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**Louisiana Post
ESTABLISHED IN 1920
5321 TOBY LANE
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MONTHLY NEWSLETTER

APRIL 2021

HOST SUSTAINING MEMBER INFORMATION

We still have some luncheon meetings available for Sustaining Members to host. Hosting our monthly meetings is a great opportunity to put your firm in the limelight and showcase your firm's experience and abilities. If your firm is interested in hosting one of these meetings, please contact Charlie Settoon at (504) 889-0182.

We would like to thank all the Sustaining Member Firms who have hosted a monthly meeting in the past. If it has been a while since your firm hosted a meeting, you are welcome to host another meeting. Let's continue to show our support for the Louisiana Post through this great professional opportunity.



MEMBERSHIP INFORMATION AND NEWS

MEMBER INFORMATION

LOUISIANA POST MEETING

WEDNESDAY, APRIL 14, 2021

VIRTUAL SOCIAL – 11:45 A.M.

POST LUNCHEON - 12:00 P.M.

LOCATION: <https://us02web.zoom.us/j/86080824070?pwd=Z1paYW1PR3VtSG0zejJDTm5tcHVuZz09>

Meeting ID: 860 8082 4070

Passcode: 709768

**GUEST SPEAKER: KATELYN COSTANZA, P.E, CFM
PRINCIPAL ENGINEER, CE HYDRO**

TOPIC: COMPOUND FLOOD INUNDATION GUIDANCE SYSTEM (CFIGS)

THIS WILL QUALIFY AS 1.0 PDH

DON'T FORGET THAT EVERY MONTH YOU CAN EARN 1.0 PDH (PROFESSIONAL DEVELOPMENT HOUR) FOR ATTENDING S.A.M.E. LUNCHEON MEETINGS.

SPEAKER'S BIOGRAPHY

Katelyn Costanza, P.E, CFM **Principal Engineer, CE Hydro**



Ms. Costanza is a Licensed Professional Engineer and Certified Floodplain Manager (CFM) with nearly 20 years of experience. She owns a small water resources engineering firm, CE Hydro, located in Mandeville, Louisiana. Prior to starting CE Hydro, she has managed various United States Army Corps of Engineers Civil Works projects and programs and provided nationally recognized technical expertise to the National Oceanic and Atmospheric Administration's National Weather Service. Ms. Costanza received the Gregg B. Rishel Award for making significant advancements to the National Weather Service's hydrologic program. She played an integral role in performing hydraulic and hydrologic modeling and implementing numerical routing techniques which enhanced the federal government's mission to provide flood and drought decision support on the Lower Mississippi River Basin. She also enhanced operations by coupling operational storm surge models to the operational hydraulic model of the Mississippi River to provide guidance on combined influences of storm surge and riverine flows. She has led various interdisciplinary technical teams including the NWS's Southern Region Flood Inundation Mapping Program. Since starting CE Hydro, she has developed Compound Flood Inundation Guidance System (CFIGS). This tool provides real-time, dynamic flood inundation guidance for the combined impacts of storm surge (provided by ADCIRC Surge Guidance System) and precipitation (official National Weather Service Quantitative Precipitation Forecasts). In 2020, a pilot study was implemented in the Lakes Pontchartrain and Maurepas drainage basin. The Coastal Emergency Risk Assessment (CERA), an interactive web mapping interface which delivers storm surge and wave guidance, now hosts the CFIGS.

Ms. Costanza will present on the new CFIGS prototype hosted on the Coastal Emergency Risk Assessment (CERA) web interface. CFIGS is a fully automated framework capable of predicting flooding due to the combined influences of precipitation and storm surge/tidal fluctuations. CFIGS provides flood inundation guidance to promote understanding of the timing and extent of flooding prior to an event. CFIGS rapidly ingests and processes official National Weather Service forecast products for precipitation inputs, and operational storm surge guidance provided by the ADCIRC Surge Guidance System (ASGS). The computations are provided by various USACE HEC and NOAA software. Other topics of discussion will include the known strengths of the system/modeling capabilities, areas of improvement, and lessons learned.