore real-world examples of how these technologies and their integrations provide a solution to streamline Florida’s disaster response efforts and asset management overall, building enhanced long-term infrastructure resilience. <u>1 PDH</u>
	Designing Tomorrow: Value-Based Innovation <i>(FEE Track)</i> George Franco – Alberici Group <u>0 PDH</u>
2:45pm – 3:45pm	The World Turned Upside Down? Updates to PFAS Regulation <i>(FES Track)</i> Nicholas Albergo, PE, DEE, F.ASCE, EWRI, D.WRE – GHF Services Limited The U.S. Environmental Protection Agency (EPA) was laser-focused in 2024 regulating per- and polyfluoroalkyl substances (referred to generally as PFAS). But, with a torrent of regulations, expensive treatment options, owners' liability associated with the waste, and an uncertain future, the management of PFAS will continue to be a hot issue. The change in the executive branch will only fuel the uncertainty and confusion. <u>1 PDH</u>
	Resilience and Innovation in Transportation: The Fort-Lauderdale Hollywood <i>(ACEC Florida Track)</i> Jill Capelli, PE – Kimley-Horn To accommodate the envisioned growth while enhancing resilience and sustainability at the Fort Lauderdale-Hollywood International Airport (FLL), the Broward County Aviation Department (BCAD) is programming the Intermodal Center (IMC). The IMC is envisioned as the nexus of connectivity between the airport and the seaport, enhancing the resilience of the transportation network by providing robust, multimodal options. <u>1 PDH</u>

	Career Fair <i>(FEE Track)</i> Please join us for the FES Career Fair. The future of our profession comes to the FES conference every year hungry to get started in our profession. This recruitment opportunity is in the style of speed/mini interviews that last around 5 minutes each. Enough time for an introduction, collect their CV and for them to answer a few short questions on skills and interest that you can have for the students. <u>0 PDH</u>
4:15pm – 5:15pm	The Evolving Role of Engineers in Times of Change: Trends, Challenges, and Opportunities <i>(FES Track)</i> Mohamad Hussein, PE – GRL Engineers, Inc. Dr. Manoj Chopra, PhD, PE – UCF David Wantman, PE CEO – WGI Rachel Andre, PE – GEC LK Nandam, PE - FDOT Historically the traditional role of engineers has been to efficiently and effectively utilize available resources for the betterment of humankind; with deliverables mainly including ideas, advice, services, and products. In modern societies, we also have the responsibility of providing the know-how needed to make informed decisions about the application of technology and public policies. In recent years, however, the role of engineers has been evolving in times of tremendous changes at various levels and in many directions, from artificial intelligence, nanomaterials, big data, advanced processes, mega-structures, to working remotely and flexible schedules. The education and practice of engineering are also experiencing significant changes. A highly qualified panel will discuss the evolving role of engineers in times of change and highlight trends, challenges, and opportunities to help us in effectively embracing the future of engineering. They include an associate dean of engineering at UCF one of the nation’s largest universities representing academia, the chief operating officer from a large engineering company and president of a smaller engineering company representing private practice, and a leader from the FDOT representing the public sector. <u>1 PDH</u>
	SR 516 – The Future of Expressways <i>(ACEC Florida Track)</i> Keith Jackson, PE – Dewberry Engineering, Inc. Glenn Pressimone, PE – Central Florida Expressway Authority Patrick O’Shea – AECOM Racquel ASA – Central Florida Expressway Authority The Central Florida Expressway Authority (CFX) is building the future of expressways where sustainability and technology intersect with their SR 516 project. Applying ENVISION principles, SR 516 will be the most sustainable project ever delivered by CFX. CFX challenged Dewberry to create a sustainable facility that balances transportation needs with the environment. In this presentation, we will showcase project features. <u>1 PDH</u>
	Student Presentations & Competition <i>(FEE Track)</i> <u>0 PDH</u> Most Active Student Chapter Presentations The most active Alpha/Beta and Delta Student Chapters will present their student activities and lessons learned from the past year. The students will also discuss their goals for the next year.

Friday, August 1st

8:30am – 9:30am	Integrating Flood Resiliency to Stormwater Design with Sea Level Rise <i>(FES Track)</i> Jennifer Nunn, PE, CFM, BC.WRE – The Balmoral Group The presentation will focus on case studies highlighting emerging approaches to resiliency in sea level rise-induced roadway flooding. Two examples of design approaches will be described including detailed design specs, illustrating new strategies for managing nuisance tidal flooding. Tailwater analysis, resiliency considerations and their impacts to costs and benefits will be discussed for both case studies. <u>1 PDH</u>
	Condominium Laws affecting Engineers <i>(ACEC Florida Track)</i> John Pistorino, PE, SI, FRSE – Pistorino & Alam Consulting Engineers, Inc. The Champlain Tower South collapse has resulted in FL. Statue requirements for Condominium Associations that rely fully on the expertise and judgement of Engineers. Mandatory Engineering reports such as the Structural Integrity Reserve Study and building conditions not only deal with life safety issues of a Building but the economic ability of Associations to set up reserves, special assessments, that require meetings with engineers. <u>1 PDH</u>
	Resiliency and Sustainability in Order to Meet in the New Standard of Care <i>(ACEC Florida Track)</i> Mark Jackson, ARM Erin Johnson, RPLU – JCJ Insurance Agency Designing to code may have satisfied the standard of care in the past, but a focus on resilient design is requiring engineers to take environmental trends into consideration. Engineers may be at risk for negligence claims if they fail to adapt their designs accordingly. <u>1 PDH</u>
10:00am – 11:00am	Adapting to Extreme Rainfall: Tallahassee's Flood Vulnerability Assessment <i>(FES Track)</i> Jason Smith, PE, CPM – City of Tallahassee Justin Gregory, PE – Jones Edmunds & Associates Inland communities are increasingly becoming more vulnerable to flooding from intense storms such as the one experienced in Tallahassee in April of 2024. In response, the City created a high-resolution 2D flood model, providing a comprehensive citywide understanding of flooding. Using these calibrated results, we quickly identified potential flood areas and bolstered adaptation planning to enhance the stormwater system's resilience. <u>1 PDH</u>

	Resilient Transportation: Integrating Resilience from Planning to Design <i>(ACEC Florida Track)</i> Lindsey Koren, PE Ben Moore, AICP, LEED AP O+M, ENV SP – RS&H The impacts of climate change: sea level rise and increasing storms are challenging Florida's transportation facilities, and escalating repair and maintenance costs. Integrating resilience through data-driven planning and innovative designs is a strategic approach to enhance safety, minimize disruption, and reduce costs. This presentation will showcase tested methods to integrate resilience in aviation and surface transportation projects. <u>1 PDH</u>
10:30 am – 11:30 am	Legislative Program <i>(ACEC Florida)</i> This 1-hr program will include a recap of the 2024 Legislative Session, brief presentation regarding the legislative process and how you can support advocacy through FES ACEC Florida, and a preview of the 2024 Legislative Session including key focus areas. <u>0 PDH</u>
1:30pm – 2:30pm	3D Technology Solutions for Construction Verification <i>(FES Track)</i> Gregory Cleveland, PE, CCM Adam Long, PE, CCM – SAM-Construction Services, LLC Discuss the use of advanced technology in the changing landscape of construction by comparing traditional tools vs. digital tools for construction inspection. Findings from a recently constructed retaining wall using real-time kinematic scanners, augmented reality, and 3D design plans will be presented. Leveraging 3D technology solutions in construction allows for early detection of conflicts resulting in more insightful field acceptance decisions. <u>1 PDH</u>
	7 Steps for Shifting from Reactive Management to Proactive Leadership <i>(ACEC Florida Track)</i> Chuck Roberts – Performance Management Group, Inc. Shifting your personal approach and your organization's orientation from reactive management to proactive leadership can enable you to achieve higher performance, improve employee engagement, alignment, and morale, make your job easier, and help you accomplish more with your available resources. You'll learn the seven critical steps for successfully making the shift to proactive leadership so you can successfully lead positive and lasting change. <u>1 PDH</u>
	Resiliency in Naples, Florida: Naples Storm Water Management Improvement Project <i>(Project Track)</i> Peter Seidle, PE – GRAEF Sergio Hoyos, PE - Stantec The City of Naples Drainage Basin II System, in the Naples Beach area, currently collects stormwater and discharges to the Gulf of Mexico. Drivers of this project started with the increasingly common occurrence of local road flooding during high tides and heavy rain events. The overall quality of the water discharged to the Gulf is improved with pre-treatment. <u>1 PDH</u>

	Got “Salty” Bridge Decks? <i>(FES Track)</i> Ralph Verrastro, PE – Ralph Verrastro, PE For some bridge owners, there is no way to avoid having “salty” bridge decks. In northern states, DOTs and public works departments dump salt on the bridge decks in the winter which is the most cost-effective approach to meet their state’s “bare-road policy”. In Florida and other coastal states, the bridge crossings near the coast have moist salty laden air and saltwater floating around 24/7/365. This presentation provides a summary of the basics of concrete bridge deck design and the corrosion of reinforcing steel in concrete bridge decks that have a high salt diet. It also provides a summary of the typical bridge deck inspection and evaluation techniques used by bridge engineers. In addition, the presentation covers some of the more common bridge deck protection methods utilized to reduce and possibly eliminate the problems caused by the rusting of bridge deck reinforcing steel on “salty” bridge decks. The presentation concludes with a review of a bridge rehabilitation case study project related to an adjacent, prestressed concrete slab beam bridge superstructure in a “salty” environment. <u>1 PDH</u>
2:45pm – 3:45pm	Picking Low-Hanging Fruit: Advancing Climate Hazard Resilience in Naples <i>(ACEC Florida Track)</i> Erica Harris, MS Annie DeBoer, MA Natalie Hardman – AECOM The presentation describes the City of Naples’s approach to develop and implement a Critical Assets and Facilities Adaptation Plan to reduce impacts posed by flooding and extreme heat hazards. Strategies in the plan include a holistic mix of actions to increase City resilience. This presentation focuses on the “low-hanging fruit” strategies that the city has already implemented to demonstrate immediate adaptation steps other cities can take. <u>1 PDH</u>
	Unique Solution to Stormwater Challenges – FDOT Alternative Mitigation <i>(Project Track)</i> James Myers, PE Steve Johnston, PE – TLP Engineering Consultants Casey Lyon, MS – FDOT District 5 The SR 528 Widening Project crosses the Banana River Lagoon, part of the Indian River Lagoon National Estuary and initially, proposed offsite ponds within estuarine wetlands. TLP facilitated partnering between FDOT and Brevard County to fund a septic-to-sewer project to remove nutrients to satisfy water quality needs. Thus, eliminating the offsite ponds. The result was direct environmental benefits and a more resilient transportation system. <u>1 PDH</u>

	Engineering Resilient Infrastructure for a Climate-Tech Florida Future <i>(FES Track)</i> Dr. Ben Amaba, PE, LEED AP, CPIM – <i>Analogy Solutions, LLC</i> Florida’s resilience strategies are under pressure from climate change, population growth, and rising infrastructure costs, necessitating technology. Key initiatives focus on analytics, fortified infrastructure, and climate adaptation. This session emphasizes engineering’s role in protecting energy, transportation, and water systems. Professional licensure, cybersecurity, and AI integration surface for managing complex, critical safety systems. <u>1 PDH</u>
4:15pm – 5:15pm	AI & Anticipated Impacts on the Engineering Industry <i>(ACEC Florida Track)</i> Roger Giulian, JD, CRIS Ross Bundschuh, JD – <i>Greyling Insurance Brokerage & Risk Consulting</i> This presentation will provide insight to conference attendees into the anticipated impacts of AI on the engineering industry. Particular emphasis will be paid to (1) the evolving standard of care and the use of AI, (2) ownership of intellectual property generated by AI, (3) how engineering firms are currently utilizing AI and the platforms they're using, (4) formal AI-usage guidelines for firms to consider. <u>1 PDH</u> Building a Workforce for the Long Haul: The Power of Employee-Centered Benefits <i>(Project Track)</i> Lydia Zabrycki – <i>CAPTRUST</i> Employee engagement as a journey, Strategic Benefits Utilization, Retention Through Loyalty, Building an Engaged Workforce. <u>1 PDH</u>
Saturday, August 2nd	
8:30am – 10:30am	Laws, Rules & Professional Ethics Edwin Bayo Licensees are required to obtain one (1) hour of continuing education focusing on Florida’s professional engineering laws (F.S. 471) and rules (F.A.C. 61G15). Licensees are required to obtain one (1) hour of continuing education focusing on ethics for professional engineers. These courses are expected to cover the basic engineering canons. <u>2 PDHs</u>