

K.

December 1, 2020

Brevard County Commissioners  
2725 Judge Fran Jamieson Way  
Viera, FL 32940

Honorable Commissioners:

The Indian River Lagoon has reached yet another low point, with unsightly and unprecedented bright green and potentially toxic algae blooms and fish kills over the past months. After three years of the SOIRL program, the public is well aware that the algal blooms are getting worse, and are not a positive sign for recovery of the Lagoon's seagrasses and fisheries.

In a recent 12 September 2020 *Space Coast Daily* article, the Brevard's Natural Resources Director stated that upon completion of nearly 200 Save Our IRL projects, we will see recovery of the Lagoon. However, many of the expensive multi-million-dollar projects do not appear to be realistic nitrogen-reduction solutions to recover the Lagoon's seagrasses and fisheries.

For example, the recent July 2020 Muck Removal Efficiency Report by Florida Tech "*largely confirms the beneficial impacts of muck dredging.*" However, the details contained in the report are not as rosy. From FL Tech's study of the Turkey Creek (Palm Bay) muck dredging, the actual surface area of muck removed was about 20%, with only 63% making it to the "muck lagoon." Also, only 32% of the material was actually muck, the remaining 68% was non-target sandy material. The nutrient removal efficiency was an estimated 43% of the potential nitrogen flux. The discharge water to the IRL (after the muck settled out) contained 6 times the nitrogen than the receiving lagoon water. After dredging, the study stated that very low oxygen saturation levels at the bottom will result in a "*semi-permanent hypoxic zone.*" Simply stated, a dead zone that will remain devoid of life, while not adequately mitigating nitrogen flux to the IRL.

Spending \$155 million on "de-mucking" projects before removing nutrients that cause muck accumulation is wasteful. The plan states "upland input of muck components must be reduced to prevent new muck accumulation. The Florida DEP Basin Action Plan states, "removing muck is only a temporary fix for some areas since there is a continuous flow of muck coming from the watershed." Clearly, expensive muck dredging projects don't provide the projected nitrogen-reductions stated in the SOIRL plan, and their value for nitrogen removal must be re-evaluated.

Spending \$30 million removing muck from man-made canals is wasteful. These projects may ultimately provide little nitrogen reduction value for Lagoon restoration. However, individual SOIRL Citizen Oversight Committee (COC) members may have "conflicts of interest" by prioritizing projects that benefit their jurisdictions, over projects that actually restore the IRL.

Spending \$10 million for living shorelines before eliminating harmful algae blooms is wasteful. Oyster and "super-clam" restoration projects are doomed to fail in the face of nearly annual high-density phytoplankton blooms. Contrary to the opinion of SOIRL and the IRLNEP, the best scientific evidence indicates that shellfish cannot filter out these toxic phytoplankton bloom species at high cell densities, and instead will stop filter feeding. Filtering 55 gallons of phytoplankton of over-enriched Lagoon water per day, as advertized by the SOIRL plan, is not valid. Further, if the Lagoon algae bloom and hypoxic events kill more mobile fish by the millions, can we really expect that bottom dwelling shellfish could possibly survive both the high-density blooms and the extended hypoxic events.

In summary, we believe the SOIRL program has repeatedly wasted tax revenue on projects that will never result in the restoration of the Lagoon. We ask the Brevard County Commission for: 1) new and better qualified management of the SOIRL program, 2) removal of any COC member with a conflict of interest; and 3) external expert review of the SOIRL projects by individuals who are not paid consultants or otherwise from institutions receiving SOIRL funding.

---

Respectfully signed,

Steven Moon, President  
Florida Fly Fishing Association

John Hitchcock, President  
Florida Wetlands Forever, Inc.

And supported by local businesses, organizations, and individuals, below:

Strike Zone Fishing, Melbourne

Harry Goode's Outdoor shop, Melbourne

Terry's Barber Shop, Cocoa, Avid fisherman

Handlers Fishing Supply, Merritt Island

Shut up and Fish, Inc. Cocoa Beach Bait Shop

Femme Fatale Arms, Melbourne fisherman

Honest John's Fish Camp, Melbourne Beach

Terry Lamielle Fishing Charters, Retired

Michael Prasse, Palm Bay Commercial Fisherman

Flat Line Fishing Charters, Capt. Rick Worman

Jim Pinter, Proprietor/Carrabbas MI

Jeffery Stark, Avid fisherman

Kit Truong, Owner Brevard RV

Mike Galpin, Avid fisherman

Matt Adams, Property Maintenance Co.

David Harbour, Owner DCH Sports

Pat Stone, Port Canaveral Commercial Fisherman



## Virginia Barker



**Vince Lamb** is with Kimberly Meehan Agee and Dixie Sansom.

Sep 9, 2016 · 🌐

I was invited to join the two Barker ladies, [Virginia Barker](#) and [Courtney Harris Barker](#). to speak at the Government Affairs Committee of the Cocoa Beach Chamber of Commerce this morning. We had lots of good questions about the Project Plan and the Referendum.

... See More



👍 Clark Giangarra and 27 others

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**Vince Lamb**

Aug 9, 2016 · 🌐

Brevard County Commission voted unanimously to accept the Lagoon Restoration Plan and to approve a referendum for a half-cent sales to fund the restoration. Now the voters will decide in the November election.



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## FORM 1

STATEMENT OF  
FINANCIAL INTERESTS

2020

Please print or type your name, mailing  
address, agency name, and position below:

FOR OFFICE USE ONLY:

LAST NAME -- FIRST NAME -- MIDDLE NAME :

Barker Virginia

261174

MAILING ADDRESS :

2738 School Dr NE

CITY :

Palm Bay, FL

ZIP :

32905-4244

COUNTY :

Brevard

NAME OF AGENCY :

Brevard County

NAME OF OFFICE OR POSITION HELD OR SOUGHT :

Natural Resources Director

CHECK ONLY IF ☐ CANDIDATE OR ☐ NEW EMPLOYEE OR APPOINTEE\*\*\*\* THIS SECTION MUST BE COMPLETED \*\*\*\*

## DISCLOSURE PERIOD:

THIS STATEMENT REFLECTS YOUR FINANCIAL INTERESTS FOR CALENDAR YEAR ENDING DECEMBER 31, 2020.

## MANNER OF CALCULATING REPORTABLE INTERESTS:

FILERS HAVE THE OPTION OF USING REPORTING THRESHOLDS THAT ARE ABSOLUTE DOLLAR VALUES, WHICH REQUIRES FEWER CALCULATIONS, OR USING COMPARATIVE THRESHOLDS, WHICH ARE USUALLY BASED ON PERCENTAGE VALUES (see instructions for further details). CHECK THE ONE YOU ARE USING (**must check one**):☐ COMPARATIVE (PERCENTAGE) THRESHOLDS OR ☐ DOLLAR VALUE THRESHOLDS

## PART A -- PRIMARY SOURCES OF INCOME [Major sources of income to the reporting person - See instructions]

(If you have nothing to report, write "none" or "n/a")

| NAME OF SOURCE<br>OF INCOME | SOURCE'S<br>ADDRESS                 | DESCRIPTION OF THE SOURCE'S<br>PRINCIPAL BUSINESS ACTIVITY |
|-----------------------------|-------------------------------------|--|
| Schwab One                  | 211 Main St. San Francisco CA 94105 | Investment   |
| Rent                        | 5115 Thompson Rd Micco FL           | Rental Income  |
| Rent                        | 2482 School Dr. NE Palm Bay, FL     | Rental Income  |

## PART B -- SECONDARY SOURCES OF INCOME

[Major customers, clients, and other sources of income to businesses owned by the reporting person - See instructions]

(If you have nothing to report, write "none" or "n/a")

| NAME OF<br>BUSINESS ENTITY | NAME OF MAJOR SOURCES<br>OF BUSINESS' INCOME | ADDRESS<br>OF SOURCE | PRINCIPAL BUSINESS<br>ACTIVITY OF SOURCE |
|----------------------------|--|----------------------|--|
| N/A                        |  |                      |  |
|                            |  |                      |  |
|                            |  |                      |  |

## PART C -- REAL PROPERTY [Land, buildings owned by the reporting person - See instructions]

(If you have nothing to report, write "none" or "n/a")

You are not limited to the space on the  
lines on this form. Attach additional  
sheets, if necessary.FILING INSTRUCTIONS for when  
and where to file this form are  
located at the bottom of page 2.INSTRUCTIONS on who must file  
this form and how to fill it out  
begin on page 3.

**PART D — INTANGIBLE PERSONAL PROPERTY** [Stocks, bonds, certificates of deposit, etc. - See instructions]

(If you have nothing to report, write "none" or "n/a")

TYPE OF INTANGIBLE Cash Wells Fargo BUSINESS ENTITY TO WHICH THE PROPERTY RELATESStocks + BondsSchwab457(b) Mutual FundsNationwide Retirement Solutions**PART E — LIABILITIES** [Major debts - See instructions]

(If you have nothing to report, write "none" or "n/a")

NAME OF CREDITOR

ADDRESS OF CREDITOR

**PART F — INTERESTS IN SPECIFIED BUSINESSES** [Ownership or positions in certain types of businesses - See instructions]

(If you have nothing to report, write "none" or "n/a")

BUSINESS ENTITY # 1

BUSINESS ENTITY # 2

NAME OF BUSINESS ENTITY

N/A

ADDRESS OF BUSINESS ENTITY

PRINCIPAL BUSINESS ACTIVITY

POSITION HELD WITH ENTITY

I OWN MORE THAN A 5% INTEREST IN THE BUSINESS

NATURE OF MY OWNERSHIP INTEREST

**PART G — TRAINING** For elected municipal officers, appointed school superintendents, and commissioners of a community redevelopment agency created under Part III, Chapter 163 required to complete annual ethics training pursuant to section 112.3142, F.S.☐ **I CERTIFY THAT I HAVE COMPLETED THE REQUIRED TRAINING.****IF ANY OF PARTS A THROUGH G ARE CONTINUED ON A SEPARATE SHEET, PLEASE CHECK HERE** ☐**SIGNATURE OF FILER:**

Signature:

Vigoria Baker

Date Signed:

6/23/21**CPA or ATTORNEY SIGNATURE ONLY**

If a certified public accountant licensed under Chapter 473, or attorney in good standing with the Florida Bar prepared this form for you, he or she must complete the following statement:

I, \_\_\_\_\_, prepared the CE Form 1 in accordance with Section 112.3145, Florida Statutes, and the instructions to the form. Upon my reasonable knowledge and belief, the disclosure herein is true and correct.

CPA/Attorney Signature: \_\_\_\_\_

Date Signed: \_\_\_\_\_

**FILING INSTRUCTIONS:**

If you were mailed the form by the Commission on Ethics or a County Supervisor of Elections for your annual disclosure filing, return the form to that location. To determine what category your position falls under, see page 3 of instructions.

**Local officers/employees** file with the Supervisor of Elections of the county in which they permanently reside. (If you do not permanently reside in Florida, file with the Supervisor of the county where your agency has its headquarters.) Form 1 filers who file with the Supervisor of Elections may file by mail or email. Contact your Supervisor of Elections for the mailing address or email address to use. Do not email your form to the Commission on Ethics, it will be returned.**State officers or specified state employees** who file with the Commission on Ethics may file by mail or email. To file by mail, send the completed form to P.O. Drawer 15709, Tallahassee, FL 32317-5709; physical address: 325 John Knox Rd, Bldg E, Ste 200, Tallahassee, FL 32303. To file with the Commission by email, scan your completed form and any attachments as a pdf (do not use any other format), send it to CEForm1@leg.state.fl.us and retain a copy for your records. Do not file by both mail and email. Choose only one filing method. Form 6s will not be accepted via email.**Candidates** file this form together with their filing papers.**MULTIPLE FILING UNNECESSARY:** A candidate who files a Form 1 with a qualifying officer is not required to file with the Commission or Supervisor of Elections.**WHEN TO FILE: Initially**, each local officer/employee, state officer, and specified state employee must file **within 30 days** of the date of his or her appointment or of the beginning of employment. Appointees who must be confirmed by the Senate must file prior to confirmation, even if that is less than 30 days from the date of their appointment.**Candidates** must file at the same time they file their qualifying papers.**Thereafter**, file by July 1 following each calendar year in which they hold their positions.**Finally**, file a final disclosure form (Form 1F) within 60 days of leaving office or employment. Filing a CE Form 1F (Final Statement of Financial Interests) does not relieve the filer of filing a CE Form 1 if the filer was in his or her position on December 31, 2020.



**BREVARD COUNTY**  
BOARD OF COUNTY COMMISSIONERS

**INTER-OFFICE  
MEMORANDUM**

PAS #7650

**DATE:** October 20, 2008  
**TO:** Peggy Busacca, County Manager  
**THROUGH:** Mel Scott, Assistant County Manager  
Frank Abbate, Human Resources Director  
**FROM:** Ernest Brown, Director, Natural Resources Management Office  
**RE:** Non Competitive Appointment – Virginia Barker # 11000436 / PCN 2375

As part of the FY 08/09 approved budget reductions, NRMO reorganized and consolidated several functional areas creating the new Watershed Management Program. A key component of this re-alignment was the creation of the Watershed Program Manager position to over see the new program and its highly technical and complex components. The budget reduction benefit approved the elimination of the general funding for one Environmental Section Supervisor. This action necessitates the non competitive promotion of Ms. Virginia Barker, the former Environmental Section Supervisor, to the newly created Watershed Management Program Manager.

↓  
3796

Consistent with the new Watershed Management Program and the associated responsibilities, a new Watershed Program Manager description has been created and approved by HR, to appropriately manage the responsibilities of the new program. Specifically, the position, under the general direction of the Director, is responsible for the oversight and management of professional licensed engineers (pay grades 819 and 818); a Water Quality Section Supervisor (pay grade 817); more the 28 capital improvement projects, several state and federally mandate water quality programs and a budget in excess of seven (7) million dollars. This Program Manager is also directly responsible for the effective implementation of Stormwater Water Quality (TMDLs, NPDES, PLRG, etc.) Stormwater Engineering and Beach Management service levels. Based on a position analysis with HR, the new position was graded as an 818.

These additional duties, functions and significant increase in supervisory responsibilities necessitate my request for the non competitive promotion and associated compensation in accordance with Merit Policy 2, Section II.F. Ms. Barker's current salary is \$67,283.32 and with a 5% increase, as allowed per policy, her annual salary will be \$70,647.49. This pay adjustment appropriately positions Ms. Barker compared to her subordinates, to the extent allowable by policy. Specifically, one member will still be making more (\$74K) while three others will be within \$2,000 in annual compensation.

Should this be approved, I am requesting that the non competitive promotion be retroactive to the beginning of the fiscal year, October 1, 2008 or as early as is fiscally feasible, as these duties commenced in May 2007. The fiscal impact for FY 08/09 is approximately \$4,528.17 including benefits, and will be supported entirely by the Stormwater Utility Assessment.

Based on the authority granted to you in Merit Systems Policy 2 Section II., should you concur with this recommendation, your signature is requested below indicating your approval of this action.

Please let me know if I can provide any additional information.

*Peggy Busacca*  
Peggy Busacca County Manager

10/29/08





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## About

### ORGANIZING COMMITTEE

Robert Weaver & Kelli Hunsucker, Co-Chairs, Florida Institute of Technology

Claudia Listopad, Applied Ecology

Walker Dawn, Brevard County Office of Natural Resources

Kathy Hill, Indian River Lagoon National Estuary Program

Leesa Souto, Marine Resources Council

Bo Platt, Brevard Indian River Lagoon Coalition

Austin Fox, Florida Institute of technology

### CONTACT

Email: [techcon@fit.edu](mailto:techcon@fit.edu)

Phone: 321-674-8437

### IMPORTANT DATES

**May 15, 2019**

Opening of Abstract  
Submissions

**August 31, 2019**

Deadline for Abstract  
Submissions.

**September 7, 2019**

Acceptance of

**The PMC website is updating on 03/14/2022. Try out this update now on [PMC Labs](#) or [Learn more](#).**

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ROYAL  
SOCIETY  
PUBLISHING

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ABOUT ►  
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ALERTS ►  
FREE TRIAL ►

*Philos Trans R Soc Lond B Biol Sci.* 2007 Feb 28; 362(1478): 209–218.

PMCID: PMC2311425

Published online 2007 Jan 9. doi: [10.1098/rstb.2006.1980](https://doi.org/10.1098/rstb.2006.1980)

PMID: [17255030](https://pubmed.ncbi.nlm.nih.gov/17255030/)

## Holocene fire and occupation in Amazonia: records from two lake districts

Mark B Bush,<sup>1,\*</sup> Miles R Silman,<sup>2</sup> Mauro B de Toledo,<sup>1,4</sup> Claudia Listopad,<sup>1</sup> William D Gosling,<sup>1,†</sup> Christopher Williams,<sup>1</sup> Paulo E de Oliveira,<sup>3</sup> and Carolyn Kriese<sup>2</sup>

### ABSTRACT

While large-scale pre-Columbian human occupation and ecological disturbance have been demonstrated close to major Amazonian waterways, less is known of sites in terra firme settings. Palaeoecological analyses of two lake districts in central and western Amazonia reveal long histories of occupation and land use. At both locations, human activity was centred on one of the lakes, while the others were either lightly used or unused. These analyses indicate that the scale of human impacts in these terra firme settings is localized and probably strongly influenced by the presence of a permanent open-water body. Evidence is found of forest clearance and cultivation of maize and manioc. These data are directly relevant to the resilience of Amazonian conservation, as they do not support the contention that all of Amazonia is a ‘built landscape’ and therefore a product of past human land use.

**Keywords:** agriculture, charcoal, fossil pollen, Peru, Brazil, pre-Columbian

### 1. INTRODUCTION

The role of pre-Columbian human activity in shaping Amazonian ecosystems has received considerable attention in the light of occupational records from the Xingu River basin, Marajos Island, and near the modern cities of Santarém and Manaus (Roosevelt 1991; Roosevelt *et al.* 1991; Heckenberger *et al.* 1999). Advocates of widespread human influence in Amazonia point to what appear to be urban centres (Roosevelt 1991; Roosevelt *et al.* 1991; Heckenberger *et al.* 1999, 2003), large earthworks in Bolivian savannahs bordering Amazonia (Mann 2000; Erickson 2001), and the widespread occurrence of soils enriched with carbon (terra preta) within Amazonia (Glaser *et al.* 2001; Lima *et al.* 2002). If Amazonia was a managed landscape prior to European contact, the biodiversity of the region has withstood substantial fragmentation, hunting and human interaction, and such manifest resilience would influence conservation decision making. While Erickson (2001) has described the Bolivian savannah landscape as having been manufactured by humans, other authors are generally more circumspect when dealing with the densely forested regions.



**Impacts of Environmental Muck Dredging 2016-2017  
Muck Dredging Research Project Management (Subtask 1)**

Final Project Report Submitted to  
Brevard County Natural Resources Management Department  
2725 Judge Fran Jamieson Way, Building A, Room 219  
Viera, Florida 32940  
Funding provided by the Florida Legislature as part of  
DEP Grant Agreement No. NS005 - Brevard County Muck  
Dredging

Principal Investigator: John G. Windsor

Indian River Lagoon Research Institute  
150 West University Boulevard  
Florida Institute of Technology  
Melbourne, Florida 32901

June 2019



Sat Bch  
Council

Barker

Sat Beach

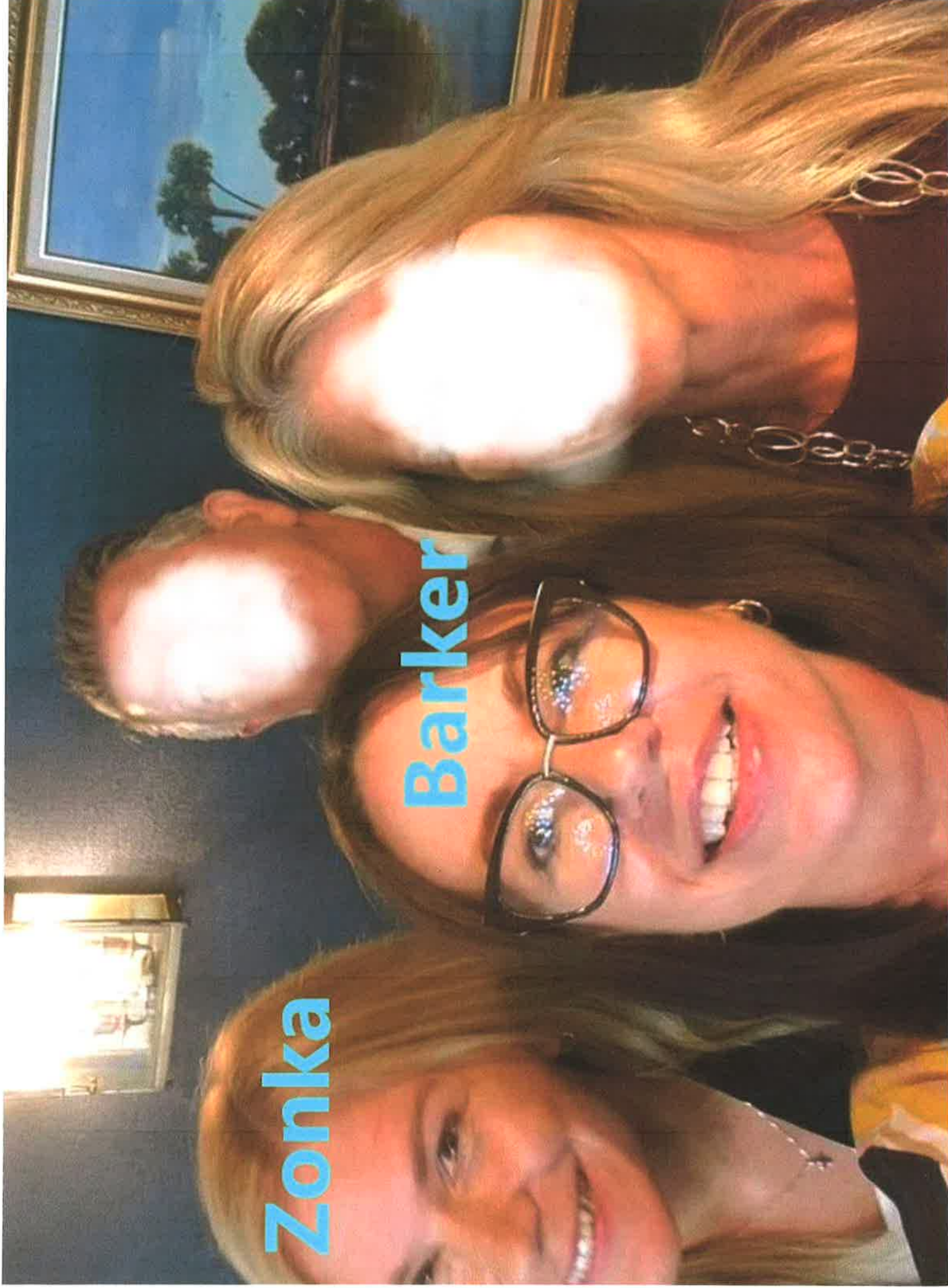
City Manager

Zonka

Sat Bch

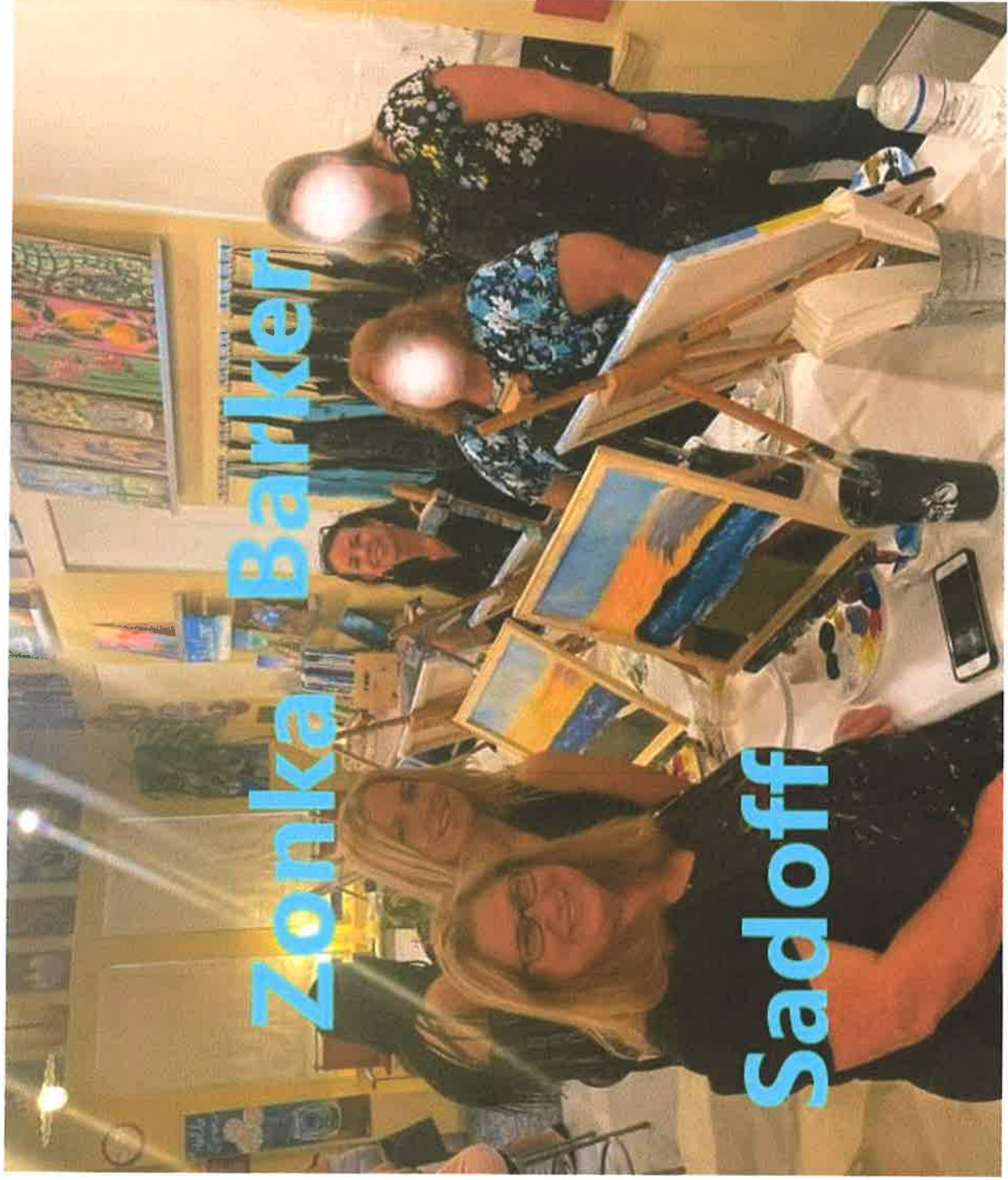
Assist CM





Barker

Zonka







Sandra Sullivan &lt;s2sully@gmail.com&gt;

**Fwd: RE: FIT EMD Year 3 Subtask 3 Final Report Trends for Inputs of Muck Components from Rivers, Creeks and Outfalls to the IRL Trefry and Fox**

Sandra Sullivan &lt;s2sully@gmail.com&gt;

Thu, Mar 3, 2022 at 12:49 PM

To: "s2sully@gmail.com" &lt;s2sully@gmail.com&gt;

----- Forwarded message -----

From: Barker, Virginia H &lt;Virginia.Barker@brevardfl.gov&gt;

To: John Windsor <jwindsor@fit.edu>, Culver, Matt <Matt.Culver@brevardfl.gov>, McGarry, Michael J <Mike.McGarry@brevardfl.gov>, Austin Fox <afox@fit.edu>, Dawson, Walker <Walker.Dawson@brevardfl.gov>, Smith, Brandon S <Brandon.Smith@brevardfl.gov>, Culver, Matt <Matt.Culver@brevardfl.gov>, Dennis Hanisak (dhanisak@fau.edu) <dhanisak@fau.edu>, Gubler, Anthony <Anthony.Gubler@brevardfl.gov>, jsteward@dmces.com <jsteward@dmces.com>, Robert Virnstein <seagrass3@gmail.com>, Charles Jacoby (CJacoby@sjrwmd.com) <CJacoby@sjrwmd.com>, Gary Zarillo <zarillo@fit.edu>, John Trefry <jtrefry@fit.edu>, Jonathan Shenker <shenker@fit.edu>, Kevin Johnson <johnson@fit.edu>, Leesa Souto <leesa@mrcirl.org>, Robert Weaver <rjweaver@fit.edu>, Claudia Listopad <clistopad@appliedecologyinc.com>, Carolyn Lockyer <clockyer@fit.edu>, Frank Kinney <fkinney@fit.edu>, Richard Aronson <raronson@fit.edu>, Gisele Bennett <gbennett@fit.edu>, Kelli Hunsucker <khunsucker@fit.edu>, Robert Salonen <rsalonen@fit.edu>, Donn Miller-Kermani <dkermani@fit.edu>, Duane De Freese <dooceanfl@gmail.com>, Vince Lamb <vince@vincelamb.com>, Lew Kontnik <lewkontnik@gmail.com>, Marilyn Waters <mjwaters9@gmail.com>, Randall W. Parkinson <rwparkinson.inc@gmail.com>, Abaco711@hotmail.com <Abaco711@hotmail.com>, Abeels-External, Holly <habeels@ufl.edu>, Shelton, Matt <Matt.Shelton@tetrattech.com>, Frick, Marcy <Marcy.Frick@tetrattech.com>

Cc: "McGarry, Michael J" <Mike.McGarry@brevardfl.gov>, Austin Fox <afox@fit.edu>, "Dawson, Walker" <Walker.Dawson@brevardfl.gov>, "Smith, Brandon S" <Brandon.Smith@brevardfl.gov>, "Culver, Matt" <Matt.Culver@brevardfl.gov>, Dennis Hanisak (dhanisak@fau.edu) <dhanisak@fau.edu>, "Gubler, Anthony" <Anthony.Gubler@brevardfl.gov>, 'jsteward@dmces.com' <jsteward@dmces.com>, Robert Virnstein <seagrass3@gmail.com>, Charles Jacoby (CJacoby@sjrwmd.com) <CJacoby@sjrwmd.com>, Gary Zarillo <zarillo@fit.edu>, John Trefry <jtrefry@fit.edu>, Jonathan Shenker <shenker@fit.edu>, Kevin Johnson <johnson@fit.edu>, Leesa Souto <leesa@mrcirl.org>, Robert Weaver <rjweaver@fit.edu>, Claudia Listopad <clistopad@appliedecologyinc.com>, Carolyn Lockyer <clockyer@fit.edu>, Frank Kinney <fkinney@fit.edu>, Richard Aronson <raronson@fit.edu>, Gisele Bennett <gbennett@fit.edu>, Kelli Hunsucker <khunsucker@fit.edu>, Robert Salonen <rsalonen@fit.edu>, Donn Miller-Kermani <dkermani@fit.edu>, Duane De Freese <dooceanfl@gmail.com>, Vince Lamb <vince@vincelamb.com>, Lew Kontnik <lewkontnik@gmail.com>, Marilyn Waters <mjwaters9@gmail.com>, Randall W. Parkinson <rwparkinson.inc@gmail.com>, Abaco711@hotmail.com <Abaco711@hotmail.com>, "Abeels-External, Holly" <habeels@ufl.edu>, "Shelton, Matt" <Matt.Shelton@tetrattech.com>, "Frick, Marcy" <Marcy.Frick@tetrattech.com>

Date: Thursday, March 4, 2021, 6:07 PM -0500

Subject: RE: FIT EMD Year 3 Subtask 3 Final Report Trends for Inputs of Muck Components from Rivers, Creeks and Outfalls to the IRL Trefry and Fox

Dr. Windsor,

Thank you for all the project management, including many extra years. Thank you to the entire team for all the work and information sharing. We learned a lot and will hopefully use that information to make a big difference for lagoon health. I really miss our meetings and time with the brain trust.

Please keep in touch!

Virginia

From: John Windsor &lt;jwindsor@fit.edu&gt;

Sent: Monday, March 01, 2021 3:39 PM

To: Culver, Matt &lt;Matt.Culver@brevardfl.gov&gt;

**Cc:** Barker, Virginia H <Virginia.Barker@brevardfl.gov>; McGarry, Michael J <Mike.Mcgarry@brevardfl.gov>; Austin Fox <afox@fit.edu>; Dawson, Walker <Walker.Dawson@brevardfl.gov>; Smith, Brandon S <Brandon.Smith@brevardfl.gov>; Culver, Matt <Matt.Culver@brevardfl.gov>; Dennis Hanisak (dhanisak@fau.edu) <dhanisak@fau.edu>; Gubler, Anthony <Anthony.Gubler@brevardfl.gov>; 'jsteward@dmces.com' <jsteward@dmces.com>; Robert Virnstein <seagrass3@gmail.com>; Charles Jacoby (CJacoby@sjrwmd.com) <CJacoby@sjrwmd.com>; Gary Zarillo <zarillo@fit.edu>; John Trefry <jtrefry@fit.edu>; Jonathan Shenker <shenker@fit.edu>; Kevin Johnson <johnson@fit.edu>; Leesa Souto <leesa@mrcl.org>; Robert Weaver <rjweaver@fit.edu>; Claudia Listopad <clistopad@appliedecologyinc.com>; Carolyn Lockyer <clockyer@fit.edu>; Frank Kinney <fkinney@fit.edu>; Richard Aronson <raronson@fit.edu>; Gisele Bennett <gbennett@fit.edu>; Kelli Hunsucker <khunsucker@fit.edu>; Robert Salonen <rsalonen@fit.edu>; Donn Miller-Kermani <dkermani@fit.edu>; Duane De Freese <dfoceanfl@gmail.com>; Vince Lamb <vince@vincelamb.com>; Lew Kontnik <lewkontnik@gmail.com>; Marilyn Waters <mjwaters9@gmail.com>; Randall W. Parkinson <rwparkinson.inc@gmail.com>; Abaco711@hotmail.com; Abeels-External, Holly <habeels@ufl.edu>; Shelton, Matt <Matt.Shelton@tetrattech.com>; Frick, Marcy <Marcy.Frick@tetrattech.com>

**Subject:** RE: FIT EMD Year 3 Subtask 3 Final Report Trends for Inputs of Muck Components from Rivers, Creeks and Outfalls to the IRL Trefry and Fox

**[EXTERNAL EMAIL]** DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good afternoon Matt, external reviewers and interested stakeholders,

The final report for FIT EMD Year 3 Subtask 6 Hydrologic and Water Quality Model for Management and Forecasting within Brevard County Waters of the Indian River Lagoon by Drs. Zarillo and Listopad is attached. Comments provided by everyone on earlier drafts were greatly appreciated and contributed significantly to improving this very important final report. If you have any questions, please feel free to contact me.

In addition to the Subtask 6 final report I have attached my final report for FIT EMD Year 3 Subtask 1 Muck Dredging Research Project Management. You will also find attached a document that summarizes key findings and recommendations from the 17 final reports.

Matt, I will deliver a thumb drive that includes all the reports produced from all three years of Florida Institute of Technology Environmental Muck Dredging Research funding. I believe this will complete the contractual obligations for which I am responsible.

I want to thank you, all the PIs, and all the reviewers and stakeholders for their contributions over the last five years. My special thanks go out to Virginia Barker and "Dr. Muck."

Thanks,

John W.

John G. Windsor

Professor, Emeritus, Oceanography and Environmental Science