

www.FLMS.net Summer 2020

President's Message

FLMS President Robbin Huffines

Greetings to all our hardworking water resource managers,

We have all made it to summer and it is officially in full swing. The summer heat and rains are here and so are the tropical storms. With all the challenges a normal summer brings with rain, heat, and plant growth, this summer we have to deal with all of those challenges and figure out how to do them and work around Covid-19. How that impacts each of us is very different I am sure, but the fact that it does impact all of us is the same. FLMS is going to a virtual conference format this year, and that is a first for us. I will certainly miss the opportunity to see all of you this year in person. I know we will all get through this challenging time and come out better for it. Keep doing great work. Stay safe and well. I'm looking forward to getting past this and to a point where we can all see each other in person and catch

up. Robbin

FLMS Goes Virtual for 2020 Symposium!

After a review of member surveys, the FLMS Board voted unanimously to cancel our in-person conference for 2020 and opt for virtual sessions. The safety of our members is most important. The original dates of August 25-28 will be postponed to the fall of this year, with the first session taking place on August 26. This initial session will include our Plenary speaker, announcement of our annual Awards of Excellence and our brief annual business meeting as required by our bylaws.



Florida Lake Management Society

Managing Florida's Water Resources

This virtual platform will be given live with audiences and will also be recorded for future viewing. Sessions will be staggered over several weeks, and most workshops will also be given virtually. Your Board members are working hard to quickly transfer to this new format and information will be sent to you as it becomes available.

Our Program Chair, Rob Burnes, will be in contact with all originally accept presenters to schedule your session date and time. Our Exhibitor Chairs Monty Montgomery and Rory Roten will be in touch with our exhibitors and sponsors with new opportunities to support the FLMS mission. We can't do it without our sponsors!

The registration rate for this year will be reduced, and a final price will be determined shortly. This will enable you to register and pay prior to the end of your fiscal year. If you already registered, your fee will be adjusted or refunded accordingly. You will be contacted by FLMS directly to discuss your choice once virtual fees are set.

Please note, if you have already made reservations at the Hyatt Regency Coconut Point, you will need to cancel these reservations yourself. They are not automatically canceled.

In the Future: FLMS 2021 & FLMS 2022 Symposium

Future Symposium Rate Information

Every year, the FLMS Board works diligently to keep symposium costs as affordable as possible. Proceeds from each symposium and workshop go directly to support the mission of FLMS. Unfortunately, even now, facility costs are on the rise and the Board finds it necessary to increase the registration rate beginning with the August 2021 symposium at Hawks Cay. Please note the following increases for your FY 21 budgeting purposes.

Individual 3-day registration - \$350 Exhibit Booth - \$850

Where are we headed?

August 2021 – Hawks Cay, Duck Key

August 2022 – Hyatt Regency Coconut Point, Bonita Springs

See you then!!!



Go with the Flow! by Serge Thomas, Ph.D, Florida Gulf Coast University

Teams of teachers worked with Florida Gulf Coast University to develop project-based curriculum engaging students in water quality monitoring, while managing their school rainwater retention ponds.

Florida is an environmentally sensitive and unique subtropical ecoregion, which has suffered severe anthropogenic alterations. Driven by an ever-increasing settling population, its natural hydrosystems have been particularly impacted. While water pumping has a direct deleterious effect, so does the ecosystem reduction (e.g. wetlands) and the timing changes of the native hydrology, both of which warrant clean water renewal and storage. Although billions of dollars are used to study, manage, restore and mitigate humans' intrusion, a more modest fraction of this financial effort is geared toward environmental education to better understand Florida's altered ecology and



ecomanagement. Environmental Education is, however, key to the protection, restoration and overall perception and change in people's environmental behavior. Thus, to bridge the gap within the existing science curriculum, which overlooked anthropogenic actions leading to dystrophic (hydro)systems and water crises in the region, a partnership between Florida Gulf Coast University (FGCU) and Lee County School District (LCSD) arose in Lee County (SW Florida) to develop curricula to educate K-12 students and their educators.

Project "Future Leaders of Water Quality (FLOW)" involved the development of a five-day innovative curriculum prototype focused on the causes and implications of cultural eutrophication, in which middle school students investigated their school's watershed and stormwater pond. Schools' ponds display the characteristics of shallow water bodies typical of the region and offer unique hands-on materials which are very compelling to the students. Place-based learning at the school detention ponds forges a connection between the student and school community to the outdoor environment. The curriculum, which included field, experimental laboratory, video viewing, artistic and writing activities, addressed the Florida State Standard SC.7.E6.6: *"Identify the impact that humans have had on Earth, such as desertification, urbanization, deforestation , erosion, air and water quality and changing the flow of water"*. FLOW focused on educating students and engaged them in environmental and water quality literacy.



Students engaged in i) the importance of a pervious and

planted watershed and littoral zone to warrant groundwater recharge and runoff filtration, ii) the relationship between nutrients and eutrophication, iii) hydrosystems continua horizontally and vertically, iv) water resilience strategies, v) environmental literacy and vi) environmental civic engagement designed to encourage student-led action and citizen science initiatives. Through increasing awareness, and knowledge about water quality, students developed personal understandings of local water resiliency as well as the development of green infrastructures to mitigate human impacts, protecting health and controlling eutrophication and hydrology. Students indeed enhanced the ecological filter function of their pond through littoral planting and the implementation of limestone filled gabions at point-sources of entry. Further, subsequent to field and laboratory skill development, students became equipped to become citizen scientists.

Based upon the success of Project FLOW, project Go with the FLOW (LCSD) and Watershed Teacher Leadership Academy (WeTLAnd), Center for Environmental & Sustainability Education, CESE/FGCU) also took place to teach K-12 teachers to develop project-base curriculum engaging in water quality monitoring while managing school ponds.

The primary goals were to help K-12 teachers increase self-efficacy, and gain the skills, confidence, and inspiration to incorporate authentic inquiry-based scientific practices into their curricula by participating in authentic field research with FGCU researchers, and share researchers' timely watershed research with local communities. It is anticipated that each year a new cohort of teachers would be selected from to participate in the academy. Project FLOW is also continuing to be funded (DEP Clean Water Act Section 319h). As informed future citizens, students, and teachers are better equipped to weigh the interests of both conservation and development and know how to mitigate human impacts in their local community.



Serge Thomas is an Associate Professor at Florida Gulf Coast University in Fort Myers, Florida.

For more about this project, contact Serge at SEThomas@FGCU.edu

Digitally Documenting History (& Lakes) by Connie Lester, Ph.D, University of Central Florida

RICHES is an interdisciplinary digital project that partners with multiple academic units at the University of Central Florida, six other Florida universities, and commercial and nonprofit sectors of the community. The project has two goals: 1) to serve as a model for documenting regional history, especially "hidden" history and culture, through an interactive database that draws from multiple repositories and personal collections, and 2) to develop new digital tools for historians.

A central component of the project is the RICHES Mosaic Interface (RICHES MI) <u>https://richesmi.cah.ucf.edu</u> which is an interactive digital collection of Florida's history. This free public tool offers a searchable database with access to images, documents, podcasts, oral histories, films, and visualizations. It combines time and geographical results with text analysis techniques to help users find hidden connections within the archive. Users of the RICHESMI site can save items in a personal BookBag where they can organize, analyze, and storyboard, their items. Users of RICHES MI can search the database, analyze the data, and learn about Florida history.

The digitization of a portion of the collection on Lake Apopka mitigation began when the Friends of Lake Apopka (FOLA) invited the RICHES team to the Oakland Nature Preserve to assess the collection housed there and to discuss preservation of the materials. FOLA wanted to assure public accessibility of the materials in order to foster future research. Joshua King, an undergraduate at UCF, served a one-semester internship in which he assessed the extent of the collection and began the process of digitizing portions of the collection and the writing metadata that would make the collection searchable. One semester was not enough time to complete the full project. The Friends of Lake Apopka then hired Mr. King part time to continue work on the collection. He was meticulous in his research and writing, and hundreds of items are now available for public viewing. The physical collection is also available at the Winter Garden Heritage Center.

Access the Friends of Lake Apopka Collection: <u>https://richesmi.cah.ucf.edu/omeka/collections/show/153</u>

For a listing of all the special collections in RICHES: https://richesmi.cah.ucf.edu/omeka/collection-tree

Connie Lester is Associate Professor of History at the University of Central Florida in Orlando, Florida. She is the Director of RICHES of Central Florida and the Editor of Florida Historical Quarterly. She can be reached at Connie.Lester@ucf.edu.



Florida Lakes & Rivers Through the Years



Tourists on the *Okeehunkee* in Silver Springs ca. 1880

Citrus groves on the lakeshore in Winter Haven ca. 1920s

Steamboat Astatula in Marion County

String of Black Bass from Lake Apopka ca. 1939.

Photos courtesy Florida State Archives

July is Lakes Appreciation Month

Join the Florida Lake Management Society and our national organization, the North American Lake Management Society, as we celebrate Lakes Appreciation Month. During this month-long recognition, NALMS promotes the Great Secchi Dip-in. According to NALMS, the Secchi Dip-In is a demonstration of the potential of volunteer monitors to gather environmentally important information on our lakes, rivers, and estuaries. Volunteers have been submitting information during the annual Dip-In since 1994. Please join them in this international effort to track changes in water quality!

While it may be difficult to have our usual celebrations such as clean ups or kayak events, let's be creative and love our lakes even more this month! Introduce a child to the wonders of aquatic invertebrates. Go fishing with your neighbor. Drift down along the shoreline in your kayak. Plant some shoreline vegetation.

Or... just enjoy the sunset!

Sunset on Lake Kirkland, Lake County

FLMS Bandanas Still Available

Call them what you will - buffs, tubular bandanas, gaiters, face socks – FLMS has them available for purchase on our website at <u>https://flms.net/flms-buffs/</u>

Prices start at \$6 for one and the deals get better the more you buy! We ship them out within 1 - 2 days.

Need to Contact Us?

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Our Mission

The mission of the Florida Lake Management Society is to promote protection, enhancement, conservation, restoration, and management of Florida's aquatic resources; provide a forum for education and information exchange; and advocate environmentally sound and economically feasible lake and aquatic resource management for the citizens of Florida.

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