

THE FLORIDA SURVEYOR

November 2024
Volume XXXII, Issue 10



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The U.S. Geodesy Crisis
Ultimate Hammer: Lehtinen's Lawsuit
Charles H. Goldsborough





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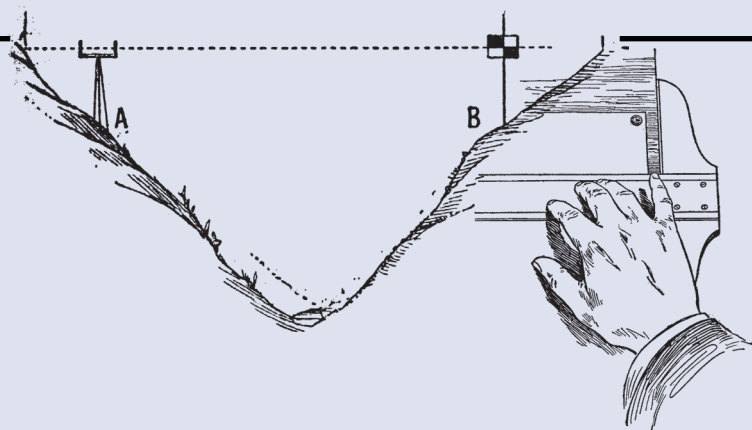
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THE FLORIDA SURVEYOR is the official publication of the Florida Surveying and Mapping Society, also known as FSMS. It is published monthly for the purpose of communicating with the professional surveying community and related professions who are members of FSMS. Our award winning publication informs members eleven months out of the year about national, state, and district events and accomplishments, as well as articles relevant to the surveying profession. In addition, continuing educational courses are also available.

PRESIDENT'S Message

November 19th, 2024



Members,

I am happy to report that we have been able to help several members and their staff through our Disaster Relief Fund. It's a terrific feeling knowing you are helping members get through a crisis time in their

lives. Our members are the most important part of this Society and supporting them is critical, especially when a disaster strikes. Keeping the communication lines open and being able to call upon someone you know and trust is part of what this Society brings to the table.

You should all have gotten notice of the membership opening up to renew for 2025. We appreciate your time and the efforts of those in each and every Chapter that get together each month or every other month to renew friendships and refresh the members on what's going on in the Society, as well as address any local issues and to help support our PAC fund to keep up with Legislative issues that may affect our profession.

Your membership is what supports the efforts of a totally Volunteer group of Officers, Board of Directors, and Committees in keeping you abreast of legal and legislative issues, providing quality continuing education programs, the Monthly Florida Surveyor magazine that has just exploded in its quality and content, bigger and better Annual Conventions, and a dedicated and responsive staff that are ready to assist you at anytime.

We have also opened up another Membership Contest to see who can bring in the most new members this year. The Recruitment Bonus Prize is a Packet One Registration for 2025 Annual Conference and includes: 1 Wednesday BBQ Ticket, 1 Friday Exhibitor's Luncheon Ticket, 1 Friday Recognition Banquet Ticket, 6 Saturday Seminar CECs, along with a 2 night stay at our conference resort.



President

Richard Pryce

(954) 651-5942

rdpryce@gmail.com

PRESIDENT'S Message

The Recruitment Bonus will be awarded based on a point system. 6 Points will be awarded for each new Full Member, Government Surveyor, and Sustaining Firm. 1 Point will be awarded for each new Associate, Affiliate, and Student Member. A New Member is defined as any individual who has not ever been a member, or has not been a member of FSMS for the past two years. Whichever member has the most points accumulated between November 18, 2024 and March 31, 2025, will be deemed the winner of the Recruitment Bonus. The winner of the Recruitment Bonus will be announced in the April 2025 edition of The Florida Surveyor.

As always, respectfully submitted,
Richard D. Pryce, RLS/PSM



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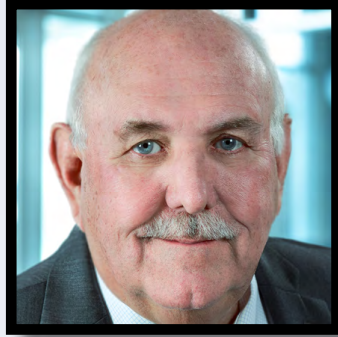


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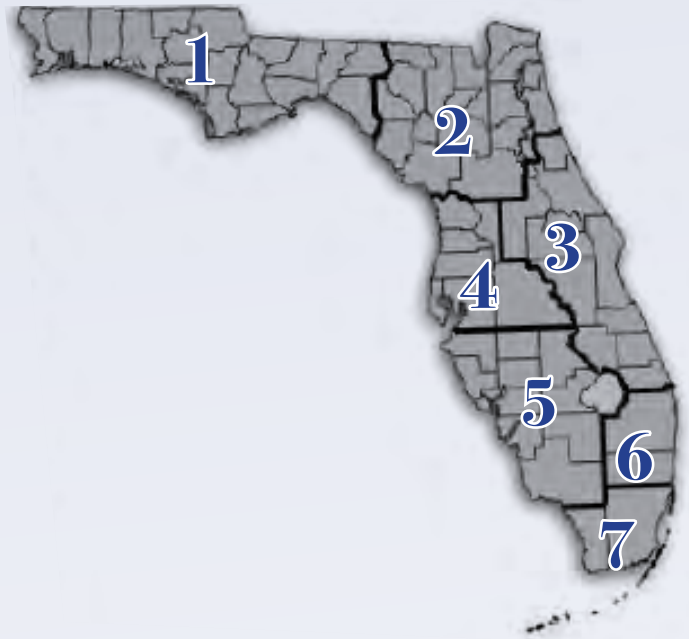
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FES	Lou Campanile, Jr.

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Geospatial Users Group	Richard Allen
Young Surveyors Network	Melissa A. Padilla Cintrón, SIT

To All,

The importance of finding, saving, and making available to other Surveyors unrecorded Plats and Maps cannot be stated enough.

I have done this for years and find the information on these documents invaluable in understanding and following in the footsteps of previous Surveyors all over the State. I know that multiple counties have those in their records and are available through the Public Records searches, but there are also ones that keep on popping up occasionally referenced in another document, e.g. (also known as Lot 20, Block 5, unrecorded Plat.....).

Many times, there is a metes and bounds description with the above statement at the end in the recorded document. And sometimes the metes and bounds has errors that if you had a copy of that unrecorded Plat/Map would become clear as to where the error occurred.

I have a couple of examples attached, one for the most recent one I found and talk about below in Miramar, and another one where I got a very poor copy from Monroe County and was able clean it up and send them back to them a more readable one.

I found the attached one last year when doing a proposal for a roadway project in Miramar, Fl. I knew it existed, having surveyed in the area back in the late 70's, but the County didn't have it and I feared it had been lost forever. It was in a somewhat rural area and the roadways were sketchy as to how they were laid out. Because of my background of area, I also knew who did the work, an Engineer/Surveyor that was the head of a previous Drainage District (Hollywood Reclamation District) that was now in the South Broward Drainage District. The district Engineer is a friend of mine so I asked him to search their records, but to no avail, most of those old records didn't exist anymore.

I then reached out to older Survey firms in the area, and luckily one of them had a copy in their file. It was in extremely poor condition, folded & taped together from an old blueprint copy. But, with the help of Photoshop I was able to enhance it enough to be able to read and interpret it.

From the Desk of Rick Pryce:

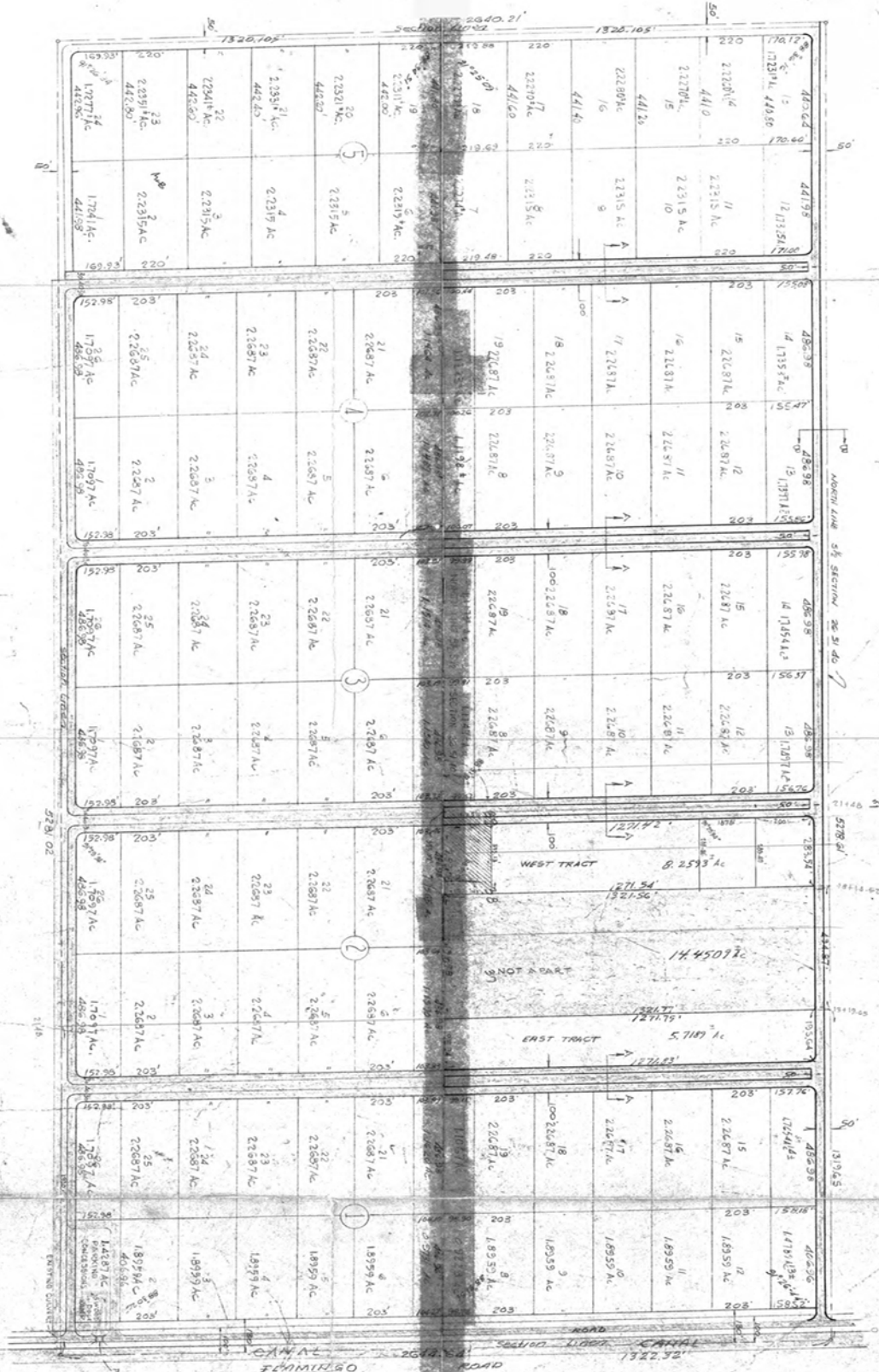
FIG. 278

NORTH LINE 5/2 SEC 26-51-40-2

TYPICAL SECTION B.B.



NOTE!
- HEAVY LINES INDICATE PROPOSED WORK IN 1/2 SEC. 26-51-40-2.



HRD PROJECT - 66

PROPOSED SUBDIVISION

5/2 SECTION 26-51-40-2

BROWARD COUNTY

M. B. GARRIS

CIVIL AND CONSULTING ENGINEER

DATE: MAY 5, 1966

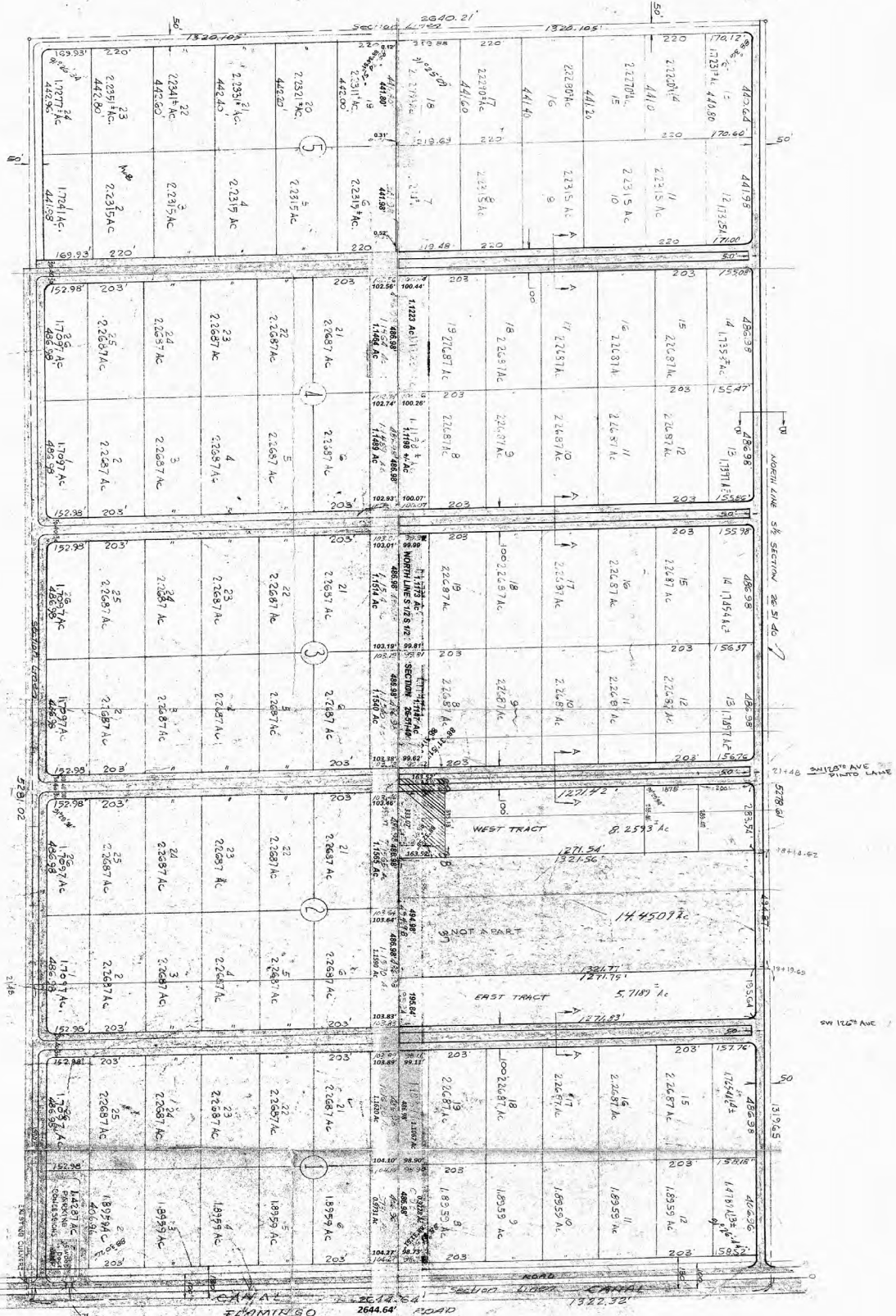
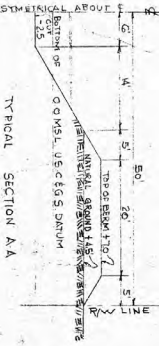
SCALE: 1" = 200'

UN-RECORDED MAP/PLAT OF "COUNTRY CLUB RANCHES"
by: M.B. Garris, P.E. / R.L.S. dated 5/6/1966

FIG. 27B

NORTH LINE 5/2 SEC 26-51-40-2

TYPICAL SECTION B.B.



NOTE: - HEAVY LINES INDICATE PROPOSED WORK IN 1/2 SEC 26-51-40-2.

SUPPLEMENT NOTE: Un-recorded Map/Plat of "COUNTRY CLUB RANCHES"

12/15/2023 - R.D. Price

This map by M.B. Garris, P.E. & R.L.S., dated 5/6/1966, who was the Engineer for the former
Hollywood Reclamation District, which is now South Broward Drainage District is the plan
and boundary of the lots and roadways in "Country Club Ranches". In the south half (S 1/2)
of Section 26-51-40 in the City of Miramar, Florida. The original paper copy had was filed
and taped across the central area of the sheet and in poor condition. It was scanned at 600
dpi and the resulting image was processed to enhance the legibility of the map. The map
dimensions and angles that were in the left-right control area were more accurate than others
because of the taping to the left-right control area to the observed dimensions for clarity.

Richard D. Price, PSM/MS # 4038

REVISIONS

NO.	DATE	DESCRIPTION
1	5/6/1966	Original Map/Plat

HRD PROJECT 1-66

PROPOSED SUBDIVISION

S 1/2 SECTION 26-51-40-2

BROWARD COUNTY

M. B. GARRIS

CIVIL AND CONSULTING ENGINEER

SCALE: 1" = 200'

DATE: MAY 6, 1966

ORDER NO. 8745

SHEET 1 OF 1

NORTH SUGARLOAF ACRES

SECTIONS ONE & TWO

IN SECTIONS 25 & 36 - TOWNSHIP 66th - RANGE 27th
ON SUGARLOAF KEY - MONROE COUNTY - FLA.

SCALE: 1" = 200'
C. G. DAILEY & ASSOCIATES
LAND SURVEYORS
P.O. BOX 728
MARATHON - FLORIDA
FEBRUARY 17, 1969
REVISED AUGUST 4, 1969

N

BOW
CHANNEL

UPPER
SUGARLOAF
SOUND

BOULEVARD

CRAND

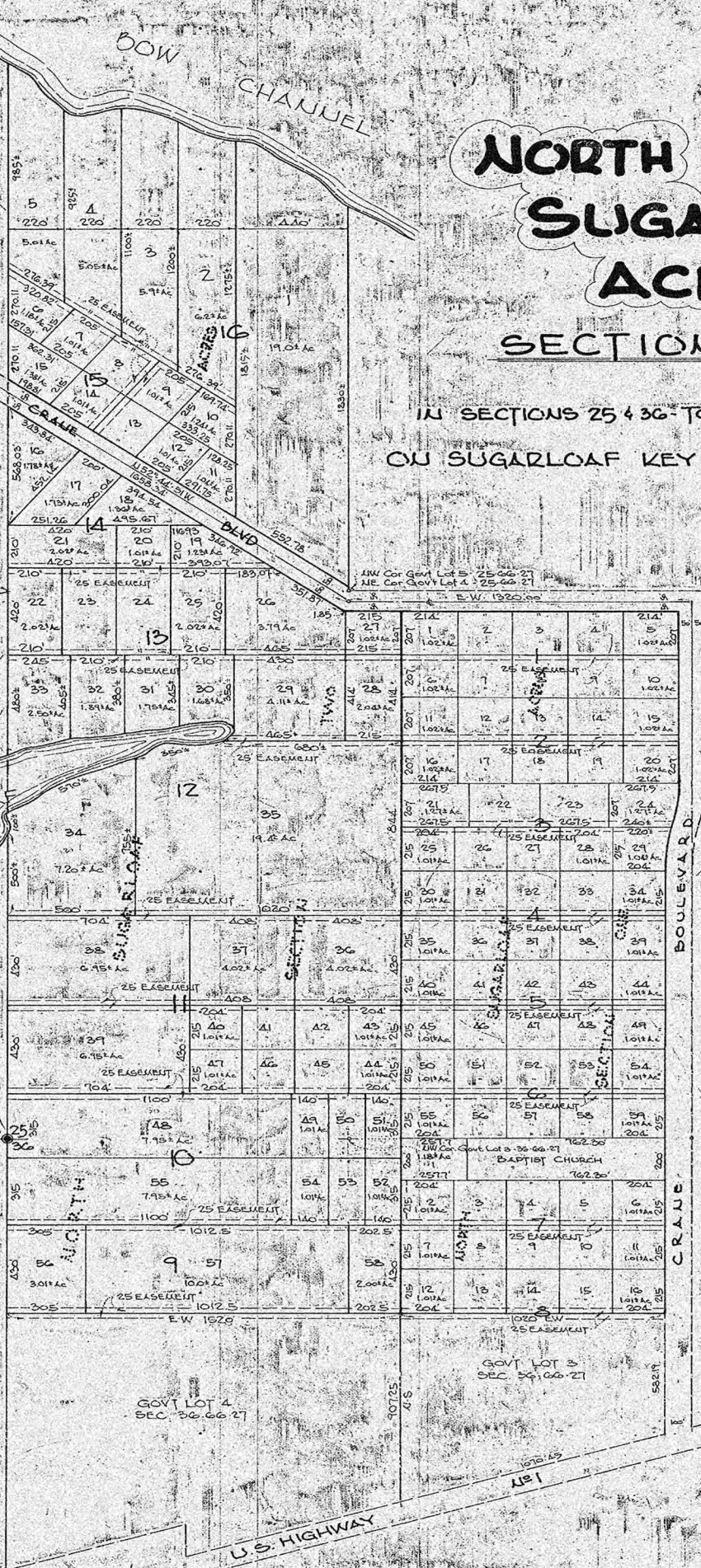
U.S. HIGHWAY

GOVT LOT 4
SEC. 36, 66-27

GOVT LOT 3
SEC. 36, 66-27

1181

H-0523

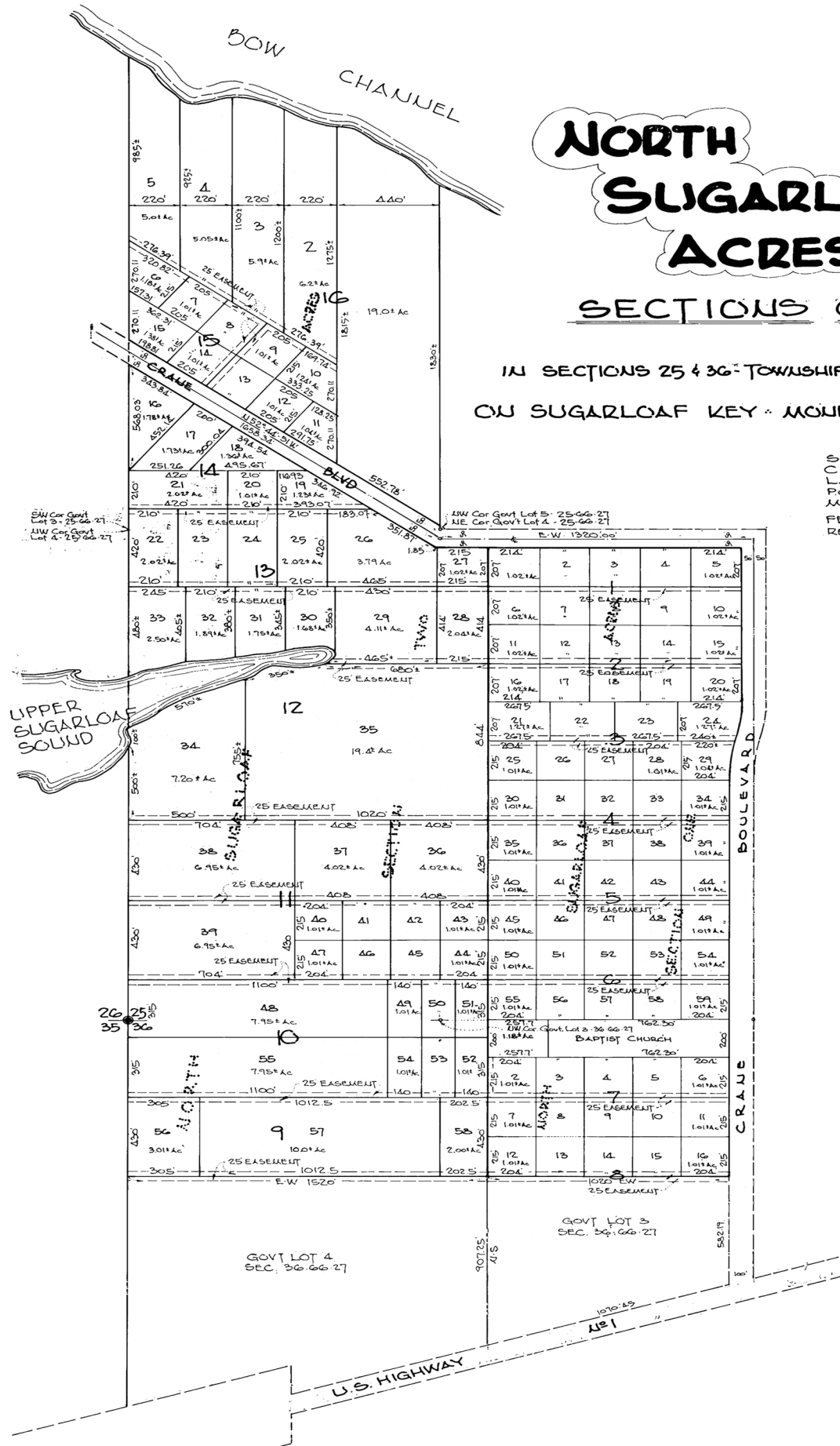


NORTH SUGARLOAF ACRES

SECTIONS ONE & TWO

IN SECTIONS 25 & 36 - TOWNSHIP 66 - RANGE 27
ON SUGARLOAF KEY - MONROE COUNTY - FLA.

SCALE: 1" = 300'
C.G. DAILEY & ASSOCIATES
LAND SURVEYORS
P.O. BOX 728
MARATHON - FLORIDA
FEBRUARY 17 - 1969
REVISED AUGUST 4 - 1969



H-0523

From the Desk of Rick Pryce:

So the areas that were still a little fuzzy, and barely readable, I added new text to show my interpretation, and added a note to the document what I had done. I then made a new PDF of it and forwarded it to our County Surveyor so he could make it available to whomever might need it in the future.

We did not get the Project that I did this work for, but a month or so ago, the Broward County Surveyor (Eric Augusto) called me to ask if I had a copy of the same map because another Surveyor was looking for it, and I reminded him I had sent it to him by email maybe 3-4 months earlier.

These are the things, we as Surveyors, who understand the importance of these historical documents, need to pass on to those coming after us and as we move to the future.

Kind Regards,

Richard D. Pryce, RLS/PSM
FSMS President 2024-25
rpryce@craventhompson.com



Lewis H. Kent

August 18th, 1931 - October 4th, 2024

(FSMS President 1975-1976)

It is with deep sadness that we share the news of Lewis H. Kent's passing on October 4th, 2024. As the former President of George F Young, Lew made a lasting impact that continues through his two sons, Lewie Kent (Principal) and Bill Kent (CEO/President), who are dedicated to upholding their father's remarkable legacy at GFY. Lew's 29 years at GFY were transformative, as he built friendships and fostered a sense of family among his coworkers.

Lew was not only a devoted leader, but also an avid outdoorsman who enjoyed biking, fishing, and traveling. His commitment extended beyond work with his active engagement in the community. He inspired us all with his unwavering commitment to education, hard work, and the belief in making a positive impact on the world around us. To find out more about Lewis H. Kent's legacy, visit: <https://www.legacy.com/us/obituaries/name/lewis-kent-obituary?id=56608878>



GIS DAY MAP CONTEST

GUEST SPEAKER

Gabbie Drice

Information Systems Manager at
Broward County, Florida

Presentation Title:

Creating a Strong, Dynamic,
and Skilled GIS Team



Gabrielle (Gabbie) Drice is a results-driven GIS leader with over 20 years of experience specializing in ESRI technologies, SQL, cloud platforms, and strategic management, with a proven track record of leveraging geospatial expertise to drive business objectives and enhance operational efficiency.

Recognition and valuable prizes will be given
to the best maps!

GIS DAY 2024

NOV 21, 2024

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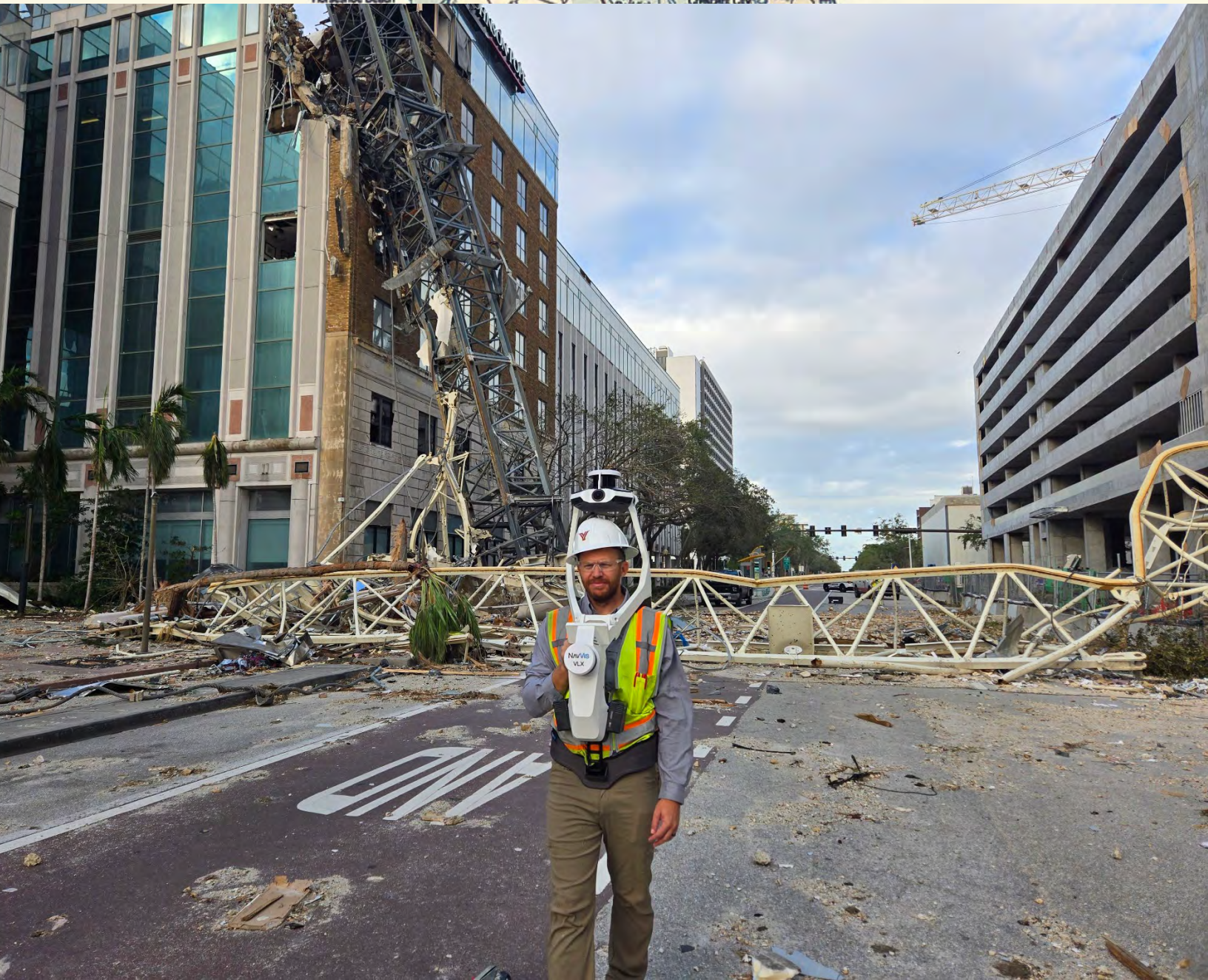
[Learn more](#)



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Lauderdale, FL 33314

JOIN US

**November 21, 2024
6:15 PM - 7:30 PM ET**



(Photo courtesy of District 5 Director Shane Christy)



Palm Beach Chapter Meeting

FROM CHAPTER PRESIDENT TODD BATES: Thanks to the 37 surveyors and Geomatics students who attended. Special shoutout to guest speaker, Katie Britt from UF for her presentation on the UF/IFAS "Workforce Development" Program.

Congratulations to the Fall-2024 FAU Carl Miller Memorial FAU Geomatics Engineering Scholarship recipients Nithish Manikkavasagam and Christian De La Rocha.

Great to have FSMS President Richard Pryce and FAU Student Chapter President Brianna Parsons with us. Congrats to Andrew L. Beckwith, CST I, our new Chapter Treasurer!

Proud to be part of the incredible FSMS PALM BEACH CHAPTER. Fantastic food, networking, and learning opportunities. Keeps getting better!





Florida Young Surveyors Network (Albuquerque, New Mexico)

We had a great time at the NSPS Fall Meeting with the NSPS Young Surveyors Network (YSN)!

Thank you Florida Surveying and Mapping Society and DRMP for your support!





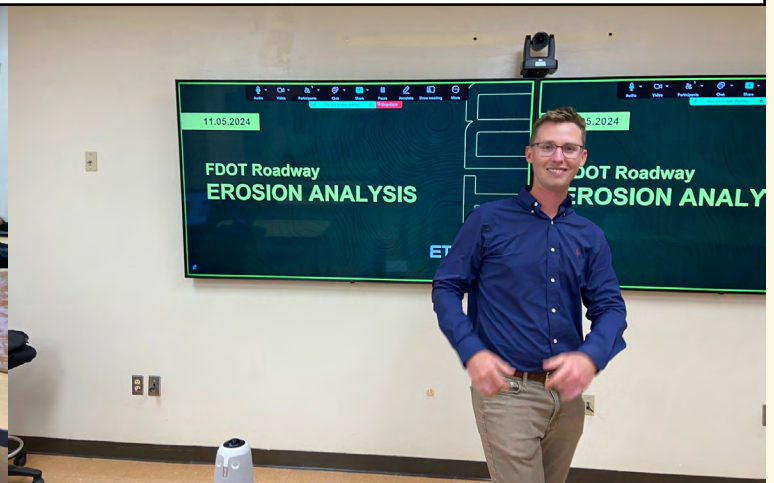
UF FFGS Alum Katie Britt is the Assistant Director for Geomatics Extension Workforce Education and Training. This is the first geomatics extension position in Florida. Katie is currently making rounds throughout the state meeting with chapter members and practicing surveyors, as well as industry experts. She is collecting data and asking for input that will help her design training and certification programs that will help educate the next generation of geomatics professionals.





UF Geomatics Student Association

England-Thims & Miller, Inc. (ETM) discussing their project relating to Geospatial Applications in Hurricane Erosion Control to current students. Students also had the chance to learn more about internship and career opportunities through the ETM Gainesville Accelerator Office.





UF GSA President Kenneth Dell and Treasurer Austin Rupert with Dr. Youssef Kaddoura attending the UF/FL-ASPRS (American Society for Photogrammetry and Remote Sensing) Geospatial Workshop in Apopka, FL to learn more about Geospatial technologies and meet with industry professionals.





From Dr. Youssef Kaddoura — ASPRS Geospatial Workshop Event

We're grateful for the support of FSMS (including Richard Allen, PSM, CFM and Earl Soeder) and the opportunity to collaborate at such an engaging 17th UF/ASPRS - Florida Region Geospatial Workshop event. It's partnerships like these that make our gatherings so successful and meaningful!





Administrative Office in Tallahassee, FL.

The UF GSA officers attended the November FSMS Quarterly Board Meeting which enriched their understanding of FSMS proceedings, as well as important issues regarding the surveying profession in Florida.

From Left to Right: Treasurer Austin Rupert, Secretary Christian Hays, Vice President Augustus Benoit, ROAR Officer Marla Horn, and University of Florida Academic Advisor and Liason Justin Thomas.



President Rick Pryce
(keynote speaker)
presenting at UF/IFAS in
Plant City for
GeoFlo Summit 2024.

Survey & GIS
Richard D. Pryce, RLS/PSM

- > 52 Years of Surveying Experience
- > 28 years of ESRI GIS Expertise
- > 28 years of Conversion between AutoCAD, ESRI ArcGIS
- > 18 years of Laser/Lidar Expertise (2006)
- > GIS, Survey & Remote Sensing Seminars
- > Giving Back to the Profession
 - > National President of Surveying Society
 - > Past President & Director of Surveying Society
 - > Executive Member, FIMS International User Group
 - > President, Chairman, FIMS GIS Committee
 - > Past Chairman, FIMS Tech Committee
- > Member Advisory Board UF Geomatics Program
- > Past Member FAU Advisory Board
- > Member of PSMS, NSPS, former ASPRS member
- > Miami Dade, Broward, Palm Beach, & Central Florida GIS User Groups
- > Member of Leica Laser Scanning User Group

2023-24 Mapping 750 miles of waterline

2018-2020 Managed and created Sanitary Sewer GIS project for Ft Lauderdale

7,500 acre Topographic Survey of Grassy Waters Preserve in West Palm Beach

2016-2017 Managed and created Storm Sewer GIS project for Ft Lauderdale (25,000 acres)

2014-15 Managed Conversion Water & Sewer System from AutoCAD to ArcGIS for North Miami Beach covering 42 Land Sections (25,000 acres)

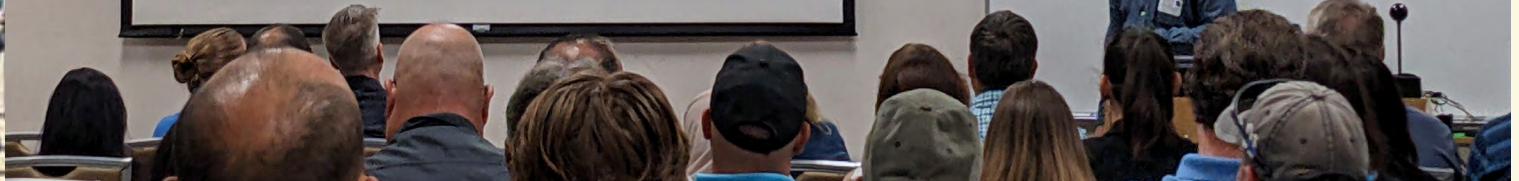
2010 Forensic Laser scanning the Collapsed Garage at Miami-Dade College (4 people killed)

2009-10 Comprehensive Utility GIS, Storm Water Master Plan for Port Everglades, including GPS, Survey, Engineering and GIS

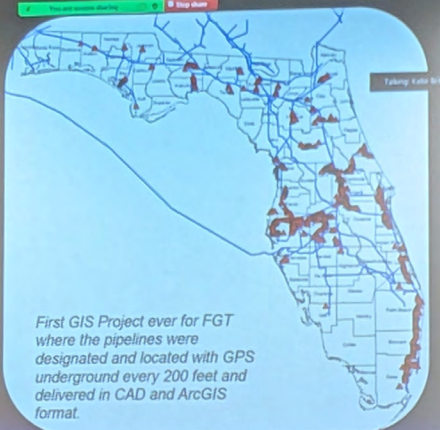
1999-2000 Managed and Created 827 mile GIS of all Class 3 & 4 Natural Gas Pipelines in 46 Counties in Florida for Florida Gas Transmission, (Enron)

1996-2004 Surveyor and GIS Specialist Subcontractor to BC Property Appraiser GIS Parcel Mapping for 8 years

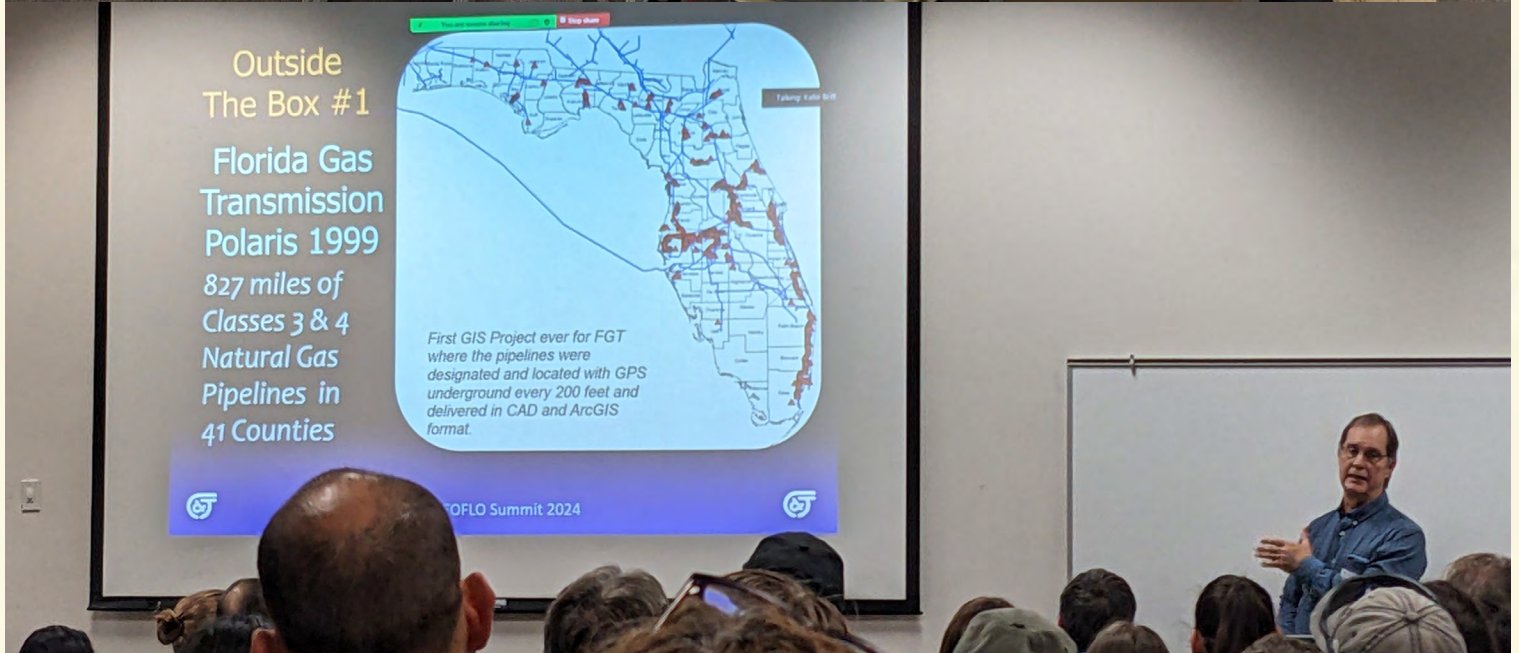
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Classes 3 & 4
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41 Counties



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HYDROGRAPHIC SERVICES REVIEW PANEL

A federal advisory committee, advising the NOAA Administrator

The U.S. Geodesy Crisis

The current decline in the geodetic capacity in the United States is at a crisis point that is a threat to our economy, international competitiveness and national defense. The current shortage of practicing geodesists, the number of students in the pipeline to become geodesists, and the reduced number of U.S. geodetic academic programs directly undermines the essential role NOAA's National Geodetic Survey (NGS) plays in accurate positioning services nationwide. It more broadly affects any NOAA program that relies on the fundamental geospatial framework, and in particular the programs of the Office of Coast Survey (OCS) and Center for Operational Oceanographic Products and Services (CO-OPS).

In January 2022, the American Association of Geodetic Surveying posted on its website a white paper authored by prominent non-governmental subject matter experts addressing the issue titled "[The Geodesy Crisis: America's loss of capacity and international competitiveness in geodesy, the economic and military implications, and some modes of corrective action](#)".

This paper lays bare the need to take immediate action because it takes time to:

- Train geodesists at the remaining geodetic-related academic programs in the U.S.
- Expand the number of geodetic and geomatic programs in the U.S. and populate the programs with students.

What is geodesy and why is it important that the U.S. gains leadership in geodesy-related research and training?

Geodesy is the science of measuring and monitoring the size and shape of the Earth and the location of points on its surface. Without geodesy, the Global Positioning System and other Global Navigation Satellite Systems will not operate properly. Geodesy is the foundation science that supports all navigation, surveying, mapping, timing, geographic information systems, and numerous other activities. This doesn't include the critical role of geodesy to support our troops and the defense of our country.

Geodesy Crisis Impact to the United States

Geodesy underpins most military platforms and systems. If the U.S. geodesy crisis is not resolved, the U.S. government, industry and academia will be unable to compete with Europe, let alone China, in geodesy and geodetic technology. This loss of competitiveness threatens our national security and will cause a dramatic reduction of America's share of the more than \$1 trillion per year geospatial economy. The most immediate threat to geodesy in America is the loss of academic training capacity. Without immediate and sustained industrial-scale investment in basic research and graduate training, the few remaining geodesy programs around the country will shrink rather than grow, and America will no longer be able to train itself out of the crisis. The loss of competitiveness would then become permanent.

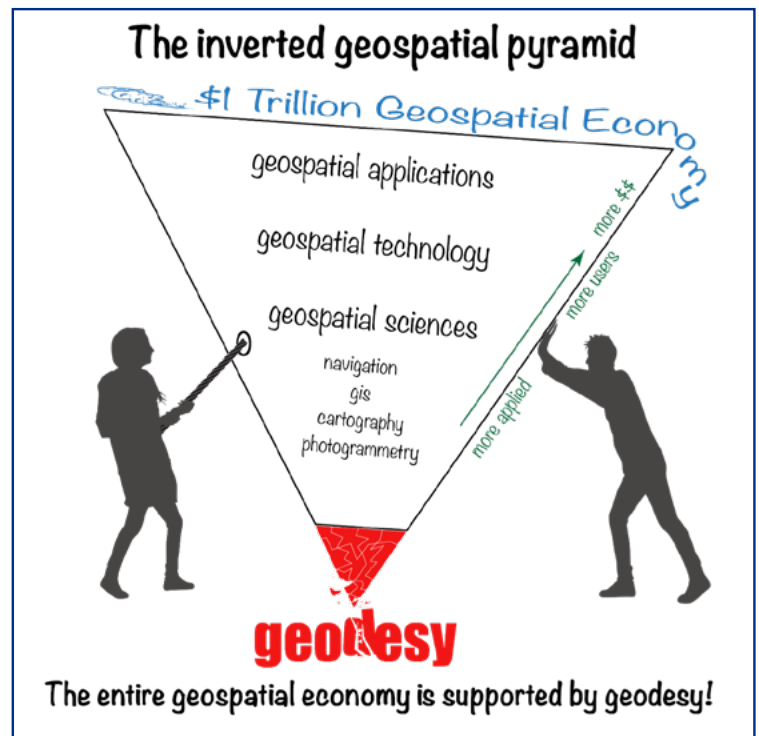


Image credit: Dana Caccamise II

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Current U.S. government agency activities related to the Geodesy Crisis

To address the difficulty filling critical technical geodesy positions with qualified U.S. citizen applicants, leadership from NGS, the National Geospatial Intelligence Agency (NGA), and the National Aeronautics and Space Administration (NASA) have formed the Geodesy Community of Practice. Together these agencies are developing a multi-pronged strategy to increase collaboration and coordination on geodesy education, training, research, fieldwork, and funding opportunities to rebuild the geodesy tradecraft pipeline. Under recent funding levels, NGS' ability to implement many of the recommendations from this group will remain severely limited. In FY 2023, NGS was funded to award ~\$4 million in [Geospatial Modeling Grants](#) which now provides NGS a direct mechanism to address the crisis, as long as it continues to be funded in the appropriations process into the future.

Why do we have a Geodesy Crisis?

Since the 1990's, U.S. academic programs have reduced focus on geodetic academic research and graduate training in geodesy due to a significant decrease in government funding and associated perceived lack of interest. While the U.S. was reducing geodesy-related research and training, China was dramatically increasing funding and activities in geodesy research and training.

Recommendations for NOAA Action:

- Join the other government leaders and academia in raising the geodesy crisis to the highest level of government to warn of impacts to national security and economic growth.
- Advocate for the designation of geodetic infrastructure as national Critical Infrastructure.
- Support increased investment in the Geospatial Modeling Grants that promote and increase academic and government relationships, training and research activities in geodesy, surveying and related geospatial areas, and rebuild the pipeline for students to follow a geodesy and geomatics career path.
- Sponsor early and mid-career academic training, details, internships, and research work in geodesy and geomatic fields.
- Promote the modernized National Spatial Reference System (NSRS) and communicate the value of an updated, consistent, national coordinate system to support mapping, charting, navigation, infrastructure development, floodplain analysis, resource evaluation surveys, and many other scientific and management applications.
- Endorse requirements for U.S. government agencies to adopt the NSRS for all geospatial data and transition to the modernized NSRS expeditiously upon release.
- Encourage the adoption of the modernized NSRS by state, regional, local and tribal governments as well as the private sector and academia, to make their geospatial data more readily interoperable with government data.
- Proactively engage with national and international geospatial Standards Working Groups, such as the Federal Geospatial Data Committee and International Organization for Standardization to help ensure that the benefits of the modernized NSRS and advances in geodesy are applied to improve socio-economic, environmental, ecological, intelligence, and military programs.

In October 2003, Secretary of Commerce Don Evans established the HSRP as directed by the Hydrographic Services Improvement Act of 2002, Public Law 107-372. Panel members, appointed by the NOAA Administrator, include a diverse field of experts.

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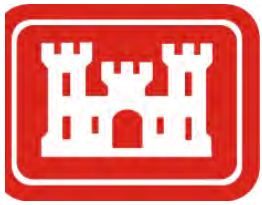
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CHAPTER TWELVE

The “Ultimate Hammer”: Dexter Lehtinen’s Lawsuit

Litigation was part of the political mix in South Florida water management as early as the nineteenth century. But when the United States brought suit against the SFWMD in 1988 it raised litigation to a new level, initiating one of the largest environmental lawsuits in American history. The suit pitted federal and state agencies against each other, pushed agricultural organizations to harden their position against environmental remediation, incited environmental organizations to vilify Big Sugar, and alienated the people who were nearest to the geographic center of it all, the Miccosukee Tribe. For all of the turmoil that it caused, however, the suit raised awareness and compelled action. It laid the foundation for the broad consensus approach that would triumph at the end of the century in Congress’s billion-dollar blessing of the Comprehensive Everglades Restoration Plan. To people who worked on Everglades issues and were inured to litigation, the suit that began in 1988 would long be known as “the Big One,” or simply as “Dexter Lehtinen’s lawsuit.”¹

Dexter Lehtinen, raised in Homestead, Florida, in the 1950s, knew the Everglades as a place of tranquility and boyhood innocence. During the Vietnam War, Lehtinen volunteered to serve in the U.S. Special Forces as a paratrooper and ranger. Gravely wounded while leading his platoon on reconnaissance during the invasion of Laos in 1971, he bore a deep scar on his left cheek afterwards – a “trademark,” journalists would later write, of his fiery, combative public persona. Returned from the war, he went to Stanford Law School and graduated at the top of his class. In the 1980s, he entered Florida politics, serving one term in the House and one in the Senate. As a state senator, Lehtinen switched from the Democratic to the Republican Party after marrying a Republican colleague – Ileana Ros – thereby attracting the attention of Republicans at the national level. In 1988, he was appointed the U.S. Department of Justice’s top attorney in South Florida. The Reagan administration picked Lehtinen for the prominent position of U.S. attorney in Miami because they saw a man who would increase efforts in the drug war. Said former Associate Attorney General Frank Keating, he was “the brightest, toughest, meanest scrapper we could find.” Lehtinen immediately grabbed attention by trying to assume the lead role in prosecuting former Panamanian dictator and drug lord General Manuel Noriega. Lehtinen further made news by carrying a plastic AK-47 as a symbol of his aggressive attack on drugs and by publicizing his office’s new motto, “No Guts. No Glory.”² He received the nickname “Machine Gun.”³

Lehtinen was also passionate, if less demonstrative, about protecting the environment. Soon after taking office he arranged a meeting with Michael Finley, the superintendent of Everglades National Park, who, since his arrival in 1986, had become very concerned about the quality of water entering the park. The problem, as Finley discovered, was that EAA farmers – primarily sugar growers – used nitrate and phosphate fertilizers to stimulate their crops, and these nutrients became absorbed in the runoff that ultimately flowed into the water conservation areas and then into the park. Because of the influx of nutrients, the water conservation areas (especially

Loxahatchee National Wildlife Preserve, which adjoined the EAA) and the canals transmitting the water were choked with cattails and algae that prevented sunshine from reaching underwater plants, creating stagnant, oxygen-depleted waterbodies. Although Everglades National Park had so far experienced few of these problems, Finley realized that it was only a matter of time. “It’s like a cancer,” he told *Time* magazine, “and the cancer is moving south.”⁴

After meeting together in 1988, both Lehtinen and Finley saw an opening to combat this agricultural pollution of South Florida waters. The state, under its five water management districts (including the SFWMD), was chiefly responsible for regulating water quality. Since the water entering the conservation areas and the park was, in the opinion of Lehtinen, Finley, and other park officials, of poor quality, the state had obviously failed to fulfill its mission, opening itself to litigation for damages done to Loxahatchee National Wildlife Refuge and Everglades National Park.⁵

Lehtinen and Finley relied on the work of Ron Jones, a microbiologist at Florida International University, for their evidence. Jones, described by one journalist as “a nerdy young [man] who was a devout adherent of an Amish-style sect called Apostolic Christianity, and believed God had sent him to Florida to save the Everglades,” conducted studies that convinced him that any phosphorous amounts over 10 parts per billion would destroy the Everglades ecosystem by, among other things, transforming sawgrass swaths into areas choked with cattails – “the markers on the grave of the Everglades,” according to Jones.⁶ Phosphorous also killed periphyton, a food source for fish and snails that are then consumed by birds, disrupting the food chain. Yet phosphorous-rich runoff continued to pour into the Everglades, making it oligotrophic and poisoning it to death. Only by reducing phosphorous amounts to 10 parts per billion, Jones argued, could any healing begin.⁷



Periphyton. (Source: South Florida Water Management District.)

When the SFWMD released a first draft of its SWIM plan for protecting the water quality of Lake Okeechobee, Lehtinen and Finley had a clear target for their lawsuit. Although there was no direct federal interest in Lake Okeechobee, the SWIM plan clearly had ramifications for waters draining into Loxahatchee National Wildlife Refuge and Everglades National Park, two federal areas. In Lehtinen’s and Finley’s view, the draft SWIM plan would not reduce phosphorus levels quickly or drastically

enough to protect the federal areas from the contaminated sheet flow emanating from Lake Okeechobee. Therefore, the lawsuit would ask the U.S. district court in Miami to maintain its jurisdiction until the state agencies developed an adequate plan. In other words, the suit would force the state to take a tougher stand against polluters, particularly the sugar industry.⁸

Finley had been searching for solid ground for a lawsuit against the state for the previous two years, consulting with legal counsel in the Natural Resources Defense Council and the Sierra Club, and later assigning members of his staff to develop causes for action. But it was Lehtinen who finally crafted the complaint. Legal scholar William H. Rodgers, Jr., has written that the lawsuit, entitled *United States v. South Florida Water Management District and Florida Department of Environmental Regulation, et al.*, was “brilliantly conceived” and “one of the most creative contributions in the history of modern environmental law.”⁹ The complaint contained five counts. The first and second counts held that the damage to natural vegetation in the Loxahatchee National Wildlife Refuge and Everglades National Park – which the state was allowing to happen by not enforcing water quality regulations – violated state law and the public trust doctrine because it was destroying federal property. The third count alleged a breach of contract: the National Park Service had contracted with the SFWMD to have water of a certain quality delivered to the park and the SFWMD had not complied. The fourth count maintained that the excessive water-born nutrients entering the park constituted a nuisance under common law and riparian water rights, while the fifth held that the state’s actions violated the National Park Service Organic Act, which provided that parks would be preserved in an unimpaired condition for future generations.¹⁰

The strength of the lawsuit was that it claimed that the state failed to enforce its own water quality standards, in particular the narrative standard for high quality waters as defined in the Florida Administrative Code. For so-called Class III waters, the code stated that “in no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna.” Although experts disagreed on the precise causes for the changes in natural vegetation, water quality was clearly involved. Thus, in the eyes of many environmentalists, Lehtinen’s nuisance theory was practically irrefutable, and the litigation came to focus on nutrient loading as the keystone pollutant that altered natural conditions in both the refuge and the park.¹¹

But to state lawyers and administrators, a bitter irony existed in the lawsuit: the C&SF Project – the pollution delivery system – was largely a federal project. As Keith Rizzardi, an attorney for the SFWMD, later wrote, “The federal government sued the State of Florida and the Water Management District for the consequences of operating the flood control project that the United States had helped to design and build.”¹² The lawsuit simply sidestepped the federal interest in the C&SF Project, focusing instead on the federal interest in conservation lands. Lehtinen’s client in this case was the Department of the Interior, not the Corps of Engineers.

In a similar vein, the agricultural interests declared that the state had developed its water quality standards under the aegis of a federal statute, the Clean Water Act, in cooperation with the federal enforcing agency, the Environmental Protection Agency. There was no legal precedent, they observed, for using the Clean Water Act to control non-point-source pollution. Since the Biscayne aquifer lay just beneath the ground surface in South Florida, non-point source pollution was ubiquitous in that region. Agricultural interests contended that the Clean Water Act did not create a federal right to sue the state over how it was managing non-point-source pollution, but Lehtinen’s litigation took the opposite view, one of the first lawsuits to do so.¹³

Lehtinen filed the lawsuit on 11 October 1988, one day after the SFWMD released its draft SWIM plan for Lake Okeechobee. The SFWMD acknowledged in the plan that phosphorus

levels in the lake had increased by more than two and a half times since the early 1970s, and it recommended that the phosphorus concentration be reduced by at least half. According to the lawsuit, this was not good enough. Phosphorus levels in Lake Okeechobee had reached approximately 120 parts per billion (ppb), and ran as high as 200 ppb in the runoff from the EAA. By contrast, ambient levels of phosphorus in park waters were about 10 ppb. The lawsuit therefore highlighted the need for an Everglades SWIM plan in order to reduce nutrient levels to an amount that would not harm park resources.¹⁴

Lehtinen had other reasons for filing the lawsuit when he did. According to Finley, he and the U.S. attorney waited for Governor Martinez to endorse the proposed Everglades National Park Protection and Expansion Act, anxious that the litigation should not derail that effort. Perhaps, too, Lehtinen waited because he doubted whether the Reagan administration would support such a headlong legal battle with the sugar industry in Florida. By October, Vice President George H. W. Bush was in the final heat of his presidential campaign, castigating the Democratic Party nominee, Massachusetts Governor Michael S. Dukakis, for his failure to clean up Boston Harbor. The U.S. Justice Department would hardly be able to back away from a lawsuit aimed at protecting the Everglades. Regardless, Lehtinen filed the lawsuit without consulting his superiors at “Main Justice” in Washington.¹⁵

Because Finley had been working closely with Governor Martinez on the matter of expanding the boundaries of Everglades National Park, the superintendent wanted to maintain a good relationship. Therefore, immediately after Lehtinen filed the suit, Finley telephoned Martinez so the governor would not have to discover the action in the newspapers. Finley tried to inform Martinez gently, using the bad-news, good-news formula. “What could possibly be the good news?” the governor responded when he was told that his state and the water management district were being sued by the United States. The good news, Finley replied, was that the suit did not name the governor personally.¹⁶

Martinez issued a statement on the lawsuit the following day. He listed various initiatives he had taken as governor for the protection of Florida’s environment. He was proud of what his administration had accomplished, he said, and it would do more in the future. “While I have not seen the federal lawsuit and cannot comment on it at this time,” he said, “I welcome the efforts of anyone who chooses to join in our efforts to protect one of the world’s unique environmental resources.”¹⁷



An employee of the SFWMD conducting sampling for water quality studies. (Source: South Florida Water Management District.)



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Despite Martinez's spirit of turning the other cheek, the litigation was politically charged from the outset, and it grew more politicized as various interest groups lined up on either side. The governing board of the SFWMD immediately hired outside counsel to assess the implications of the lawsuit. Vice Chairman James Garner persuaded Governor Martinez that he should request the Department of Justice to drop the suit. They flew to Washington and met with Attorney General Richard Thornburgh. According to another board member, Nathaniel Reed, who strongly opposed this move, Thornburgh told the governor, "I do not force my U.S. attorneys to drop lawsuits." If Martinez felt that the state was being unjustly sued, Thornburgh continued, he should prepare a good defense. Reed recollected that the lawsuit divided the SFWMD's governing board, as members like Reed contended that the district needed to listen more assiduously to its own scientists and agree to more stringent pollution controls, while others urged the state to spend enormous sums on legal defense so as to defeat the lawsuit without taking any action.¹⁸ "There has to be a change," Reed insisted, while board member Doran Jason retorted, "If [Lehtinen] wants to fight, let's go ahead."¹⁹

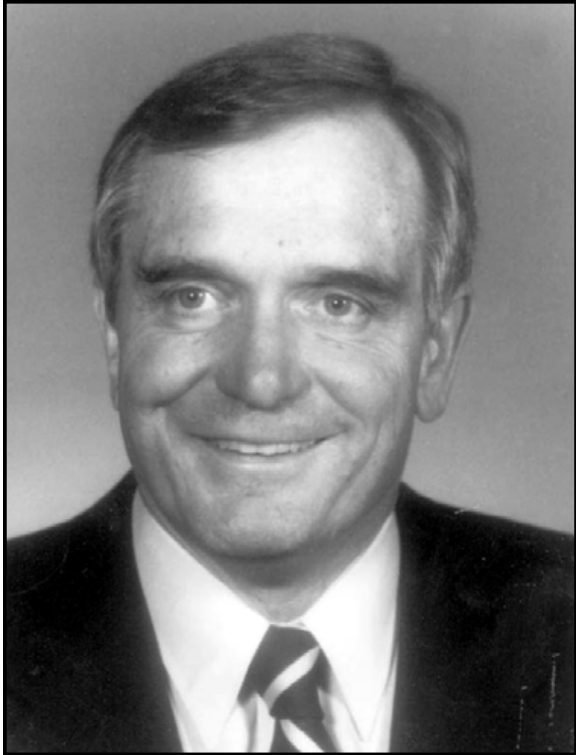
Meanwhile, the U.S. Army Corps of Engineers' reaction to the lawsuit was mixed. Colonel Terrence "Rock" Salt, who became District Engineer of the Jacksonville District in 1991, claimed that the lawsuit was useful for bringing about stronger environmental protections, but he also recognized the unprecedented strain it placed on the Corps' historic partnership with the SFWMD. The action put the Corps between the SFWMD and the National Park Service, two agencies with which it had long enjoyed close, if sometimes contentious, relationships. The Corps staff was conflicted about the litigation, with some division managers approving it and others opposing it. Legal counsel in the Jacksonville District were cautiously supportive, supplying documents upon request by the Justice Department, preparing its experts for deposition, but never offering advice on litigation strategy.²⁰

In the Justice Department, the lawsuit was not given high priority, and many attorneys were doubtful that Lehtinen could win the case. His legal arguments involving the Clean Water Act were unprecedented. Moreover, without strong backing from Washington, Lehtinen and his staff attorneys in Miami were soon outgunned. While the federal government assigned relatively few lawyers to the case, the state began to spend millions of dollars on legal fees. In the words of one publication, it "responded to the suit by hiring the most expensive lawyers it could find," eventually expending approximately \$6 million.²¹ In addition, the court granted the Florida Sugar Cane League and other agricultural interests intervention in the case in January 1991, allowing the sugar industry to supplement state efforts with its financial resources. The industry hired high-priced law firms in Miami, and these attorneys began to accumulate deposition after deposition of interminable testimony taken from experts on both sides. By the early 1990s, the lawsuit rivaled the litigation surrounding the *Exxon Valdez* oil spill as the most expensive environmental litigation ever seen.²²

U.S. Senator Lawton Chiles (D-Florida) made the litigation expense a campaign issue when he ran for Florida's governorship in 1990. Chiles argued that the millions of dollars Governor Martinez was spending on legal fees would be better spent on working with the federal agencies to solve the problem. Chiles promised not only to settle the lawsuit, but he also declared that cleanup of the water flowing into the Everglades would be his top environmental priority. In the November election, Chiles defeated Martinez, but it is unclear how much of a deciding factor the

Everglades lawsuit played in the outcome. Nevertheless, in fulfillment of his campaign promise, Chiles made settlement of the Everglades lawsuit his “Number 1 Environmental Priority,” assigning Carol Browner, secretary of the Department of Environmental Regulation, to oversee the negotiations.²³

Encouraged by the change in administration, a number of environmental organizations began to urge a negotiated settlement, and commenced work in that direction.²⁴ Also influential was Richard Stewart, assistant attorney general for the Bush administration, who had formerly worked as a lawyer specializing in environmental lawsuits against copper smelters. Stewart,



Governor Lawton Chiles, who “surrendered his sword.” (Source: The Florida Memory Project, State Library and Archives of Florida.)

described by one observer as “pompous, well organized, and conniving,” in contrast to Lehtinen, who was “down-to-earth, frantic, and candid,” organized federal agencies responsible for the South Florida ecosystem and got them to submit unified comments on the Everglades SWIM Plan developed by the SFWMD, decrying the destruction that had taken place to the environment.²⁵

This united front helped convince Governor Chiles that continuing a defense in the lawsuit was fruitless. Accordingly, on 20 May 1991, in a bit of political theater that Everglades hands would recount for years afterwards, Governor Chiles walked into the federal courthouse in Miami and appealed directly to Judge William Hoeveler to end the litigation. “I am ready to stipulate today that water is dirty,” Governor Chiles declared. “I am here and I brought my sword. I want to find out who I can give that sword to and I want to be able to give that sword up and have our troops start the reparation, the clean up. . . . We want to surrender. We want to plead that the water is dirty. We want the water to be clean, and the question is how can we get it the quickest.”²⁶ A few weeks later, the Florida Department

of Environmental Regulation filed papers with the court agreeing that water going into the conservation areas and into Everglades National Park contained excessive amounts of nutrients. Department Secretary Carol Browner explained why both Chiles and the state took these actions. “The real challenge for everyone concerned,” she noted, “is to stop pointing fingers to prove who is at fault and get on with the cleanup.”²⁷

Although environmentalists lauded Chiles and the state, some in the sugar industry were not pleased, especially since they believed that the state had a sound defense against Lehtinen’s allegations. Chiles did not “want to have an albatross of a lawsuit, so he waltzed into federal court [and] surrendered his sword,” Barbara Miedema, vice-president of communications for the Sugar Cane Growers Cooperative of Florida, stated in her characterization of the situation. This action, according to George Wedgworth, founder and president of the Sugar Cane Growers Cooperative, “forfeited our interests.”²⁸

The sugar industry's preferences notwithstanding, Chiles' action set in motion a more intense period of negotiations, and in July 1991, the Florida Department of Environmental Regulation, the SFWMD, and the U.S. Department of Justice reached a settlement. In the resulting 30-page "Settlement Agreement," a landmark document, the parties defined the problem, articulated a set of remedial solutions, and specified dates in the future by which certain goals had to be met. It began with a set of definitions, including item "F," which defined "imbalance in natural populations of flora and fauna" as "situations when nutrient additions result in nuisance species." Such circumstances included

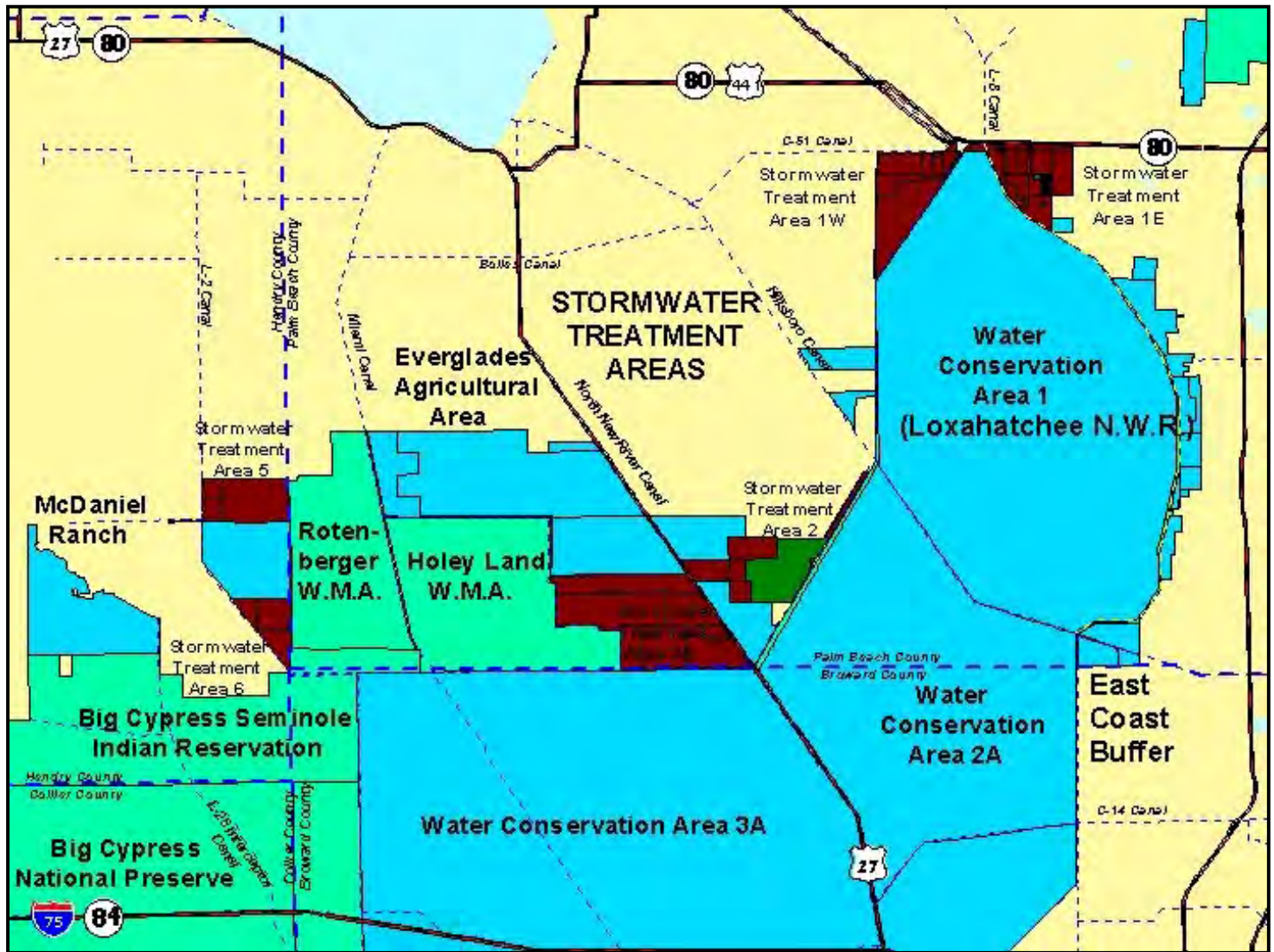
replacement of native periphyton algal species by more pollution-tolerant algal species, loss of the native periphyton community or, in advanced stages of nutrient pollution, native sawgrass and wet prairie communities giving way to dense cattail stands or other nutrient-altered ecosystems, which impair or destroy the ability of the ecosystem to serve as habitat and forage for higher trophic levels characteristic of the Everglades.²⁹

With "imbalance" of natural systems defined, the document proceeded to describe the problem, drawing a link between the phosphorus-loaded water flowing out of the EAA and the nutrient-lean (oligotrophic) natural condition of the Everglades ecosystem. The following statement carried unusual weight because it was prefaced by "the Parties agree" and it concluded with the freighted term "imbalances":

Excess phosphorus accumulates in the peat underlying the water, alters the activity of microorganisms in the water, and disturbs the natural species composition of the algal mat (periphyton) and other plant communities in the marsh. These disturbed communities deplete the marsh of oxygen, and, ultimately, result in native sawgrass and wet prairie communities being replaced by dense cattail stands or other nutrient-tolerant ecosystems. The ability of the ecosystem to serve as habitat and forage for the native wildlife is thereby greatly diminished or destroyed. These changes constitute imbalances in the natural populations of aquatic flora and fauna or indicators of such imbalances.³⁰

Following the sections on definitions and background, the document contained 20 more numbered paragraphs, of which three were especially important. In Paragraph 7, the parties agreed that phosphorus concentrations in waters entering Everglades National Park would be reduced to amounts that would prevent an imbalance of flora and fauna. In general, the objective was to obtain prescribed concentration limits for Shark River Slough and Taylor Slough in two stages, with "interim concentration limits" met by 1 July 1997 and "long-term concentration limits" by 1 July 2002. Target levels were tied to "baseline" amounts measured in 1978 and 1979. These levels, expressed in parts per billion (ppb), were set forth in Appendix A of the Settlement Agreement. The amounts varied to take into account wet and dry cycles, but reflected an overall target of about 10 ppb. Paragraph 8 of the Settlement Agreement established similar goals for water discharged from the EAA into the Loxahatchee National Wildlife Refuge. Target levels for this area were set forth in Appendix B.³¹

Paragraph 10 committed the SFWMD to develop stormwater treatment areas (STAs). The agreement identified STAs as "the primary strategy to remove nutrients from agricultural runoff." Construction and operation of these giant water filtration plants would constitute the primary remedial action, and, as such, they would become the focus of much further debate over the next decade. The district was to purchase land for the STAs, design the structures, and build them (the agreement was later amended to commit the Corps to this task as well). Initially, the



Stormwater Treatment Area 2. (Source: South Florida Water Management District.)

SFWMD was to construct four STAs, and if these did not sufficiently reduce phosphorus concentrations coming from the EAA, the district would acquire more acreage and build additional facilities. The location and size of the four STAs and the basins that each STA would serve were stipulated in a table, with further specifications detailed in Appendix C. In addition to the STAs, the Florida Department of Environmental Regulation agreed to regulate agricultural discharges by a regulatory permit system. The STAs and the permits together were expected to reduce phosphorus loading by 80 percent.³²

But the Settlement Agreement was not the only result of Lehtinen's lawsuit. In May 1991, the Florida legislature had also passed unanimously the Marjory Stoneman Douglas Everglades Protection Act, which specifically dealt with water quality in the conservation areas and Everglades National Park. The law declared that it was the state's imperative to preserve and restore the Everglades Protection Area, which it defined as the Loxahatchee National Wildlife Refuge, the other water conservation areas, and the park, and it required the SFWMD to develop specific programs to protect and restore the Everglades. In addition, the act mandated tougher objectives for incorporation into the draft Everglades SWIM plan, including the development of

STAs and the implementation of a permit system for discharges into waters managed by the district.³³

In February 1992, Judge Hoeveler approved the Settlement Agreement, entering it as a consent decree. The judge noted that its “ambitious plan” essentially implemented what the state had set forth in the Marjory Stoneman Douglas Everglades Protection Act. Indeed, the only real differences were that the agreement delineated additional specificity for schedules and it imposed an administrative process rather than a result.³⁴ This administrative process was based on interagency cooperation and consensus, achieved through a Technical Oversight Committee. This committee consisted of five members representing Everglades National Park, the Loxahatchee National Wildlife Refuge, the Florida Department of Environmental Regulation, the SFWMD, and the Corps. It had the responsibilities of planning, reviewing, and recommending all research pursuant to the Settlement Agreement, and it was supposed to operate under a consensus approach, defined as a four out of five majority. In the absence of a consensus decision, parties could seek arbitration.³⁵

Although the entering of the Settlement Agreement as a consent decree supposedly ended the litigation, it continued, in large part because some entities were not happy with the arrangement. The Florida Cane Sugar League and other agricultural interests, for example, appealed the court order approving the settlement. Likewise, in the spring of 1992, following the SFWMD’s Governing Board’s approval of the final Everglades SWIM Plan (which, to no one’s surprise, mirrored the requirements in the Everglades Protection Act and the Settlement Agreement), more than 30 agricultural cooperatives and corporations brought suit against the SFWMD. Several of these entities, mostly representing the sugar industry, petitioned for administrative proceedings to determine the legality of the Everglades SWIM Plan. The petitioners argued that the SFWMD, in refusing to disclose technical information that had been used in the settlement process and in developing the Everglades SWIM Plan, had violated the Florida Administrative Procedures Act. The petitions went to the Division of Administrative Hearings, which consolidated them into three cases. The Florida Department of Environmental Regulation, the United States, the Miccosukee Tribe, and certain environmental organizations moved to intervene in the litigation, and the Florida Division of Administrative Hearings granted all these motions for intervention.³⁶ As Carol Browner, secretary of the Department of Environmental Regulation derisively explained, “We get sued every day by sugar. I call it ‘suit du jour.’”³⁷

Referring to these challenges, Deputy Assistant Attorney General Myles Flint later explained to Congress that “relaxed rules of evidence and procedure and a plenary grant of jurisdiction governed these proceedings,” so that despite efforts by the state and federal agencies to stand by the Settlement Agreement and Consent Decree, “the administrative challenges became protracted and complicated, with voluminous discovery.” Not only did this renewed litigation cause further delays and expense, it threatened to undermine the consensus approach fashioned in the Settlement Agreement and Consent Decree as agricultural interests took one side while the Miccosukee Tribe and environmental organizations closed ranks on the other.³⁸

Indeed, even though the Miccosukee had not participated in the water quality suit, the tribe, whose reservation lands were affected by quality issues, still had an interest in the proceedings. Lehtinen and his staff had carefully framed the lawsuit so that it neither embraced nor prejudiced tribal interests, but once a settlement was reached the tribe did not want to be left out of the

remediation effort. It therefore filed a motion to intervene in the case and attain status as a party to the Settlement Agreement. U.S. attorneys, however, were concerned that the tribe's move might jeopardize the agreement. Following negotiations, the tribe withdrew its motion to intervene in return for a Memorandum of Agreement with three Interior Department agencies: the NPS, the FWS, and the Bureau of Indian Affairs. This memorandum, dated 1 November 1991, pledged that the Interior Department would provide the tribe with results and data of all studies relating to water quality in the Everglades, allow the tribe to attend Technical Oversight Committee meetings as an interested non-member, and consult with the tribe on the Department's position prior to such meetings. For its part, the tribe agreed to give the Department notice before taking any further actions in court with regard to the Settlement Agreement.³⁹



Cattails, “the markers on the grave of the Everglades.” (Source: South Florida Water Management District.)

Meanwhile, even though agricultural interests continued fighting the Settlement Agreement and Consent Decree in court, Lehtinen's role in the lawsuit had just about run its course. His superiors in Washington had lost patience with his renegade spirit, while many of his staff attorneys in Miami had had enough of his autocratic management style. More importantly, the Justice Department now wanted to preserve the fragile consensus that the Settlement Agreement produced, even though it was seemingly teetering on a precipice. Toward the end of 1992, Lehtinen quit his office as U.S. attorney in Miami, leaving behind a staff that was deeply divided and isolated from the rest of the Justice Department.⁴⁰

Lehtinen was far from through with Everglades litigation, however. Less than a year after resigning from the Justice Department, he went to work for the Miccosukee Tribe. As the tribe's attorney, Lehtinen would file suit against the United States in 1995, initiating another phase in the Everglades litigation. For Lehtinen's detractors, the volatile attorney's new championship of the Miccosukee Tribe appeared self-serving, perhaps even vengeful. “You have to be careful, because Dexter is like gasoline,” complained one federal official.⁴¹ But by then,

Lehtinen was no longer calling the shots. The Miccosukee Tribe was making its own decisions and Lehtinen was merely its agent. He would continue to make himself heard on Everglades issues, but henceforth he would be at the edge of the process rather than at the center of it, accusing the federal government of selling out the Everglades and his client, the Miccosukee

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Tribe, to the wealthy corporations that had an economic stake in polluting the waters of South Florida.⁴²

In a similar way, Lehtinen's lawsuit continued. Although the Everglades Forever Act of 1994, discussed in Chapter 14, brought some resolve to the litigation – in that it appeased the sugar industry, which called it a “far better, more comprehensive solution than the settlement agreement” – later amendments to that act would be the subject of additional appeals and contentions. In the initial years of the twenty-first century, *U.S. v. South Florida Water Management District* remained active, although under the jurisdiction of Judge Federico A. Moreno.⁴³ To Michael Finley, this was a good thing. “The court still has jurisdiction,” he stated in a 2004 interview, “which is the ultimate hammer over the state and the South Florida Water Management District.”⁴⁴

The lawsuit that Dexter Lehtinen instigated in 1988, then, was not a happy affair. It sharpened differences among all stakeholders in South Florida's water resources and drove wedges between federal and state agencies that had long labored to work cooperatively and share information with one another. As Estus Whitfield, environmental adviser to both Governor Martinez and Governor Chiles maintained, “the lawsuit set back the restoration efforts substantially” by “pitt[ing] everybody against everybody else.” “That is not the formula for getting something done,” Whitfield contended. “That is the formula for fussing and fighting and going nowhere.”⁴⁵

Yet in other ways, the lawsuit was a necessary instrument of change. The cost of litigation – both in monetary terms and in the toll it took on people's lives – drove many diverse interests to seek consensus as an alternative to fighting and gridlock. At the same time, it jarred Florida into taking action to restore water quality to the Everglades. “Without litigation,” Nathaniel Reed contended, the SFWMD “never would have been able to persuade the taxpayers and the sugar industry that steps had to be taken to control the pollution of the Everglades marsh.”⁴⁶ Indeed, the litigation brought about four specific actions that established a foundation for environmental mitigation efforts in the 1990s: the Marjory Stoneman Douglas Everglades Protection Act, the Everglades SWIM Plan, the Settlement Agreement, and the Consent Decree. Viewed in retrospect, the lawsuit was a major turning point in the long, complicated, and arduous transformation of the C&SF Project from a system designed primarily for flood control and irrigation to one bent toward ecosystem restoration and the preservation of a sustainable environment.

Chapter Twelve Endnotes

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² All quotations in Rebecca Wakefield, “Lehtinen for Mayor,” *Miami New Times*, 22 May 2003; see also James Carney, “Last Gasp for the Everglades,” *Time* 134 (25 September 1989): 27.

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⁴ As quoted in Carney, “Last Gasp for the Everglades,” 27.

⁵ Finley interview, 2.

⁶ Both quotations in Grunwald, *The Swamp*, 284-285.

⁷ Michael Grunwald, “Water Quality is Long-Standing Issue for Tribe,” *The Washington Post*, 24 June 2002.

⁸ Keith Rizzardi, “Translating Science into Law: Phosphorus Standards in the Everglades,” *Journal of Land Use and Environmental Law* 17 (Fall 2001): 151; “Everglades Water Threatened,” *Engineering News-Record* 221 (27 October 1988): 16.

⁹ Rodgers, “The Miccosukee Indians and the Environmental Law,” 10918.

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¹⁴ South Florida Water Management District, “Draft Interim Surface Water Improvement and Management (SWIM) Plan for Lake Okeechobee,” 10 October 1988, 19, File Okeechobee S.W.I.M. Plan (SFWMD) – 1988, Box 1, S1497, Department of Agriculture and Consumer Services, Surface Water Improvement and Management Plan Files, FSA, 19; Rizzardi, “Translating Science into Law,” 151; “Everglades Water Threatened,” 16.

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¹⁷ “For Your Information,” 12 October 1988, File Everglades, Box 88-02, S1331, Executive Office of the Governor, Brian Ballard, Director of Operations, Subject Files 1988, FSA.

¹⁸ Nathaniel Reed interview by Julian Pleasants, 18 December 2000, 22, Everglades Interview No. 2, Samuel Proctor Oral History Program, University of Florida, Gainesville, Florida [hereafter referred to as Reed interview].

¹⁹ As quoted in Carney, “Last Gasp for the Everglades,” 27.

²⁰ Brady interview, 2.

²¹ Norman Boucher, “Smart as Gods: Can We Put the Everglades Back Together Again?” *Wilderness* 55 (Winter 1991): 18.

²² Brady interview, 2; Michael Satchell, “Can the Everglades Still Be Saved?” *U.S. News & World Report* 108 (2 April 1990): 24; Wedgworth and Miedema interview, 5.

²³ Jim Lewis, “Key Environmental Accomplishments of the Chiles-McKay Administration,” 12 December 1991, File Environmental Issues, Box 5, S1824, Executive Office of the Governor Subject Files, 1991-1996, FSA.

Chapter Twelve Endnotes (continued)

²⁴ “Everglades Lawsuit and Cleanup,” undated memorandum, File Environmental Issues, Box 5, S1824, Executive Office of the Governor, Subject Files, 1991-1996, FSA. The environmental organizations were the Wilderness Society, Florida Audubon Society, and Environmental Defense Fund.

²⁵ Rodgers, “The Miccosukee Indians and Environmental Law,” 10923.

²⁶ As quoted in John J. Fumero and Keith W. Rizzardi, “The Everglades Ecosystem: From Engineering to Litigation to Consensus-Based Restoration,” *St. Thomas Law Review* 13 (Spring 2001): 674; see also Grunwald, *The Swamp*, 290-291.

²⁷ “DER Stipulates to Majority of Disputed Facts in Everglades Lawsuit,” Florida Department of Environmental Regulation Press Release, 10 June 1991, File Environmental Regulation, Box 5, S1824, Executive Office of the Governor Subject Files, 1991-1996, FSA.

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²⁹ *United States of America, et al., v. South Florida Water Management District*, Settlement Agreement, 26 July 1991, “Everglades Litigation and Restoration” <<http://exchange.law.miami.edu/everglades>> (25 August 2005) [hereafter referred to as Settlement Agreement].

³⁰ Settlement Agreement.

³¹ Settlement Agreement.

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³⁴ *United States of America, et al., v. South Florida Water Management District*, Consent Decree, 24 February 1992, File 1110-2-1150a Settlement Agreement, Case #88-1886-CIV-HOEVELER, Box 3977, JDAR.

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³⁶ SWIM Challenges, “Everglades Litigation and Restoration” <<http://exchange.law.miami.edu/everglades>> (29 August 2005). The following organizations petitioned: Sugar Cane Growers Cooperative of Florida; Roth Farms, Inc.; and Wedgworth Farms, Inc. (DOAH Case No. 92-3038); Florida Sugar Cane League, Inc.; United States Sugar Cane Corporation; and New Hope South, Inc. (DOAH Case No. 92-3039); Florida Fruit and Vegetable Association; Lewis Pope Farms; W. E. Schlechter & Sons, Inc.; and Hundley Farms, Inc. (DOAH Case No. 92-3040).

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FACES ON THE FRONTIER

FLORIDA SURVEYORS AND DEVELOPERS IN THE 19TH CENTURY

by Dr. Joe Knetsch

CHAPTER 12

CHARLES H. GOLDSBOROUGH

The process of surveying on an unknown frontier is difficult at best. The obstacles to be overcome are only to be guessed, the real or imagined “enemies” are sheer speculation and the securing of competent assistance is a variable to which there are no sure answers. In the frontier situation, these things can either mean disaster or fortune. To find your way into the great wilderness without some advanced knowledge of what lays ahead takes courage, skill and some luck. This is what faced almost every surveyor of the Florida frontier in the Territorial Period and later.

Not every surveyor or survey was successful. Some went broke and left the territory for greener pastures. Others tried their luck in the courts, and frequently lost! A few simply disappear from the written pages of history without much of a trace. These frontier tragedies were often played out, to the extent of a written record, in the correspondence of the Office of the Surveyor General of Florida. The reading of these old letters gives a valuable insight to the life of the frontier surveyor and the problems that faced them in attempting to bring order out of chaos. One such failed attempt was that of Charles H. Goldsborough whose three year struggle to survey the outer boundary of the Forbes Purchase ended in debt and humiliation.

The story of the Forbes Purchase is relatively well known to many in North Florida, however, a brief recapitulation is in order to help in

understanding the nature of Goldsborough's problems. In essence, the "Purchase" was little more than a collection of debts from various Indian groups that owed money to the firm of Panton and Leslie, the greatest of the trading companies operating in the South during the British and Second Spanish Periods of Florida's history (1776-1821). The trading partners had worked with the Indians (Creeks and Seminoles) for many years and had accumulated large amounts of credit from these tribes in exchange for goods sold at their various stores, especially those on the Apalachicola river. With the consent of the Spanish governor, the firm was allowed to receive tentative title to the lands recognized as belonging to these Indians in return for the cancellation of the debts. The company did not have full right to sell any of these lands without the consent of the Spanish authorities. The bulk of the transaction regarding the land took place in 1804.¹

¹John C. Upchurch, "Some Aspects of Early Exploration, Settlement, and Economic Development Within the Forbes Purchase," (Unpublished Masters Thesis, Florida State University, 1965), 10-11.

The Panton, Leslie and Company changed its name to John Forbes and Company shortly after the cession of lands had been made in 1804. To it went all of the rights and privileges that had formerly been granted to the Panton, Leslie and Company. As Indian debts continued to mount in those tenuous years, the company had to petition to the Spanish governor for additional lands in return for the further cancellation of debts. By 1811, most of the lands to be included in the final grant were ceded to the firm, including the famous grant of Forbes Island, seven miles in length and one in width. Title was confirmed to the company by the Spanish government toward the end of 1811. This grant, or "purchase," encompassed nearly one and one-half million acres of land stretching from the Apalachicola River to the St. Marks River and as far north as Little River in modern Gadsden County.²

²*Ibid*, 10-14.

The grant actually implied that the Forbes Island was included and Richard Keith Call argued against this inclusion of the island when the case was heard before the Supreme Court in 1835. Call's arguments against the grant being confirmed to the Forbe's interests included the concept that the

Indians did not own the land they gave in return for the dismissal of their debts (they belonged to the Crown), that the Spanish Governor of West Florida did not have the power to grant such lands and that the lands were in, technically, East Florida and out of the jurisdiction of the Governor of West Florida. An additional argument could have been made, as it was in the case of the second Forbes Grant, that the documents concerning the grant were fraudulent and therefore illegal. This was not forcibly argued in front of the Supreme Court and the documents produced by two visits to Havana were not admitted as evidence against the grant. When the ruling came down from Chief Justice Marshall, the island was included in the grant.³

³See William S. Coker and Thomas D. Watson, *Indian Traders of the Southeastern Spanish Borderlands: Pantón, Leslie & Company and John Forbes & Company, 1783-1847* (Gainesville: University Presses of Florida), 1986. 350-360.

The second Forbes Grant was to extend to the west beyond the St. Andrews Bay and include nearly as much land as the first grant. The Innerarity brothers, James and John, had fought in local court to have it confirmed on behalf of the investors in the Forbes Company, of which they were two of the largest. When Call made two trips to Havana, he found his suspicions confirmed of the fraudulent nature of the second grant and brought the evidence in front of the court, which ruled against the validity of the grant, especially since it had been made after the deadline called for in the Adams-Onís Treaty of January 24, 1818. The second grant was, therefore, annulled by the court's action.⁴

⁴*Ibid*

The litigation over the grant was finally decided in 1835, in the case of *Mitchel v. United States*. The original suit had been brought in 1828 by Colin Mitchel and others in the Superior Court of Middle Florida on behalf of Mitchel's firm, a Savannah based land investment house which included John Carnochan, James Innerarity, William Calder, Benjamin W. Rogers and others. The firm lost the suit in the lower court and appealed to the Supreme Court of the United States, which has jurisdiction in cases involving treaties, etc. The boundary of the grant was defined by the Court's final order and included the Forbes Island portion and stipulated that if the attorneys for the

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claimants could show evidence that the Fort of St. Marks was included in the terms of the grant, they might include this property too. However, if the fort were used for military purposes and not part of the Indian cession to the firm of Panton, Leslie & Company, the fortress area would be public land of the United States and not part of the grant. So ruled favor the Superior Court of Middle Florida in 1838, a judgment that was affirmed by the Supreme Court of Florida in 1841.⁵

⁵*Apalachicola Land & Development Co. et. al. v. McCrea*, Commissioner of Agriculture, *et. al.* 98 *Southern Reporter*. Cited in "A Report on the Application of the Marketable Record Title Act to the Sovereign Lands of Florida." Florida Department of Natural Resources, Office of the General Counsel, Tallahassee, Florida, August 1985.

The Supreme Court's ruling in 1835 necessitated a survey of the boundary of the grant. Although the language of the Court's order made specific designations concerning the boundary line, it did not have an adequate map of the area nor did it have an official survey upon which to base any definite opinion. Therefore, the Surveyor General of Florida, Robert Butler, was ordered by the General Land Office to hire a surveyor to make the required survey so as to delineate the final boundary of the grant. Butler turned to Charles H. Goldsborough, a relative of Lieutenant Louis M. Goldsborough, the son-in-law to William Wirt, a former Cabinet officer under Andrew Jackson. Goldsborough signed his contract to survey the grant on September 28, 1835, and was joined by Louis Goldsborough and Judge Richard C. Allen. The contract specifically read, "Connecting the Public lands with Surveying the several Deeds of Cession enumerated and recognized in the decree of the Supreme Court of the United States at the January Term 1835 To Colin Mitchel and others, as per copy thereof, and instructions furnished herewith." In layman's terms, this meant that all boundary lines surveyed under the grant's language must be tied into those already completed for the Public lands in the area and corners established where these lines met.⁶

⁶Copy of Contract between Robert Butler and Charles H. Goldsborough, Dated September 28, 1835. Drawer: "U.S. Deputy Surveyors A-H" [File] "U. S. Deputy Surveyor, Charles H. Goldsborough." Land Records and Title Section, Division of State Lands, Florida Department of Environmental Protection, Tallahassee, Florida. Hereafter "Goldsborough file."

The major direction given to Goldsborough was to follow strictly the dictate of the court and certified copies of the decision were given to him as part of the instructions. Butler also gave special attention to the surveying of Forbes Island noting that, “The Island granted to John Forbes in the Apalachicola River must be also surveyed, and the necessary observation taken to show its connexion with same (the nearest stations) of the adjoining survey, with a view to perpetuate on paper in your return thereof its relative position in said River.” He then continued, “you will designate in like manner St. Vincent or Deer Island, with the tract to which it is appended at the Mouth of Apalachicola River.” Each grant, and there were numerous concessions mentioned in the Court’s decision, was to be surveyed separately. This clause made the final tying together of all the surveys difficult, especially in consideration of the large number of islands, coves, rivers, streams, etc. that dotted the landscape to be included in the grant’s survey. These special instructions also added one further complication, the boundary of the Fort of St. Marks could not be laid off until the Superior Court had ruled on its extent, but its exterior lines were to be run, “leaving the reservation to be bounded, where its limits shall be settled by the Court aforesaid.” This unclear language made the eastern section of the survey even more confusing.⁷

⁷*Ibid*, Letter of September 28, 1835. Butler to Goldsborough.

The land greeting the surveyor was not the Elysian Field of classical mythology. Instead, it more closely resembled the name for a large section within the grant, later called Tate’s Hell. The number of islands, the twisting, turning shoreline and the sheer impenetrable nature of some of the lands made the attempt to run any meaningful lines difficult at best. On November 22, 1835, at the beginning of his work, Goldsborough wrote to Butler asking for some specific instructions in surveying some of the questionable marsh near St. Marks:

I do myself the honor to enquire of your Department whether you will require the Islands lying West of, and near the St Marks river meandered or not. These a half dozen very inferior group of Islands near that river, very boggy and covered entirely with marsh grass, indeed I question whether they ought to be considered Islands or as an appendage to the adjoining main land. I find on examining the map,

Faces on the Frontier

which I presume the claimants had drawn, that the Islands which I have reference to, are not noticed, but considered simply as marsh land and attached to the main. There many little creeks or bayous which run in different directions and when during high water separate these Islands but when the tide is full ebb leaves but a mass of soft mud.⁸

⁸Goldsborough file, Letter of November 22, 1835. Goldsborough to Butler.

This description of the land at the beginning of the survey was to presage the rest of this nearly impossible adventure.

Butler's immediate answer to Goldsborough's request for further directions was brusque and pointed, "Your letter of enquiry bearing the date of 22 Ult. can only be answered by reference to the documents in your possession. From the description of the mud banks alluded to by you it would appear to my mind that they can not be esteemed other than marsh."⁹ The tenor of the reply gives an indication that Butler was not going to be sympathetic to any delays caused by the surveyor not knowing a marsh from an island or any other reason.

⁹Goldsborough file, Letter of November 30, 1835. Butler to Goldsborough.

By the following May, Charles Goldsborough's troubles were only just beginning. Not only did he incur the displeasure of the Surveyor General, but he had also aroused the ire of the holders of the grant, who, in turn, put more pressure on the over-wrought Butler. On May 7, 1836, Goldsborough penned the following letter in hopes of gaining more time, and, we suspect, sympathy from Butler:

Sir: I have the honor to inform you of the very great difficulty I am at present labouring under, viz. that of employing men to assist me in the performance of the duties which you have been pleased to honor me with. I have had occasion recently to discharge three of my men, who, in consequence of disabilities I was forced to part with. I have to request you to permit me to suspend the survey, on which I am engaged, until the ensuing fall, at which time I shall, as a matter of course, proceed to duty. I can at present, employ men at \$40 per month which price

I am not disposed to give, indeed I might say, unable to afford, and which I am satisfied you are well aware this contract will not authorise, taking into consideration the circumstances of my having been forced heretofore to give extra wages. However Sir; permit me to remark, that should you insist on the immediate execution of the duties on which I am engaged, I shall go with, notwithstanding the great difficulties I am laboring. With sentiments of great respect.¹⁰

¹⁰Goldsborough file, Letter of May 7, 1836. Goldsborough to Butler.

Three days later, on May 10th, Butler fired off his reply:

Sir: Your letter of the 7 inst. is before me and I hasten to communicate that I would not feel myself authorized to suspend the execution of your contract until the fall ensuing upon any plea of pecuniary consideration and I feel it necessary to state that I had reported some time since to the Comms. of Genl. Land Office that I expected that contract completed in a short time. The claimants urge its completion the contract requires its completion, the Government expects its completion and my duties require me to say that I expected its completion before this time. Under all the circumstances I must beg your unremitted attention to this duty under apprehensions that you and securities will be ordered to be sued on your bond if much further delay shall be experienced.¹¹

¹¹Goldsborough file, Letter of May 10, 1836. Butler to Goldsborough.

Butler's impatience with the constant delays in completing the contract are justified when it is considered that this survey was only expected to last one surveying season and not two years. Also, from the above letter it can be seen that the Surveyor General was under considerable political pressure to get the lands surveyed so the firm could commence sales of the land recently confirmed to it by the Supreme Court of the United States. Despite the pressure asserted by Butler, the survey did not go on as scheduled.

The next letter in the correspondence between Butler and Goldsborough comes on January 21, 1837. Again we find Butler imploring the surveyor to report progress of any sort, "Sir: From the repeated

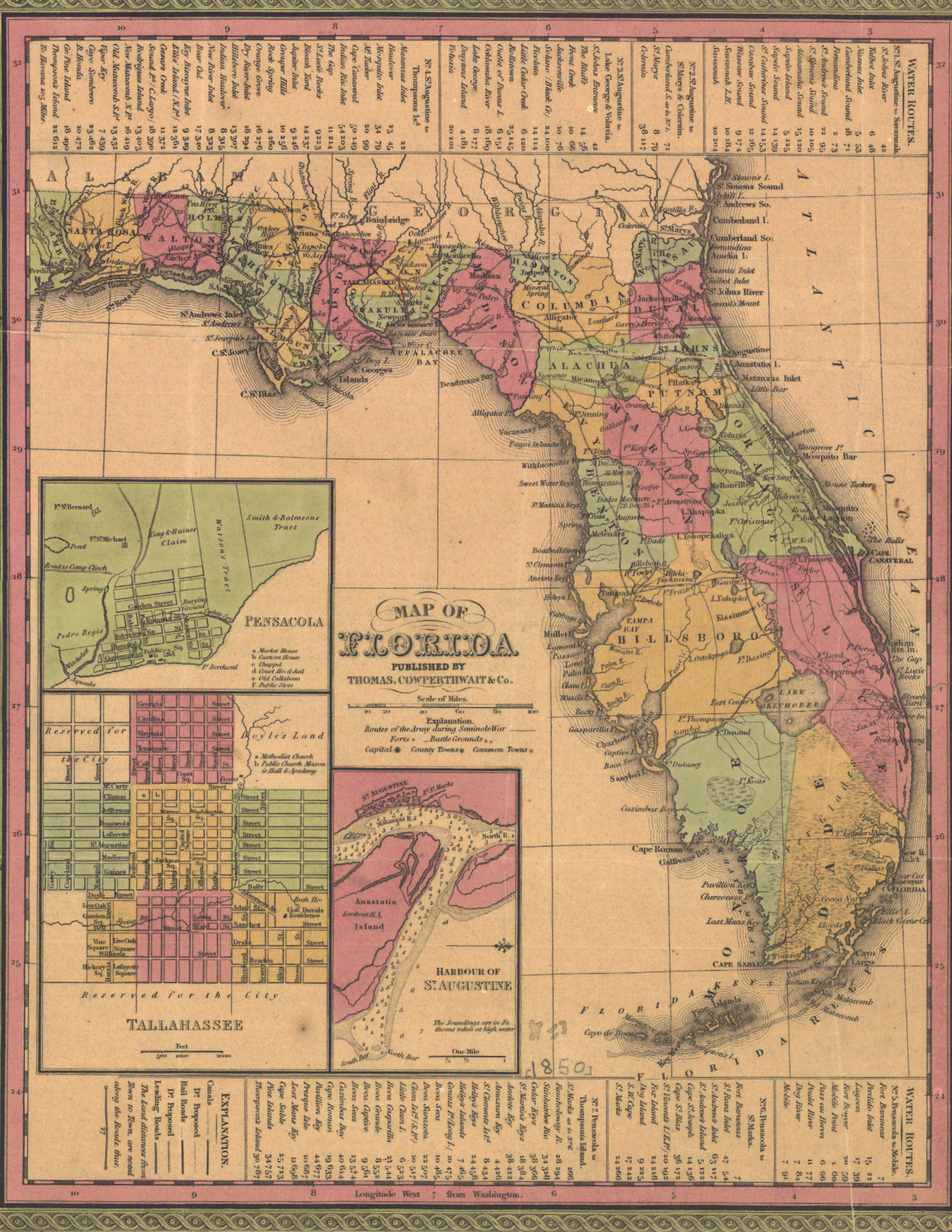
solicitations and inquiries of the Attorney for the Company of the large grant Forbes & co and for the survey of which you long since entered into contract, I feel it my imperious duty to require that you will without delay report in writing the cause or causes which have led to the unusual delay in filling said contract in all its provisions, that I may be enabled to report immediately a copy to the Commr. of the Gen'l L' Office for the information and decision of government.”¹² Goldsborough replied on February 6:

Your letter to me bearing the date 21st ulto. has just reached me, and in answer have to remark that the very great difficulty attending the survey of “Forbes Purchase” particularly that part which is required by your Dept. of making out exact returns showing the very many indentations on all the lines, also the exact area of all the purchases (say four) can be the only excuse I have in my power to offer you for the long delay of hand in the returns. I have been at work night and day for some time past at my brother's making the drawings of the survey, is the cause why your letter did not sooner reach me, and receive that attention which was incumbent on me on [Sic] (to) bestow on it. / You have been pleased, Sir; to remark that, “the unusual delay in filling said contract in all its provisions” &c &c. In answer to which I have only to say that the difficulty in procuring the necessary assistants and also the long spell of sickness which I was afflicted with last summer will possibly be a sufficient apology for the delay. It is only the person who performs the d_ery [drudgery] who knows and who can in all possibly appreciate the difficulty which I have had to encounter in the late survey. I was not aware myself, Sir, that more and serious difficulties awaited me at my table, by more difficulties have been, in a great measure, overcome, and I think I may safely say that you will be in possession of all the papers incident to the survey in the course of the present month.¹³

¹²*Letters of Surveyor General*, Volume 2, 1836-41, 23. Bound volume of original letters. Letter of January 21, 1837. Butler to Goldsborough. Land Records and Title Section, Division of State Lands, Florida Department of Environmental Protection. Tallahassee, Florida. Hereafter, *Letters of Surveyor General*.

¹³Goldsborough file, Letter of February 6, 1837. Goldsborough to Butler.

Two pieces of information stand out as reasons for the long delay in the



WATER ROUTES.

N. 1. St. Augustine to Savannah	42
St. John River	6 48
St. John Inlet	5 33
St. John Sound	8 71
St. John Sound	2 73
St. John Sound	2 95
St. John Sound	10 105
St. John Sound	15 130
St. John Sound	3 125
St. John Sound	14 130
St. John Sound	12 165
St. John Sound	9 174
St. John Sound	10 184
St. John Sound	20 204
N. 2. St. Augustine to St. Marks & Calumet	71
St. Marks	8 70
St. Marks	38 117
N. 3. St. Augustine to Lake George & Volusia	42
St. John Sound	14 56
St. John Sound	10 66
St. John Sound	10 76
St. John Sound	14 114
St. John Sound	6 120
St. John Sound	25 145
St. John Sound	6 151
St. John Sound	18 169
St. John Sound	8 177
St. John Sound	4 181
St. John Sound	20 201
N. 4. St. Augustine to Thompsons Is.	22
Thompsons Is.	23 45
Thompsons Is.	34 79
Thompsons Is.	20 99
Thompsons Is.	50 149
Thompsons Is.	54 163
Thompsons Is.	11 214
Thompsons Is.	9 223
Thompsons Is.	14 327
Thompsons Is.	9 346
Thompsons Is.	10 366
Thompsons Is.	4 380
Thompsons Is.	16 376
Thompsons Is.	18 394
Thompsons Is.	13 397
Thompsons Is.	8 345
Thompsons Is.	8 343
Thompsons Is.	17 340
Thompsons Is.	9 349
Thompsons Is.	12 301
Thompsons Is.	11 372
Thompsons Is.	18 390
Thompsons Is.	13 403
Thompsons Is.	16 419
Thompsons Is.	13 437
Thompsons Is.	7 439
Thompsons Is.	23 462
Thompsons Is.	10 472
Thompsons Is.	18 490
Thompsons Is.	22 512

WATER ROUTES.

N. 1. Pensacola to Mobile	7
St. John River	15 22
St. John Inlet	37 39
St. John Sound	20 59
St. John Sound	1 06
St. John Sound	6 66
St. John Sound	11 77
St. John Sound	7 84
St. John Sound	7 94
N. 2. Pensacola to St. Marks	7
St. Marks	37 54
St. Marks	63 117
St. Marks	5 125
St. Marks	14 126
St. Marks	36 172
St. Marks	20 192
St. Marks	24 210
St. Marks	9 225
St. Marks	17 242
St. Marks	24 266
N. 3. Pensacola to Lake George & Volusia	42
St. John Sound	14 56
St. John Sound	10 66
St. John Sound	10 76
St. John Sound	14 114
St. John Sound	6 120
St. John Sound	25 145
St. John Sound	6 151
St. John Sound	18 169
St. John Sound	8 177
St. John Sound	4 181
St. John Sound	20 201
N. 4. Pensacola to Thompsons Is.	22
Thompsons Is.	23 45
Thompsons Is.	34 79
Thompsons Is.	20 99
Thompsons Is.	50 149
Thompsons Is.	54 163
Thompsons Is.	11 214
Thompsons Is.	9 223
Thompsons Is.	14 327
Thompsons Is.	9 346
Thompsons Is.	10 366
Thompsons Is.	4 380
Thompsons Is.	16 376
Thompsons Is.	18 394
Thompsons Is.	13 397
Thompsons Is.	8 345
Thompsons Is.	8 343
Thompsons Is.	17 340
Thompsons Is.	9 349
Thompsons Is.	12 301
Thompsons Is.	11 372
Thompsons Is.	18 390
Thompsons Is.	13 403
Thompsons Is.	16 419
Thompsons Is.	13 437
Thompsons Is.	7 439
Thompsons Is.	23 462
Thompsons Is.	10 472
Thompsons Is.	18 490
Thompsons Is.	22 512

MAP OF FLORIDA
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Scale of Miles.
0 10 20 30 40 50 60 70 80 90 100
Explanation.
Routes of the Army during Seminole War
Forts — Battle Grounds —
Capital * County Towns Common Towns



TALLAHASSEE

Foot
200 400 600 800 1000

EXPLANATION.

Canals
Dashed Lines
Rail Roads
Dashed Lines
Levees
The land distances from town to town are noted along the route lines.

completion of the survey, Goldsborough's personal illness over the summer and the lack of an adequate labor force on the frontier. He also notes other difficulties, but, at this stage, does not inform the Surveyor General exactly what they are. He also makes an unfortunate remark on Butler's knowledge of surveying on the frontier in stating that only the person who "performs the d_ery [drudgery]" can appreciate the difficulties. Butler, who knew the area as an aide to Jackson in his Florida campaign and crossed some of the Forbes Purchase territory, was not one to take such an attempted slight lightly.

Butler, a good bureaucrat and administrator, did not want this delayed fulfillment of a contract to reflect poorly on him. On February 9, 1837, he wrote the Commissioner of the General Land Office, James Whitcomb, noting Goldsborough's letter, which he enclosed, and all of the back correspondence, plus instructions, to show that he was not the cause of the delay in fulfilling the Supreme Court's mandate.¹⁴ On March 31, 1837, Butler again wrote to the Commissione; to note that he has had "to order Mr. Goldsborough again to the woods for the important purpose of connecting the public lands with the Survey of Forbe's et. al. as is required in his instructions ... which he failed to comply with and which fact but recently came to my knowledge."¹⁵ Thus, it appears from this letter that Goldsborough did send in his field notes for the survey along with the drawings, however, as Butler bluntly remarks, he did not fulfill the contract as instructed, therefore, Goldsborough was again sent to the field.

¹⁴*Letters of Surveyor General*, Volume 2. Letter of February 9, 1837. Butler to Whitcomb. 23.

¹⁵*Letters of Surveyor General*, Volume 2. Letter of March 31, 1837. Butler to Whitcomb. 26.

The costs of the survey were originally set at about four thousand dollars, according to Goldsborough's contract, however, Butler, evidently, did not think that sum would be expended. On April 20, 1837, he noted to the Commissioner: "It has been estimated that the Survey of Forbes Claim (now under execution) will cost near four thousand dollars, if this be true, a further sum than that on hand in deposit will be required."¹⁶ Butler appears to have expected the survey to be done for less than the contracted amount, but, because of the delays, the added labor costs, return to the field, etc., Goldsborough had succeeded in running the costs close to this amount.

The Commissioner wrote to Butler on June 7 acknowledging the receipt of his letter informing the General Land Office of Goldsborough's successful completion of the Forbes Survey and remitting \$4,000 to Butler's account for payment on the contract.¹⁷ On June 12, 1837, the Surveyor General again wrote to the Commissioner exclaiming that he now had enough money on hand to meet, "the expected demand of Mr. Goldsborough on his contract."¹⁸ All appeared to be finished with the long awaited survey of the Forbes Purchase, but it was not to be.

¹⁶*Letters of Surveyor General*, Volume 2. Letter of April 20, 1837. Butler to Whitcomb. 29. Also see the contract in Goldsborough file.

¹⁷Letters from Commissioner, Volume 2, 1832-39. Letter of June 7, 1837. Whitcomb to Butler 419. Land Records and Title Section, Division of State Lands, Florida Department of Environmental Protection. Tallahassee, Florida.

¹⁸*Letters of Surveyor General*, Volume 2. Letter of June 12, 1837. Butler to Whitcomb. 36.

From the correspondence of the Surveyor General, dated June 29, 1837, Goldsborough apparently had not turned in the final product of his survey. Butler expected the results almost daily and was anxious to have done with this problem.¹⁹ On July 3rd, Butler again wrote to the Commissioner informing him that he had met with Goldsborough and was informed by the surveyor of, "being ready to return his work into the office in a week at farthest."²⁰ Seven days later Butler received the following from the tardy surveyor:

I have the honor to acknowledge the receipt of your letter of this morning calling on me for a circumstantial statement showing the condition of my contract. It is a subject Sir; of regret to me that I should have been so long beyond the period for the completion of my contract. In the protraction of the extensive grant to Pantan, Leslie & Co. including all the lands between the Apalachicola River on the West and extending to the River St. Marks on the East I find on examination that there has been a great error, so much so, that I could not, with propriety had in your office. The plot has been protracted and as I thought a day or two ago, would be ready for examination by this time, yet it requires a more thorough one than I have enabled to bestow on it and also make out a new plot entirely. The one I have finished being

Faces on the Frontier

drawn in ink it will require at least a fortnight to protract another so as to ascertain where the error was committed [t]here being upwards to three thousand courses. All the field notes are finished and ready for inspection. The plots of the other grants are also finished and ready for inspection... . I will proceed immediately to the examination and protraction of the above named grant and when finished will report to your office the result of it.²¹

¹⁹*Letters of Surveyor General*, Volume 2. Letter of June 29, 1837. Butler to Whitcomb. 40-41.

²⁰*Ibid*, 41.

²¹Goldsborough file, Letter of July 10, 1837. Goldsborough to Butler.

The delay produced by this “great error” was to be costly. Two days later Goldsborough again wrote Butler, this time with a new request.

The letter of July 12th shows the extent of expenses incurred by the Deputy Surveyor in attempting to finish this enormous survey. The letter and Butler’s response also indicate the closeness usually found between Butler and his deputies:

Owing to the great length of time I have been engaged in my contract with your office and the very heavy expense I have of necessity, been at, which are upwards of \$2500 induce me again to ask you for such an advance of which you are to be the judge. I feel rather diffident in pressing the matter on you, but Sir; I must resort to the old adage that there is not excuse necessary for an application of this character when necessity demands it of which, I assure you is fully the case. I pledge myself that the returns of my contract will be forthcoming.²²

²²Goldsborough file, Letter of July 12, 1837. Goldsborough to Butler.

Butler replied on the same day:

Sir: Your letter of present date is just received requesting an advance of public funds on your contract for the survey of the claim decreed by the

Supreme Court to certain individuals therein named. Will you have the goodness to revert to the conversation had with you on this subject a few weeks since wherein I informed you most distinctly that my instructions forbid me in positive terms to making such advances. If I had private funds to spare I would take pleasure to relieve your wants (as I have before to others without the advantage of one cent emolument) but I am denied the pleasure of obliging you.²³

²³*Letters of Surveyor General*, Volume 2. Letter of July 12, 1837. Butler to Goldsborough, 45.

At the same time, Butler wrote to the Commissioner of the General Land Office that Goldsborough had found the “great error” in his own work and that would, “require some time to correct.”²⁴

²⁴*Letters of Surveyor General*, Volume 2. Letter of July 12, 1837. Butler to Whitcomb. 46.

By mid-October the returns of Goldsborough’s survey had not been sent to Butler and he had to inform the Commissioner that such was the case. He also noted that should the returns be sent in soon, they would still have to await the decision of the Superior Court of Middle Florida concerning the boundaries of the St. Marks reserve, which would then have to be surveyed and included in the Goldsborough contract.²⁵ This an even longer time before the money-starved Apalachicola Land Company, the successor to John Forbes & Co., could get their lands to market with a possibility of clear title.

²⁵*Letters of Surveyor General*, Volume 2. Letter of October 16, 1837. Butler to Whitcomb. 47.

With time and patience running out, Butler received the following from Goldsborough on November 28th:

In case you may suppose me too negligent (in which, ‘tis tru, I have been) in the performance of the duties prescribed to me by your office in the year 1835, I have the honor to make you acquainted in detail with the circumstances which produced the failure of making out the returns which are usual with your deputies. In surveying the Apalachicola River I was forced as a matter of necessity, to observe the triangular mode of survey, and in doing so, I must have made a considerable error & am therefore

unable to form the plots or rather close the maps in accordance with the usage of your Department. I have, in vain tried every means to close the maps so as to make a correct survey, but find it utterly impossible. A re-survey will be absolutely necessary & I should have undertaken it myself long since had my health have permitted it, which has been bad, and is at this time in rather a precarious situation, and I have my doubts whether I could survive the swamps of Appalachicola were I now to go in them. The other surveys/the one West of the River is completed also the Island the Appalachicola and the Islands appertaining to the large survey together with notes of those surveys.²⁶

²⁶Goldsborough file, Letter of November 28, 1837. Goldsborough to Butler.

This letter led Butler to ask the Commissioner to decide whether he could hire another surveyor to finish the job at Government expense or take it from the contracted amount due to Goldsborough through a suit for non-compliance.²⁷ One final complication arose from the reports of murders of settlers on the Gadsden and Wakulla frontiers. This meant that no surveyors would be able to take the field and complete any survey at that time.²⁸

²⁷*Letters of Surveyor General*, Volume 2. Letter of November 28, 1837. Butler to Whitcomb. 53.

²⁸*Letters of Surveyor General*, Volume 2. Letter of October 1, 1838. Butler to Whitcomb. 121.

Not until February 1, 1839, did Robert Butler get the opportunity to hire a deputy to finish and correct the work attempted, but never completed, by Charles Goldsborough. On that day, he hired Robert Ker, a fellow member of the First Presbyterian Church of Tallahassee and experienced surveyor. The contract reads almost exactly as that of Goldsborough's, as does the special instructions inclosed with the contract.²⁹ As Rod Maddox, Public Land Surveyor, noted a few years ago in his, *The Forbes Purchase: A Surveyor's Dilemma*, "First, the entire boundary was run as a tremendous closed traverse, and the three other contiguous grants given in 1811 were run also along with the islands off the coast which were given in the first cession. This survey [Ker's] is the first complete boundary survey who's notes are presently on record. He then [Ker] retraced the original section, township and range lines which the government did complete on the exterior of the Purchase

boundary, and tied them together with the boundary.”³⁰ These tasks, not performed well by Goldsborough, were satisfactorily completed by Ker during the 1839 surveying season. With the survey complete and acceptable, Robert Butler could rest more easily and turn his attentions to the many other important surveys to be completed under his direction.

²⁹Contract of February 1, 1839. Robert Ker. “Drawer: U. S. Deputy Surveyors: 1-N,” File: U. S. Deputy Surveyor.

³⁰Rod Maddox, “The Forbes Purchase: A Surveyor's Dilemma,” 11. Paper on file in the Land Records and Title Section, Division of State Lands, Florida Department of Environmental Protection. Tallahassee, Florida. This paper was originally composed as a requirement for seniors in the surveying seminars in the University of Florida’s surveying program and was done under the supervision of Professor David Gibson.

Next Month ...

CHAPTER 13

FORGING THE FLORIDA FRONTIER: THE LIFE AND CAREER OF CAPTAIN SAMUEL E. HOPE

Joe Knetsch has published over 170 articles and given over 130 papers on the history of Florida. He is the author of [*Florida's Seminole Wars: 1817-1858*](#) and he has edited two additional books. [*Faces on the Frontier: Florida Surveyors and Developers in 19th Century Florida*](#) is a history of the evolution of surveying public lands in Florida and traces the problems associated with any new frontier through the personalities of the major historical figures of the period. As the historian for the Division of State Lands, Florida Department of Environmental Protection, he is often called to give expert witness testimony involving land titles and navigable waterways issues.

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6 CEC	\$145 Per Course	x _____	= \$ _____
3 CEC	\$88 Per Course	x _____	= \$ _____
TOTAL			\$ _____

☐ **Non-Licensed in ANY State**

EMAILED	Fee	Quantity	Amount
6 CEC	\$100 Per Course	x _____	= \$ _____
3 CEC	\$60 Per Course	x _____	= \$ _____
MAILED			
6 CEC	\$110 Per Course	x _____	= \$ _____
3 CEC	\$70 Per Course	x _____	= \$ _____
TOTAL			\$ _____

Step 3: Payment Information

Name: _____ PSM#: _____ State: _____ FSMS Member: ☐ YES ☐ NO

Firm: _____ Sustaining Firm: ☐ YES ☐ NO

Address: _____

City/State: _____ Zip Code: _____

Email Address: _____ Work Phone: _____

Payment Information: ☐ Check Enclosed (Payable to FSMS) _____ VISA/MasterCard/American Express
Card #: _____ Exp. Date: _____ CVV Code: _____

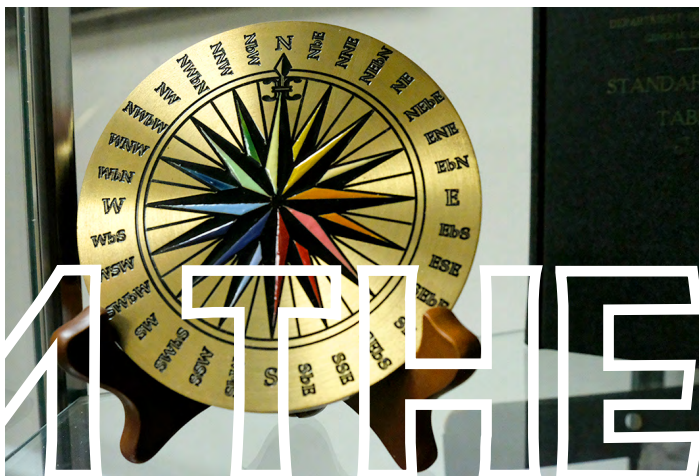
Billing Address of Credit Card: _____

Signature: _____

IF PAYING BY CHECK, MAIL FORM TO: FSMS, P.O. Box 850001-243, Orlando, Florida 32885-0243

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QUESTIONS? CALL 800.237.4384



FROM THE ARCHIVES



SCENES

IN A

SURVEYOR'S LIFE;

OR A

RECORD OF HARDSHIPS AND DANGERS ENCOUNTERED.
AND AMUSING SCENES WHICH OCCURRED,

IN THE

Operations of a Party of Surveyors

IN

SOUTH FLORIDA.

By W. L. PERRY.

JACKSONVILLE:
C. DREW'S BOOK AND JOB PRINTING OFFICE 1859.

CHAPTER XIII

It may be readily inferred by the reader, that for some days after the starvation, fatigue and distress, result of events recorded in the previous chapter, we were too badly “used up” to do much business. In fact, for three days the larger portion of us were scarcely able to stir from a recumbent position at all. Smith, whose kindness, as manifested on this occasion, in taking care of us in our utterly undone condition, I shall ever remember with feelings of the most profound gratitude, went into the woods and gathered a large quantity of green moss, with which he made us comfortable beds in the grass, where we lay almost helpless, and were fed by him on soup made of such materials as were at hand, as often as was required, until we began to be able to help ourselves.

Joe Rogers, of whose gluttony, from remarks occasionally dropped in the course of this narrative, the reader is already aware, would eat at the risk of his life, in spite of everything that could be done to prevent it. At midnight, while others slept, he would sneak up from his mossy couch, and go to the pork barrel and biscuit tub, where he gorged his irritated stomach with these articles without the first apparent thought for the consequences, and almost died from the effects of it each time.

For three days I thought he would die, despite everything the Captain and Smith could do for him; and when I saw the great lumps of pork he vomited up, and heard him swear to the bitter end that he hadn't eaten a single mouthful, I almost heartily wished he would. The means we had to resort to at last to prevent him killing himself, was to establish a regular watch or guard, which we kept up every night, taking turns, until he so far recovered that he could be allowed to eat.

After a time, we began gradually to mend, and at the end of a

week were in tolerable condition to resume our duties on the line.

There was still a portion of our survey to the westward which we had not yet seen, and the Captain now determined to push operations in that direction.

Smith was again set to work to prepare six days rations for each man, and on Monday morning bright and early, although still not entirely recovered from our prostration, each man cheerfully shouldered his heavy knapsack, and we again plunged into the prairies and swamps.

In order to provide against every possible contingency, one of the ponies (old Bet) was packed heavily with provisions also, and, in charge of Joe, who was still very weak, taken along with us.

The country, in the direction we were now pursuing, consisted of small prairies, small swamps, and almost any number of bay-galls of various sizes, from a few hundred feet to half a mile in width; some of the latter excessively thick, and difficult to cut a passage through.

On the first day of our march in this trip, nothing of particular interest occurred. We trudged slowly through swamp and prairie, and when dark caught us we were only two and a half miles from the camp. We had now plenty of pure water, as the rains had set in, and consequently got along with much less suffering on this account than on the former six days trip—that is, so far as drinking was concerned. We also had much water to wade, and were wet from head to foot from day's end to day's end.

Soon after we had left our camping-place, on the morning of the second day, our dog (Bull) ran into a small but thick bunch of bushes we were passing, and out jumped the biggest sort of a panther, frightened by his approach, not more than fifteen feet from where we were walking.

The panther made for a small bay-gall about two hundred yards distant, as fast as he could put it down, with Bull as nearly at his heels as he could keep, yelping at every jump. They both disappeared presently in the bay, but in a few moments afterwards we saw the panther scaling up a tree about the middle of it, as if he thought Bull was right after him and would catch him before he could reach the top.

When we had looked at and admired him, perched amongst

the topmost branches of the tall tree, for some time, Tap made a proposition, (as we had no gun to shoot him, Joe having taken that and gone on ahead,) that we cut the tree down, and it was immediately seconded by all. We agreed that one should go in and cut the tree, while the rest should scatter around the bay and take stands at different points, so that, should he not be killed in the fall, by whooping and yelling, they might prevent him from leaving the bay, and make him take up another tree for a second chance.

The next question was, who would go in and cut the tree, with that enormous and ferocious brute in its boughs?

None expressing a desire to take upon themselves that part of the design, it was determined that we should draw straws, and whoever got the longest should be the man.

Tap soon had the straws prepared and we commenced the drawing, and I, in perfect accordance with my usual luck got the long straw.

Knowing the danger attending the undertaking, I dreaded it; but to have backed out would have brought down upon me ridicule, and taunts of cowardice, unendurable. I therefore, without hesitancy, laid off my pack and walked in, axe in hand, to perform the duty.

The bay was immensely thick, so much so, that I had, in many places, to cut a way through the bamboo vines with my butcher knife, and then had to crawl sometimes ten or fifteen feet on hands and knees. After a time, however, I reached the tree, and having cleared away a sufficient space to enable me to swing the axe tolerably clear of the vines and bushes, commenced work.

At the close of about half an hour, during which time the panther kept his large green eyes steadily fixed on me from above, and the end of his tail in constant motion from right to left, the tree began to crack and show signs of falling. The panther now exhibited indications of uneasiness, which grew more and more marked at each stroke of the axe, and I greatly feared he would either climb rapidly down the tree, leaving me no time to get out of his way, or spring down upon me outright.

As time was now getting precious, I went at it earnestly, without raising my head to see what was going on above. My feelings were greatly relieved when the tree gave two or three loud snaps and started

to fall, amidst the shouts of the boys outside. But the relief was only momentary; for, imagine my feelings, on looking up as the tree was going over, to see the panther coming down the body of it, head foremost, with his ears laid back to his head, and his eyes looking like two balls of fire, glistening with fear and rage. I thought my last line had been run—the notes of my last “scene” taken; but, like Davy Crockett, when the Mexicans got him hemmed in a corner, I determined to sell my life as dearly as possible—there being no chance to run— and as he came I drew my trusty old butcher from its sheath, and stood ready, in a striking attitude, to give him one plunge that would reach the vitals before he could accomplish his purpose. Fortunately for me, however, when within ten feet of where I stood, and about to make a spring for me, he placed his feet upon a loose piece of bark on the side of the falling tree, it slipped and he fell to the ground, striking some four feet from me, and scampered off into the bushes, and up another tree, some twenty yards off. I immediately returned to the open woods, and informed the boys that if they had any idea of drawing straws to determine who should cut down the next tree, they need not consider me as a participant in the game. So we left him sitting on the tree, and went on our way rejoicing.

On the afternoon of this day we came, to our astonishment, to high, open pine woods, almost mountainous. We were as much rejoiced as surprised; for, in this direction, we expected to find scarcely anything but swamps and bays. This ridge or streak of mountainous country, we afterwards learned, was a continuation of the same which commences some hundred and twenty miles to the north of where we were then working, known as the Sand Mountains, and running north and south about the middle of the peninsular, and sometimes not inappropriately termed the backbone of the same. I have never seen any mention made of this singularly mountainous country in any of the descriptions of Florida. Something is said of them in Sprague’s “History of the Seminole War.” •

Now Available: NOAA Technical Memorandum NOS NGS 92

This week, NGS published [NOAA Technical Memorandum NOS NGS 92 \(NGS 92\)](#) to provide **classification, standards, and specifications for using GPS/GNSS surveying measurements in conjunction with OPUS Projects software**, as these types of surveys were not well-established by the dates of the previous 1997 and 2008 publications. Using NGS 92, users can establish geodetic control referenced to the National Spatial Reference System (NSRS) in the quantity, proximity, timeliness, and the accuracy and precision needed for their applications. Any user has the option to submit their GNSS surveys to NGS for review and publication as a part of the NSRS.

NGS 92 has detailed specifications for achieving intended network and local accuracies that meet the needs of a broad range of applications. Three positional classifications are introduced: local, secondary, and primary. By adhering to the specifications in NGS 92, the following network and local accuracies at the 95% confidence level are expected to be achieved:

- Local: 2.5 cm horizontal, 5 cm ellipsoid height, 6 cm orthometric height
- Secondary: 1.5 cm horizontal, 3 cm ellipsoid height, 4 cm orthometric height
- Primary: 1 cm horizontal, 2 cm ellipsoid height, 3 cm orthometric height

NGS 92 addresses using a combination of multiple static (2+ hours) and real-time kinematic (5+ minutes) GNSS occupations. Real-time kinematic (RTK) occupations may use a single base (SRTK) or a

NGS News

network (NRTK). The observation method requirements are flexible, allowing the surveyor to choose the most efficient method for the project. NGS 92 includes clear standards and specifications to help obtain high accuracy results using the chosen methods.

NGS 92 replaces earlier documents that were published to guide users in establishing high-accuracy GPS-derived heights, known as NOAA TM NOS NGS 58 and NOAA TM NOS NGS 59. NGS 92 supplements “Standards and Specifications for Geodetic Control Networks” which was published before the broad accessibility of GPS. The OPUS Projects User Guide should be consulted in tandem with NGS 92, and OPUS Projects training is highly recommended.

NGS has a long history of providing guidance for geospatial professionals to establish or tie to geodetic control networks. Today, NGS’s highly accurate geodetic control network consists of stable, identifiable marks with published positions referenced to datums designed and established by NGS. These marks provide a consistent geospatial framework for scientific purposes, engineering projects, navigation, precision agriculture, emergency response, disaster recovery, and community resilience.

For more information and background, watch our April 2023 webinar, *[Classifications, Standards, and Specifications Supporting OPUS Projects 5.1](#)*. For questions or concerns, please email NGS at ngs.infocenter@noaa.gov.

Past Presidents



1956 - 1957
H.O. Peters



1957 - 1958
Harry C.
Schwebke



1958 - 1959
John P. Goggin



1959 - 1960
R.H. Jones



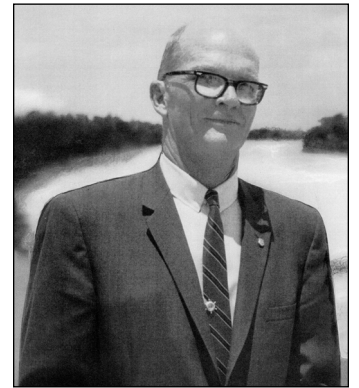
1960 - 1961
Hugh A. Binyon



1961 - 1962
Russell H.
DeGrove



1962 - 1963
Perry C. McGriff



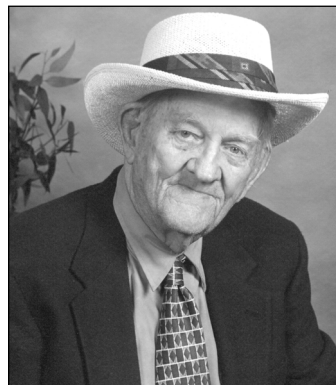
1963 - 1964
Carl E. Johnson



1964 - 1965
James A.
Thigpenn, III



1965 - 1966
Harold A.
Schuler, Jr.



1966 - 1967
Shields E. Clark



1967 - 1968
Maurice E. Berry

Past Presidents



1968 - 1969
William C. Hart



1969 - 1970
Frank R.
Shilling, Jr.



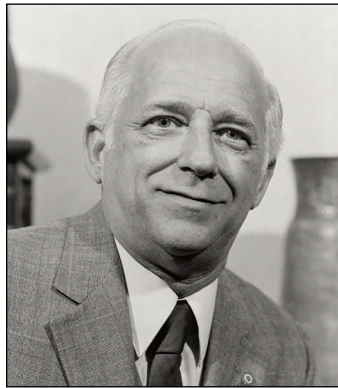
1970 - 1971
William V. Keith



1971 - 1972
James M. King



1972 - 1973
Broward P. Davis



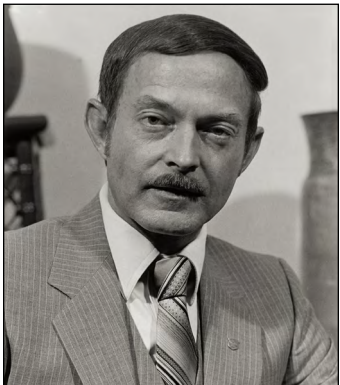
1973 - 1974
E.R. (Ed)
Brownell



1974 - 1975
E.W. (Gene)
Stoner



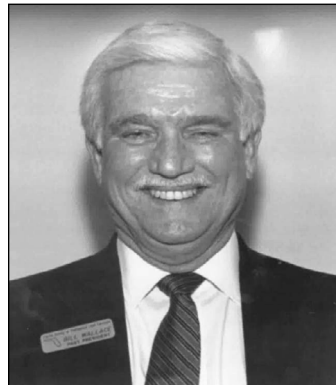
1975 - 1976
Lewis H. Kent



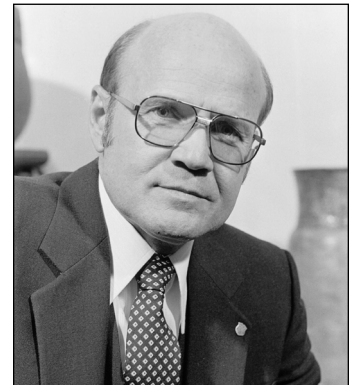
1976 - 1977
Robert S. Harris



1977 - 1978
Paul T.
O'Hargan

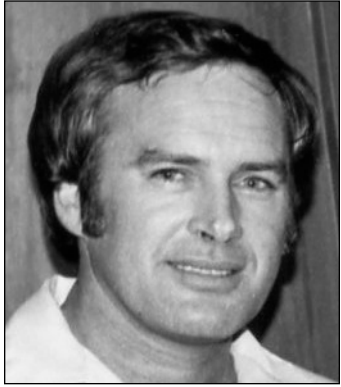


1978 - 1979
William G.
Wallace, Jr.



1979 - 1980
Robert W.
Wigglesworth

Past Presidents



1980 - 1981
Ben P.
Blackburn



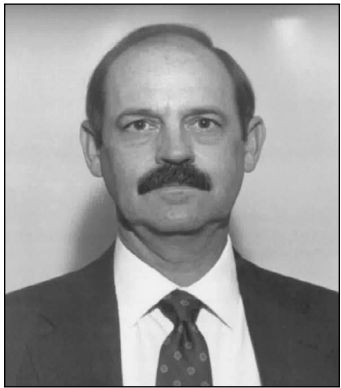
1981 - 1982
William B.
Thompson, III



1982 - 1983
John R. Gargis



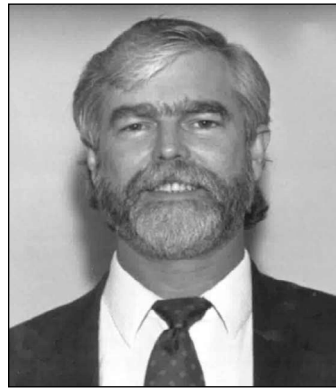
1983 - 1984
Robert A.
Bannerman



1984 - 1985
Buell H. Harper



1985 - 1986
H. Bruce
Durdén



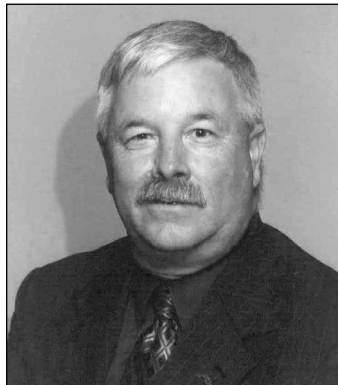
1986 - 1987
Jan L. Skipper



1987 - 1988
Stephen M.
Woods



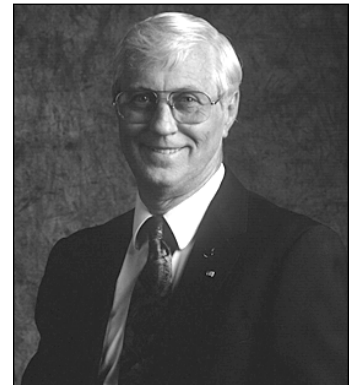
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Stephen G.
Vrabel



1989 - 1990
W. Lamar Evers

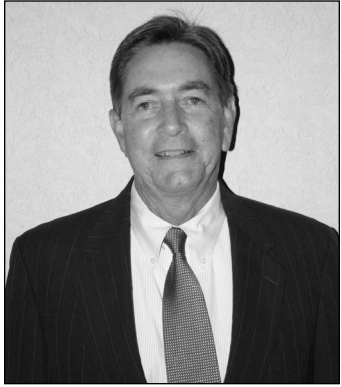


1990 - 1991
Joseph S. Boggs



1991 - 1992
Robert L.
Graham

Past Presidents



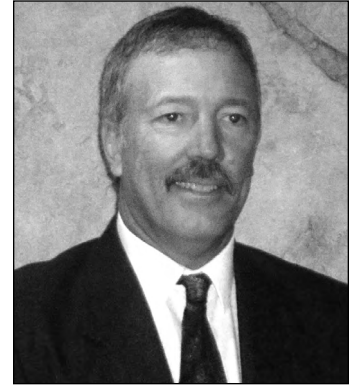
1992 - 1993
Nicholas D.
Miller



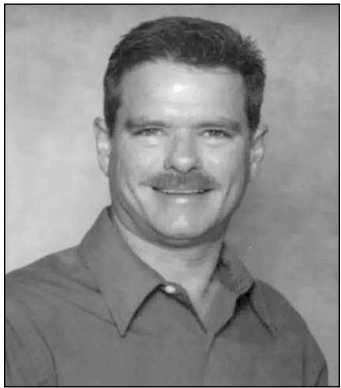
1993 - 1994
Loren E.
Mercer



1994 - 1995
Kent Green



1994 - 1995
Robert D. Cross



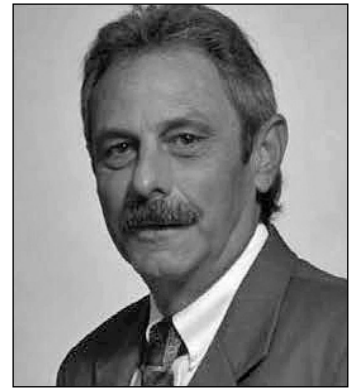
1995 - 1996
Thomas L.
Connor



1996 - 1997
Gordon R.
Niles, Jr.



1997 - 1998
Dennis E.
Blankenship



1998 - 1999
W. Lanier
Mathews, II



1999 - 2000
Jack Breed



2000 - 2001
Arthur A.
Mastronicola



2001 - 2002
Michael H.
Maxwell



2002 - 2003
John M. Clyatt

Past Presidents



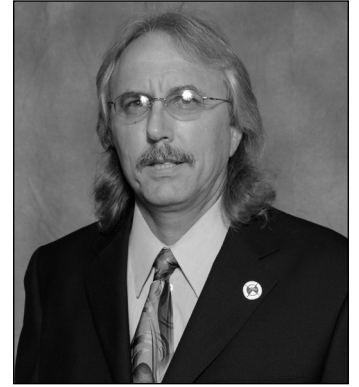
2003 - 2004
David W.
Schryver



2004 - 2005
Stephen M.
Gordon



2005 - 2006
Richard G.
Powell



2006 - 2007
Michael J.
Whitling



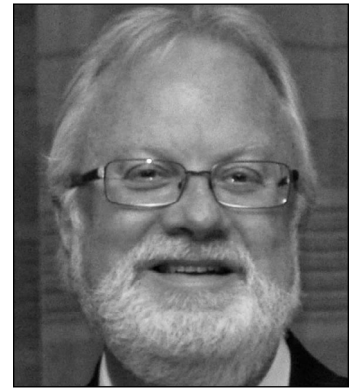
2007 - 2008
Robert W.
Jackson, Jr.



2008 - 2009
Pablo Ferrari



2009 - 2010
Steve Stinson



2010 - 2011
Dan Ferrans



2011 - 2012
Jeremiah
Slaymaker



2012 - 2013
Ken Glass



2013 - 2014
Russell Hyatt



2014 - 2015
William Rowe

Past Presidents



2015 - 2016
Dale Bradshaw



2016 - 2017
Lou Campanile, Jr.



2017 - 2018
Robert Strayer, Jr.



2018 - 2019
Dianne Collins



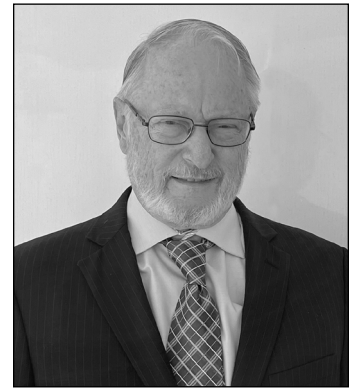
2019 - 2020
Don Elder



2020 - 2021
Hal Peters



2021 - 2022
Lou Campanile, Jr.



2022 - 2024
Howard Ehkme

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Florida in Pictures

View of the amusement center at
Daytona Beach, Florida, 1975.

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