EBC 13th Annual Dredging Conference
Technology in Dredging: Old School meets High Tech

Friday, November 8, 2019
Battelle | Norwell, Massachusetts

Thank you to our Bronze Sponsor

AGENDA

8:00 a.m. Welcome: Payson Whitney, Chair
EBC Ocean and Coastal Resources Committee
Vice President, ESS Group, Inc.

Welcome to Battelle: Lisa Lefkovitz, Senior Research Scientist

Program Purpose and What You Will Learn
• Andrew Timmis, Program Chair & Moderator
  Director of Business Development - Environmental Group
  J.F. Brennan Company, Inc.

8:15 a.m. Innovative Surveying Technique Locates Contaminated Sediments for Surgical Removal
• Shailesh K. Patel, President, ArcDMC Sediment Solutions

8:40 a.m. On Board Technology is Changing How We Work
• Scott Hagemann, Market Professional GRADE Technology, Caterpillar

9:05 a.m. Scow Geofence System (SGS) & Its Application in Dredged Material Disposal
• Tim Mannering, Dredge Engineer Manager, Cashman Dredging & Marine Contracting Company, LLC

9:30 a.m. Sediment Coring – Mitigating Risk with Real-time Metal Detection
• Ken Hayes, President/Founder, Aqua Survey
10:00 a.m.  Networking Break

10:30 a.m.  What do you do with Mud? – Processing Technologies that Drive Beneficial Use
    • Eric Stern, Director of Sediment Management & Technology Development, Tipping Point Resources Group, LLC

10:55 a.m.  Dredging Equipment: Old School & Progress
    • Steve Miller, Domestic Sales Manager, Ellicott Dredges LLC

11:20 a.m.  Moderated Panel Discussion
    Panel Members:
    • Shailesh K. Patel, Arc Surveying & Mapping
    • Scott Hagemann, Caterpillar
    • Tim Mannering, Cashman Dredging & Marine Contracting Company, LLC,
    • Ken Hayes, President/Founder, Aqua Survey
    • Steve Miller, Ellicott Dredges LLC
    • Eric Stern, Tipping Point Resources Group, LLC

12:00 p.m.  Adjourn

PROGRAM CHAIR

Andrew Timmis, Director of Business Development - Environmental Group
J.F. Brennan Company, Inc.
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Andrew has over 30 years of operational and business development experience working for a number of environmental remediation companies, providing services such as technical support for dredging, and soil and groundwater remediation projects. Prior to joining the Brennan team, he was in charge of developing environmental opportunities, as well as the design and estimating of UST removal projects. Andrew has a technical background with experience in large civil construction, dredging and capping operations. He received a Bachelor of Arts in Environmental Resources Management & Planning from Plattsburgh State University.

SPEAKERS

Scott Hagemann, Market Professional GRADE Technology
Global Construction & Infrastructure
Caterpillar
100 NE Adams St, Peoria, IL 61602
(309) 494-1857. M (309) 657-7171. Hagemann_Scott_J@Cat.com
Scott has over 25 years’ experience at Caterpillar and 18 years working in the Machine Control and Guidance area. Scott has both a technical and a hands on application background with experience in site development and road building using on board machine technology. He has travel all round the world educating and showing the benefits of Grade technology to Cat dealers and customers. He received his Bachelor’s degree in Construction Management from Bradley University.

**Ken Hayes**, President/Founder
Aqua Survey
469 Point Breeze Road
Flemington, NJ 08822
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Mr. Kenneth Hayes, president and founder of Aqua Survey, Inc. (1975), supervises corporate research & development, sales & marketing, scientific sponsorship and business activities. Since 1975, Mr. Hayes has been an innovator in applying new systems and technologies for sediment survey and sampling & testing. He has directed work on hundreds of the superfund sites on the east coast, working in cooperation with the US Army Corps of Engineers, US Navy, major municipalities and utilities and in partnership with nearly all the major consulting engineering firms in the United States.

Mr. Hayes invented and patented the IQ Toxicity Test, to screen public drinking water supplies for WMDs to thwart terrorist attacks. He is responsible for ASI's development and refinement of high-powered EM technology for metal detection. Ultimately, this detection technology allows sediment cores to be more safely collected in urban environments as well as areas known to contain unexploded ordnance (UXO).

Mr. Hayes, through ASI, fulfilled the State of New Jersey and FEMA's request to gather nearly 3,000 sediment core samples following Superstorm Sandy. He successfully met the state and FEMA's requirements, gathering the required samples in a three week timeframe.

Hayes is dedicated to leaving this watery-blue planet in better shape through using science and hard work.

**Tim Mannering**, Dredge Engineer Manager
Cashman Dredging & Marine Contracting Company, LLC
549 South St, Quincy MA 02169
(617) 890-0600 | TMannering@jaycashman.com

Tim Mannering is Cashman's Director of Engineering where he oversees 20 field engineers and hydrographic surveyors, and is responsible for the operations of all dredge positioning and guidance systems. Additionally, he creates innovative solutions to complex problems which includes implementing new strategies, processes, and importantly, improving equipment.

His expansive two-decade career started off as a Geophysicist Scientist where he was responsible for the predesign investigations of PCB cleanup sites, sediment contaminated profiling and delineation operations, and managed terrestrial unexploded ordinance investigations. He has written several white papers on topics including PCB-impacted sediment and delineation. Tim received his Master's in Exploration Geophysics from Curtin University of Technology in Western Australia and his undergraduate degree in Physics from Otago University in New Zealand.
**Steven Miller**, Domestic Sales Manager  
Ellicott Dredges, LLC  
1611 Bush Street Baltimore MD 21230  
(410)-545-0261 | Smiller@dredge.com

Steve has over 16 years working at Ellicott Dredges LLC (Est. 1885) a market leading dredging equipment engineering and manufacture. Having strong marine contracting background allows Steve to review project specifics and properly match equipment to fully meet site conditions & end users' objectives. Active member in industry associations and technical events facilitates the transfer of new information to the companies engineering and customer service departments for implementation into the companies dredging equipment product lines.

**Shailesh K. Patel**, President ArcDMC Sediment Solutions, LLC  
4643 S. Clyde Morris, Blvd, Unit 302, Port Orange FL, 32129  
(386)304-6505 I spatel@dmces.com

Shailesh has 30 years of experience in research and consulting, with 24 years of experience in the field of sediment dredging, specifically organic bearing, fine-grained sediment or what is commonly referred to as Muck. His interest has been in the management and beneficial uses of dredged sediment. Much of his experience has been in the state of Florida where the muck has been attributed to algal blooms leading to fish kills and other environmental impacts. He was invited by the Maryland Port Authority to share his experience on this topic and has assisted the Florida Department of Environmental Protection with promulgating ways to provide TMDL credits for muck removal within the Indian River Lagoon. He founded Dredging & Marine Consultants, LLC in 2002 and recently formed a Joint-Venture with Arc Survey & Mapping based on his 25 years of association on dredging projects with Arc Surveying & Mapping. ArcDMC Sediment Solutions was created to introduce a new Aquares (Resistivity) Survey Technology to help assess variation in in-situ sediment, both in spatial coverage and depth, with a specific interest in identifying soft Muck sediment that have been linked to algal blooms due to its nutrient concentration, particularly Nitrogen and Phosphorus. It is our goal to further refine this technology not only to identify variability that can be used to better bid projects and help dredgers with providing the correct equipment, but also to use this technology to help with restoration projects that would enable more surgical dredging leading to greater cost savings.

**Eric Stern**, Director of Sediment Management and Technology Development  
Tipping Point Resources Group, LLC  
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Eric has over 30 years of government, academia and applied consulting sediment management experience having spent 24 years in US Government both with the US Army Corps of Engineers New York District (Operations Division) and the US Environmental Protection Agency Region 2 (Dredging, Sediments and Oceans Team). At USEPA, Eric served as the Regional Contaminated Sediment Program Manager where he directed the New York / New Jersey Harbor Sediment Decontamination Program. Eric was also the Research Leader for Sediment Management at Battelle. He is a founding Partner of Tipping Point Resources Group, LLC which focuses on innovative dredged material/contaminated sediment processing and construction applications with upland beneficial use applications. Eric is an active member of the European Union Sediment Network Research (SedNet) and member of the Central Dredging Association (CEDA) Beneficial Use Workgroup which just recently published 2 position/information papers on sustainable management and beneficial use of contaminated sediments. His focus areas include urban and Regional Sediment Management,
beneficial use applications of dredged material and post-treated contaminated sediments, sediment sustainability, development of integrated system approaches to managing contaminated sediments, innovative decontamination treatment technologies (ex and in-situ) and development of Regional Dredged Material Manufacturing Facilities (RDMMF).

UPCOMING EBC PROGRAMS

NOVEMBER 2019
November 12 – Solid Waste Management Program: Impact of PFAS on Solid Waste Operations
November 13 – Evening Program: Update from MWRA Executive Director Fred Laskey
November 14 – New Hampshire Climate Change Update
November 15 – Climate Change Matchmaking Forum
November 19 – Dam Management Program: Permitting & Funding for Removal
November 20 – TSCA and PCB Subcommittee Program Planning Meeting
November 20 – Emerging Contaminants Subcommittee Program Planning Meeting
November 22 – Climate Adaptation Forum – Infrastructure
November 25 – Water Resources Committee Program Planning Meeting

DECEMBER 2019
December 2 – Rhode Island Chapter Program Planning Meeting
December 2 – New Hampshire Chapter Program Planning Meeting
December 3 – Rhode Island Enforcement Program with DEM & EPA
December 5 – Annual Winter Garden Party
December 9 – Energy Resources Committee Program Planning Meeting
December 9 – Dam Management Committee Program Planning Meeting
December 10 – Annual New Hampshire Chapter Holiday Party
December 11 – EBC & RISEP Annual Rhode Island Chapter Holiday Party
December 16 – Ocean & Coastal Resources Committee Program Planning Meeting
December 17 – Infrastructure Committee Program Planning Meeting

JANUARY 2019
January 8 – Leadership Series with MassDEP Regional Teams: Headquarters
January 13 – Site Remediation and Redevelopment Committee Program Planning Meeting
January 13 – Climate Change and Air Committee Program Planning Meeting
January 22 – Leadership Program with Massachusetts EEA Secretary Kathleen Theoharides
January 30 – 14th Annual Construction & Demolition Materials Management Summit