Keynote Speaker

Dr. Bruce Means, Ph.D., Scientist, Explorer, Professor, Author, and Entrepreneur

Topic: The Wild, Wild World of the Florida Panhandle: An Amazing Cradle of Life Dr. Means is a triple alumnus from Florida State University and calls Tallahassee home. He is a field ecologist with 50+ years' experience, his main research interests center on ecosystems of the southeastern US, longleaf pine ecosystem, ecology of South American tepuis, biogeography, wetlands ecology, amphibians and reptiles, and rare and endangered species. He has published10 books and 290 scientific research papers, contract reports, and popular articles that have appeared in *Natural History, National Geographic, International Wildlife, National Wildlife, BBC Wildlife, South American Explorer* and other natural history magazines. He co-produced and starred in numerous documentary films about his research for National Geographic Explorer, BBC Television, and PBS.Canada.

Workshop Speakers

Category: Brownfields

Topic: Speakers will discuss the issues associated with site redevelopment within areas designated as Brownfields.

<u>Jake Cremer</u>, Stearns Weaver (Moderator)

<u>Joe Ullo, Jr., P.E.,</u> Director of Waste Management, Florida Department of Environmental Protection

<u>Theresa Booeshaghi, Program Administrator, FDEP, Division of Waste Management, Waster Cleanup Program</u>

Alissa Meyers, City of Tallahassee

Related Field Trip: Cascade Park (Wednesday 5:30-6:30 PM)

Category: Emerging Technology for Fieldwork

<u>Mathew Miller</u>, Environmental Manager at Water Resource Associates, Inc (WRA), Professional Wetland Scientist, Gopher Tortoise Agent, Technical Advisory Committee of Charlotte Harbor National Estuary Program. (Moderator)

<u>Dylan Ayers</u>, Environmental Scientist at WRA, UAV Pilot, Gopher Tortoise Agent Topic: Utilizing an Unmanned Aerial Vehicle (UAV) to Determine Abundance and Species Richness of Wading Bird nesting Sites on Linear Project Areas Chad Northington PE, Regenesis Southeast District Technical Manager

Topic: Design Verification Program - Lessons Learned from Pre-Application Assessments at *In Situ* Remediation Sites

Naeem Rahman, Vice President of Operations at Coastal Systems International

Topic: Drone technology advancements for engineering and environmental applications.

Topic: Field trip drone demonstration - Earl Soeder, PSM, GPServ

Related Field Trip: <u>Fire Ecology, Land Management, Wetland Mitigation, and</u> Drone Demonstration (Friday 12:30-4:30 PM)

Category: Imperiled Species

Topic: With increasing numbers of state or federally-listed species in Florida, it is imperative to know what surveys must be done, what requirements must be met, and what the regulatory process entails. This discussion will provide an overview of Florida's Imperiled Species Management Plan, an analysis of the federal consultation and permitting program, and tips for navigating these processes.

Amelia Savage, Attorney and Shareholder at Hopping, Green & Sams (Moderator)

Brad O'Hanlon, Florida Fish & Wildlife Conservation Commission

Julie Wraithmell, Deputy Executive Director for Audubon Florida

Elaine Imbruglia, President, Modica & Associates

Dr Heath Rauschenberger, PhD, Deputy Field Supervisor with USFWS

Related Field Trip: St Marks Wildlife Refuge Photography (Friday 12:30-4:30 PM)

Category: Institutional Controls

Topic: In recent years, Institutional Controls have been featured prominently in more contaminated site closures. From Brownfields to dry cleaners to hazardous waste sites, the approach to achieve site closure using several forms of available governmental controls is considered by responsible parties as the sole option when remediation is no longer cost efficient or when remedial costs are not economical. When is site closure with conditions an option? When is this approach not necessarily a viable option? Learn the latest developments on this evolving issue with the panel of experts.

<u>Jorge Caspary, Vice President, WSource Group (Moderator)</u>
<u>Michael Petrovich, Shareholder, Hopping, Green & Sams</u>
William Preston, William Preston, PA

<u>Brian Dougherty</u>, Division of Waste Management, Florida Department of Environmental Protection

Al Malefatto, Lewis Longman Walker

Category: Intergovernmental Coordination

Topic: Subject matter experts will discuss the latest efforts to expand coordination efforts between key agencies that shape the regulatory landscape in Florida.

Adam Blalock, Attorney at Hopping, Green & Sams (Moderator)

<u>Annie Dziergowski</u>, Project Consultation Supervisor, US Fish and Wildlife Service <u>Fritz Wettstein</u>, Land Use Planning Program Administrator at Florida Fish and Wildlife Conservation Commission

<u>Tim Rach</u>, Administrator for the Office of Submerged Lands and Environmental Resources Coordination Program at the FDEP

<u>Kelly Finch</u>, PWS, Chief, South Permit Branch, Regulatory Division, Jacksonville District U.S. Army Corps of Engineers

Category: Land Management

<u>Kelly Sands</u>, MS, Business Development Process Coordinator for the Southeast Region, Westervelt Ecological Services (Moderator)

<u>Shane Wellendorf</u>, Conservation Coordinator with Tall Timbers Research Station and Land Conservancy, Wildlife Research Biologist

Topic: Win-Win Land Management: Ecological Benefits of Plantation Management in the Red Hills Region

<u>Bruce Hasbrouck</u>, CEP, Vice President of Environmental Services, Faller, Davis and Associates, Inc.

Topic: Land Management Strategies for Wetland Mitigation Projects: A Long Term Monitoring Example

Related Field Trip: <u>Fire Ecology, Land Management, Wetland Mitigation, and Drone Demonstration (Friday 12:30-4:30 PM)</u>

Category: Living Shorelines

<u>Scott Zengel, PhD,</u> Vice President and Director of Environmental Sciences, Resource Planning (Moderator)

Zach Schang, FDEP Coastal Office, Aquatic Preserves

Topic: Re-engineering Living Shorelines in High Energy Environments: presentation of a new strategy for shoreline protection case study.

Jonathan Brucker, FDEP Central Panhandle Aquatic Preserves Manager

Topic: Seagrass Restoration in Northwest Florida

Kent Smith, Biological Administrator, Marine/Estuarine Subsection, FWC

Topic: Living Shorelines: Going from Gray to Green and Making Florida's Coasts More Resilient to Sea Level Rise

Category: Resiliency

<u>Danielle Irwin</u>, Director, Coastal Systems International Inc. (Moderator)

Topic: Finding Resiliency at Ports

<u>Lainie Edwards</u>, Program Administrator, Beaches, Inlets, and Ports Program, FDEP Topic: Coastal construction of small and large scale projects are being adaptively managed to better protect the beach and coastal system, and to promote longevity of critically eroding shoreline. This session discusses state strategies for coastal management from the State's perspective.

Erin Deady, Attorney and President at Erin Deady P.A.

Topic: Overview of federal and state law regarding sea level rise, climate, comprehensive planning, and case law.

Category: Springs and Sinkholes

<u>Kathleen Coates</u>, P.E., PhD, Chief Bureau of Water Resource Evaluation, Northwest Florida Water Management District (Moderator)

Topic: Restoration of Wakulla Spring: An Emerging Success Story. With funding from the Governor and Legislature, the state and local governments have invested hundreds

of millions of dollars to restore and protect Wakulla Springs by upgrading sewage treatment, land acquisition, and utilizing advanced septic system pilot projects. This project is an emerging success story that demonstrates what can be achieved when citizens, local and state governments and our elected officials work in cooperation to restore Florida's unique and valued spring ecosystems.

Debra Preble, PE, Senior Associate, Dewberry

Topic: Unsustainable water consumption, runoff from farms and residences, invasive species, unrestricted recreational use, and the abundance of on-site sewage and disposal systems are among the main threats to the health of natural springs. The state is committed to funding spring restoration projects. This segment discusses two projects, one associated with the connection of homes currently on septic tanks near the Wakulla River and one that focuses on the restoration through stabilization of Wacissa River springs in Jefferson County.

<u>Thomas Kwader</u>, PhD, PG, Principal Hydrogeologist with AECOM, former Senior Hydrologist with the NWFWMD, Courtesy Professor at FSU, former Coast Guard Captain

Topic: Florida Sinkholes, their formation, evolution, types and threat they pose to well drillers and our groundwater resources. This presentation discusses damage from sinkholes range from subtle settling and cracking of foundations to catastrophic collapse and severe injury and occasional death of citizens and well drillers caught by their sudden collapse.

<u>Thomas Frick</u>, Division Director of Environmental Assessment and Restoration, FDEP. Topic: This session will provide an overview of water quality challenges and associated legislatively established programs related to spring restoration.

Related Field Trip: <u>Leon Sinks Geologic Area (Thursday 12:-4:30 PM)</u>
Related Field Trip: <u>Wakulla Springs Tour (Thursday 12:-4:30 PM)</u>
Related Field Trip: Wacissa River Paddle Tour (Thursday 12:-4:30 PM)

Category: Stormwater Management

<u>Timothy J. Perry, Esq.</u> (Moderator) Oertel, Fernandez, Bryant & Atkinson, P.A. <u>Melissa Corbett</u>, PE, President, The Milcor Group and John Healy, EI, Project Manager, The Milcor Group

Topic: The Caulkins Water Farm Pilot and Expansion. This pilot reservoir project was intended to remove nitrogen and phosphorous from water discharged from Lake Okeechobee and C-44 watersheds. The project exceeded the expected results and has been expanded.

Mark Thomasson, PE, Senior Vice President, WSource Group, LLC.

Topic: Beyond Stormwater BMPs, With Florida's increasing population, dwindling water supply, and falling aquifer, stormwater must be considered more than just a liability, but as a potential asset. This presentation will look beyond traditional stormwater management at ways that stormwater is being used to solve problems rather than create them.

Marcy Frick, PE, Senior Water Resources Engineer, Tetra Tech Topic: Planning to Most Cost-effectively Achieve Water Quality Requirements. Presentation of a case study in the City of Cape Coral where planning of stormwater treatment and control measures were designed to meet TMDL, BMAP and NPDES criteria.

Related Field Trip: Cascade Park (Wednesday 5:30-6:30 PM)

Category: Submerged Lands & Riparian Rights

Topic: Common Misconceptions of Sovereign Submerged Lands and Riparian Rights. This presentation focuses on the common misconceptions when applying 18-21 F.A.C. to a diversity of project scenarios. The presentation intends to expose attendees to the most common questions regarding some of the more complex concepts that revolve around Sovereign Submerged Lands.

<u>Richard Brightman</u>, PE, Attorney and Shareholder with Hopping, Green & Sams (Moderator)

<u>Brad Richardson</u>, OMC Manager, Bureau of Public Land Administration, Division of State Lands, FDEP

<u>Richard Malloy</u>, PSM, Chief, Bureau of Survey and Mapping, Division of State Lands, FDEP

Category: Waste Regulatory Update

Topic: This session will cover updates in Regulations in regard to the Waste program. The two presenters from FDEP will cover important changes and other relevant topics concerning the Waste program.

(Moderator)

<u>Joe Ullo, Jr., P.E., Director of Waste Management, Florida Department of Environmental Protection</u>
Rebecca Robinette, Office of General Counsel, FDEP

Related Field Trip: Cascade Park (Wednesday 5:30-6:30 PM)

Category: Water Regulatory Update

<u>David Childs</u>, Shareholder with Hopping, Green and Sams (Moderator)

<u>Timothy Rach</u>, Program Administrator, Submerged Lands and Environmental Resources, FDEP

Topic: Overview of regulatory updates on the Statewide Environmental Resources Program (SWERP) including new and ongoing rule amendments. He will also give an update on FDEP processing changes to increase efficiency.

<u>Kelly Finch</u>, PWS, Chief, South Permit Branch, Regulatory Division, Jacksonville District U.S. Army Corps of Engineers

Rick Hutton, GRU. Topic: Reclaimed Water Policy

Training Session Instructors

Category: Grasses ID

Topic: This training session will educate on what to look for during the identification of Florida grasses and grasslike species. There will also be a segment on identification of seagrasses. Examples of species will be provided. Attendees should bring a hand lens to view small parts.

<u>Dr. Loran Anderson, PhD,</u> FSU Professor Emeritus, Former Director and Curator of R.K. Godfrey Herbarium, Plant Surveys and Identification <u>John Herbert,</u> St Marks National Wildlife Refuge, Native Plant Society

Category: Hydric Soils

Topic: Training will include a lecture and in-field study of what to look for to identify hydric soils, including the effects of wet or dry seasons on hydric soils.

<u>Lisel Hinrichs</u>, Soil Scientist, Burea of Environmental Regulation, St. Johns River Water Management District

<u>Jim Cooper</u>, PhD CPSS, Soil Scientist with the Florida Department of Agriculture and Consumer Services, Researcher, Professor, Agronomist <u>David Hammonds</u>, Instructor for the Florida Department of Health

<u>Travis Richardson</u>, Soil Scientist with T. Richardson Soils and Environmental, Wetland Scientist. Instructor, Fisherman, and Entrepreneur

Category: Phase 1 Training

Topic: What is a Phase I Environmental Site Assessment and why do we perform them? The presentation will discuss environmental due diligence drivers - regulatory and otherwise - and conduct a high-level overview of the ASTM E 1527 Standard. That overview will include a discussion of recent revisions to the standard, key terms, common problems, and "gotchas". It will also include a discussion of items that are outside the scope of the standard but that may be of critical importance to prospective owners of a property. The discussion will include some case studies using real-life examples and will allow time for questions.

<u>Scott Davis</u>, GeoSearch HE HAS BEEN REPLACED. GETTING THE NAME TO UPDATE-EP

Category: Survey 101

Topic: This session will discuss the basics of survey reading, the best way to help your surveyor complete his/her job, new techniques that are available and give hands on examples of map reading. Topic may include descriptions of mean high water, ordinary high water, riparian rights lines, metes and bounds, field survey, etc. The session is intended for all levels of professionals, as surveys are part of almost every project.

<u>Allen Nobles, PSM, President, NCG, Nobles Consulting Group, Inc. John Clyatt, PSM, President, Pickett Surveying & Engineering</u>

Category: UMAM Training

Topic: UMAM or the Unified Mitigation Assessment Method, has been utilized by the state and Army Corps to assess the value of wetlands or other resources for years. This course, which will have a field component as well as an in house session, teaches

attendees the correct method of applying the method. Attendees who intend to participate in the field training should be prepared with field appropriate attire, sunscreen and insect repellent.

<u>Shannon Gonzalez</u>, PWS, Senior Ecologist, Principal, Flatwoods Consulting Group <u>Penny Cople</u>, Principal Scientist, Breedlove, Dennis and Associates, Inc. <u>Carrie Kelly</u>, Flatwoods Consulting Group (field portion only)

Field Trips

Cascade Park (Wednesday 5:30-6:30 PM)

Topic: Remediation of this EPA Superfund site began around 2005 and focused on the excavation of contaminated soil and creek sediment, capping the landfill, and monitoring contaminated groundwater. Redevelopment of the site included important stormwater features such as connected ponds and a restored streambed with native Florida riparian landscaping. The stormwater facilities addressed historical flooding issues in the area. The Park opened in 2014 and features 2.3 miles of walking and biking trails, greenspace, water fountains, play grounds, and the outdoor Capital City Amphitheater. Despite its success, the City is still working with the EPA to close this remediation site. Our guides for this walking tour have deep knowledge of the site history, clean up, and regulatory hurdles that they will share. The walking tour ends at the former City Electric Building, the gasification plant building that is a trendy new restaurant and Park amenity called The Edison (see photo below). Enjoy networking and hors d'oeuvres. One drink ticket will be provided. One highlight of the evening at The Edison will be the "Presenter Tips" offered by professional speaking coach, John Warren, from PowerSpeaking. In this brief but entertaining session, Warren will offer tips for presenters and moderators that will be informative and easy to incorporate into the following conference days. More information about the park can be found at www.discovercascades.com

Mark Llewellyn, Genesis Group

John Powell, Environmental Services and Facilities, City of Tallahassee

Gary Phillips, BluePrint2000, City of Tallahassee

John Warren, Professional Speaking Coach from Power Speaking,Inc.

Echo Gates, Genesis Group- Field Trip Organizer

Sheraton Four Points LEED Hotel Tour (Thursday 5:10-5:30 PM)

Topic: The Four Points Sheraton is centrally located in downtown Tallahassee and was chosen for this in part because of its dedication to the environment. The hotel is a LEED silver certified hotel. A short walking tour detailing the features of the hotel that earned this certification will be conducted by the hotel manager.

Mark Xenophon, Manager of the Sheraton Four Points Hotel, Tallahassee

Leon Sinks Geologic Area Sinkhole and Springs Walking Tour (Friday 12:30-4:30 PM)

Topic: The geology of the Woodville Karst Plain and surrounding areas. Some of north Florida's largest karst features are located in the eastern portion of the Apalachicola National Forest and vicinity. We will visit and discuss sinkholes, caves, swallets and springs and how surface water and groundwater are intimately linked in this region. We will visit Big Dismal, a large cover-collapse sinkhole, Fisher Creek and the swallet through which this creek disappears and becomes recharge for the Upper Floridan Aquifer. We will also discuss how groundwater flows in this region and the role that cave divers have played in helping geologists understand the complex plumbing that underlies the region and links two of Florida's largest spring systems together: Wakulla Springs and Spring Creek Springs Group.

<u>Harley Means</u>, P.G., Assistant State Geologist, Geological Investigations Section, Florida Geological Survey, Florida Department of Environmental Protection <u>Rosalyn Kilcollins</u>, Environmental Educator- Field Trip Organizer

Paddle Tour of the Wacissa River (Friday 12:30-4:30 PM)

Topic: Grab a paddle and kayak or canoe along the beautiful Wacissa River within the FWC's Aucilla Wildlife Management Area. There is no experience required. We'll visit several springs, including Little Blue Spring, and Cassidy Spring, and have an opportunity to take a dip in Big Blue Spring. The Wacissa River is part of the Great Florida Birding and Wildlife Trail and is well known for its diverse vegetation and large concentration of aquatic birds including prothonotary and yellow-throated warbler, black-crowned night heron, yellow-crowned night heron, nesting osprey, limpkin, and purple gallinule. This paddle will be guided by experts familiar with the hydrology and birds of the Wildlife Management Area who will provide instruction along the way.

<u>Liz Sparks</u>, Office of Public Access and Wildlife Viewing Services with FWC, Explorer, Paddle Trail Creator, Adventurer, Former Paddling Trail Coordinator with FDEP's Office of Greenways and Trails

Fire Ecology, Land Management, Wetland Mitigation, and Drone Demonstration (Friday 12:30-4:30 PM)

Topic: On this field trip, we will visit the St. Marks Mitigation Bank and the Debbie Lightsey Nature Park to look at two examples of wetland mitigation projects. The St. Marks Mitigation Bank is a 1,450-acre mitigation bank providing mitigation credits for state and federally regulated wetland impacts within its approved service area. The City of Tallahassee's Debbie Lightsey Nature Park is a permittee-responsible mitigation project for wetland impacts resulting from a roadway project. The projects represent two different ecological and regulatory approaches for addressing wetland mitigation requirements. At the St. Marks Mitigation Bank, a slash pine silviculture plantation is being restored back to native wet flatwoods through controlled burns, hydrologic improvements, planting of longleaf and wiregrass, and exotic species management. We will look at post fire response from the winter 2016 burn and discuss land management practices within this fire dependent ecosystem. We will have a demonstration of drone operation and use for scientific purposes. At the Debbie Lightsey Nature Park, additional wetlands are being created within the newly established Nature Park will

provide environmental education and recreational opportunities, as well as stormwater treatment and wetland mitigation.

<u>Kelly Sands</u>, MS, Business Development Process Coordinator for the Southeast Region, Westervelt Ecological Services- Field Trip Organizer <u>Elva Peppers</u>, Senior Biologist, President, Florida Environmental & Land Services, Inc. <u>Jason Martin</u>, Westervelt Ecological Services

Wakulla Springs Riverboat Tour and Springs Restoration Discussion (Friday 12:30-4:30 PM)

Topic: Come see one of the largest and deepest freshwater springs in the world just south of Tallahassee. Visitors from all over the world come to see this beautiful natural and historic park. Learn about the functioning of the spring and underground caves that surface at the park, but extend for miles in all directions. The tour will include a river boat tour on the Wakulla River, which is closed to public boating and therefore offers undisturbed wildlife. The boat tour guide will be sharing knowledge of the local ecology and history. Be sure to bring your camera as the wildlife is abundant. Swimming is popular at the beach if you would like to take a dip and be sure to tour the lodge to learn about the history of the park including the stories of Old Joe and The Creature from the Black Lagoon. Ice cream at the old soda fountain is on your own.

Tim Perry, Oertel, Hernandez, Bryant & Atkinson P.A.- Field Trip Organizer

St Marks National Wildlife Refuge Wildlife Photography (Friday 12:30-4:30 PM)

Topic: Led by an expert wildlife photographer, this trip will provide some basics on equipment and techniques as well as a tour to view and photograph wildlife. The refuge, established in 1931 to provide wintering habitat for migratory birds, encompasses over 70,000 acres and includes about 43 miles along the Gulf Coast. The Refuge is a Longleaf Pine Land Management Research and Demonstration Area; Globally Important Bird Area; Outstanding Florida Waters and Class 1 Air Quality area. September brings the bald eagles returning to nest, butterflies, and autumn wildflowers. On the tour you may see fresh and saltwater marshes and coastal hammocks and have opportunities to photograph bald eagles, alligators, red cockaded woodpeckers, many varieties of shorebirds butterflies, fall wildflowers and the historic lighthouse. See www.fws.gov/refuge/st_marks for additional information on the refuge.

Robin Will, USFWS St Marks National Wildlife Refuge