# Conference Seminars

## Wednesday - July 29

**8:00 am - 3:00 pm**

**Riparian Rights**
**(6 CEC – #11310) Instructor: Richard P. Green, Esq.**

The 2026 Update will deliver an overview of the Department of Environmental Protection's criteria for reviewing surveys submitted, the role of the "Guidelines for the Determination of Riparian Rights" and resources available to surveyors as it relates to sovereign submerged lands. The panel will then discuss recent cases and scenarios where surveyors have been employed to delineate riparian lines or to equitably distribute the available riparian area between upland owners. The panel will discuss the technology employed for riparian surveys, the methods used by surveyors to opine on riparian boundaries, and what attorneys and judges have said about the role of surveying in determining riparian rights.

**Richard P. Green, Esq.** is Senior Attorney at the St. Petersburg office of Lewis, Longman & Walker, P.A. He has extensive litigation experience in a variety of areas such as real property, commercial, riparian rights, and environmental matters. He represents various public and private entities in litigation in both federal, state, and administrative forums. Green was included in Tampa Magazine's 2024 Top Lawyers List in the areas of Administrative/Regulatory Law and Environmental Litigation, the 2024 Best Lawyers in America "Ones to Watch List" for Environmental Litigation and Real Estate Law, and Rising Star by Florida Super Lawyers, a peer designation awarded to only 2.5% of Florida lawyers, since 2020.

Panelists: James C. Weed, PLS , David O'Brien PSM, Richard Malloy, PSM, Eric Sellers, PSM, Kevin Mears, PSM

Choose one 6-hour seminar for Wednesday

**Setting the "Footsteps" in Preparing Legal Descriptions**
**(6 CEC – #11311) Instructor: Ron Nelms, PLS**

The preparation of legal descriptions is both a process and an art. An art in the sense of mastering the ability to convey the description in a manner that causes the reader to arrive at the same location even though each writer uses their own technique. Following in the "Footsteps" is an often-used term in the Surveying Community. Retracing those "footsteps" can be frustrating especially if there are ambiguities and/or conflicts within the conveyance documents. When preparing a legal description, it will be your "Footsteps" that others will be following. The hope is that this workshop will enlighten the surveyor to foresee possible problems when preparing descriptions and how to minimize those pitfalls. The goal is to equip the attendee on how to approach each one and when to use the different methods. We will explore the importance of proper word phrases, punctuation, framework, parts of the description, and the forms to use. The emphasis will be on sufficiency and completeness while avoiding ambiguity and being verbose. We will review the proper use of the commencement, points of beginnings, and the basis of bearings. All the while stressing the importance of using ties and calls to strengthen your description. Each description is unique and methods can vary. We will review descriptions done by others and analyze them to determine if there are conflicts or ambiguities. If there are, then we will investigate possible ways to interpret the intent and act accordingly. In the end, we hope that each person will take something back to their practice that will better equip them in preparing and interpreting all types of legal descriptions.

**Ron Nelms, PLS** founded Nelms Surveying; Inc. in 1992 and serves as the principal. He is licensed in California, Arizona, and Nevada. He is a past President (2018) of the California Land Surveyors Association (CLSA). CLSA Member of the Year in 2015. During his time at Nelms Surveying he has performed numerous surveys that included Boundary retracements, Legal Descriptions, Topographic surveys, As-Builts, and ALTA standard surveys. In addition, he is noted for his expert testimony. He is the author of "Putting Big Sticks by Little Sticks." He has two sons and has been gifted with four grandchildren. A proud Rotarian and for recreation he plays tennis and pickle ball. He enjoys reading and writing in his spare time.

**SIT Prep**
**8:00 am - 4:00 pm**

**Geoscholar's Florida Surveying and Mapping Society Fundamentals of Surveying (FS) Exam Prep Course Un-Licensed Attendees - No CEC Credit - Dr. Stacey Lyle, PhD, RPLS, PLS**

Geoscholar's Florida Surveying and Mapping Society Fundamentals of Surveying (FS) Exam Prep Course is designed to provide critical information needed to obtain a Surveyor in Training (SIT) Certificate based upon topics tested on the NCEES Fundamentals of Surveying (FS) exam. The course offers an in-person FS review during the annual Florida Surveying and Mapping Society Conference, as well as an online preparation course. You must complete the online course before attending the Seminar. Dr. Lyle will be covering select questions over the required sections to help you with examination preparation. After the Seminar you will have access for 1 year to the online course.

**Dr. Stacey Lyle, PhD, RPLS, PLS** is an Associate Professor of Practice at Texas A&M University's Zachry Department of Civil and Environmental Engineering and Department of Geography. He has served as an expert witness on lanwitness on land boundary court cases. He is active in the industry with over 35 years of surveying experience 1 including civil engineering, land surveying, cadastral land recor tabases, GIS/CAD/BIM Fusion, geodesy, hydrography,photogrammetry, and cartography.

# Conference Seminars

## Thursday - July 30
## 8:00 am - 10:30 am

**New Datums - New Coordinates - New Heights**
**(3 CEC – #11312) Instructor: Dave Doyle**

In 2026 & 2027, two federal agencies, the National Geodetic Survey (NGS) and the Center for Operational Oceanographic Products and Services (CO-OPS) will deliver new and improved horizontal and vertical geodetic and tidal datums for the country. These enhancements will embrace significant advancements in earth orientation measurement systems and reflect high levels of interagency collaboration to provide more accurate and contemporary positional and height information detailing the foundation of the National Spatial Infrastructure. The community of professional surveyors will be relied upon to provide a significant leadership role in the adoption of these new systems to a vast array of other disciplines in the private and public sectors at the local, state, and national levels. It will be important for these professionals to understand the rationality for these efforts and the magnitude of changes expected in geodetic and tidal heights together with the introduction of significant changes in the State Plane Coordinate System. This presentation will discuss the foundations for these changes and demonstrate datum transformation and coordinate conversion tools to estimate the magnitude of these changes across the country.

Choose one 3-hour seminar for Thursday

Dave Doyle joined the National Geodetic Survey in 1972 and held the position of chief geodetic surveyor at his retirement in January 2013. He was responsible for the development, technical design and management of plans and programs that enhance the United States National Spatial Reference System. Mr. Doyle began his career as a geodetic surveyor in the U.S. Army in 1967 and served on numerous survey campaigns until completion of his military service in 1970. From 1970 until 1972, he worked for a private surveying company near Washington D.C. where he was responsible for completing boundary, topographic and engineering surveys while pursuing undergraduate studies in geodesy, cartography and mathematics at George Washington University. During his time at NGS his experiences included all phases of geodetic triangulation, astronomic positioning, leveling, GPS data collection, data analysis, datum transformations, network adjustments, and data publication. Mr. Doyle's activities have included extensive efforts on the development and implementation of the national horizontal and vertical geodetic datums. He is currently the owner of Base 9 Geodetic Consulting Services.  Mr. Doyle is a past president and Fellow Member of the American Association for Geodetic Surveying and is an active member of the District of Columbia, Maryland, New Jersey and Virginia professional surveyors' associations.

**FDEP - Florida's PLSS Restoration and Perpetuation, and Coastal Mapping Acts**
**(3 CEC – #11313) Instructor: Kevin Mears, PSM**

This course will meet the following objectives – The Coastal Mapping Act of 1974 - provide history leading to legislation; aspects of tides and MHW methodology; LABINS; historical and new tide stations; sample tidal station and benchmark items, vertical control and relationship to Erosion Control Lines. The PLSS Restoration and Perpetuation Act – provide history on the initial point, including reconstruction, efforts leading to legislation and the first CCR.

**Kevin Mears, PSM** manages the statutory programs and repositories for the "Florida Coastal Mapping Act of 1974" (Ch. 177, Part II, F.S.) and the "Florida Public Land Survey restoration and Perpetuation Act" (Ch. 177, Part III, F.S.) for DEP. He also manages the LABINS (www.labins.org) program via FSU FREAC (Florida State University's Florida Resources and Environmental Analysis Center). Kevin has been involved in survey and mapping for over 45 years and has spent most of his career in the private sector and joined DEP's Division of State Lands, Bureau of Survey and Mapping in 2021.

# Conference Seminars

## Saturday - August 1

**8:00 am - 9:40am**

**FDOT - History, Purpose, and Use of FDOT Right of Way Maps**
**(2 CEC – Course #11301) Instructor: Christopher (Scott) Fowler, LS, MBA**
This course presents the history of State Road Department's and Florida Department of Transportation's Right of Way Maps (RWM) as mapping evolved from the early days of automobile adoption to today's extensive transportation infrastructure inventory. This course examines different era Right of Way Map examples to assist surveyors' interpretation and application of Right of Way Map information for their practical use.

**Christopher (Scott) Fowler, LS, MBA** began land surveying in South Florida in 1989. His range of work experience includes land development, engineering support, construction layout, and roadway construction. He joined FDOT District Five in 2017 as Surveyor II in their Right of Way Mapping Section and is currently a Survey and Mapping Supervisor I in that same Section. He is a graduate of Miami Dade College, University of Minnesota, and Chancellor University. Mr. Fowler is a Licensed Surveyor in the State of Florida.

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**8:00 am - 9:40 am**

**AI in Ariel Surveying: From Marketing Hype to Practical Innovation**
**(2 CEC- #11302) Instructor: Logan Campbell**
This session, led by Logan Campbell, cuts through the noise surrounding Artificial Intelligence in remote sensing. It is essential for surveyors and engineering managers who need to understand where AI provides genuine, production-level efficiency versus where human expertise remains irreplaceable. The presentation details the practical innovations of AI in aerial surveying, specifically focusing on automated point cloud filtering for bare-earth DTM generation and initial feature detection. The primary focus is demystifying how firms can adopt these innovations to rapidly scale their processing capacity and eliminate backlogs, while establishing a crucial Human-in-the-Loop workflow to guarantee final CAD linework meets the rigorous survey-grade standards required for engineering and civil design input. Learn how to leverage technology without sacrificing legal accountability.

**Logan Campbell** is the Founder and CEO of Aerotas, which provides drone data processing for land surveyors and Civil Engineers. He founded Aerotas in 2014 and has since helped thousands of surveyors get the highest quality data out of their drone programs. Prior to founding Aerotas, Logan worked as a statistician in the financial services industry. Logan has an MBA from Harvard Business School and received his undergraduate degree from USC. Logan is a Certified Mapping Scientist with the ASPRS and a CFA Charter holder. As a recognized industry expert, he regularly speaks at survey and drone conferences and writes in numerous land surveying publications.

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**8:00 am - 9:40am**

**Hydrographic Surveying**
**(2 CEC - #11303) Instructor: Martin Taylor, CH**
This session provides a practical, high-level overview of hydrographic surveying and its application within professional land surveying practice. Hydrographic surveying involves the measurement and mapping of underwater terrain and features using technologies such as single-beam and multibeam echosounders, side-scan sonar, magnetometer, sub-bottom profilers, inertial motion units (IMUs), and autonomous platforms. Participants will gain insight into how hydrographic surveys are conducted in rivers, lakes, and coastal environments, and how the resulting data supports navigation safety, dredging, marine construction, floodplain management, and environmental restoration. A central focus of the course is the integration of hydrographic and conventional land survey data. Practical workflows for combining bathymetric and topographic datasets will be discussed, enabling seamless shoreline modeling, infrastructure planning, and boundary delineation. Emerging technologies—including autonomous surface vehicles (ASVs), bathymetric LiDAR, real-time GNSS correction services such as Real-Time Extended (RTX), and cloud-based data processing—will also be introduced, equipping land surveyors with the knowledge needed to collaborate across disciplines and adapt to an evolving geospatial landscape.

Martin Taylor is a THSOA-NSPS Certified Hydrographer with over 20 years of professional experience in the geospatial and surveying industry. He serves as a Senior Geospatial Project Manager at McKim & Creed, managing complex, multi-disciplinary surveying projects that integrate hydrographic surveying with mobile, aerial, and static lidar and conventional land surveying techniques. His project experience includes federal navigation channel surveys, beach renourishment initiatives, and extensive surveying support for transportation infrastructure projects, including mobile lidar corridor mapping for state Department of Transportation (DOT) roadway programs.Martin's professional focus spans hydrographic surveying, terrestrial lidar, and transportation-related surveying, with an emphasis on sensor integration, survey design, data processing, standards development, and the integration of bathymetric and topographic datasets. His work supports shoreline modeling, infrastructure planning, corridor mapping, and the management of coastal and transportation systems. He holds a bachelor's degree in Physics from the University of Waikato in Hamilton, New Zealand, and has lived in Wilmington, North Carolina for the past 20 years, where his work encompasses riverine, coastal, nearshore, and transportation environments. This presentation marks his first appearance at the Florida Surveying & Mapping Society (FSMS) conference.

# Conference Seminars

## Saturday - August 1

**10:10 am - 11:50 am**

**FDOT - History and Utilization of Murphy Reservations and the Marketable Record Title Act**
**(2 CEC - #11304) Instructor: Suzette Hicks, CPM**

This course presents the history of the Murphy Act and its impact on present-day property. Students will learn how to identify a valid State Road and how to obtain a release. We will also cover the Marketable Record Title Act (MRTA) and its impact on the title search and its exceptions.

**Suzette Hicks, CPM** started her career in banking, after graduating from the University of Central Florida, with a Bachelor of Science in Business Administration with a major in Finance. She worked many different positions in banking, including a Loan Secretary, Assistant Branch Manager and an Administrative Assistant, where her duties included training Loan Secretaries and Branch Managers the proper way to execute the loan documents. Following her 8 years in banking, she went to work for a Title Insurance Underwriter and learned title examination. After learning how to do complete title searching and even supervising the research department for 7 years, she left the private industry for FDOT. At the FDOT, Suzette has worked on many important projects, such as Ultimate I-4, SunRail, Wekiva Parkway, and High Speed Rail. She is the supervisor of the Title and Documents Section for District 5, with 9 counties and 6 employees. She has been at the FDOT for 27 years, 13 as a supervisor.

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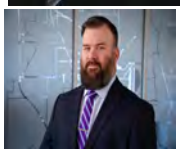
**10:10 am - 11:50 am**



**Technology Advancements Supporting Infrastructure**
**(2 CEC – #11306) Instructors: Mousa Diabat, PhD, Rick Wallace, Chad Colson, PSM**

This session features a series of presentations highlighting current practices and emerging technologies for bridge deck inspection, bridge clearance, infrastructure expansion along with right-away safety and compliance. Contributors will discuss a broad spectrum of methods, including traditional visual assessments, physical assessments, and modern data-collection platforms that support more efficient condition monitoring. Among the techniques covered is the use of airborne thermal infrared imaging to help identify potential delamination, presented as part of a wider toolkit of remotely sensed approaches. By examining the strengths, limitations, and practical considerations of each method, the session offers a well-rounded perspective on how diverse inspection and planning strategies can be integrated to support safer, more resilient infrastructure.

**Dr. Mousa Diabat, PhD** (pronounced Moo-sa, De-ya-bat) is a Technical Domain Expert at NV5 Geospatial, specializing in remote sensing thermography and hydrology. He has led the development of several innovative airborne thermal infrared imaging solutions for infrastructure inspection, pipeline monitoring, and the mapping of geothermal resources and natural assets. Dr. Diabat's work brings cutting-edge technology with practical applications, advancing the role of thermal infrared remote sensing in environmental and engineering domains.
**Rick Wallace** has a strong management background with more than 35 years of combined experience in both the information technology and geospatial industries. Rick currently serves as the Southeast Regional Manager for NV5 Geospatial. His responsibilities include Quality Assurance and Quality Control for photogrammetric and GIS projects, project design and estimation, contract administration and scheduling, along with client liaison responsibilities. He coordinates Southeast project activities with assigned project managers and technical staff. A native of North Carolina, Rick has worked with project teams throughout the United States to provide leading edge technical solutions for clients and their constituents.
**Chad Colson, PSM** serves as a Director of Surveying, SUE, Transportation + Geospatial services, and has over 13 years' experience with boundary surveys, hydrographic surveys, terrestrial LiDAR, topographic surveys, aerial mapping with drones (using photogrammetry and LiDAR), subsurface utility surveys, right of way mapping and construction staking. He holds a Graduate Certificate from the University of Florida in Mapping with Unmanned Aerial Systems. In addition to working on a variety of projects throughout Florida, he has also supported technical aspects of the field efforts on projects throughout the southeast region of the United States for engineers.

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**10:10 am - 11:50 am**

**Electric Utilities: Records, Land Development Role, and Risk Management**
**(2 CEC - #11307) Instructor: Stephen Tinder**

This course provides an overview of electric utilities' role in land development, surveying, and risk management. Participants will learn how to research and request land rights records, including easements, corridor maps, as-built drawings, and encroachment agreements, and understand the step-by-step process for coordinating with various Land Rights and Right-of-Way teams. The course explains when and why development activities trigger electric utilities review, outlines the possible outcomes of that review process, and emphasizes the importance of proper encroachment documentation as a risk mitigation tool. It also examines electric utilities' influence on easement and encroachment case law and discusses the practical implications for surveyors, developers, and other professionals involved in land development.

**Stephen Tinder** is an accomplished multidisciplinary land professional with over 20 years of experience in the oil and gas, electric transmission and distribution, and renewable energy sectors. He has vast experience conducting title research and negotiating agreements from private landowners, utility companies, and the Department of Transportation for various states. Mr. Tinder also has experience in creating and implementing training materials to ensure consistency in deliverables to the client.

# Conference Seminars

## Saturday - August 1

**1:30 pm - 3:00 pm**

**FDOT - Using the FPRN with the Modernized NSRS**
**(2 CEC - #11336) - Instructor: Ron Hanson, PSM, CPM**

This course outlines the best practices for using the Florida Permanent Reference Network (FPRN) for accurate GNSS positioning. Review the suggested methods for using each of the four reference frames offered by the FPRN. NAD 83 – The current horizontal and geometric control datum for the United States. NATRF 22 – The modernized National Spatial Reference System (NSRS) replacing NAD 83. WGS 84 – Reference Frame developed by the United States Department of Defense, commonly used with autonomous vehicles and drones. ITRF 2020 – The latest version of the International Terrestrial Reference Frame. Used as the basis for the modernized NSRS. Review services offered on the FPRN web page. Rinex download. Computation service.

**Ronald "Ron" Hanson, PSM CPM i**s a Florida Professional Surveyor and Mapper. He is employed by the Florida Department of Transportation, Office of Transportation Technology, Surveying and Mapping Office as the Geodetic Services Supervisor, ultimately responsible for the operation of the Florida Permanent Reference Network (FPRN) and State-Wide Geodetic Control. Ron has a survey career that spans 40 years, with 25 years as a PSM. Ron was one of the first users of the FPRN in private practice to receive Real-Time corrections. He has been managing the FPRN since January 1, 2013.

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**Project Management for Surveying and Mapping**
**(2 CEC – Course #11308) - Instructor:Jason Tommell, MBA, PLS/PSM, PMP, LSSBB**

**1:30 pm - 3:00 pm**

Explore practical project management frameworks tailored for Surveying & Mapping. We'll discuss baselines, tracking performance, managing changes systematically, and selecting appropriate approaches (waterfall, agile, or hybrid) for different project types. A conversational session examining tools and techniques worth considering for your surveying practice.

**Jason Tommell, MBA, PLS/PSM, PMP, LSSB** grew up in Saratoga Springs, NY and worked on survey field crews from a young age during summers in his father's regional survey company. His work as a survey rodman and later as an instrument operator continued through high school and college. Jason attended Washington College in Chestertown, MD as a Humanities major, earning a Bachelor of Arts degree. After college, he worked in and later ran the family survey business, which grew to include engineering, landscape architecture, GIS, and forestry services. Since closing the business in 2015, Jason has held multiple survey leadership roles at engineering and surveying firms, currently serving as Director of Survey and Operational Excellence and a Program Manager at SGC Survey. Jason completed Norwich University's MBA program in 2009 with a concentration in organizational leadership. He holds a certified floodplain manager (CFM®) certification, project management professional (PMP®) certification, and is a Lean Six Sigma black belt (Council for Six Sigma Certification). He obtained an online graduate certificate in surveying engineering technology from the University of Maine and is currently pursuing an MS in Surveying Engineering Technology at the University of Maine. Jason's initial land surveying license is in New York (2006). He is also licensed in Florida and Kentucky.

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**1:30 pm - 3:00 pm**

**Survey Smarter: A Connected Workflow with Trimble Connect**
**(2 CEC – Course #11354) - Instructors: Taylor Gay and Erick Scott**

Discover how Trimble Connect streamlines project data throughout the entire surveying workflow—from project setup and field collection to transferring data into Trimble Business Center.

**Taylor Gay** brings 15 years of surveying experience, with expertise spanning construction, topographic, boundary, and DOT surveys. He began his career in the field as a rodman and worked his way through the profession, eventually advancing to the role of Senior Crew Chief before joining Duncan Parnell as a Geospatial Training and Support Specialist. Throughout his career, Taylor has worked on projects throughout Florida. His extensive field experience includes working with a wide range of Trimble equipment and software, including S and SX Series robotic total stations, Trimble X9 3D laser scanner, Trimble data collectors, digital levels, Trimble GNSS receivers, Trimble Access, and Trimble Perspective.

**Erick Scott** brings more than 25 years of surveying experience, with expertise in control networks, DOT, and construction surveying. He began his career as a rear chainman and worked his way through the profession, eventually serving as a Field Crew Supervisor and Project Manager before joining Duncan Parnell. For the past seven years, Erick has provided technical support and training to surveyors throughout the United States, helping professionals implement Trimble solutions and improve their field and office workflows. His experience has taken him from local projects to supporting the National Park Service in Alaska, giving him a broad perspective on the unique challenges surveyors face in diverse environments. Known for his practical, hands-on approach, Erick enjoys sharing real-world techniques and best practices that attendees can immediately apply to improve efficiency, accuracy, and productivity in their own organizations.