

FRIENDS OF ST. SEBASTIAN RIVER
BOARD OF DIRECTORS' MEETING AGENDA
TUESDAY, SEPTEMBER 12, 2023 – 4pm, Ryall house/South Prong Preserve

CALL TO ORDER/ATTENDANCE

CALL FOR ADDITIONS/DELETIONS TO THE AGENDA

MINUTES FROM THE PREVIOUS MEETING(S) – p. 2

TREASURER'S REPORT – pp. 3-9

PRESIDENT'S REPORT –

UNFINISHED BUSINESS

Adopt-a-Road – response for route 510 – no update

NEW BUSINESS

COMMITTEE REPORTS

Advocacy – Herrmann

SJRWMD permits

Cypress Bay West Phase III B-permit #96251

IR County Fran Adams Park new restroom-permit #66856

FDOT CR510 to 82nd Ave. widening stormwater-permit #93656

Liberty Park Phase 1C, grading/stormwater-permit #165199

ACOE permits – none

IRNA/Clean Water Coalition Sebastian City Council candidate questions – pp. 10-11

Education/Outreach – Bolton/Stephen

River cleanup Sep. 30, 9-11am, US 1 & SSR bridge

Sep. 26 FSSR meeting, North IR Library, Karen Greb-Florida's Right to Clean Water

Pelican Island Audubon, Transforming Landscapes Conf. sponsorship – pp. 12-15

Financial – Greene

Governance – Herrmann – suggestions for new Advisory Directors

Information – Glover, website stats

Membership – Herrmann, new members since Apr. – Nicholas Polge

Publicity – Penny Phillips

Volunteer – vacant, planned activities/dates - possible activities from Jun23 agenda; unmet volunteers from Jan23 – pp. 16-17

Adjournment

ANNOUNCEMENTS

1) Next BOD meeting – October 10, 4pm, Ryall house

2) Ryall property/South Prong Preserve Open House, TBD

3) A Day in the Life of the IRL, ORCA, Oct 5, 2023

4) ORCA – One Health/Fish Monitoring webinar, Sep. 27, 6pm; Pollution Mapping Findings webinar, Oct. 10, 6pm - www.teamorca.org/calendar

5) Marine Resources Council Low-Impact Development Conf./Babcock Ranch, Oct. 19-20 – pp. 18-28

6) IR Lagoon Day festival, Front Street Park, Melbourne, Nov. 18, 2023

7) PIAS Transforming Landscapes Conference, Jan. 20, 2024

**FRIENDS OF ST. SEBASTIAN RIVER
BOARD OF DIRECTORS' MEETING MINUTES
JUNE 13, 2023, 4PM, RYALL HOUSE /SOUTH PRONG PRESERVE**

CALL TO ORDER/ATTENDANCE--Pres. Glover called the meeting to order at 4:00 pm. Present were Greene (treasurer), Peterson(secretary), and directors Stephen and Zingman. Bolton and Herrmann had excused absences. CALL FOR ADDITIONS/DELETIONS TO AGENDA--Add American Rivers membership renewal to New Business MINUTES FROM PREVIOUS MEETING(S) (AP,pp.2-3)--Stephen made a motion, seconded by Greene, that the Minutes from the May 9th meeting be approved and accepted; all voted in favor.

TREASURER'S REPORT(AP,pp.4-10)Glover noted that we still have a negative value for accounts payable (FPL credit). Peterson made a motion, seconded by Stephen, that the report be accepted and approved for audit; all voted in favor.

PRESIDENT'S REPORT:1) Letter to Gov. DeSantis re phosphogypsum veto request--Glover will write this week after further researching subject 2)meeting with new IR County manager John Titkanich--very productive recent gathering that included Glover, George Glenn, Judy Orcutt, and Dan Lamson

UNFINISHED BUSINESS

Adopt-a-Road--response for route 510(AP,pp.11-16)--no response to our request for new signs

NEW BUSINESS

1)Mobile Beacon/Internet hotspot device annual renewal, \$120/year--Greene made a motion, seconded by Peterson, that we renew for another year; all voted in favor.

2)American Rivers renewal--Stephen made a motion, seconded by Peterson, that we renew at the \$25 level; all voted in favor.

COMMITTEE REPORTS

Advocacy-Herrmann-none

SJRWMD permits-Cross Creek Lakes addition/Henry Fischer, permit #203809

ACOE permits-none

SJRWMD-Southern Recreation Lands public meeting, May 16,2023 presentation info.(AP,pp.17-29)

Education/Outreach-Bolton/Stephen

Intl. Coastal Cleanup, river cleanup with KIRB Sept. 16th?-Glover will contact our members by e-mail in Aug. and also place event on our website; he will also have Penny place on Facebook to encourage a good turnout.

2023-2024 Meeting topics-Booth/Florida oaks; Peralta/stormwater; McGrath/Gopher Tortoise Alliance; Powell/IRC Conservations Lands-South Prong Preserve; Keith Touchberry/Future Planning in Fellsmere

Stop Aquatic Hitchhikers partnership sign-up-(AP,p.30)

Financial-Greene

Paddle Fest financial report-(AP,p.31)

Impact 100 grant workshop report(AP,p.32)

NonprofitHub grant readiness webinar, slides (AP,pp.32-36),recording-<https://vimeo.com/825545518>

Nonprofit Accounting Basics, stewardship & accountability commentary(AP, pp. 38-39)

Governance-Herrmann-suggestions for new Advisory Directors-none

Information-Glover, website stats(AP,pp.40-41)

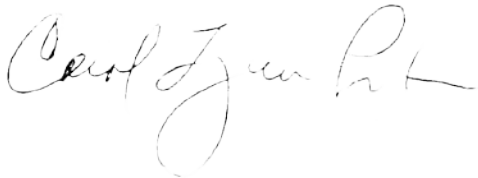
Membership-Herrmann-new member since April-Michelle Smith

Publicity-Penny Phillips-none

Volunteer-vacant, planned activities/dates(AP, p.42)

Adjournment-Greene made a motion, seconded by Peterson, that the meeting be adjourned at 5:00pm; all voted in favor.

Respectfully submitted,



Carol Lynn Peterson
FSSR Secretary

****July 11th BOD meeting canceled; no meeting scheduled for August**

Friends of St. Sebastian River
Profit & Loss
 June through August 2023

	Jun - Aug 23
Ordinary Income/Expense	
Income	
43400 · Direct Public Support	
43410 · Corporate Contributions	45.00
43450 · Individ, Business Contributions	711.24
Total 43400 · Direct Public Support	756.24
47200 · Program Income	
47230 · Membership Dues	30.00
Total 47200 · Program Income	30.00
Total Income	786.24
Gross Profit	786.24
Expense	
62800 · Facilities and Equipment	
62890 · Rent, Parking, Utilities	236.14
Total 62800 · Facilities and Equipment	236.14
65000 · Operations	
65010 · Books, Subscriptions, Reference	25.00
65020 · Postage, Mailing Service	23.59
65050 · Telephone, Telecommunications	27.48
65060 · Merchant Service Fee-PayPal	2.37
Total 65000 · Operations	78.44
Total Expense	314.58
Net Ordinary Income	471.66
Net Income	471.66

Friends of St. Sebastian River Balance Sheet As of August 31, 2023

	Aug 31, 23
ASSETS	
Current Assets	
Checking/Savings	
10000 · Checking	
10020 · Without Donor Restrictions	9,805.12
10030 · With Donor Restirctions	
10031 · Geo Schum Memorial Fd	500.00
10033 · Archie Laird Memorial	585.00
10034 · Grants	422.54
Total 10030 · With Donor Restirctions	1,507.54
Total 10000 · Checking	11,312.66
10100 · Petty Cash	45.00
10200 · PayPal	310.02
Total Checking/Savings	11,667.68
Other Current Assets	
10300 · Gift Card	26.26
12000 · Undeposited Funds	15.00
12100 · Inventory Asset	
12110 · Puppets	284.50
12120 · Clothing	137.05
12130 · Miscellaneous Inventory	4.82
12140 · Hats	116.64
12100 · Inventory Asset - Other	1,202.62
Total 12100 · Inventory Asset	1,745.63
Total Other Current Assets	1,786.89
Total Current Assets	13,454.57
TOTAL ASSETS	13,454.57
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20000 · Accounts Payable	18.15
Total Accounts Payable	18.15
Other Current Liabilities	
25500 · Sales Tax Payable	19.68
Total Other Current Liabilities	19.68
Total Current Liabilities	37.83
Total Liabilities	37.83
Equity	
30000 · Opening Balance Equity	316.73
32000 · Unrestricted Net Assets	11,674.89
Net Income	1,425.12
Total Equity	13,416.74
TOTAL LIABILITIES & EQUITY	13,454.57

Friends of St. Sebastian River
Reconciliation Detail
10000 · Checking, Period Ending 08/31/2023

Type	Date	Num	Name	Clr	Amount	Balance
Beginning Balance						11,083.04
Cleared Transactions						
Checks and Payments - 4 items						
Check	8/2/2023	DC	Google	X	-3.00	-3.00
Bill Pmt -Check	8/7/2023	DC	Folkmanis	X	-50.75	-53.75
Bill Pmt -Check	8/7/2023	DC	Folkmanis	X	-43.59	-97.34
Check	8/11/2023	DC	Ooma	X	-6.16	-103.50
Total Checks and Payments					-103.50	-103.50
Deposits and Credits - 3 items						
Sales Receipt	8/2/2023	981	Charities Aid Found...	X	166.56	166.56
Sales Receipt	8/22/2023	982	Charities Aid Found...	X	83.28	249.84
Sales Receipt	8/23/2023	983	Charities Aid Found...	X	83.28	333.12
Total Deposits and Credits					333.12	333.12
Total Cleared Transactions					229.62	229.62
Cleared Balance					229.62	11,312.66
Register Balance as of 08/31/2023					229.62	11,312.66
New Transactions						
Checks and Payments - 2 items						
Check	9/2/2023	DC	Google		-3.00	-3.00
Bill Pmt -Check	9/7/2023	DC	FPL		-18.15	-21.15
Total Checks and Payments					-21.15	-21.15
Total New Transactions					-21.15	-21.15
Ending Balance					208.47	11,291.51



Transaction history

Date	Check Number	Description	Deposits/ Credits	Withdrawals/ Debits	Ending daily balance
8/2		Cybergrants-Cafa Cybergrant ACH_6064121 Friends of St Sebastia	83.28		
8/2		Cybergrants-Cafa Cybergrant ACH_6080205 Friends of St Sebastia	83.28		
8/2		Recurring Payment authorized on 08/01 Google Gsuite_Fss 650-2530000 CA S383213404147384 Card [REDACTED]		3.00	11,246.60
8/7		Purchase authorized on 08/04 Folkmanis, Inc. 510-6587677 CA S463216601478124 Card [REDACTED]		94.34	11,152.26
8/11		Recurring Payment authorized on 08/10 Ooma,Inc 888-711-6662 CA S583222765783215 Card [REDACTED]		6.16	11,146.10
8/22		Cybergrants-Cafa Cybergrant ACH_6148719 Friends of St Sebastia	83.28		11,229.38
8/23		Cybergrants-Cafa Cybergrant ACH_6161531 Friends of St Sebastia	83.28		11,312.66
Ending balance on 8/31					11,312.66
Totals			\$333.12	\$103.50	

The Ending Daily Balance does not reflect any pending withdrawals or holds on deposited funds that may have been outstanding on your account when your transactions posted. If you had insufficient available funds when a transaction posted, fees may have been assessed.

Monthly service fee summary

For a complete list of fees and detailed account information, see the disclosures applicable to your account or talk to a banker. Go to wells Fargo.com/feefaq for a link to these documents, and answers to common monthly service fee questions.

Fee period 08/01/2023 - 08/31/2023	Standard monthly service fee \$10.00	You paid \$0.00
The bank has waived the fee for this fee period.		
How to avoid the monthly service fee	Minimum required	This fee period
Have any ONE of the following each fee period		
• Average ledger balance	\$1,000.00	\$11,212.00 <input type="checkbox"/>
• Minimum daily balance	\$500.00	\$11,083.04 <input type="checkbox"/>

C1/C1

Account transaction fees summary

Service charge description	Units used	Units included	Excess units	Service charge per excess units (\$)	Total service charge (\$)
Cash Deposited (\$)	0	5,000	0	0.0030	0.00
Transactions	0	100	0	0.50	0.00
Total service charges					\$0.00



Sebastian City Council Candidate Questions:

Thank you for participating in our candidate questionnaire. Your thoughtful responses will help our community make informed voting decisions. We encourage you to give detailed answers to provide the most insight into your positions.

1. **Comprehensive Responses:** Please avoid one-word answers like "yes" or "no." We're looking for full explanations that give voters a better understanding of your perspective.
2. **Word Limit:** Aim to limit each answer to 250 words. While exceeding this isn't a deal-breaker, keep in mind that lengthy answers may lose reader engagement.
3. **Deadline:** Please adhere to the submission deadline provided. Late submissions may not be included in our final report.
4. **Format:** Submit your answers in a digital format that is easy to read and disseminate. Preferably, by returning this Word document with your answers under the questions.
5. **Clarity and Civility:** While we appreciate passion, please maintain a respectful and professional tone in your responses.
6. **Citations:** If you refer to data or studies to support your points, please provide appropriate citations.
7. **Editing:** We will not alter the content of your answers in any way before public presentation. While we reserve the right to adjust fonts and formatting for consistency, we will not correct typos or grammatical errors, as we believe it's important to present your words exactly as submitted.
8. **Questions:** If you have any questions about this questionnaire, please contact us before the deadline for clarification.

Candidate Name:

Water/Lagoon

How will you work with the county utilities department to get more septic to sewer conversion in the city?

Can you share your understanding of the key drivers of lagoon decline, and what initiatives do you propose to combat this issue from the dais?

How do you plan to address the issue of at-risk and derelict vessels in our area, ensuring both safety and environmental protection?

Would you support the discontinuation of the SJRWMD rolling back rates to provide additional funding for cities and counties to help fund septic to sewer conversions?

With the new research coming out about how Glyphosate impacts seagrass and other lagoon plants what would you change about how Sebastian deals with weeds? (see presentation by Dr. Austin Fox here: <https://youtu.be/2MUcbtsK93w?t=1963>)

Several years ago the city council authorized a \$700,000 study of the city's stormwater problems and to report back through the city engineer. As of August 2023 we have not seen this report and the rumor is that the cost of this 700 page report is now over \$1 million. Do you know why this report has grown so expensive? What will you do to make the report public? And will you be willing to accept and implement all the recommendations in the report in a timely manner?

Growth

How do you intend to manage growth in Sebastian?

River Oaks Preserve: this will add 352 homes with the threat of traffic overloading local roads for access and pouring still more traffic on CR 510. Should the city provide final approval for this project?

Vision

What is your view on the future of the Graves Brothers Annexation? What did the City of Sebastian do right and what could it have done better? If you were involved in the process, what did you take away from it?

Do you have any plans to foster a better working relationship with the county, and if so how will you accomplish them?

From: [Richard Baker](#)
To: [Tim Glover](#)
Subject: Coming! The 5th Conference "Transforming Landscapes for a Sustainable Future" January 20, 2023.
Date: Saturday, September 2, 2023 3:34:38 PM
Attachments: [2024 landscape conference flyer final. pdf.pdf](#)
[Untitled attachment 00022.htm](#)

Dear Tim,

Thank you for FSSR last year's generous contribution allowing us to put on our 4th conference "***Transforming Landscapes for a Sustainable Future.***" You helped us do it! That conference led several communities and many home owners to take action planting natives in their yards. The community is responding as PIAS has distributed 19,000 native plants and trees under our Trees for Life/Plants for Birds program! See <https://pelicanislandaudubon.org/trees-for-life-plants-for-birds/>

Attached is the Flyer for our upcoming 5th Conference on Jan 20, 2024 listing the great speakers schedule and their bios. The photos at the top show the **Education and Demonstration Native Plant Garden** at the entrance to the Indian River County Commission before and after planting 272 native plants of 21 species. A second Education and Demonstration Native Plant Garden was planted at the UP Against Poverty (UP) this year with 223 native plants of 27 species. Many folks come to the county complex to visit the county health department, pay their taxes, and attend commission meetings and at the UP, 10,000 low-income visitors. The third Garden is started in at the Vero's Beach Post Office entrance. These native gardens educate and demonstrate to the public that a native plant garden can be beautiful and functional as well as sequester more carbon, reduce need for harmful pesticides and filter harmful fertilizer from entering our Lagoon.

We hope you will help us maintain this momentum by becoming a generous sponsor for our 5th conference, "***Transforming Landscapes for a Sustainable Future.***" These great speakers again covering many aspects of the importance of native plants to humanity's future. The emphasis is on transforming our landscapes to reduce our water usage, to save our fragile lagoon and ponds, and bring a vision and understanding of proposed environmental annexation requests. The conference will be held at the Emerson Center, 1590 27th Ave, Vero Beach. We will have outside native plant vendors also. Admission is \$25 (attendees will have a box lunch) and \$35 after January 17th. To encourage interest and involvement, we will give one free ticket to HOA board presidents.

For this conference, we want a wide representation of diverse audiences: local governments, businesses, homeowner's associations, developers, landscape architects, consulting engineers, nurseries, and our concerned residents. This is an opportunity to learn how to landscape that is sustainable, cost-effective, and enhances quality of life for all. The rate of development in the Indian River Lagoon region is tremendous. Join us and be part of the solution NOW for a healthier environment by transforming our residential and commercial landscapes.

Please, let me know as soon as possible about your donation we want to develop advertisements with your name giving you credit for your essential contribution. Invite your family and friends! If you choose to be a sponsor for \$1,500 or more you will get 12 complimentary tickets; \$1,000 = 8 Tickets; \$500.00 = 4 Tickets; \$250 = 2 Tickets. Sponsors will be listed on the program, flyers, and in our advertising. You can have a table at the conference.

To make your important donation go to <https://pelicanislandaudubon.org/2023/08/31/fifth-transforming-landscapes-for-a-sustainable-future-conference/>. You can use your credit card or call our office at 772-567-3520 (9 a.m.-1 p.m. M-F). Or mail a check payable: to Pelican Island

Audubon, P.O. Box 1833, Vero Beach, 32961 Please share this letter & spread the word! **SAVE THE DATE.**

Thank you for helping transform our community. We look forward to your continued sponsorship!

Richard
Richard H. Baker, Ph.D.
Chair, Pelican Island Audubon Society

LEARN TO ENHANCE YOUR YARD WITH NATIVE PLANTS 5TH TRANSFORMING LANDSCAPES FOR A SUSTAINABLE FUTURE

JANUARY 20, 2024
AT THE EMERSON CENTER

1590 27TH AVENUE
VERO BEACH, FL 32960

CONFERENCE SCHEDULE



SPONSORS

Become a conference sponsor and get your name or business listed here!

\$1,500

\$1,000

\$500

\$250

8:00AM	Online Registration-PelicanIslandAudubon.org-Tickets \$25 & includes box lunch. \$35 after Jan 17. Native plants on sale from Native Plant Nurseries
9:00-9:50	Dr. Craig N. Huegel , Director, University of South Florida Botanical Garden, <i>Sustainable Landscapes and the Concept of Reciprocity: Why is giving back to the natural world sustainable?</i>
10:00-10:50	Betty Osceola , Member of the Miccosukee Tribe, <i>Reclaiming and Healing Our Natural Landscapes</i>
10:50-11:10	Break
11:10-12:10PM	Dr. Basil V. Iannone, III , Associate Professor, School of Forest, Fisheries, & Geomatics Sciences, University of Florida, <i>Stormwater Ponds: assessing utility, impacts, & potential contribution to urban diversity</i>
12:10-1:00	Lunch with Box Lunches included in the \$25 admission ticket for those attending in person.
1:00-1:50	Maya Dutta , Asst. Director of Regenerative Projects, Biodiversity for a Livable Climate, Cambridge, MA, <i>Restoring Ecosystems to Address Global Warming: Pocket Rewilding Using the Miyawaki Method</i>
2:00-2:50	Dr. Jaret C. Daniels , Curator, McGuire Center for Lepidoptera & Biodiversity, UF Museum of Natural History, <i>Creating Pollinator Pathways in the Built Environment & the Importance of Insects Especially Florida Natives</i>
2:50-3:20	Break
3:20-4:10	Dr. Reed F. Noss , President, Florida Institute for Conservation Science, <i>Big Picture Ecology: How Deep History & Large Landscape Thinking Help Us Understand & Save Florida's Unique Biodiversity</i>
4:10-4:30	Dr. Richard Baker - Discussion and Summary

LEARN MORE ABOUT PELICAN ISLAND AUDUBON SOCIETY

WWW.PELICANISLANDAUDUBON.ORG

PHONE: 772-567-3520

EMAIL: PIAUDUBON@YAHOO.COM

SPEAKER BIOGRAPHIES



Dr. Craig N. Huegel, Director, University of South Florida Botanical Garden, owner and operator of Hawthorn Hill Native Wildflowers, and teaches biology at St. Petersburg College. Former faculty member, Department of Wildlife Ecology and Conservation, University of Florida where he cofounded the Cooperative Urban Wildlife Extension Program. Author of *Native Florida Plants for Shady Landscapes*, *Native Wildflower and Other Ground Covers for Florida Landscapes*, and *Naive Plant Landscaping for Florida Wildlife*. Uses central Florida landscapes as laboratories to evaluate native plants and grows a wide variety of species (mostly wildflowers) that are not commonly propagated elsewhere.



Betty Osceola, Enrolled Member of the Miccosukee Tribe of Indians of Florida. Utilizes her upbringing in the Greater Everglades and the indigenous traditional ecological knowledge of Miccosukee and Seminole people in their connection to the environment to educate and advocate for environmental conservation. Airboat Captain and owns and operates Buffalo Tiger Airboat Tours utilizing her experience to educate the public about the Miccosukee and Everglades ecosystem. Serves on the Miccosukee Tribe's Everglades Advisory Committee. Received the John V. Kabler Grassroots Organizing Award during the January 2018 Everglades Coalition annual summit. Featured in the 2023 film, *Path of the Panther*.



Dr. Basil Iannone, Assoc. Professor School of Forest, Fisheries, and Geomatics Sciences, University of Florida. Affiliated with the Center for Land Use Efficiency, the Program for Resource Efficient Communities, and the School of Natural Resources and Environment. His work is to inform the design, construction, and management of urban and residential landscapes that support greater levels of native biodiversity and ecological functioning. Brings together plant ecologists, soil scientists, entomologists, biogeochemists, wildlife ecologists, landscape architects, horticultural scientists, turfgrass scientists, social scientists, engineers, and economists. Works closely with Extension faculty and practitioners interested in adopting more sustainable landscaping practices, including municipalities, homeowners, land developers, planners, landscape architects, plant nurseries, and green industry professionals.



Maya Dutta, Ecosystem restorer working to spread understanding on the key role of biodiversity in shaping the climate and the water, carbon, nutrient and energy cycles we rely on. Passionate about climate change adaptation and mitigation and the ways that community-led ecosystem restoration can fight global climate change. Works on project management, research, outreach, education and advocacy efforts at Biodiversity for a Livable Climate. Focused on biodiversity and access to nature and ecological connection in urban areas, motivating her work on Miyawaki Forests. These fast growing and resilient mini-forests offer environmental benefits, including cooling urban heat islands, establishing wildlife corridors, building soil health, sequestering carbon, creating pollinator habitats, etc. Shares information on the Miyawaki methodology, examples of its implementation, and opportunities to scale this work and advance regenerative practices and environmental justice in cities and communities worldwide. A 2022 SUGi Fellow, Forestmaker, a TED speaker, and worked with Bio4Climate to plant the first Miyawaki Forests in the Northeast US in 2021 and 2022.



Dr. Jaret C. Daniels, Curator at the Florida Museum of Natural History's McGuire Center for Lepidoptera and Biodiversity and Professor, Department of Entomology and Nematology, University of Florida. Ph.D. from the University of Florida. Specializes in insect ecology and conservation with a focus on at-risk butterflies and native insect pollinators. Works on varied landscapes from wild lands, roadsides, and suburban yards in an effort to develop best insect conservation and management practices. Authored many books on butterflies, insects, wildflowers, native plants, and wildlife landscaping including *Your Florida Guide to Butterfly Gardening*, *Butterflies of Florida Field Guide*, *Native Plant Gardening for Birds, Bees & Butterflies: Native Plant Gardening for Birds, Bees & Butterflies: Southeast*, *Wildflowers of Florida Field Guide*.



Dr. Reed Noss, President, Florida Institute for Conservation Science and Chief Science Advisor for the Southeastern Grasslands Institute and Science Advisor for the University of Florida's Center for Landscape Conservation Planning. Formerly Provost's Distinguished Research Professor of Biology at the University of Central Florida. Ph.D. in wildlife ecology from the University of Florida. Served as Editor-in-Chief of *Conservation Biology*, President of the Society for Conservation Biology, Elected Fellow of the American Association for the Advancement of Science. Research include landscape/regional conservation planning; fire ecology; ecosystem conservation and restoration; road ecology; and vulnerability of species and ecosystems to climate change. Over 360 publications, including eight books the most recent are *Forgotten Grasslands of the South: Natural History and Conservation* and *Fire Ecology of Florida and the Southeastern Coastal Plain*. Currently focused on landscape conservation history and rewilding in Florida.

**Friends of St. Sebastian River
Volunteer Committee Report – Tim Glover
January 10, 2023**

Unmet volunteer needs:

- 1) Publicity – newsletter production, press releases, publicity/PR, media, marketing, photography, coordinate with Facebook editor.
- 2) Information – St. Sebastian River research project, website, digitizing archive/historical information, walking tours development/informational materials.
- 3) Advocacy – monitoring of permits (St. Johns River WMD, Army Corps of Engineers), monitoring legal notices/IR County/City of Sebastian Council agendas, monitor/coordinate activity with other environmental organizations – statewide and national.
- 4) Volunteers – coordinator and activity leaders/docents, festival/event coordinator.
- 5) Administrative – monitoring FSSR emails and voice messages, library.
- 6) Merchandising – monitor merchandise needs/reorders, research/recommend new items.

**Friends of St. Sebastian River
Volunteer Committee Report – Tim Glover
June 13, 2023**

In addition to the “unmet volunteer needs” from the Committee report of January 2023, the following is a list of projects that may be considered for the Ryall property/South Prong Preserve.

As per our Committee meeting in September 2023, tentative plans are to schedule workdays/activities at the Ryall property in the morning on the second and fourth Fridays, and the third Saturday. Our agreement with IR County requires 12 public activities per year.

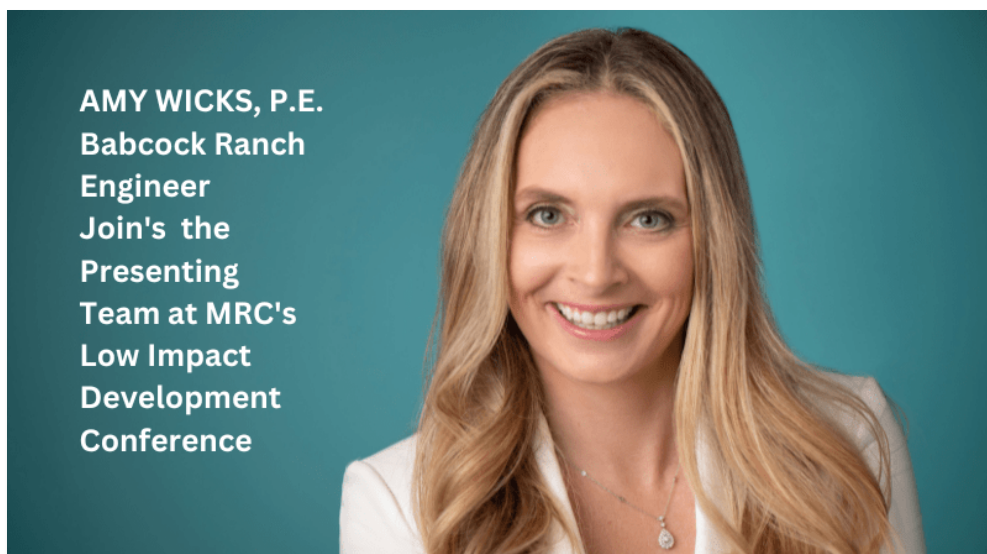
- Bird watching
- Plant identification/list update
- Invasive plant eradication
- Native plant/butterfly gardening – establish planting areas
- Front entry/walk improvements – reset/new pavers
- Stain deck – requires County to replace rotting boards
- Establish walking trail along South Prong
- Driveway entrance improvements – regrading, widening flare
- General maintenance and cleaning
- Mowing/weeding
- Student engagement activities – coordinate with teachers, perhaps Julia Held and Kai Andrews
- Repair vertical blind valances
- Configure deadbolt lock
- NOAA algae ID project
- Coordinate with MRC/IRLT on St. Sebastian River Greenway program
- Other?

The Lagoon House is open to the public by appointment only.
Call us at 321-725-7775 to request an appointment.

Latest: Developing New Shoreline



You are here: [Home](#) » [What's New](#) » [A Sustainable Tomorrow for Development](#)



LATEST FROM MRC

- [Developing New Shoreline Restoration Techniques](#)
- [A Sustainable Tomorrow for Development](#)
- [Sebastian Inlet Seagrass Monitoring](#)

Stay Informed!

The Marker is the Marine Resources Council's monthly newsletter. [Sign up](#) for our email updates, or browse our recent [newsletter archives](#).



UPCOMING EVENTS

Lagoon at Noon - Developing New Shoreline Restoration Techniques
September 12, 2023 | 12:00 pm - 1:00 pm

[Click for details](#)

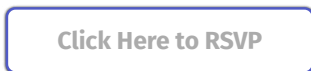
MRC Coastal Cleanup
September 16, 2023

A Sustainable Tomorrow for Development

📌 low impact development, LID, sustainability, in the news

This is your invitation! Please join the 2023 MRC Low Impact Development Conference, Thursday – Friday, October 19 & 20.

With your help, we can build community resiliency, control pollution, improve water quality, and protect our paradise.



MRC is pleased to welcome the newest presenting member of the conference.

Amy has built a career centered around surface water planning and management in Southwest Florida. In 2006, she was assigned to a project that would shape her long-term professional focus: Babcock Ranch, a sustainable town northeast of Fort Myers. Upon joining the project team, Amy pursued and obtained a Master's of Water Resources Planning and Management with a focus on Sustainability to aid in her design of a new town that would be both sustainable and storm resilient. While the community has been a living

laboratory for sustainable development since its groundbreaking in 2016, it wasn't until 2022 that Amy and her family got to test the storm resiliency of the community in which they now live.

Babcock Ranch spent 10 hours in the eyewall of Hurricane Ian on September 28, 2022, with sustained winds over 100 mph for more than 8 hours, with gusts reaching up to 150 mph. In addition to the winds, the community received between 10 and 17 inches of rain. After the storm passed, it was obvious that the resiliency of the community worked as designed. The streets did not flood, and there was minimal damage throughout, with Babcock Ranch being the only place in all of Charlotte County to maintain electricity and clean drinking water. Since the storm, Amy has been even more vocal in her advocacy of implementing the design strategies used in Babcock Ranch throughout the State of Florida to minimize destruction in the wake of climate change.

We hope you join us for Amy's presentation, A Sustainable Tomorrow: Past, Present, and Future – a case study of Babcock Ranch.

The conference covers a full range of LID/GI tools, from design, modeling, construction, and maintenance, to funding and cost analysis. In addition, experts will share design tools, policies, projects, and case studies to set and meet pollution load reductions, recharge groundwater aquifers, and prevent flooding.

Elected officials, community leaders and managers, engineers, planners, builders, developers, resource managers, landscape architects, public works and stormwater personnel, environmental professionals, scientists, educators, and advocates will all benefit from the experience of Florida's leading LID/GI experts.

Registration & details are available at: <https://2023mrclidcon.eventbrite.com/?aff=mrcb>.

**Anything you can do to help promote this opportunity is greatly needed and appreciated. Please share this event link with your family, friends, and professional networks.*

Conference location: Center for Collaboration at 1100 Rockledge Blvd, Rockledge, FL 32955.

Now Seeking Conference Sponsors, Exhibitors, & Donors!

- Your contribution will go to MRC's efforts to promote and implement LID, GI, and advanced stormwater management practices in Florida. Contact conference management for details.
- **ACT TODAY:** Exhibit space and sponsorships are limited and confirmed on a first-come, first-served basis.
- **Add to the Program!** We dare you to inquire about presenting your ground-breaking and cutting-edge expertise at the conference.

[Download the Conference Resources Packet](#)

Questions & Contact Information

Please contact Conference Manager Steve Sharkey ~ Call: 321.978.8862 ~ Email: SharkeyMRC@gmail.com.

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November 3, 2023 | 6:00 pm - 9:00 pm

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GRAY TO GREEN WITH LID

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Center for Collaboration ✦ Rockledge, FL
✦ Thur-Fri, October 19-20

Featuring Special Guests

Martin Wanielista, Ph.D., P.E.

Peter Singhofen, P.E., Streamline Tech

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Experts will showcase LID/GI tools, policies, case studies, & empower a new future in stormwater management.

Modeling Integrated with Pollution Control & Water Quality

Go Gray to Green with BMP TRAINS & icpr4

- Build Community Resiliency
- Reduce Flooding
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2023 CONFERENCE & EXPO SPACE

Center for Collaboration

1100 Rockledge Blvd, US-1, Rockledge, FL 32955



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- Scientists
- Stormwater Managers



LID Photo Credit: Ferguson Waterworks

*The Marine Resources Council
is excited to host Florida's East Coast
2023 Low Impact Development Conference*

**CONFERENCE & TRADE EXPO DATES
OCTOBER 19 & 20, 2023**

PLEASE RSVP

County and municipal coastal community development leaders, engineers, planners, builders, developers, public works and stormwater personnel, environmental professionals, and advocates will benefit from the 2023 MRC Low Impact Development Conference.

The Marine Resources Council has challenged Florida communities to reduce the amount of polluted stormwater entering coastal waterways, especially the Indian River Lagoon. Low Impact Development (LID) and Green Infrastructure (GI) represent the most progressive stormwater management trends to protect water quality and reduce flooding. Participation in the conference is available on a first-come-first-served basis. Please be sure to RSVP today to help build a better Florida.

2023 CONFERENCE

BENEFITS INCLUDE

- Two-Day Learning Experience
- Turn Gray to Green with BMP TRAINS & icpr4 Modeling
- **BMP Selection Course**
- Green Infrastructure Construction & Installation Curriculum
- LID Code Audit Tool Update
- **Learn what Grants & Funding are Available**
- Calculate the Real Deal with Maintenance & Costs
- What You Need to be Successful Survey
- **Open Panel Discussion**
- Connecting with industry leaders and making valuable contacts with state-of-the-art products, services, and solutions
- Earn Continuing Education Credits approved by the Florida Board of Professional Engineers and the Florida Nursery, Growers and Landscape Association
- **Complimentary continental breakfast (8 a.m.), lunch, and beverage service**
- Complimentary Happy Hour Reception with live music on Thursday, Oct. 19, 2023
- More TBA



GENERAL ADMISSION

2023 CONFERENCE DATES
OCTOBER 19 & 20
8 A.M.



Registration Rates

All attendees \$265 + \$19.62 Eventbrite Processing Fees

Includes general admission, continental breakfast (8 a.m.), lunch, and beverage service. There will be a complimentary Happy Hour Reception Thursday, October 19, 2023.

This conference is valued at over \$650 per attendee. The MRC is pleased to offer this opportunity at a discount, thanks to sponsor support and charitable gifts.

PLEASE REGISTER AT LOVETHEIRL.ORG,

or mail this form with full payment to:

Marine Resources Council, Attention: LID Conference,
3275 Dixie Hwy NE, Palm Bay, Florida 32905.

*** Registrations are confirmed on a first-come-first-served basis.**

Attendee Name: _____

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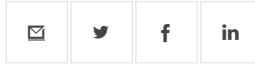
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For program details and updates, conference policies, important dates, cancellations, and refunds, please visit LoveTheIRL.org. For further assistance, contact Conference Manager Steve Sharkey at 321.978.8862 or at sharkeymrc@gmail.com.

FUTURE PLANET | WEATHER

Babcock Ranch: Florida's first hurricane-proof town



(Image credit: Jeffrey Greenberg / Getty Images)



By Lucy Sherriff 4th September 2023

Florida's Babcock Ranch was built to survive a storm. Hurricane Ian was the town's first test. Incredibly, the community weathered the storm – emerging almost unscathed.

Article continues below

When Hurricane Ian **made landfall on the southwest Florida coast**, it brought **150mph (241km/h) winds, 17 inches (43cm) of rain within 24 hours**, and storm surges of **up to 18ft (5.5m)**. It was the costliest hurricane in Florida's history, causing **more than \$112bn (£88bn) in damage** – and **at least 150 deaths**.

Amid the calamity, there was one community that weathered the storm surprisingly well: Babcock Ranch, **an 18,000-acre (73 sq km) development** that was sitting in the eye of the storm, on the southwest of the state, just north of Fort Myers. Built to withstand powerful storms, the town came out relatively unscathed.

And although it was not in the direct line of hurricane Idalia when it swept across the southeastern United States at the end of August, the town may yet get to prove its resilience again this year.

The 2023 hurricane season is expected to be **even more severe** than the one experienced in 2022. Atmospheric scientists at the **US National Oceanic and Atmospheric Administration (NOAA) have predicted an "above normal" season**, with as many as five major hurricanes – which would bring winds of 111mph and higher.

Florida is **more likely to flood than any other state** in the US due to its flat terrain. Despite this, **only 18% of Florida homes have flood insurance** – some residents **even report their insurance would be more than their rent**. A recent study found the **cost of insurance was projected to increase by 40% in 2023**. Exacerbating the issue is the **explosive population growth** and subsequent housing development that's taken place over the past century – **much of it on the wetlands** that would normally **help prevent to flooding**. Over the next 50 years, Florida's population **is expected to increase by another 12 million people**, and the proportion of land developed **could jump from 18% to 28%** – an increase of 3.5m acres (14,000 sq km).

Building climate-resilient communities is especially important in a state like Florida, which experiences a **six month-long** hurricane season. And that's exactly what Syd Kitson, developer of Babcock Ranch, hoped he'd achieved.



Are hurricanes in the US getting worse?

Five days before Hurricane Ian hit, Kitson sat around a table with his team of engineers, contractors and internal managers, and pored over the layouts of Babcock Ranch. He asked them: "Have we done everything humanly possible to ensure we're safe?"

Kitson had built the development above building code requirements – at a large additional cost – to ensure it was capable of withstanding a storm. "We spent a lot of additional dollars to make it safe, to plan it differently from other communities," he says. "The entire plan was based on the environment and resiliency. Everything we did was to address those two concerns."

The ranch, which opened in 2018 and is around **five times the size of Manhattan Island**, is like a picture-postcard, with neatly manicured lawns, vibrant green golf courses, forest trails and cycle paths. Residents zip around in solar-powered golf carts, kayak on the lakes, birdwatch, and congregate at the community pools. But the beautiful aesthetics have a dual purpose: the lakes double up as retaining ponds to protect houses from floods, streets are designed to absorb excess rainfall, and the community hall is reinforced as a storm shelter.

Hurricane Ian was to be the development's first test. "The winds felt like a freight train running through my house," remembers Kitson, who lives at Babcock. "And I remember thinking 'if we survive this the way we should, it's going to prove a point'. But you never really know until you're absolutely tested – you can do all the planning and engineering you want, but don't know for sure what the results will be."

In the aftermath, **not a single house lost power**, internet, or access to clean water, and the development opened its doors to the surrounding community who had lost their homes, turning a sports hall into an emergency shelter. And when Kitson drove around the site the next morning to inspect the damage, he found that the community he had built had survived – almost unscathed, bar a few upturned palm trees and street signs.

"We had minimal damage. If we hadn't had put in place those resilient steps, we would have had tens of billions of dollars of damage. So those upfront costs to make Babcock resilient paid for themselves in just the first couple of years."

The realisation that his climate-resilient design had worked was an "emotional" moment for Kitson. "It was incredible to see this new town had really proved climate resilience planning can be done the right way."

The White House estimates that climate change could cost the US government \$2 trillion (£1.58 trillion) per year by the end of the century

Building Babcock Ranch took years of planning and thoughtful design. Kitson's team consulted maps from the 1940s to find out where the natural flow ways of the land lay – essentially, where water would channel through during periods of high rainfall. Over decades, the flows had been changed to make way for farming, developments and other manmade purposes. "I told my planners 'forget where they are today, because the land has been drained'. You can't mess with Mother Nature, because Mother Nature is going to win every single time. We went and found these natural flows and we said we'd keep out of them and build around them."

Doing so meant the area's wetlands, which are adept at soaking up and holding rainwater, would be preserved. And in heavy rainfall events, when the wetlands are overburdened with water, the flow ways are able to carry the water down to Caloosahatchee River, because they have not been built on and so prevent flooding.

"It's refreshing that land developers are finally waking up to the fact that they have to address climate resilience and flooding," says Jennison Kipp, a researcher at the University of Florida's center for land use efficiency, who was "happy" to see the ranch survive the hurricane so well.



Hurricane Ian knocked out power to more than four million people in Florida and caused catastrophic flooding (Credit: Giorgio Viera / Getty Images)

Another key component in building resilient towns is location. Babcock Ranch lies inland along Highway 31, around a 45 minute-drive to the region's barrier island beaches, which

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other storms, particularly excess rainwater.

"We're literally paying billions of dollars in repairing damage caused by extreme weather," says Kipp. "These new developments offer a huge opportunity – as long as they can look past the short-term return on investment and take the long-term view." Last year, the White House estimated that climate change could cost the US government **\$2 trillion (£1.58 trillion) per year** by the end of the century.

It was incredible to see this new town had really proved climate resilience planning can be done the right way – Syd Kitson

Even though the ranch's first residents only moved in five years ago, the development became **the fifth top-selling master planned community** in the country last year. Richard Kinley and his wife were the first to buy a property at the ranch in 2018, moving from Atlanta, Georgia, after reading about the community's sustainable ambitions in local papers. Kinley, who says he's "always" been interested in cutting edge technology, was drawn by the problem-solving approach of the developers, particularly their water management system.

"When you're the first people to move in, you just never know," he says. "But the risk has completely paid off. I went out for a walk this morning and saw all these different birds, and fish in the lake, and lichen on the trees, and I thought about how incredibly clean the air is here. And yet, we still have a centralised downtown, and all the amenities we need."

You might also like:

- [The epic hurricane tug of war](#)
- [The US states pre-empting floods](#)
- [How Texas is heat-proofing its cities](#)

The ranch has become a blueprint for other developments, thanks to its resilience during Hurricane Ian, Kitson says. "Our success is reverberating around the country. There are solutions to living with extreme weather and Babcock Ranch is proof of that."

Climate-resilient communities have been emerging throughout the US in recent years: in Utah, a village **hopes to protect its residents from drought**; in Southern Californian, a community has been **retrofitted to withstand wildfire**; in Louisiana, an **entire neighbourhood moved inland** to escape rising sea levels; and in Florida, a coastal city is painting a **new vision for dealing with rising sea levels and eroding coastlines**.

CARBON COUNT

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It wasn't just the stormwater management that ensured the ranch's survival; the enormous 74.5 MW solar grid and battery backup system prevented it from losing power while **much of Charlotte County went dark**.

"It was surreal," says Kinley, who had prepared for the hurricane by kitting out a closet with supplies such as water, a mattress, and food. "Imagine hearing the wind blowing horrifically loud past your windows, and you're sat there with all your lights on, and watching TV. It felt so otherworldly. We thought, this is absurd – it should all be dark."

During the build, developers also buried power lines, as well as building their own water plant, meaning it was the only town in the area that did not have a boil-water alert – an advisory that is issued when there is contamination in the water system.

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must upgrade ageing infrastructure. In fact, the current white house administration has ringfenced \$121m (£95m) in funding **to upgrade critical infrastructure in rural America and along coastlines**. Billions of dollars in funding is being plowed into upgrading infrastructure around the country, including **restoring floodplains in Vermont** and **building a concrete gate in Texas** to protect the coastline.

Ensuring vulnerable communities are not left behind as expensive climate-resilient developments plough ahead is vital. "There's a very stark divide between communities that have the resources to cope with climate change impacts, and those who don't," Kipp says. "We have to figure out how to balance these new developments and ensure they are strengthening and empowering existing communities. The average person does not have access to these kinds of [master planned] communities."



Not a single home in Babcock Ranch lost power or access to clean water when Hurricane Ian hit in September 2022 (Credit: Babcock Ranch)

Large-scale new developments can exacerbate the climate divide, Kipp continues, and it's "unethical" to keep building new communities whilst existing ones don't have basic weatherproofing.

"How do we make sure these frontline, marginalised neighbourhoods can remain in the communities they've lived in for so long? Can we build communities in a way that integrates equity, environmental justice and affordable sustainability. That would be the holy grail, and I haven't seen that yet."

It's a concern for Joanne Pérodin, senior director of climate equity at the Cleo Institute, a Miami-based nonprofit dedicated to educating the public about the climate crisis.

"While [these properties] showcase how renewable energy, green spaces, and modern infrastructure can be integrated, there is the issue of exclusivity," she says. "The main barrier for low-income communities [that is] preventing access to this modern way of living is affordability. Addressing affordability concerns should be prioritised to ensure inclusivity and fairness."

Although Kitson counters this issue, saying that Babcock Ranch offers homes in the high \$200,000 (£158,344) range and in order to be sustainable, "you have to have a variety of housing types and prices", Pérodin points out that the real estate market is still a system geared towards the wealthy.

"Regardless of how new community developments like Babcock Ranch price their products, mortgage interest rates diminish the opportunity for low-income communities," she adds. "New community development can have ripple effects on their surroundings by driving up the cost of living in that region."

Developments that share Kitson's vision show no sign of slowing down, though – and even Babcock Ranch is still expanding. It may be the blueprint for now, but it won't be the standard for long – so Kitson hopes. "I've had developers from all over the world call and ask if they'd be able to use our playbook. The ultimate goal for me would be for people to not only look at what we do and copy it, but to do it better."