

The Florida Senate
COMMITTEE MEETING EXPANDED AGENDA
APPROPRIATIONS SUBCOMMITTEE ON GENERAL
GOVERNMENT
Senator Hays, Chair
Senator Braynon, Vice Chair

MEETING DATE: Thursday, December 3, 2015
TIME: 3:30—5:30 p.m.
PLACE: *Toni Jennings Committee Room*, 110 Senate Office Building

MEMBERS: Senator Hays, Chair; Senator Braynon, Vice Chair; Senators Altman, Dean, Lee, Margolis, and Simpson

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
1	Presentation on Governor's Fiscal Year 2016-2017 Budget Recommendations		Presented
2	Workshop - Testimony and Discussion on General Government Budget Development Issues (no vote to be taken)		Discussed
Other Related Meeting Documents			

FLORIDA FIRST

GOVERNOR RICK SCOTT'S FLORIDA FIRST BUDGET 2016-2017



Policy and Budget Recommendations

Governor Scott's priorities to help diversify the economy to make Florida First in job creation:

Tax Cuts for Florida Families and Businesses

Over \$1 billion in Tax Cuts

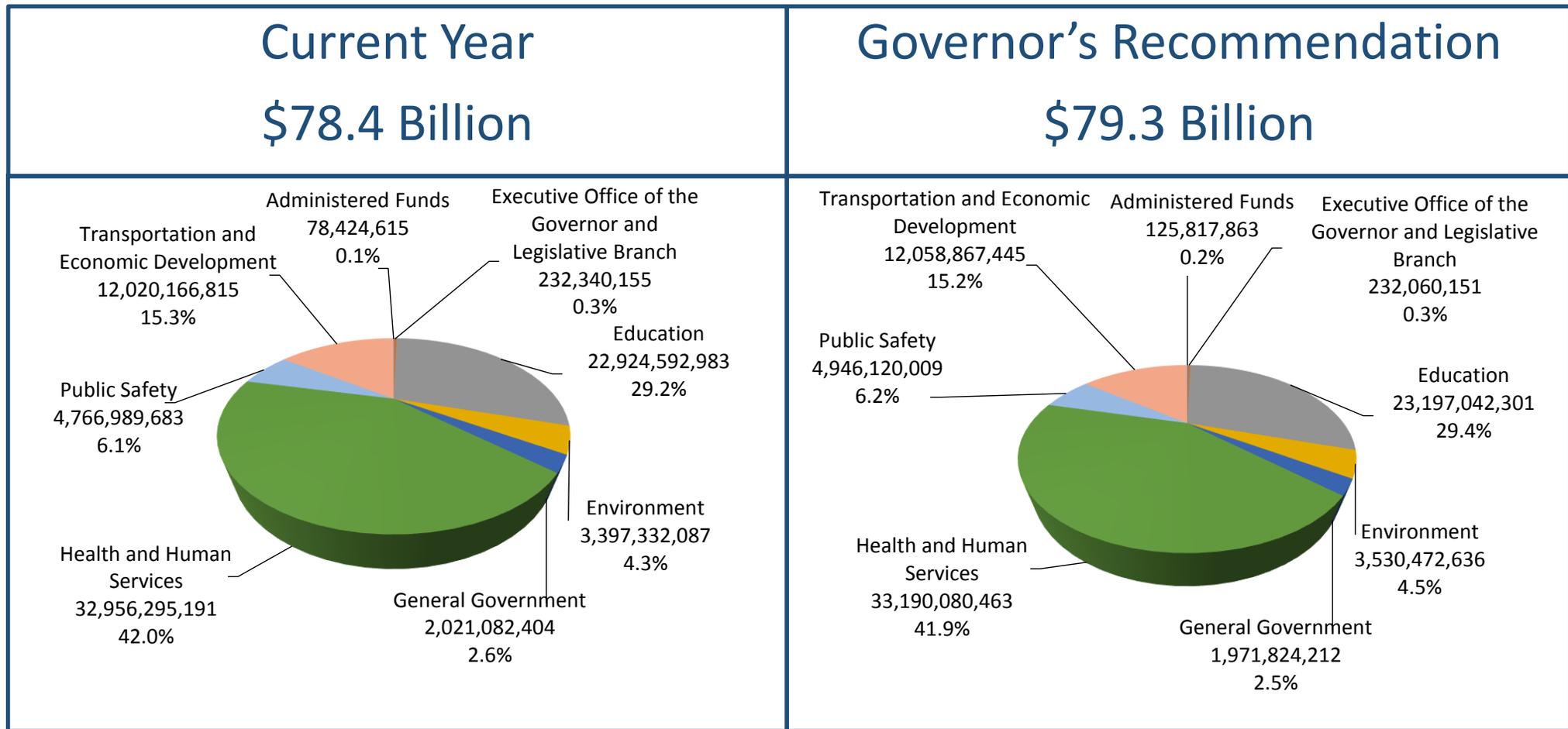
Making Florida more Competitive

Help small businesses succeed

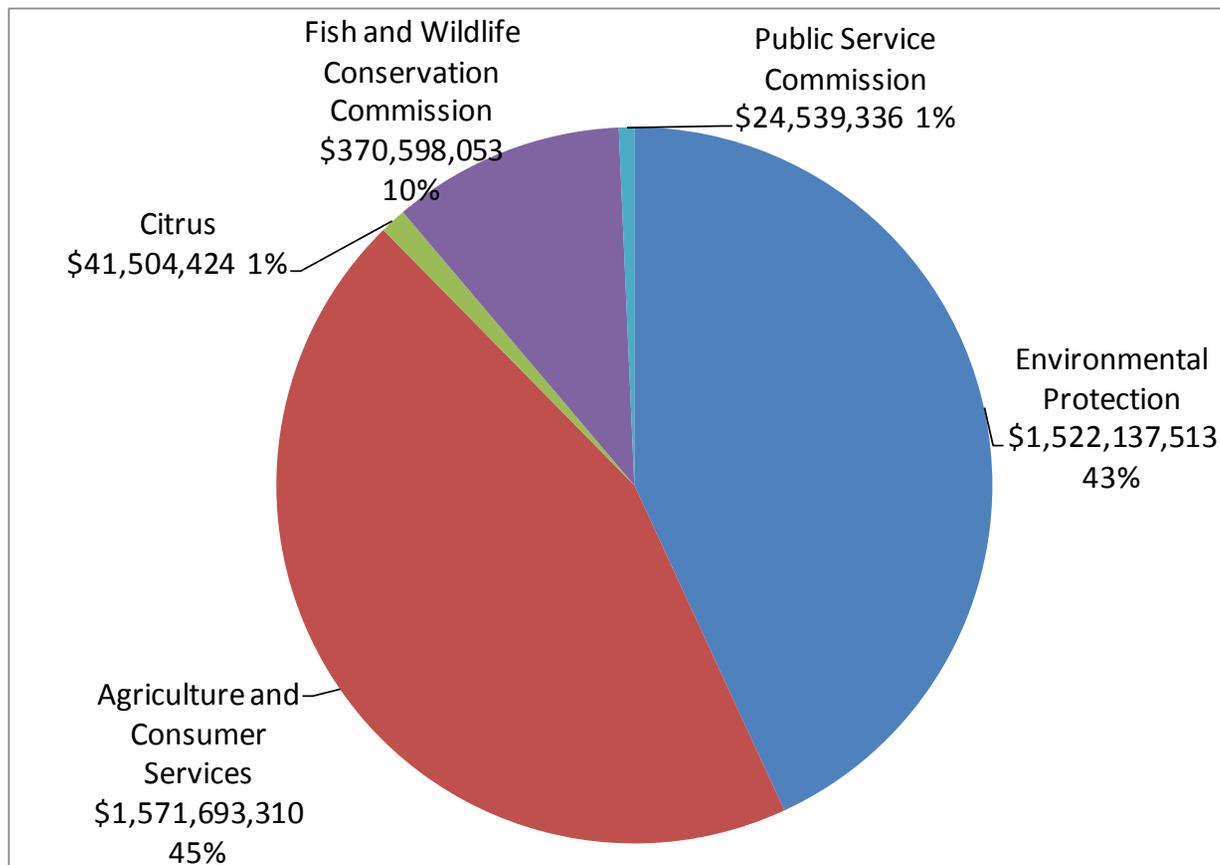
**Investing Historic Funding in K-12 Education,
State Colleges, and Universities**

Florida will have the most highly skilled workforce in the world

Governor's Budget Recommendations By Policy Area

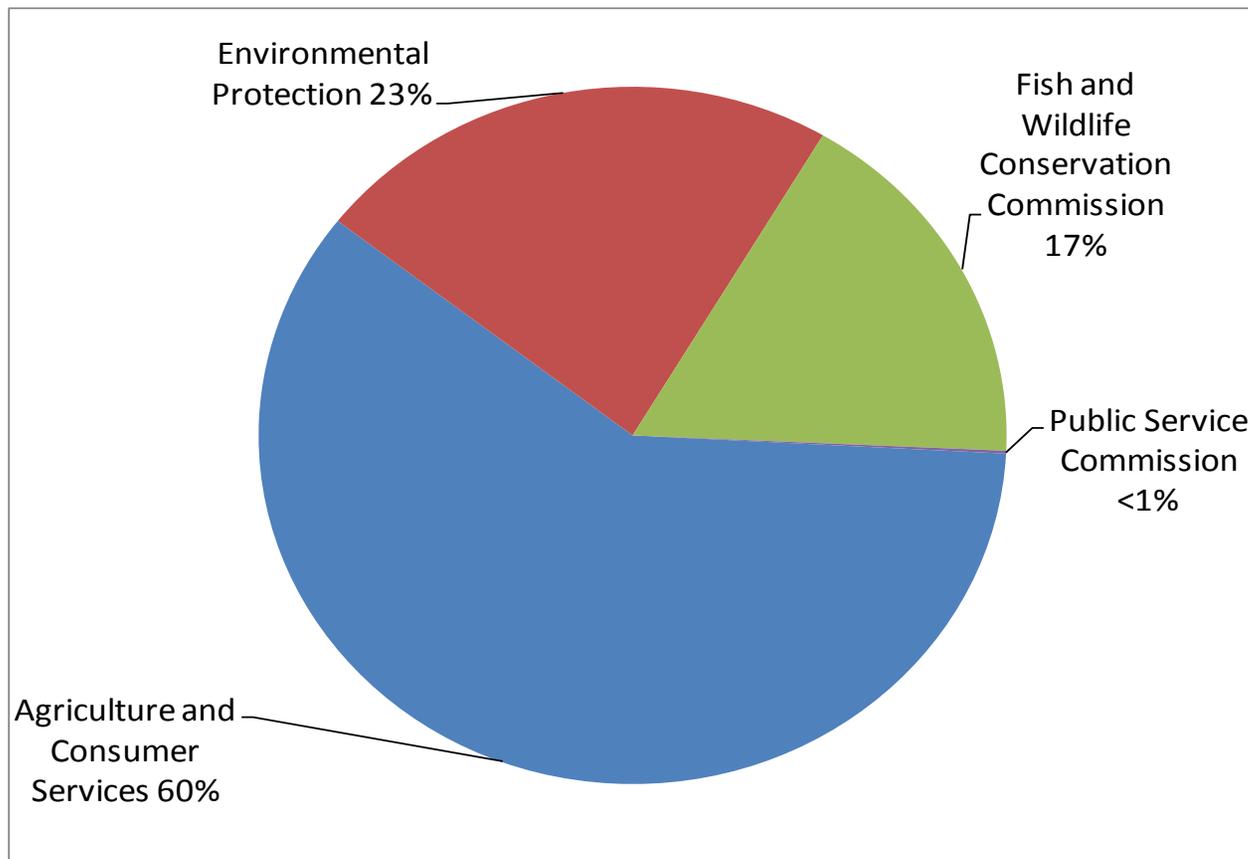


Governor's Recommended Budget Fiscal Year 2016-17 Environment - \$ 3.5 Billion



Governor's Recommended Budget Fiscal Year 2016-17

General Revenue - \$ 164.6 Million



FLORIDA FIRST

GOVERNOR RICK SCOTT'S FLORIDA FIRST BUDGET 2016-2017



Policy and Budget
Recommendations

Department of
Environmental Protection

Environmental Protection

\$1.5 Billion

Investing in Florida's water and unique ecosystems.

- **\$188 million** for Everglades Restoration (**\$5 billion** over 20 years)
- **\$50 million** for Springs Restoration (**\$1.6 billion** over 20 years)
- **\$50 million** for Sustainable Water Supply

Environmental Protection

\$1.5 Billion

Investing in Florida's natural lands and improving recreational opportunities for Florida families and tourists.

- **\$63 million** for Land Acquisition
- **\$45.5 million** State Parks
 - \$19 million Repairs, Renovations and Development
 - \$16.5 million Trails, Marketing and IT Investments
 - \$10 million Land Management
- **\$25 million** for Beaches

Environmental Protection

\$1.5 Billion

Investing in the clean up of contaminated sites throughout Florida.

- **\$125 million** for Petroleum Tank Cleanup Projects
- **\$6.5 million** for Dry Cleaning Site Cleanup
- **\$4.5 million** for Hazardous Waste Cleanup
- **\$3.2 million** for Non-Mandatory Land Reclamation Projects

FLORIDA FIRST

GOVERNOR RICK SCOTT'S FLORIDA FIRST BUDGET 2016-2017



Policy and Budget Recommendations

Department of Agriculture and
Consumer Services

Fish and Wildlife Conservation
Commission

Other Priority Issues

- **\$16.2 million** for Citrus Research and Protection
- **\$16.7 million** for Additional Land Management
 - \$15.5 million for Wildlife Management Area Improvements
 - \$866,270 for Babcock Ranch
 - \$340,298 for Florida Forever – Dedicated Funding

FLORIDA FIRST

GOVERNOR RICK SCOTT'S FLORIDA FIRST BUDGET 2016-2017



Policy and Budget Recommendations

FLORIDA FIRST

GOVERNOR RICK SCOTT'S FLORIDA FIRST BUDGET 2016-2017



General Government Recommendations

Governor Scott's priorities to help diversify the economy to make Florida First in job creation:

Tax Cuts for Florida Families and Businesses

Over \$1 billion in Tax Cuts

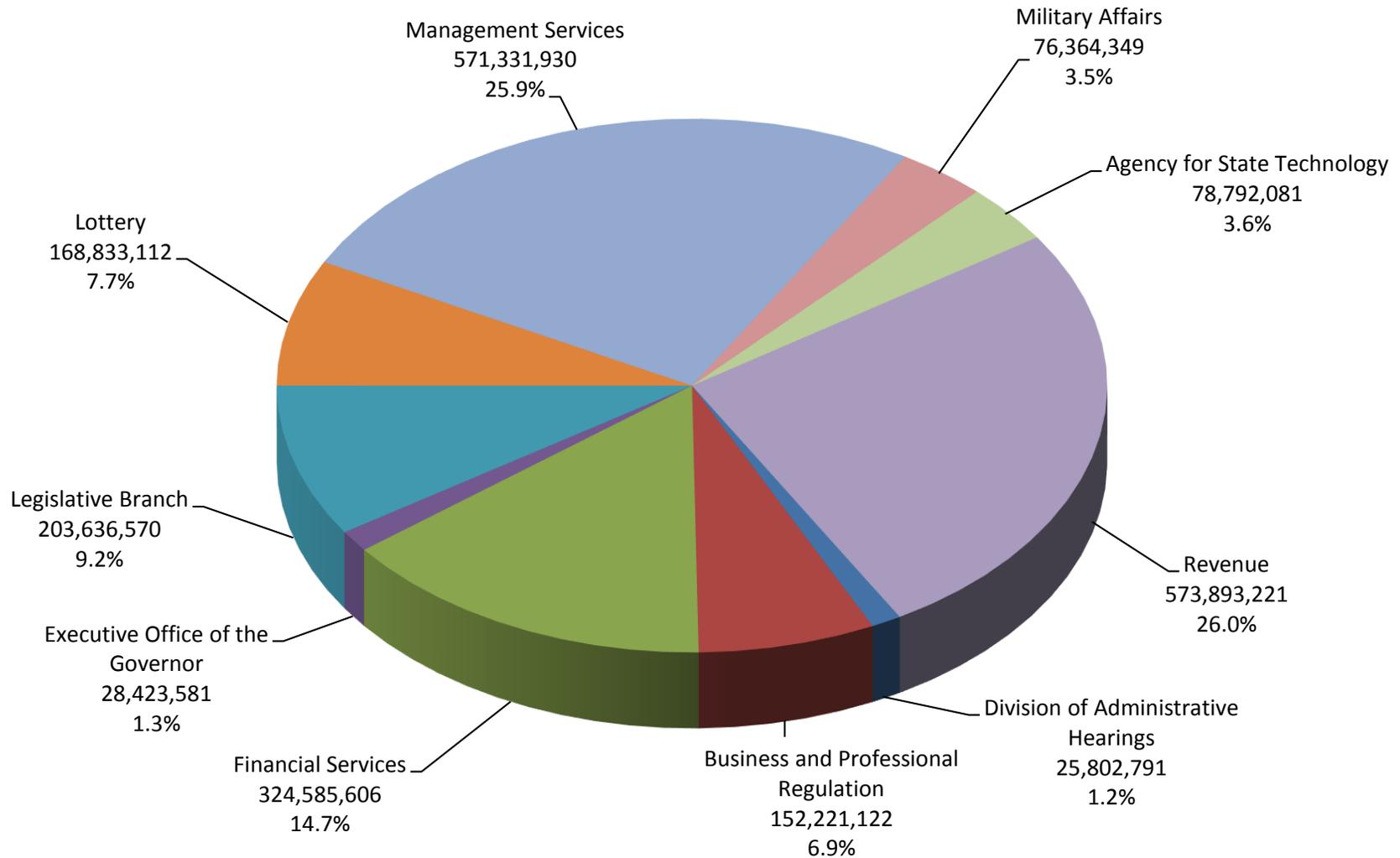
Making Florida more Competitive

Help small businesses succeed

**Investing Historic Funding in K-12 Education,
State Colleges, and Universities**

Florida will have the most highly skilled workforce in the world

Governor's Recommended Budget Fiscal Year 2016-17 General Government - \$2.2 billion



Department of Business and Professional Regulation **- \$ 152 million / 1604.25 Full-Time Positions**

- Performance based incentive plan to increase the retention of food and lodging inspectors - \$1.9 million
- Electronic Data Submission system - \$1.2 million
- Field technology for food and lodging inspections - \$176,000

Department of Business and Professional Regulation (cont.)

- 4 OPS medical gas inspectors - \$290,000
- Division of Drugs, Devices and Cosmetics - \$727,000
- Florida Boxing Commission - \$303,528

Department of the Lottery

- \$169 million / 420 Full-Time Positions

- Sales incentive plan - \$761,000
- IT and security equipment replacement - \$948,900
 - Replaces network equipment
 - Pro-Watch server replacement
 - Computer/server replacement
- Statewide network capacity increase - \$142,081
- Terminal games draw machines - \$119,700

Department of Management Services

- \$ 571 million/ 808.75 Full-Time Positions

- Florida Facilities Pool repair and renovation - \$19.9 million
- Aging government facilities infrastructure assessment
-\$.8 million
- Fleet management information system - \$1.7 million
- Dependent eligibility verification audit - \$1 million
- MyFloridaNet2 migration staff augmentation - \$.3 million

Agency for State Technology

- \$79 million / 241 Full-Time Positions

- Customer growth - \$594,000
- Information technology security - \$992,000
- Remediation, compliance and replacement - \$1.8 million

Other Priority Issues

- Fiscally constrained counties - \$24.5 million
- Department of Revenue information technology security management - \$2.3 million
- State Fire Marshal fixed capital outlay, equipment and operational needs - \$1.3 million

THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

10/3/15
Meeting Date

Bill Number (if applicable)

Topic Governor's Budget

Amendment Barcode (if applicable)

Name NOAH VALENSTEIN

Job Title SRWMD Exec. Director

Address 708 N Forest Dr.
Street

Phone 850-251-2116

TLH FL 32303
City State Zip

Email /

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing _____

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE

APPEARANCE RECORD

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12-3-15

Meeting Date

Bill Number (if applicable)

Topic Governor's General Government Budget

Amendment Barcode (if applicable)

Name Laurie Grasel

Job Title Policy Coordinator

Address 1802 The Capital Street

Phone

City

State

Zip

Email

Speaking: [X] For [] Against [] Information

Waive Speaking: [] In Support [] Against (The Chair will read this information into the record.)

Representing The Governor's Office

Appearing at request of Chair: [X] Yes [] No

Lobbyist registered with Legislature: [X] Yes [] No

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APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/03/2015
Meeting Date

Bill Number (if applicable)

Topic Presentation on Governor's FY 16-17 Budget Amendment Barcode (if applicable) _____

Name Ken Lawson

Job Title Secretary

Address 1940 N. Monroe Street

Phone 850-487-1395

Tallahassee FL 32399
City State Zip

Email _____

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Department of Business & Professional Regulation

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/2015

N/A

Meeting Date

Bill Number (if applicable)

Topic Governor Scott's Budget Recommendations

Amendment Barcode (if applicable)

Name Tom Delacenserie

Job Title Secretary of the Florida Lottery

Address 250 Marriott Drive

Phone 850-487-7728

Street

Tallahassee

FL

32301

Email _____

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing The Florida Lottery

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/03/2015

Meeting Date

N/A

Bill Number (if applicable)

N/A

Amendment Barcode (if applicable)

Topic DMS Budget Presentation

Name Chad Poppell

Job Title Secretary

Address 4050 Esplanade Way

Street

Tallahassee

City

FL

State

32399-0950

Zip

Phone 850-488-2786

Email chad.poppell@dms.myflorida.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Department of Management Services

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3

Meeting Date

Bill Number (if applicable)

Topic Governors Recommendation

Amendment Barcode (if applicable)

Name Jason Allison

Job Title Executive Director AST

Address 4050 Esplanade Way

Phone (850) 412-6050

Street

TLH

FL

32399

Email jason.allison@ast.mylab.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Agency for State Technology

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12.3.15

Meeting Date

STATE APPROPRIATIONS
RECEIVED

Bill Number (if applicable)

Topic Regional Pipelines/Integrated Loop

15 NOV 32 PM 2:00

Amendment Barcode (if applicable)

Name Patrick Lehman

OFFICE CHAIRMAN
STAFF

Job Title Executive Director

Address 9415 Town Center Parkway

Phone 941.316.1776

Street

Lakewood Ranch, FL 34202

Email plehman@regionalwater.org

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Peace River Manasota Regional Water Supply Authority

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

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12/03/2015

Meeting Date

Bill Number (if applicable)

Topic Canal Stabilization, Lake Sarah Drainage, West Lakes Drainage

Amendment Barcode (if applicable)

Name Alex Rey

Job Title Town Manager

Address 6601 Main Street

Phone 305-364-6100

Street

Miami Lakes

FL

33014

Email reya@miamilakes-fl.gov

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Town of Miami Lakes

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/2015

Meeting Date

Bill Number (if applicable)

Topic Water Project Proposal for Appropriations Subcommittee

Amendment Barcode (if applicable)

Name James Kinzler - City of Clermont

Job Title Assistant City Manager

Address 685 W Montrose Street

Phone 352-241-7356

Street

Clermont

FL

34711

Email JKinzler@clermonfl.org

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Clermont

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12-3-15

Meeting DateBill Number (if applicable)Topic ISLEBORO STORMWATER MASTER PLANAmendment Barcode (if applicable)Name KHALID RESHEIDATJob Title ASSISTANT CITY MANAGERAddress 125 INDUSTRIAL PARK AVENUEPhone 386-424-2209*Street*NEW SMYRNA BEACHFL32168Email kresheidat@cityofnsb.com*City**State**Zip*Speaking: For Against InformationWaive Speaking: In Support Against
*(The Chair will read this information into the record.)*Representing THE CITY OF NEW SMYRNA BEACHAppearing at request of Chair: Yes NoLobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

*Meeting Date**Bill Number (if applicable)*Topic Broward County Water Projects*Amendment Barcode (if applicable)*Name Edward G. LabradorJob Title Director, Intergovernmental Affairs & Professional StandardsAddress 115 S. Andrews Avenue, Room 426Phone 954-357-7575*Street*Fort LauderdaleFlorida33301Email elabrador@broward.org*City**State**Zip*Speaking: For Against InformationWaive Speaking: In Support Against
*(The Chair will read this information into the record.)*Representing Broward CountyAppearing at request of Chair: Yes NoLobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12.3.15
Meeting Date

Bill Number (if applicable)

Topic Ocala Silver Springs Stormwater Nutrient Reduction Project

Amendment Barcode (if applicable)

Name Sean Lanier

Job Title Director, Public Works Department

Address 1805 NE 30th Avenue, Building 300

Phone 352.351.6733

Street

Ocala, FL 34470

Email slanier@ocalafl.org

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Ocala

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

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12-03-2015

*Meeting Date**Bill Number (if applicable)*Topic Water Projects*Amendment Barcode (if applicable)*Name Jorge E. Corzo P.E.Job Title Town EngineerAddress 7777 NW 72 Ave.Phone 305-887-9541*Street*Medley

Fl.

33166Email jcorzo@townofmedley.com*City**State**Zip*Speaking: For Against InformationWaive Speaking: In Support Against
*(The Chair will read this information into the record.)*Representing Town of MedleyAppearing at request of Chair: Yes NoLobbyist registered with Legislature: Yes No

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Blountstown Budget Request

Amendment Barcode (if applicable)

Name Kelli Walden

Job Title Grant Coordinator

Address 20684 Central Avenue East

Phone 850-674-3300

Street

Blountstown

FL

32424

Email waldenk@preble-rish.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Blountstown

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

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THE FLORIDA SENATE
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12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Marianna Budget Request

Amendment Barcode (if applicable)

Name Kelli Walden

Job Title Grant Coordinator

Address 2898 Green Street

Phone 850-674-3300

Street

Marianna

FL

32446

Email waldenk@preble-rish.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Marianna

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE APPEARANCE RECORD

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12/3/15

Meeting Date

Bill Number (if applicable)

Topic Liberty County Budget Request

Amendment Barcode (if applicable)

Name Page Wahlquist

Job Title Public Works

Address PO Box 399

Phone 850-643-5404

Street

Bristol

FL

32321

Email kbrown@libertyclerk.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Liberty County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/15

Meeting DateBill Number (if applicable)Topic City of Monticello Budget RequestAmendment Barcode (if applicable)Name Steve WingateJob Title City ManagerAddress 245 South Mulberry StreetPhone (850) 342-0153StreetMonticelloFL32444Email eanderson@mymonticello.netCityStateZipSpeaking: For Against InformationWaive Speaking: In Support Against
*(The Chair will read this information into the record.)*Representing City of MonticelloAppearing at request of Chair: Yes NoLobbyist registered with Legislature: Yes No

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

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12-3-15

Meeting Date

Bill Number (if applicable)

Topic City of Monticello

Amendment Barcode (if applicable)

Name Debra Preble

Job Title Engineer

Address _____
Street

Phone 850-443-0067

City _____ State _____ Zip _____

Email prebled@preble-rish.ca

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Monticello

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
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12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Graceville Budget Request

Amendment Barcode (if applicable)

Name Donald Stanley

Job Title Project Engineer

Address PO Box 637

Phone 850-674-3300

Street

Graceville

FL

32440

Email stanleyd@preble-rish.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Graceville

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE APPEARANCE RECORD

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12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Jacob Budget Request

Amendment Barcode (if applicable)

Name Donald Stanley

Job Title Project Engineer

Address 4490 Jackson Road

Phone 850-674-3300

Street

Jacob

FL

32431

Email stanleyd@preble-rish.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Jacob

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

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12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Chattahoochee Budget Request

Amendment Barcode (if applicable)

Name Matthew Chester

Job Title Engineering Technician

Address 115 Lincoln Drive

Phone 850-674-3300

Street

Chattahoochee

FL

32324

Email chesterm@preble-rish.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Chattahoochee

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

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THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/15

Meeting DateBill Number (if applicable)Topic City of Quincy Budget RequestAmendment Barcode (if applicable)Name Matthew ChesterJob Title Engineering TechnicianAddress 404 W Jefferson StPhone 850-674-3300*Street*QuincyFL32351Email chesterm@preble-rish.com*City**State**Zip*Speaking: For Against InformationWaive Speaking: In Support Against
*(The Chair will read this information into the record.)*Representing City of QuincyAppearing at request of Chair: Yes NoLobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/15

Meeting DateBill Number (if applicable)Topic Farmers Feeding Florida Appropriations RequestAmendment Barcode (if applicable)Name Marcia ConwellJob Title CEO of Bread of the Mighty Food Bank and President of thAddress 325 NW 10th AvenuePhone 352-336-0839*Street*GanisvilleFlorida32627Email marcia.foodbank@bellsouth.ne*City**State**Zip*Speaking: For Against InformationWaive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing _____

Appearing at request of Chair: Yes NoLobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

THE FLORIDA SENATE
APPEARANCE RECORD

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12/3/15
Meeting Date

Bill Number (if applicable)

Topic Bay County Appropriations Request

Amendment Barcode (if applicable)

Name Bob Majka

Job Title Bay County - County Manager

Address 840 West 11th Street

Phone 850-248-8350

Street

Panama City

FL

32401

Email bmajka@baycountyfl.gov

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Bay County - North Bay State Road 77 and County Road 2300 Reuse Line Project

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15
Meeting Date

Bill Number (if applicable)

Topic Blue Spring Water Supply Protection; Mosquito/Indian River Lagoon Water Quality Protection

Amendment Barcode (if applicable)

Name Mike Ulrich

Job Title Volusia County Water Resources and Utilities Director

Address 123 W. Indiana Ave.

Phone 386-717-8228

Street

DeLand, FL

Email mulrich@volusia.org

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing _____

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15
Meeting Date

Bill Number (if applicable)

Topic Dixie County Flood Relief

Amendment Barcode (if applicable)

Name John Locklear

Job Title President, Locklear & Associates, Inc.

Address 4140 NW 37th Place, Suite A

Phone 352-672-6867

Street

Gainesville

Florida

32606

Email john@locklearconsulting.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Dixie County Board of County Commissioners

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12.3.15

Meeting Date

N/A

Bill Number (if applicable)

N/A

Amendment Barcode (if applicable)

Topic OCWS Supplemental Reclaim Water Project

Name Mark Wise

Job Title Deputy Director - Okaloosa Water and Sewer

Address 1250 North Eglin Parkway

Phone 850.685.0297

Street

Shalimar

FL

32579

Email mwise@co.okaloosa.fl.us

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Okaloosa County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Boynton Beach Mangrove Park Water Quality and Access Improvements

Amendment Barcode (if applicable)

Name John Durgan

Job Title Special Projects Coordinator

Address 100 E Boynton Beach Blvd

Phone 561-742-6010

Street

Boynton Beach

FL

33435

Email durganj@bbfl.us

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Boynton Beach

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Secretary or Senate Professional Staff conducting the hearing.)

12/15/15
Meeting Date

Bill Number (if applicable)

Topic Water Project

Assessment Barcode (if applicable)

Name Stacie Glass

Job Title League Executive Coordinator

Address 405 W. University Blvd

Phone 813-264-6829

Gainesville FL 32601

Email

Speaking: For Against Information

When Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Madison County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, this may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

11-3-2015

Meeting Date

Bill Number (if applicable)

Topic Suwannee County local funding request

Amendment Barcode (if applicable)

Name Dr. Alvin B. Jackson, Jr.

Job Title Economic Development Director

Address 13302 80th Terrace

Phone 386-688-5366

Street

Live Oak

FL

32060

Email alvinj@suwgov.org

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing _____

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

NA
Bill Number (if applicable)

Topic Local Budget Request - Oxidation Ditch Rehabilitation

Amendment Barcode (if applicable)

Name Jerry Sansom

Job Title Lobbyist

Address P O Box 98

Phone 321-777-8130

Street

Cocoa

FL

32923

Email fishhawk@aol.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Cape Canaveral

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

NA
Bill Number (if applicable)

Topic Local Budget Requests - Parking Facility, EOC, Dr. JL Smith Center

Amendment Barcode (if applicable)

Name Jerry Sansom

Job Title Lobbyist

Address P O Box 98

Phone 321-777-8130

Street

Cocoa

FL

32923

Email fishhawk@aol.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Cocoa

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

NA
Bill Number (if applicable)

Topic Local Budget Requests - Eau Gallie Dam & Florida Ave. Flood Mitigation

Amendment Barcode (if applicable)

Name Jerry Sansom

Job Title Lobbyist

Address P O Box 98

Phone 321-777-8130

Street

Cocoa

FL

32923

Email fishhawk@aol.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Melbourne

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15
Meeting Date

Bill Number (if applicable)

Topic Stormwater Project

Amendment Barcode (if applicable)

Name John DuBois, Council Representative (Public Works Director)

Job Title Vice Mayor

Address 9705 E Hibiscus St.

Phone 305-259-1234

Palmetto Bay FL 33157
Street City State Zip

Email jdubois@palmetto-bay-fl.gov

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Village of Palmetto Bay

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

DEC 3, 2015

Meeting Date

Bill Number (if applicable)

Topic WATER PROJECT FUNDING

Amendment Barcode (if applicable)

Name VICE MAYOR JOHN DUBOIS, Cortice Patterson, Director Public Works

Job Title VICE MAYOR & PUBLIC WORKS DIRECTOR

Address _____ Phone _____

Street

City

State

Zip

Email _____

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing VILLAGE OF PALMETTO BAY

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date _____ Bill Number (if applicable) _____
Topic Stormwater Project Amendment Barcode (if applicable) _____
Name Corrice Pattenson
Job Title Public Works Director
Address 9705 E. Hibiscus St Phone 365-259-1234
Palmetto Bay FL 33157 Email cpattenson@palmettobay.fl.gov
City State Zip

Speaking: For Against Information Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing _____

Appearing at request of Chair: Yes No Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic _____

Amendment Barcode (if applicable)

Name Diana Arteaga

Job Title Dir Govt Relations

Address 444 SW 2nd Ave 10th floor

Phone 786-469-1644

Street

Miami

FL

State

Zip

Email darteaga@miamigov.com

City

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Miami

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12-3-15

Meeting Date

Bill Number (if applicable)

Topic Laurel wilt funding

Amendment Barcode (if applicable)

Name Charles LaPradd

Job Title Agriculture Manager of Miami Dade County

Address 10710 SW 211 St.

Phone 305 971 5091

Street

Miami FL 33189

Email lapradd@miamidade.gov

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Miami-Dade County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic WATER PROJECT / APPROPRIATIONS

Amendment Barcode (if applicable)

Name JOSE A. BERMUDEZ

Job Title CONSULTANT

Address 121 ALHAMBRA PLAZA

Phone 305-260-1034

Street

CORAL GABLES FL

Email JBERMUDEZ@BPEGA.COM

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against

(The Chair will read this information into the record.)

Representing VILLAGE OF PINECREST

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date

Bill Number (if applicable)

Topic West Augustine Utilities Design Appropriation Amendment Barcode (if applicable)

Name John Regan, P.E.

Job Title City Manager

Address 75 King St

Phone (904) 669-1873

St. Augustine FL 32084
City State Zip

Email jcregan@citystaug.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of St. Augustine

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic Water Project

Amendment Barcode (if applicable)

Name Chris Marsh

Job Title Village Engineer

Address 1050 Royal Palm Beach Blvd.

Phone 561-790-5161

Street

Royal Palm Beach, FL

33411

City

State

Zip

Email CMARSH@RoyalPalmBeach.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Village of Royal Palm Beach

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15
Meeting Date

Bill Number (if applicable)

Topic WATER & SEWER PROJECT

Amendment Barcode (if applicable)

Name Carlos Arroyo

Job Title STORMWATER UTILITY MANAGER

Address 8401 NW 53 Terrace
Street

Phone 786-282-8911

DORAL FL 33166
City State Zip

Email Carlos.Arroyo@cityofdoral.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing CITY OF DORAL

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/2015

Meeting Date

Bill Number (if applicable)

Topic WATER & SEWER PROJECTS

Amendment Barcode (if applicable)

Name GREG NETTO

Job Title ASSISTANT PUBLIC WORKS DIRECTOR

Address 1855 NE 142nd STREET

Phone 305 895 9870

Street

NORTH MIAMI

FL

33181

Email gnetto@northmiami.fl.gov

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing CITY OF NORTH MIAMI

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date _____ Bill Number (if applicable) _____

Topic Water / Sewer Projects Amendment Barcode (if applicable) _____

Name Arthur H. Sorey III

Job Title CITY MANAGER

Address 776 NE 125 St Phone _____
Street

North Miami, FL 33161 Email asorey@northmiami.fl.gov
City State Zip

Speaking: For Against Information
Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of North Miami

Appearing at request of Chair: Yes No
Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic Water Projects

Amendment Barcode (if applicable)

Name MICHAEL BAILEY

Job Title UTILITIES DIRECTOR / CITY ENGINEER

Address 11791 SW 49 ST.

Phone 954-434-5519

Street

COOPER CITY FL 33330

Email MBAILEY@COOPER.CITY.FL.GOV

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing CITY OF COOPER CITY

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/8/15

Meeting Date

Bill Number (if applicable)

Topic Tamarac Culvert & Headwall Improvement Project

Amendment Barcode (if applicable)

Name Bryan Farrow

Job Title Engineer for City of Tamarac

Address 6011 Nob Hill Rd

Phone 954-597-3704

Street

Tamarac

City

FL

State

33521

Zip

Email bryan.farrow@tamarac.org

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Tamarac

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

3 Dec 2015
Meeting Date

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Bill Number (if applicable)

Topic Water Projects

Amendment Barcode (if applicable)

Name Robert M Sherman

Job Title Director of Community Services

Address 19200 W Country Club Drive Aventura FL

C 305-218-9300

B 305-466-8933

Aventura FL 33322
City State Zip

Email Shermanr@cityofaventura.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Aventura Florida

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/8/15

Meeting Date

Bill Number (if applicable)

Topic Water Projects

Amendment Barcode (if applicable)

Name RICHARD SALAMON

Job Title CITY MANAGER - CITY OF SUNRISE

(954) 746-3440 (G)

Address 10770 W OAKLAND PARK BLVD

Phone (954) 465-8320 (C)

Street

SUNRISE

City

FL

State

33351

Zip

Email rsalamon@sunrisefl.gov

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing CITY OF SUNRISE

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/05/2015

Meeting Date

Bill Number (if applicable)

Topic Water projects Caudades Lakes

Amendment Barcode (if applicable)

Name Kevin C. Baker

Job Title City Manager

Address 4300 N.W. 30th Street

Phone (305) 335-9174

City Caudadele, FL

State

Zip

Email kbaker@caudadele.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Caudadele, Florida

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12-3-15

Meeting Date

Bill Number (if applicable)

Topic WATER FUNDING CITY OF GRETNIA

Amendment Barcode (if applicable)

Name Antonio Jefferson

Job Title CITY MANAGER

Address 14615 MAEN Street GRETNIA

Phone 850-519-0681

Gretna
City State Zip

Email ajefferson@mggretna.ca

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Gretna

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/03/2015

Meeting Date

Bill Number (if applicable)

Topic City of Mangate Water Projects

Amendment Barcode (if applicable)

Name DAVID SIGERSON

Job Title

Address 1121 S Military Trl

Phone 954 336 3544

Street

Doerfield Bch FL 33442

Email sigerson@law@aol.com

City

State

Zip

Speaking: [x] For [] Against [] Information

Waive Speaking: [] In Support [] Against (The Chair will read this information into the record.)

Representing City of Mangate

Appearing at request of Chair: [] Yes [x] No

Lobbyist registered with Legislature: [x] Yes [] No

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date _____

Bill Number (if applicable) _____

Topic Water Projects

Amendment Barcode (if applicable) _____

Name Christine Dobkowski

Job Title Mayor - City of Belleview

Address 5343 SE Absher Blvd

Phone 352-400-1729

Street

Belleview FL 34420

City

State

Zip

Email _____

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Belleview

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12-3-15
Meeting Date

Bill Number (if applicable)

Topic Water Projects Requests

Amendment Barcode (if applicable)

Name Jordan Connors

Job Title

Address 2145 SW Cape Coral Dr

Phone 772 419 6069

Street
Port St Lucie FL 34953

Email jordan@jordannconnors.com

City State Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Port St. Lucie

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12-3-15
Meeting Date

Bill Number (if applicable)

Topic WATER PROJECTS

Amendment Barcode (if applicable)

Name TIM CADDELL

Job Title GOV. RELATIONS ADMINISTRATOR

Address 5851 PARK BLVD

Phone 727-369-5745

Street
PINELLAS PARK FL 33781
City State Zip

Email tcaddell@pinellas-park.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing CITY OF PINELLAS PARK

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic Local Initiative Funding Requests - Two Water Projects

Amendment Barcode (if applicable)

Name Stan McClain

Job Title Marion County Commissioner

Address 601 SE 25th Avenue

Phone 352-438-2323

Street

Ocala

FL

34471

Email Stan.McClain@marioncountyfl.org

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Marion County Board of County Commissioners

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date _____ Bill Number (if applicable) _____

Topic Rainbow Springs & Silver Springs Amendment Barcode (if applicable) _____

Name Carl Zalak

Job Title Marion County Commissioner

Address 601 SE 25th Ave Phone 352-438-2300

Ocala FL 34471 Email Carl.ZALAK@MARIONCOUNTYFL.org

City State Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Marion County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

December 3, 2015

Meeting Date

Bill Number (if applicable)

Topic Roosevelt Road, CR 300 Flooding

Amendment Barcode (if applicable)

Name Brian N. Lamb

Job Title Sheriff , Emergency Management

Address 178 Crawford Street

Phone 86-294-1301

Street

Mayo

FL32066

Email sherifflamb@windstream.net

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Lafayette County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic Town of Mayo Budget Request

Amendment Barcode (if applicable)

Name Wayne Hamlin

Job Title Mayor

Address _____

Phone _____

Street

Mayo

FL

City

State

Zip

Email mayotrusswayne@windstream.net

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Town of Mayo

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic City of Archer Legislative Request

Amendment Barcode (if applicable)

Name Doug Jones

Job Title Mayor

Address 16870 SW 134th Ave.

Phone (352) 495-2880

Street

Archer

FL

32618

Email _____

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Archer

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/2015

Meeting Date

Bill Number (if applicable)

Topic City of Archer Waste water System

Amendment Barcode (if applicable)

Name Doug Jones

Job Title Mayor

Address 16743 SW 143RD Ave

Phone 352.225.6883

Street

Archer, FL 32618

City

State

Zip

Email djones@cityofarcher.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Archer

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/2015

Meeting Date

Bill Number (if applicable)

Topic Water Project

Amendment Barcode (if applicable)

Name B. VAN ROYAL

Job Title MAYOR - GREEN COVE SPRINGS

Address 3688 LA COSTA CT.

Phone 904-294-2784

Street

GREEN COVE SPRINGS, FL. 32043

Email VANROYAL2@AOL.COM

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing CITY OF GREEN COVE SPRINGS

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

1/21/15
DATE

THE NUMBER OF APPEARANCES

Topic Water project request

APPROXIMATE DURATION (if applicable)

Name Van Royal

Job Title Mayor

Address 721 Walnut Street

Phone 904-297-7500

Green Cove Springs, FL 32043
CITY STATE ZIP

Speaking: For Against Information

Write Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Green Cove Springs

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

When it is a Senate matter to encourage public testimony, this may not record all persons wishing to testify to be heard at this meeting. Those who do speak may be asked to file their names so that all many persons or positions can be heard.

This form is part of the public record for this meeting.

5-003 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic WATER PROJECTS

Amendment Barcode (if applicable)

Name GEORGE VALLEJO

Job Title MAYOR

Address 17011 NE 19 AVE

Phone 305-948-2986

Street North Miami Beach FL 33162

Email nicole.gomez@citynmb.com

City State Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing _____

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12.3.15

Meeting Date

Bill Number (if applicable)

Topic Water Projects La

Amendment Barcode (if applicable)

Name PATRICIA WILLIAMS

Job Title COMMISSIONER

Address 4300 NW 36 STREET
Street

Phone 954 ~~573~~ 234-3499

Laud. Lakes
City State Zip

Email PATRICIA.W@lauderdalelakes.org

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Lauderdale

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic GGA projects

Amendment Barcode (if applicable)

Name Rachel Barnes

Job Title LA for Senator Stargel

Address 402 S. Monroe Street, Room 324

Phone 850-487-5015

Street

Tallahassee

FL

32399

Email barnes.rachel@flsenate.gov

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing 2 Water Projects for Polk County

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

December 03, 2015

Meeting Date

Bill Number (if applicable)

Topic Funding Request

Amendment Barcode (if applicable)

Name Sean Pittman

Job Title Lobbyist

Address 1028 East Park Avenue

Phone 850-216-1002

Street

Tallahassee

Florida

32301

Email sean@pittman-law.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Riviera Beach

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date

Bill Number (if applicable)

Topic Local Funding Request

Amendment Barcode (if applicable)

Name Sean Pittman

Job Title Attorney

Address 1020 East Park Avenue

Phone 351 216-1002

Street

Tallahassee FL 32301

City

State

Zip

Email sean@pittman-law.com

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Riviera Beach

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

December 02, 2015

Meeting Date

-na-

Bill Number (if applicable)

Topic Cape Canaveral Lighthouse Budget Request

Amendment Barcode (if applicable)

Name Dixie Sansom

Job Title Board Member, Cape Canaveral Lighthouse Foundation

Address P.O. Box 98

Phone 321-543-7195

Street

Cocoa

FL

32923

Email dixiesansom@aol.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing Self

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12-3-15

Meeting Date

Bill Number (if applicable)

Topic Local Funding Initiative Request

Amendment Barcode (if applicable)

Name Bill Rollins

Job Title President, Jim Stidham's Associates

Address 547 N. Monroe Street

Phone _____

Street

Tallahassee FL

32301

Email _____

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing EASTPOINT Water & Sewer District

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

12/3/15

Meeting Date

Bill Number (if applicable)

Topic Water Projects — Grant Requests

Amendment Barcode (if applicable)

Name JOHN BUSS

Job Title Manager of Water Resources - City of Tallahassee

Address 300 S. Adams

Phone 850-545-4064

Street

Tallahassee FL 32301

Email john.buss@talgov.com

City

State

Zip

Speaking: For Against Information

Waive Speaking: In Support Against
(The Chair will read this information into the record.)

Representing City of Tallahassee

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

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S-001 (10/14/14)

Appropriation Hearing for Feasibility Study for Wastewater and Storm Water Management System

- Two Supporting imperatives are economic development and enhanced stewardship of the Lower Withlacoochee River Segment
- Economics: Strategically located for Wastewater treatment for the region of South Levy County and Northwest Citrus County.
- Productive/intense economic development will not occur without this infrastructure.
- Reclaimed water from wastewater and storm water has a ready customer in Duke Energy at the Crystal River Energy Complex and possibly King Road.
- Potential service area will increase several orders of magnitude by developing this as a regional resource rather than exclusive municipal systems.
- Community and River Stewardship
- Remedy of non-functioning or nonexistent systems for storm water runoff.
- Low elevations promoted profound interaction between standing water and septic systems.
- Reduced nutrient contribution to river via surface drainage flow. Historical trends in the system indicate increasing nutrient loads in the Lower River and as of yet undetermined agents responsible for FDEP 303d List impaired Status*
- Addresses primary legislative imperative of health, safety, and welfare maintenance.

*Lower Withlacoochee Environmental Study:

Table 2-3, pg 20

Table 2-4, pgs 23-28



City of Oak Hill

Water and Wastewater Service Installation

Phase B1

Purpose: Improve Water Quality and Economic Development

The installation of water and wastewater service will provide:

- Economic stimulus for an economically disadvantaged City by providing properties along their commercial corridor with sites ready to develop; and
- A coordinated regional effort toward improving water quality by reducing the number of septic systems in use and in close proximity to Mosquito Lagoon/Indian River Lagoon.



Water Quality:

The City of Oak Hill has 730 residential units with 600 active septic tanks. The City is located along the northern portion of the Indian River Lagoon known as Mosquito Lagoon. The reduction of septic systems would substantially reduce total maximum daily loads to the lagoon.

Economic Constraints:

Economic growth in this small fishing village, known as the Redfish Capital of the World, has been disadvantaged by regulatory changes that have severely impacted the fishing industry and livelihood of many residents. Recent interest in Oak Hill by commercial and industrial users has been sparked by parcel sizes, value, and proximity to the Space Center and shipping routes. In order to capitalize on these opportunities, as well as protect the water quality for the remaining water dependent jobs, a centralized water and sewer system is critically important to the City. Many commercial properties on US 1 remain vacant or have been unable to expand because of the absence of a central utility system. The lack of site readiness for the properties along US 1 is a disincentive to economic development and private investment within the City of Oak Hill.

Household Median Income	
City	\$32,083
County	\$42,457
State	\$53,046

Project Description: Phase B1 is the first of 5 proposed phases for the installation of water and sewer service for the City. This phase would consist of the installation/construction of a trunk line along US 1 from Brooks Circle south to Lagoon Avenue. Service would be provided to the existing businesses and residential units along the commercial corridor. Stub outs would be supplied for future development. The majority of the work will take place within the existing rights of way.

Project Readiness: Design is complete, but needs to be updated. Construction can be completed within two years.

Indian River Lagoon Impacts:

The Indian River Lagoon is a grouping of three lagoons: Mosquito Lagoon, Banana River, and the Indian River, and situated on the Atlantic Coast of Florida, it is the most biodiverse lagoon ecosystem in the Northern hemisphere and is home to more than 3,000 species of plants and animals. The Indian River Lagoon provides an economic benefit to the City of Oak and is responsible for 1/7th of the region's economy. The overall, annual economic value of the lagoon was estimated at \$3.7 billion in 2007.

The lagoon ecosystem has experienced a high rate of both dolphin and manatee deaths, algal bloom and loss of seagrasses, and nutrient loading to the lagoon. Several programs and initiatives have been established in an effort to improve the health of the lagoon. The installation of a water and wastewater system would assist in furthering the goals and intent of these programs and/or initiatives by:



- Improving water quality and supporting the nationally significant National Estuary Program established to protect and restore the water quality and ecological integrity of Indian River Estuary.
- Continuing regional and local participation and support as evidenced by:
 - St. Johns River Water Management District Indian River Lagoon Protection Initiative;
 - Mayor's Roundtable (Volusia County);
 - Volusia County's effort to reduce septic systems along the lagoon; and
 - Participation and cooperation by the cities of Oak Hill, Edgewater and New Smyrna Beach with coordinated efforts to improve water quality in the lagoon.
- Continuing historical support of the Indian River Lagoon Act. This legislation was passed in an effort to reduce the flow of wastewater to the lagoon.

Project Benefits:

1. Allows for the expansion or relocation of businesses and industries that could spur the City's struggling economic base and create additional competitiveness for the state of Florida
2. Job creation and increased revenues
3. Improved water quality by reducing hazardous septic tanks located in proximity of the Mosquito Lagoon/Indian River Lagoon.



City of Oak Hill
Water and Wastewater Service Installation
Phase B1

\$775 K

Purpose: Improve Water Quality and Economic Development

The installation of water and wastewater service will provide:

- Economic stimulus for an economically disadvantaged City by providing properties along their commercial corridor with sites ready to develop; and
- A coordinated regional effort toward improving water quality by reducing the number of septic systems in use and in close proximity to Mosquito Lagoon/Indian River Lagoon.



Water Quality:

The City of Oak Hill has 730 residential units with 600 active septic tanks. The City is located along the northern portion of the Indian River Lagoon known as Mosquito Lagoon. The reduction of septic systems would substantially reduce total maximum daily loads to the lagoon.

Economic Constraints:

Economic growth in this small fishing village, known as the Redfish Capital of the World, has been disadvantaged by regulatory changes that have severely impacted the fishing industry and livelihood of many residents. Recent interest in Oak Hill by commercial and industrial users has been sparked by parcel sizes, value, and proximity to the Space Center and shipping routes. In order to capitalize on these opportunities, as well as protect the water quality for the remaining water dependent jobs, a centralized water and sewer system is critically important to the City. Many commercial properties on US 1 remain vacant or have been unable to expand because of the absence of a central utility system. The lack of site readiness for the properties along US 1 is a disincentive to economic development and private investment within the City of Oak Hill.

Household Median Income	
City	\$32,083
County	\$42,457
State	\$53,046

Project Description: Phase B1 is the first of 5 proposed phases for the installation of water and sewer service for the City. This phase would consist of the installation/construction of a trunk line along US 1 from Brooks Circle south to Lagoon Avenue. Service would be provided to the existing businesses and residential units along the commercial corridor. Stub outs would be supplied for future development. The majority of the work will take place within the existing rights of way.

Project Readiness: Design is complete, but needs to be updated. Construction can be completed within two years.

Indian River Lagoon Impacts:

The Indian River Lagoon is a grouping of three lagoons: Mosquito Lagoon, Banana River, and the Indian River, and situated on the Atlantic Coast of Florida, it is the most biodiverse lagoon ecosystem in the Northern hemisphere and is home to more than 3,000 species of plants and animals. The Indian River Lagoon provides an economic benefit to the City of Oak Hill and is responsible for 1/7th of the region's economy. The overall, annual economic value of the lagoon was estimated at \$3.7 billion in 2007.

The lagoon ecosystem has experienced a high rate of both dolphin and manatee deaths, algal bloom and loss of seagrasses, and nutrient loading to the lagoon. Several programs and initiatives have been established in an effort to improve the health of the lagoon. The installation of a water and wastewater system would assist in furthering the goals and intent of these programs and/or initiatives by:



- Improving water quality and supporting the nationally significant National Estuary Program established to protect and restore the water quality and ecological integrity of Indian River Estuary.
- Continuing regional and local participation and support as evidenced by:
 - St. Johns River Water Management District Indian River Lagoon Protection Initiative;
 - Mayor's Roundtable (Volusia County);
 - Volusia County's effort to reduce septic systems along the lagoon; and
 - Participation and cooperation by the cities of Oak Hill, Edgewater and New Smyrna Beach with coordinated efforts to improve water quality in the lagoon.
- Continuing historical support of the Indian River Lagoon Act. This legislation was passed in an effort to reduce the flow of wastewater to the lagoon.

Project Benefits:

1. Allows for the expansion or relocation of businesses and industries that could spur the City's struggling economic base and create additional competitiveness for the state of Florida
2. Job creation and increased revenues
3. Improved water quality by reducing hazardous septic tanks located in proximity of the Mosquito Lagoon/Indian River Lagoon.

West Volusia Water Supply for the Protection of Blue Springs

The County of Volusia, FL respectfully requests your support in funding construction wells for aquifer performance testing and analysis necessary for the development of a regional wellfield which will reduce reliance on groundwater withdrawals from Volusia Blue Spring.

Current Situation

Volusia Blue Spring is one of only 33 first magnitude springs in the state and is the largest on the St. Johns River with an average daily discharge of 102 million gallons per day. The spring provides a vital winter refuge for the endangered West Indian Manatee. Blue Spring has been designated as a critical habitat for the Florida Manatee by the U.S. Fish and Wildlife Service.

The springshed covers an area of 130 square miles and encompasses portions of five cities in Volusia County. It also is the groundwater source for the public water suppliers (Deland, Deltona, Orange City, and Volusia County) currently serving more than 170,000 residents and businesses.

The St. Johns River Water Management District (SJRWMD) has developed a set of objectives and strategies designed to protect the spring. In support of these goals, the County and the other water suppliers of West Volusia have been working cooperatively with the District to reduce the groundwater withdrawals in Blue Spring.

Project Description

The aquifer performance testing project calls for the construction of test/production wells on County owned property outside of the Blue Spring springshed area for the purpose of determining groundwater quality and withdrawal capacity.

The future regional wellfield system is expected to produce between 2-4 million gallons per day of new water supply, and is among one of several key initiatives in the SJRWMD adopted Prevention and Recovery Strategy intended to reduce existing groundwater withdrawals within the Blue Spring basin area which ultimately helps to increase spring discharge.

The estimated cost for the aquifer performance testing and analysis project is \$1,150,000. Volusia County has allocated \$575,000 for 50% local matching funds.

Local and Statewide Interest

Blue Spring State Park covers more than 2,600 acres and provides a variety of recreational opportunities including swimming, fishing, canoeing, picnicking, and hiking. Annual visitation reported to be over 600,000 with an estimated economic impact of more than \$45 million. The park supports 634 jobs in the local economy.

This project helps to contribute to the statewide goals for achieving minimum flows and levels established by the SJRWMD for the protection of Volusia Blue Spring as a first magnitude spring and vital warm-water winter refuge of endangered manatees.

Economic Impact

Due to fact that nearly every sector of a region's economy is influenced by the amount and quality of water available, it is difficult to fully assess the economic impact for sustaining current demand as well as meeting expected future growth with reduced water supply capacity. In conducting aquifer performance testing outside the Blue Spring basin, the four West Volusia water supply partners will jointly develop a regional wellfield producing sufficient water supply essential for continued economic growth and prosperity throughout the local region.

Based on current population and considering an average annual growth rate of 2 percent, the population in West Volusia could grow to over 253,000 by 2035, assuming potable water is available to serve additional residents and businesses. If water suppliers cannot meet the required reduction in ground water withdrawal in the Blue Spring springshed, local government consumptive use permits could be in jeopardy and continued growth could be constrained. The economic value of the lost growth for the region could be hundreds of millions of dollars.

Contact

Michael Ulrich, Director
Volusia County Water Resources & Utilities
386-943-7027
mulrich@volusia.org



Septic Tank Elimination for the Protection of Mosquito/Indian River Lagoon

The County of Volusia, FL respectfully requests your support in funding construction of a centralized wastewater collections system for the elimination of aging residential septic tanks and for the protection of the Mosquito Lagoon.

Current Situation

Mosquito Lagoon is a part of the 156-mile long Indian River Lagoon (IRL) Estuary which also includes the Indian River and Banana River. The IRL includes the five counties of Volusia, Brevard, Indian River, St. Lucie and Martin. The Mosquito Lagoon located in Volusia County is under increasing pressure from nutrient and bacteria pollution generated from a number sources, including leaching from onsite septic tank systems.

Volusia County government has taken proactive steps toward identifying onsite septic systems in the most environmentally sensitive areas throughout the county. In February 2015, County leaders released a water quality plan targeting approximately 15,000 onsite septic systems for elimination and connection to centralized wastewater treatment facilities throughout the county.

Project Description

The proposed project will provide for engineered plans and construction of a sanitary sewer collection system for Indian Harbor Estates, a 300 lot residential development with three canals located adjacent to Mosquito Lagoon in Oak Hill, FL. The sanitary sewer collection system will connect to an existing force main, leading to the County's wastewater treatment facility in Oak Hill.

Due to the high lot density within the community and its canals leading directly to the lagoon, it is ranked as the top priority for the elimination of onsite septic systems in Southeast Volusia County.

The total estimated cost for the project is \$6,080,000. The estimated cost for the design phase is approximately \$400,000. Volusia County has allocated \$200,000 for matching funds in its current FY 15-16 budget for design of the sanitary sewer collection

Local and Statewide Interest

A 2008 Economic Assessment and Analysis Update for the Indian River Lagoon released by the St. Johns River Water Management District and South Florida Water Management District assessed the economic value of the Indian River Lagoon to residents and visitors at approximately \$3.7 billion in benefits for Mosquito Lagoon. For the Volusia County the benefit was assessed at \$658 million per year.

In addition to local and state interest, the Indian River Lagoon is considered one of the most biologically diverse estuaries in North America. It is listed as an Estuary of National Significance and one of only twenty-eight (28) national estuary programs supporting healthy seagrass-based ecosystems, endangered and threatened species, and fisheries and recreation.

Return on Investment & Outcomes

- Reduces in the amount of nitrogen discharged to lagoon by approximately 11,000 lbs/yr, and phosphorus by approximately 2,000 lbs/yr.
- Improves of the lagoon's water quality and sea grass beds preserving the ecosystem and natural habitat
- Protects the lagoon and promotes economic growth and prosperity in Volusia County and the other four counties along the east coast of Florida

Contact

Michael Ulrich, Director
Volusia County Water Resources and Utilities
386-943-7027
mulrich@volusia.org



*Lower Withlacoochee River
Environmental Study*

**Phase 1 - Summary of Existing
Environmental Data**

Prepared for
Withlacoochee Area Residents, Inc.

September 2, 2013

Prepared by
Wetland Solutions, Inc.



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Section 1.0 Introduction

The Withlacoochee River (south) is located in central Florida, drains surface water runoff from the Green Swamp north of Lakeland in Polk County, intercepts groundwater from a large area of karst terrain that extends west through Pasco, Sumter, Citrus, Marion, and Levy counties, and empties into the Gulf of Mexico near Yankeetown (Figure 1-1). The estimated length of the Withlacoochee River is approximately 157 miles with a surface watershed of about 2,060 square miles (Southwest Florida Water Management District, 2010).

In its lower reaches (below Dunnellon) the Withlacoochee River has been highly altered by human activities. The most significant structural changes to the river were the closing of the Inglis Dam on the river in 1909 that impounded Lake Rousseau, and the construction of the Cross Florida Barge Canal and lock system just east of US 19, and south of Inglis in the 1960s. These alterations, as well as other environmental stresses resulting from conversion from natural to developed land uses in the river's watershed have changed the physical, chemical, and biological conditions in the Withlacoochee River.

In spite of local and state protections for this natural aquatic ecosystem, detrimental changes continue to be evident to local residents. In response to these observed changes, a local citizens' advocacy group, the Withlacoochee Area Residents, Inc. (W.A.R.) contracted with Wetland Solutions, Inc. (WSI) to conduct a Phase 1 summary of existing environmental information for the portion of the river referred to as the Lower Withlacoochee River Study Area (Figure 1-2). This river segment extends from the Lake Rousseau Inglis Bypass Canal to the Gulf of Mexico and includes approximately 10 miles of the historic river channel.

The purpose of this report is to summarize available environmental data relevant to the Lower Withlacoochee River Study Area as a reference for comparison between historic and existing conditions. This Phase 1 study is intended to identify known changes in the environment of the lower river and their causes, and to provide recommendations for additional efforts that may be needed to achieve various levels of environmental restoration in the Lower Withlacoochee River.

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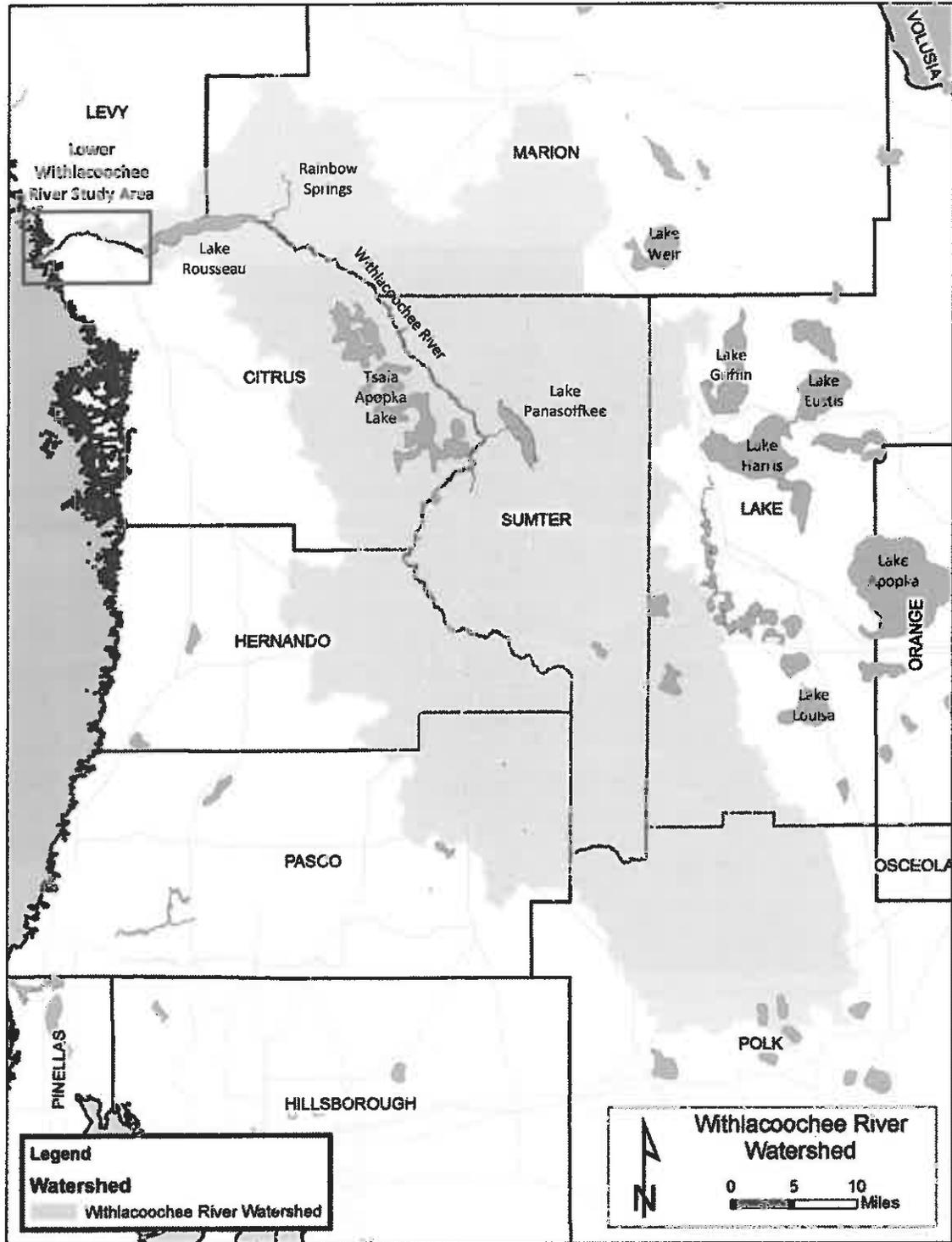


Figure 1-1. Withlacoochee River Watershed identifying the Lower Withlacoochee River Study Area

Lower Withlacoochee River Study

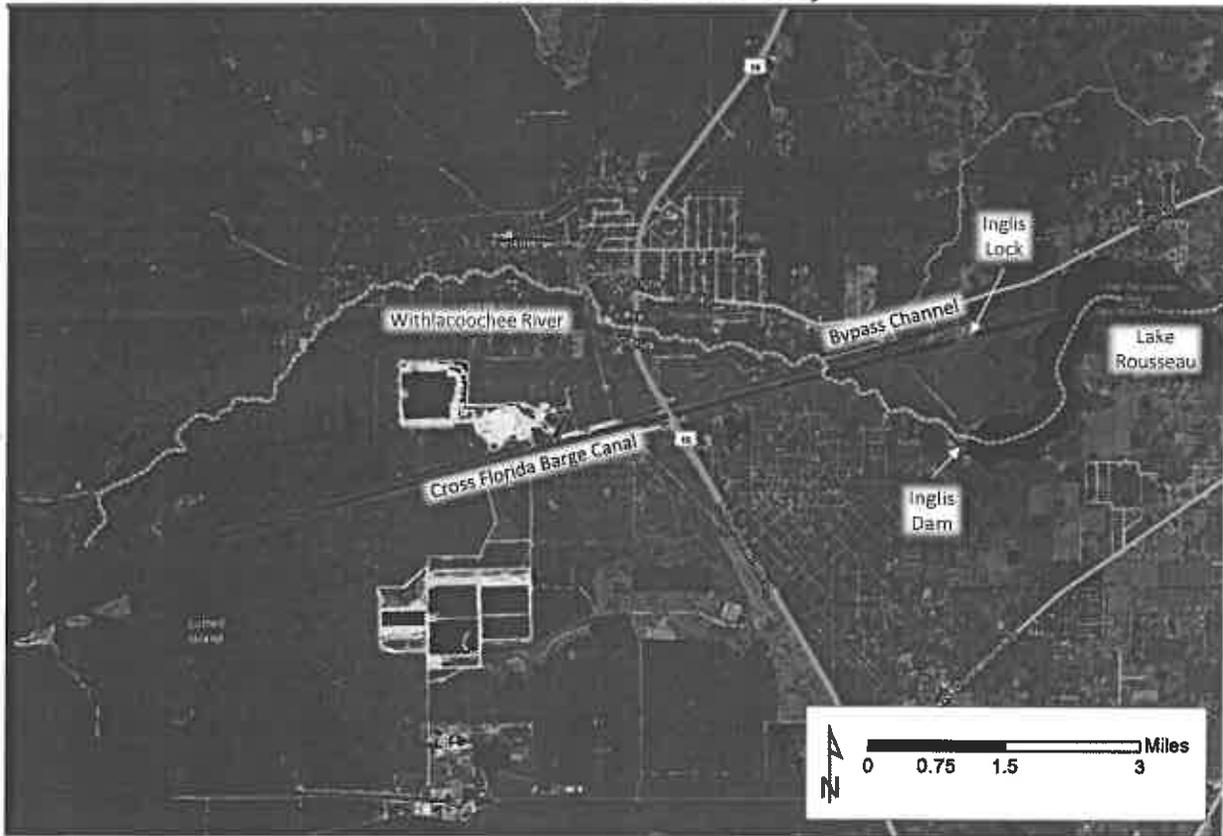


Figure 1-2. Lower Withlacoochee River Study Area

Section 2.0 Existing Data

2.1 Watershed

2.1.1 Location

The majority of the Withlacoochee watershed is located within Marion, Sumter, and Polk Counties, with smaller areas within Levy, Citrus, Hernando, Pasco, and Lake Counties (Figure 1-1). The Green Swamp, located in northern Polk County, forms the headwaters of the 157-mile-long Withlacoochee River and flows northwest ultimately discharging into the Withlacoochee Bay Estuary in the Gulf of Mexico near Yankeetown. The entire river and its connected lakes and tributaries have been designated as Outstanding Florida Waters (Florida Department of Environmental Protection, 2006).

2.1.1.1 Lakes

Lake Panasoffkee and Tsala Apopka Lake are two of the larger lakes in the Withlacoochee watershed. Lake Panasoffkee is a relatively shallow lake located in Sumter County that includes an exposed area of the Floridian aquifer. It is between 3,800 to 4,500 acres, depending on rainfall, and drains a watershed area of about 63,000 acres (Florida Department of Environmental Protection, 2006). Tsala Apopka Lake is located within Citrus County and contains three distinct hydrologic pools (Floral City, Inverness, and Hernando) totaling about 20,000 acres. Thousands of acres of contiguous marsh surround the lake's open-water features (Florida Department of Environmental Protection, 2006).

2.1.1.2 Springs

Rainbow Springs and the Rainbow River are located in southwestern Marion County approximately 4 miles north northeast of the Dunnellon city center and 19 miles west southwest of the Ocala city center. Rainbow Springs forms the headwaters of the Rainbow River which is nearly 6-miles (10 km) long and merges with the Withlacoochee River at Dunnellon. Rainbow Springs includes more than twelve named vents with a total average discharge of more than 600 cubic feet per second [cfs] (390 million gallons per day [MGD]), making it one of the largest first magnitude spring systems in Florida.

Gum Slough is located in Sumter County and is a tributary of the Withlacoochee River. Land uses surrounding Gum Slough and the spring run are in large private and public tracts, dominated by wetlands, forests, and rangeland. Outside of these immediate buffer areas, more intensive agricultural, suburban, and urban developments are evident. Gum Slough Springs is made up of multiple spring vents, some with their own short spring runs. The total length of the spring run is approximately 5.0 miles (8.1 km) from its upper-most Main Spring boil to the junction with the Withlacoochee River.

2.1.1.3 Reservoir

Lake Rousseau is a reservoir that was originally created by construction of the Inglis Dam between 1905 and 1909 to provide navigation for the commercial development (timber, phosphate, and citrus) of the Withlacoochee River. The dam also provided hydroelectric power

generation by the Florida Power Corporation. Lake Rousseau is approximately 5.7-miles (9.2 km) long and has a surface area of about 4,163 ac (1,685 ha). The flow of water over the Inglis Dam produced electric power until 1965 (Florida Department of Environmental Protection, 2006). The Withlacoochee and Rainbow Rivers are the two major surface waters that contribute to Lake Rousseau.

2.1.1.4 Cross-Florida Barge Canal

The Lower Withlacoochee River, the natural channel west of Lake Rousseau, was significantly altered with the construction of the Cross Florida Barge Canal in the 1960s. The Cross Florida Barge Canal project was de-commissioned in the 1990 before it was completed. The barge canal bisected the Withlacoochee River approximately two miles (3.2 km) downstream of the Inglis Dam, cutting off this river segment and re-routing all outflows from Lake Rousseau above about 1,600 cfs to the barge canal and the Gulf. The Inglis Structural Complex includes the Inglis Dam and the various locks and spillways of the abandoned Cross-Florida Barge Canal (Figure 1-2). Discharge to the Lower Withlacoochee River from Lake Rousseau can only be received via the Inglis Bypass Channel. These structural modifications resulted in reduced average and peak flows to the remaining Lower Withlacoochee River. It was also determined that some diffuse groundwater inflows (about 7 cfs) formerly entering the lower river were also intercepted by the excavation of the barge canal (Faulkner 1972 referenced by Bush 1973).

2.1.2 Climate

Regional rainfall was evaluated by using a data set prepared by the SWFWMD for Marion, Citrus, Sumter, Hernando, Lake, Pasco, and Polk Counties. This data set provides annual rainfall totals for the period-of-record from 1915 through 2011 as shown in Figure 2-1. These data show an average precipitation of 53 inches per year over the 97-year period. The LOESS (locally-weighted scatterplot smoothing) procedure was used to better understand the long-term patterns in rainfall. Area precipitation generally increased for the first half of the record from an average of about 50 inches per year in the early 1900s to a maximum average of about 56 inches per year in the 1960s, to an average of about 50 inches per year over the past decade. Extreme annual average rainfall totals in the area range from 32 to 74 inches per year.

The average daily temperature for this area is approximately 72° F, with average summer temperatures in the low 80's °F and average winter temperatures in the upper 50's °F (Southwest Florida Water Management District, 2010).

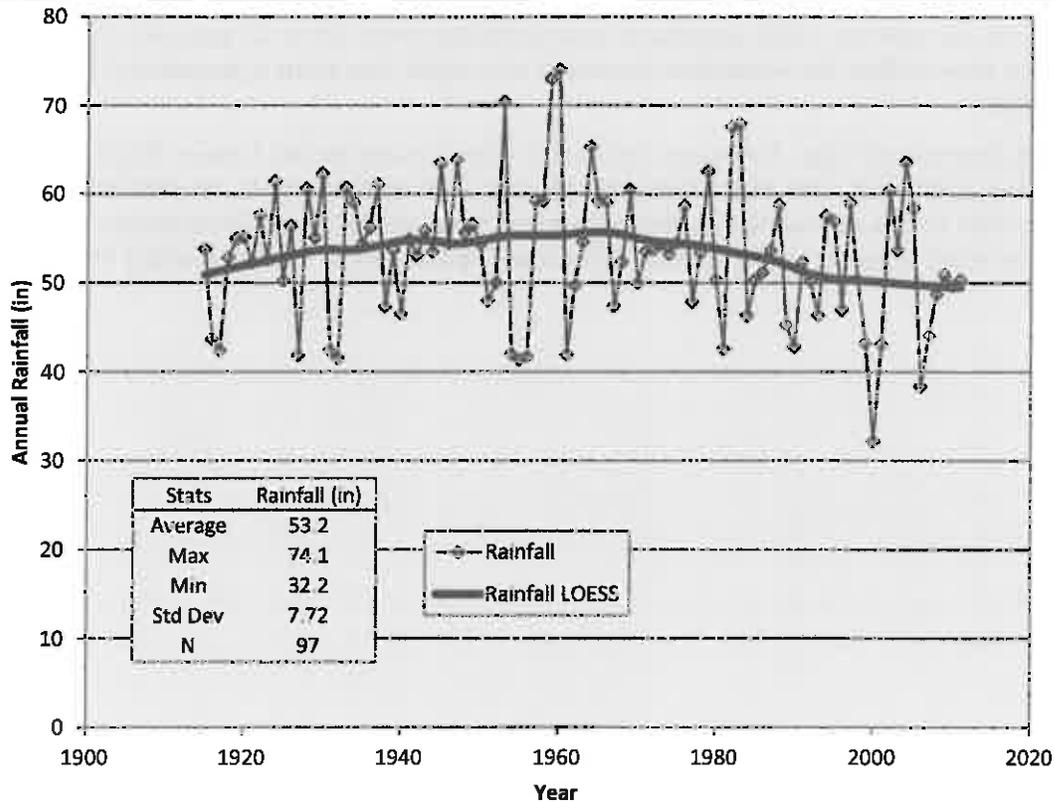


Figure 2-1. Annual Rainfall Summary for Withlacoochee Watershed Counties (Marion, Citrus, Sumter, Hernando, Lake, Pasco, and Polk) with LOBSS curve

2.1.3 Physiography

Based on the underlying sediments and topographic relief, the Withlacoochee watershed has been divided into 5 physiographic provinces: Brooksville Ridge, Tsala Apopka Plain, Coastal Lowlands, Webster Limestone Plain, and Dade City Hills. The Brooksville Ridge elevations range from 70 to 200 ft National Geodetic Vertical Datum (NGVD), with clay-rich soils that have slowed the weathering of the underlying limestone, resulting in higher elevations in comparison to the surrounding areas. Many hills in the Dade City Hills area have elevations above 200 ft NGVD with the highest reaching 301 ft NGVD. The main structural feature in the Withlacoochee watershed's geology is the Ocala Uplift. The Ocala Uplift is post-Oligocene (relatively recent geologic age) which has eroded to form the trough of the Withlacoochee River and the Green Swamp watershed (Florida Department of Environmental Protection, 2006).

2.1.4 Land-Use

A summary of land use and land cover has been summarized in the Withlacoochee Watershed for 1974, 1990, 1995, and 2004 (Southwest Florida Water Management District, 2010). A map of the 2004 land use and land cover is illustrated in Figure 2-2. The dominant land uses and land coverage in the Withlacoochee Watershed in 1974 were rangeland (40%), wetland forest (25%), and upland forest (19%), totaling 84 percent of the watershed (Table 2-1). Compared to



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mapping from 1974, by 2004, the relatively undeveloped land use categories in the watershed had declined to 63 percent, with rangeland area shrinking from 40 to 25 percent. Urban and build-up land uses within the watershed increased at a rapid rate from 4 percent in 1974 to 20 percent in 2004.

In 1909, construction of Lake Rousseau increased water levels in the Lower Withlacoochee River, shifting area land uses from limerock mining and agriculture to mostly residential. Within a ten-mile radius of Dunnellon, the population increased 37.5 percent between 1994 and 2004, and this trend is projected to continue (Florida Department of Environmental Protection, 2013).

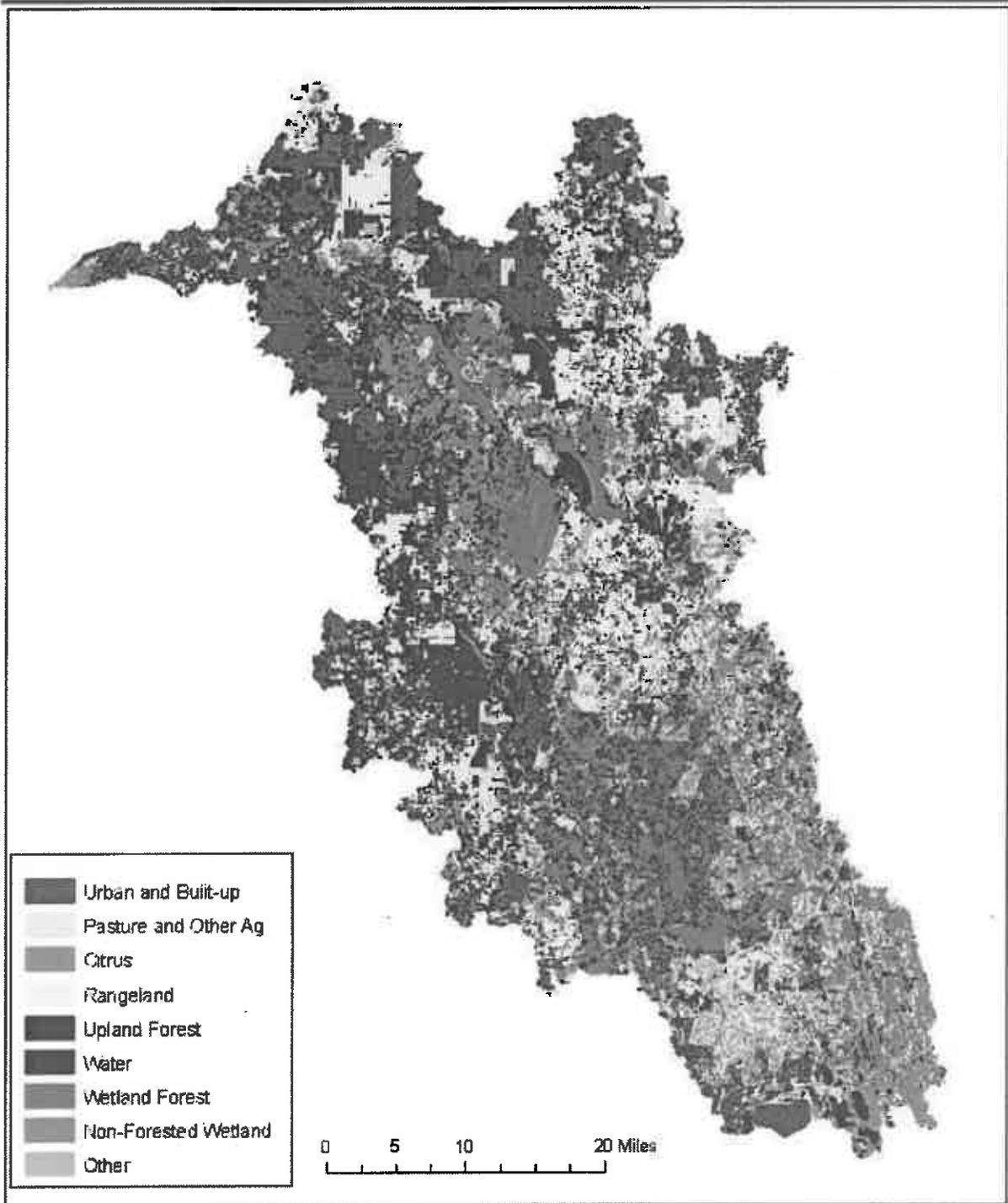


Figure 2-2. 2004 Land Use / Cover Map of the Withlacoochee River Watershed (Southwest Florida Water Management District, 2010)

Lower Withlacoochee River Study

Table 2-1. Percent of Land Use / Cover within the Withlacoochee River Watershed (1974, 1990, 1995, and 2004).

Withlacoochee River Watershed	1974(%)	1990(%)	1995(%)	2004(%)
Urban and Built-up	4	15	18	20
Rangeland	40	28	30	25
Citrus	5	2	2	1
Pasture and Other Ag	0	4	3	4
Upland Forest	19	24	23	23
Water	3	2	2	2
Wetland Forest	25	16	15	15
Non-Forested Wetland	0	8	8	8
Other	5	1	1	1

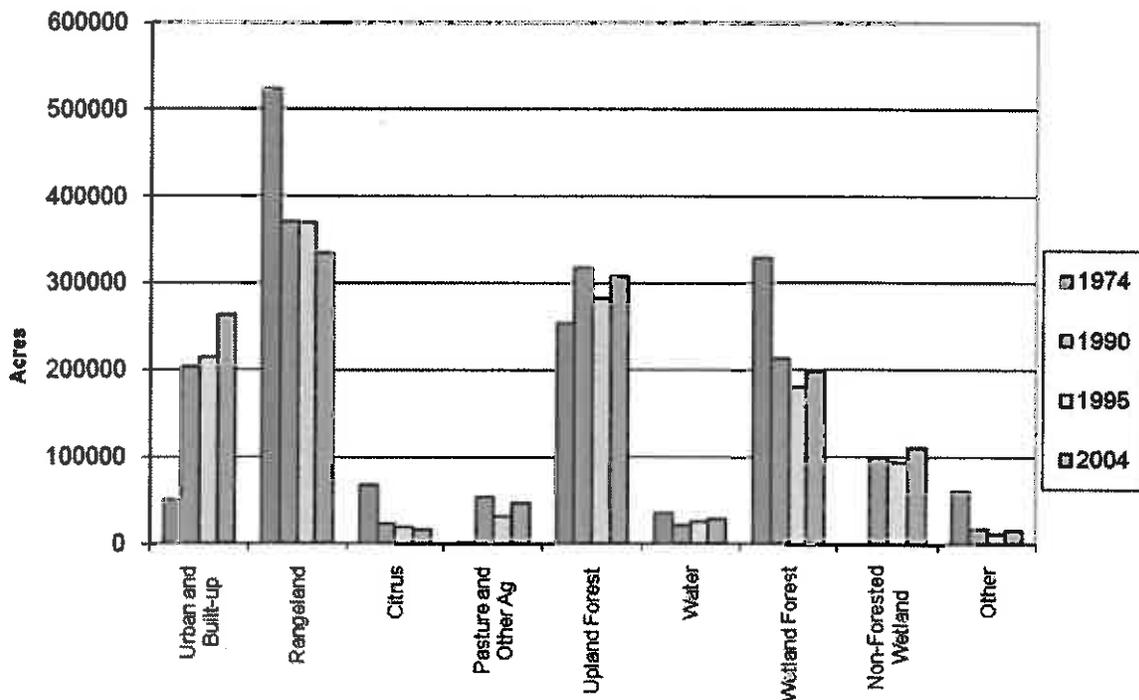


Figure 2-3. Land Use / Cover within the Withlacoochee River Watershed (1974, 1990, 1995, and 2004).

2.2 Study Area

The Lower Withlacoochee River Study Area (Figure 1-2) includes approximately 10 miles of historic river channel that extends from the Lake Rousseau Inglis Bypass Channel to the Gulf of Mexico.

The upper portion of the study area is comprised of residential developments from the Inglis and Yankeetown communities with the lower portion primarily undeveloped salt marsh. The

upper portion has an average channel width of 98 ft (30 m) with an average mid-channel depth of 13 ft (4 m) (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

This section summarizes environmental data from the Lower Withlacoochee River Study Area, as well as relevant areas upstream including Lake Rousseau and the Withlacoochee River downstream of Highway 200.

2.2.1 Discharge and Stage

The locations of USGS stage and discharge stations within the Lower Withlacoochee River are illustrated in Figure 2-4 with metadata in Table 2-1.

Discharge in the Withlacoochee River at Highway 200 (USGS 2313000) varied greatly during wet and dry season in response to storm events with flows ranging from 33 to 8,660 cfs (average 958 cfs) over the period-of-record (Figure 2-5). In comparison, Rainbow River (USGS 2313100) discharges were more stable averaging 679 cfs with a range from 391 to 1,060 cfs. Figure 2-6 presents the LOESS (locally weighted scatterplot smoothing) data curves for the detailed discharge data in Figure 2-5. Based on these curves there has been a general long-term (1960s to present) decline in discharge at each of the stations over the period-of-record. Average declines in flows in the upper and lower river and at the dam are on the order of 40 to 60%.

Discharge to the Lower Withlacoochee River from Lake Rousseau can only be received via the Inglis Bypass Channel. The design peak flow for the spillway is reported by the District to be 1,540 cfs. The average discharge from the Bypass Channel (USGS 2313250) was 1,008 cfs with a maximum recorded flow of 1,840 cfs since 1970. Since the construction of the Cross-Florida Barge Canal the Lower Withlacoochee River has been deprived of high flows. Flows of up to about 6,000 cfs have been discharged through the Inglis Dam (USGS 2313230) to the barge canal which reduces available high flows to the lower river (Figure 2-7). This makes management of water levels in Lake Rousseau difficult since lowering level by a small amount can cause significant flow reductions to the Lower Withlacoochee River (Florida Department of Environmental Protection, 2006).

Figure 2-8 presents daily average stage estimates for USGS stations downstream of Highway 200 for the period-of-record. The station at Highway 200 (USGS 2313000) had the largest fluctuation in water elevations, 26.8 to 40.8 ft NGVD29, and an average of 30.4 ft NGVD29. The average water elevation in the Withlacoochee River (USGS 2313200) downstream of the Rainbow River at Highway 41 was 27.9 ft NGVD29 with a range of 23.1 to 30.4 ft NGVD29. The Lake Rousseau Bypass Channel (USGS 2313250) was approximately 27.1 ft NGVD29 with a range from 21.7 to 28.1 ft NGVD29. The two western most stations at the Lake Rousseau Inglis Dam (USGS 2313229 & 2313230) averaged about 27.4 ft NGVD29 with a range of 21.7 to 28.0 ft NGVD29 between the two stations over the period of record. The mean water depth in Lake Rousseau is about 7.8 ft (2.4 m) with the deepest areas within the original Withlacoochee River channel (Figure 2-9).

Water elevations below the Inglis dam are approximately 26 ft (7.9 m) lower than elevations in Lake Rousseau and fluctuate over 11 ft (-1.90 to 9.25 ft NGVD29) with an average of 1.3 ft NGVD29 (Figure 2-8).

The average stage for the two stations at the Withlacoochee Bay Estuary (USGS 2313272 & 2313274) was -0.37 ft NGVD29 with a range from about -2.6 to 2.6 ft NGVD29.

Lower Withlacoochee River Study

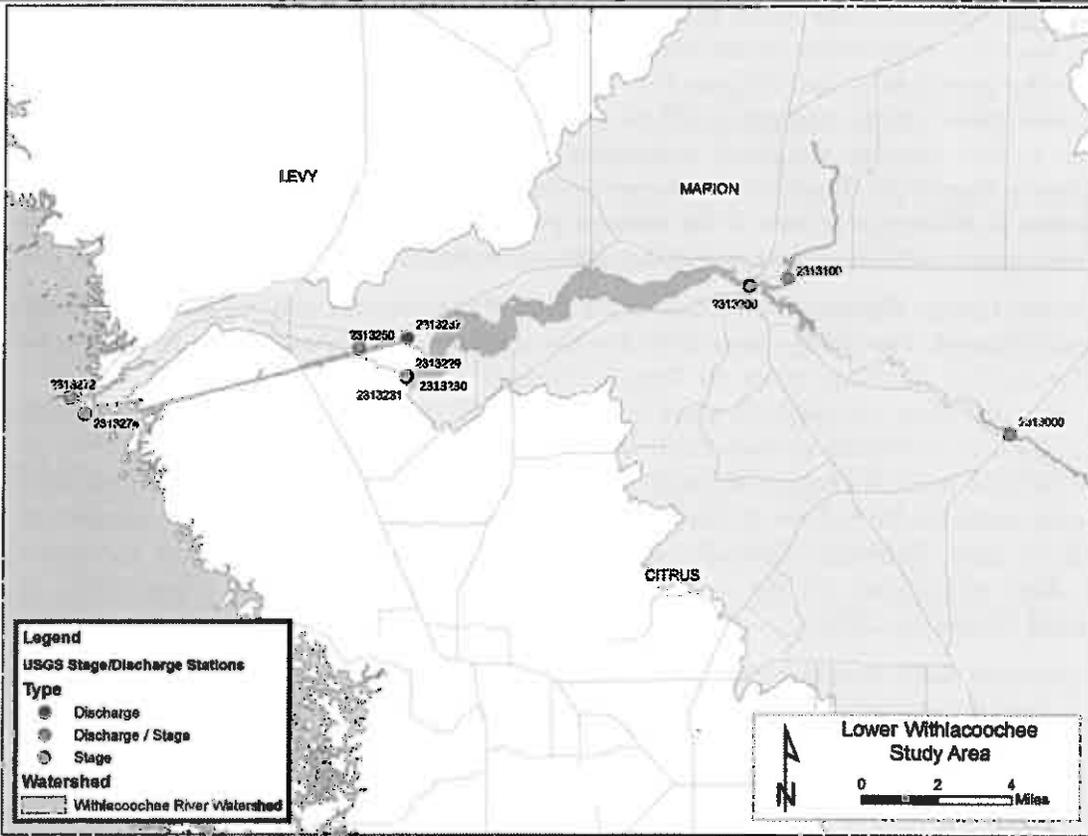


Figure 2-4. USGS Stage/Discharge Stations within the Lower Withlacoochee River

Lower Withlacoochee River Study

Table 2-2. USGS Stage/Discharge Stations within the Lower Withlacoochee River

STATION ID	STATION NAME	STN TYPE	LATITUDE	LONGITUDE
2313000	WITHLACOOCHEE RIVER NEAR HOLDER, FL	Discharge / Stage	28 988868	-82 349541
2313100	RAINBOW RIVER AT DUNNELLON, FL	Discharge / Stage	29 049167	-82 447778
2313200	WITHLACOOCHEE RIVER AT DUNNELLON, FL	Stage	29 046087	-82 464544
2313229	LAKE ROUSSEAU NR DUNNELLON, FLA	Stage	29 010253	-82 616492
2313230	WITHLACOOCHEE R AT INGLIS DAM NEAR DUNNELLON, FL	Discharge / Stage	29.009722	-82 616944
2313231	WITHLACOOCHEE R BL INGLIS DAM NR DUNNELLON, FLA	Stage	29 009975	-82 61677
2313237	BARGE CANAL AT INGLIS LOCK NR INGLIS, FLA	Discharge	29 025252	-82 616492
2313250	WITHLACOOCHEE R BYPASS CHANNEL NR INGLIS FLA	Discharge / Stage	29 021085	-82 637882
2313272	WITHLACOOCHEE R AT CHAMBERS IS NEAR YANKEETOWN FL	Stage	29 001109	-82 765788
2313274	WITHLACOOCHEE R AT BUNGALOW PASS AT PORT INGLIS FL	Stage	28 994696	-82 758996

Lower Withlacoochee River Study

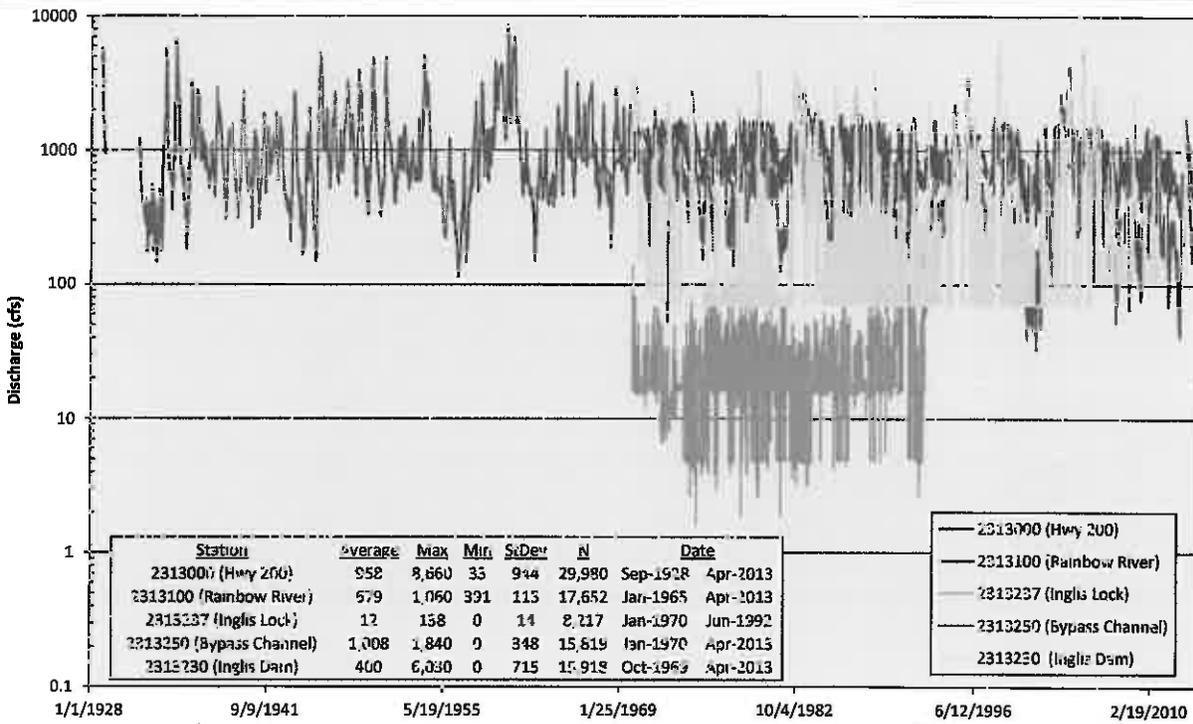


Figure 2-5. USGS daily average discharge estimates in the Lower Withlacoochee River (Max = maximum, Min = minimum, StDev = standard deviation, and N = number of individual values in the period-of-record)

Lower Withlacoochee River Study

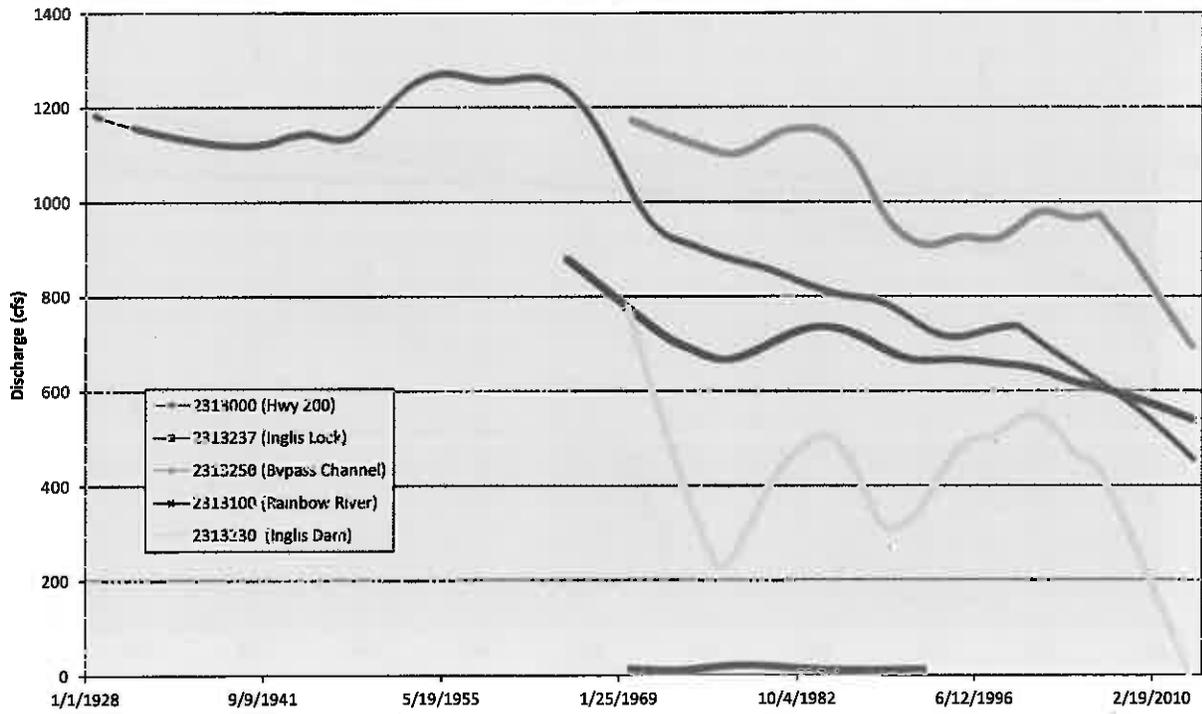


Figure 2-6. LOESS curves (alpha = 0.33) for USGS daily average discharge estimates in the Lower Withlacoochee River

Lower Withlacoochee River Study

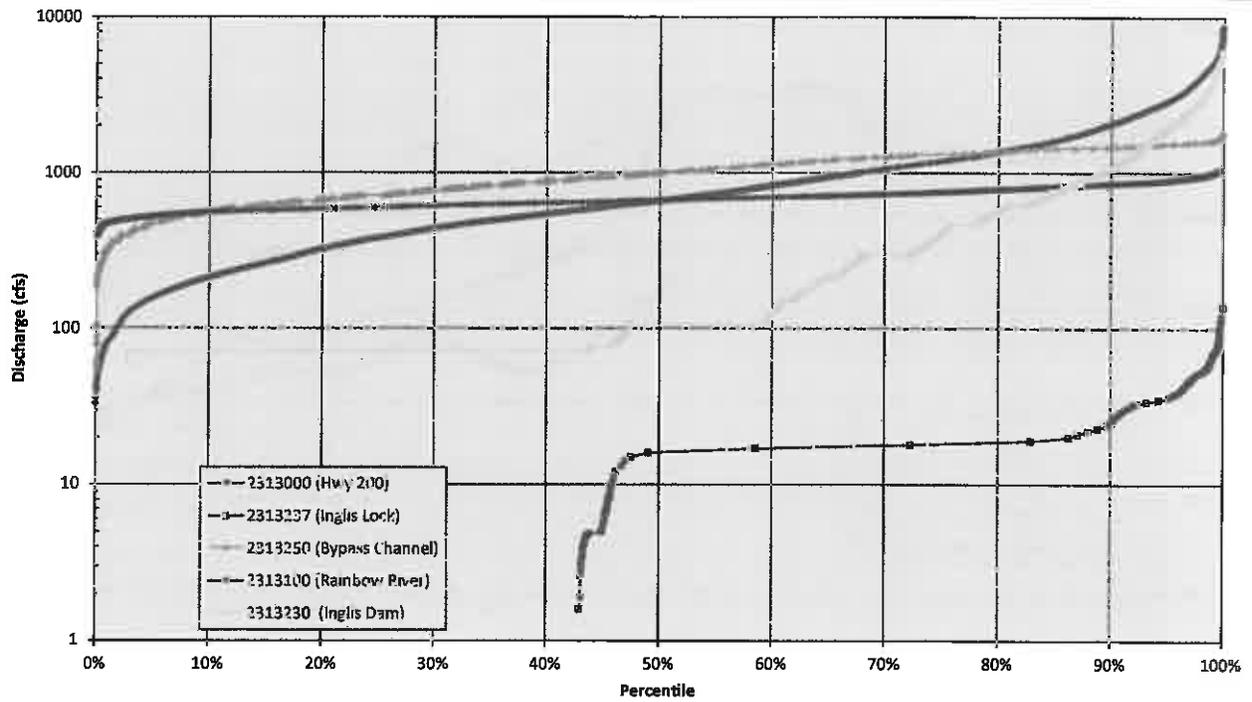


Figure 2-7. Discharge Frequency Curves for the USGS daily average discharge estimates in the Lower Withlacoochee River

Lower Withlacoochee River Study

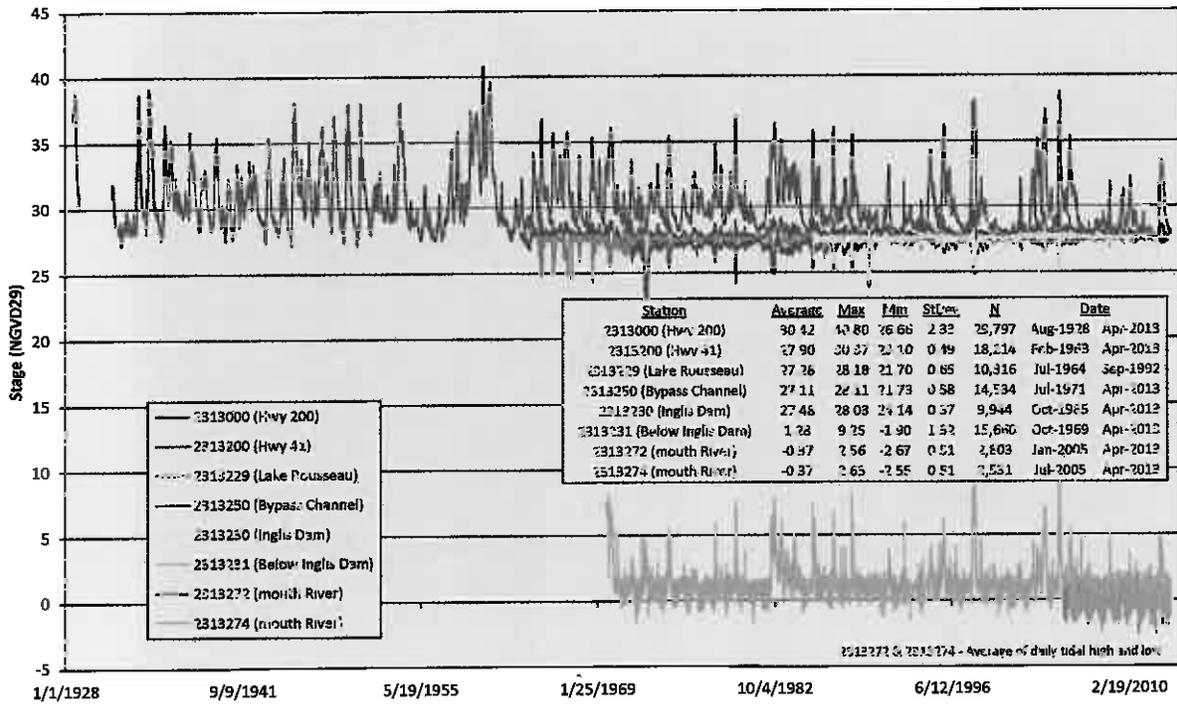


Figure 2-8. USGS daily average stage estimates in the Lower Withlacoochee River



Lower Withlacoochee River Study

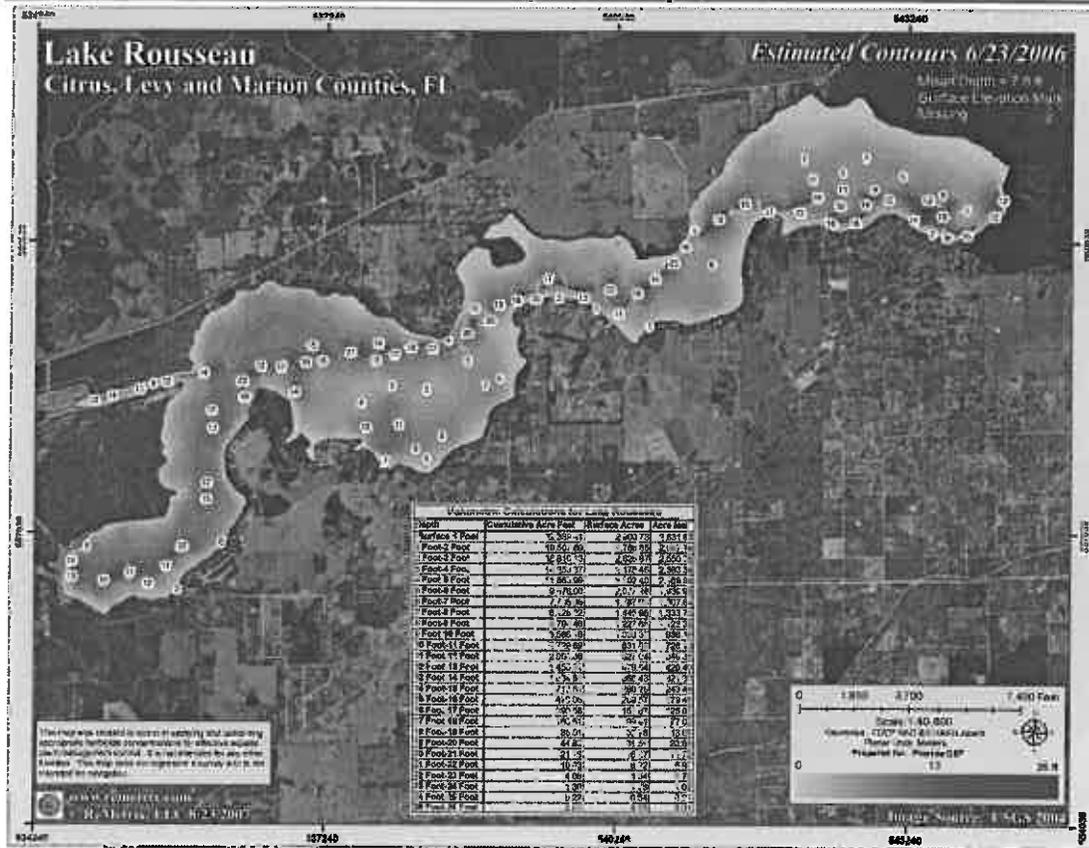


Figure 2-9. Lake Rousseau Bathymetric map (JF IFAS, 2007)

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Figure 2-10 through Figure 2-12 present summaries of flow rates, discharge, and water depths along transects in the Lower Withlacoochee River below the Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001). Averages were calculated from measurements collected at each transect from August 1998 to January 2001 (10 quarterly events). Transect 1 was located just downstream of the Inglis Bypass Channel and Transect 15 was located where the river enters the Gulf of Mexico at Chambers Island. Average flow velocities ranged from 0.41 m/s near the upper freshwater section of the river to 0.03 m/s near the lower estuary tidal areas. Reverse flows were measured as far upstream as Transect 4 (near U.S. 19). Mean discharge estimates for the upper 10 transects were variable and ranged from 339 cfs (Transect 9) to 777 cfs (Transect 2). The average depth ranged from 2.0 m (Transect 2) to 6.0 m (Transect 5) with an average depth of 3.9 m for the entire river.

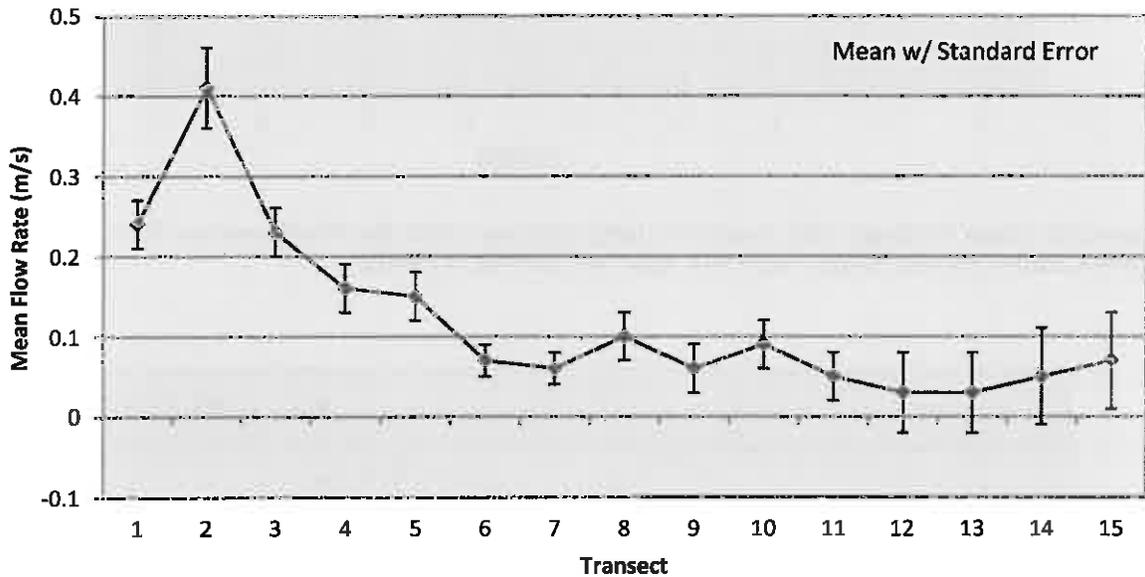


Figure 2-10. Mean flow velocities (m/s) measured along transects within the Withlacoochee River below the Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

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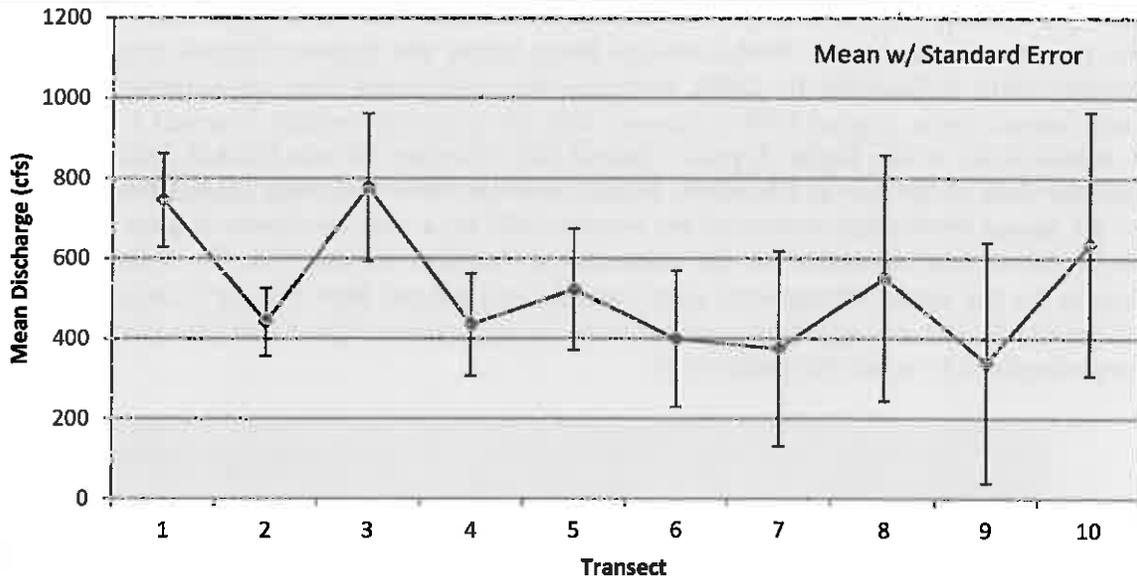


Figure 2-11. Mean discharge (cfs) measured along transects within the Withlacoochee River below the Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

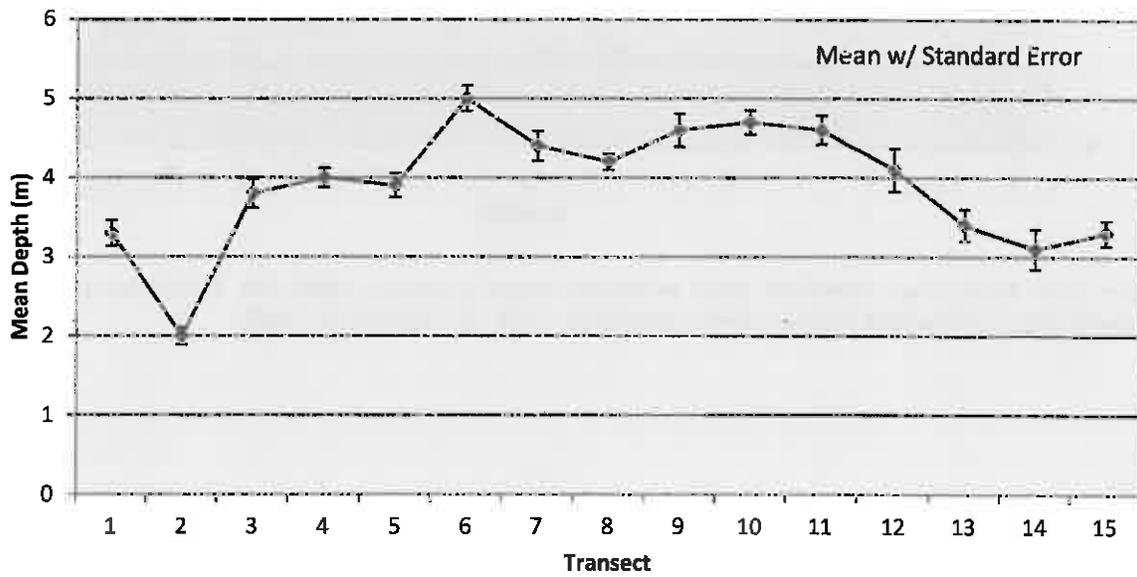


Figure 2-12. Mean depth (m) measured along transects within the Withlacoochee River below the Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

2.2.2 Water Quality
2.2.2.1 Water Quality Assessment Status

The Withlacoochee River and Lake Rousseau are classified as Class III (recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife) and have been reported in 2010 to EPA under Sections 305(b) and 303(d) of the Clean Water Act as impaired (Table 2-3). The impaired areas of the Withlacoochee River include two segments downstream of Lake Rousseau - the Lower Withlacoochee River below the Bypass Channel and the river segment between the Inglis Dam and Cross Florida Barge Canal. Each waterbody was listed as impaired for mercury in fish tissue; dissolved oxygen impairments in Lake Rousseau and the Withlacoochee River below the Inglis dam; benthic macroinvertebrate bioassessment impairment for the Lower Withlacoochee River; and chlorophyll-a impairment in the Withlacoochee River below the Inglis dam.

Table 2-3. Water Quality Assessment Report - 2010 (US Environmental Protection Agency, 2010)

Waterbody	Type	Impairment	Cause
Lake Rousseau (FL1329B)	Freshwater Lake	Dissolved oxygen	Organic Enrichment / Oxygen Depletion
		Mercury in fish tissue	Mercury
Withlacoochee River (FL1337)	Stream	Benthic Macroinvertebrate Bioassessment	Cause Unknown – Impaired Biota
		Mercury in fish tissue	Mercury
Withlacoochee River - Cross Florida Barge Canal (FL1329A)	Estuary	Chlorophyll-A	Algal Growth
		Dissolved Oxygen	Organic Enrichment/Oxygen Depletion
		Mercury in Fish Tissue	Mercury

2.2.2.2 Water Quality Summary

Water quality data for the Withlacoochee River and Lake Rousseau from the 1950's to present were available from the following sources.

- SWFWMD Water Management Information System (<http://www.swfwmd.state.fl.us/data/water-quality>)
- USGS (<http://waterdata.usgs.gov/fl/nwis>)
- Florida STORET (<http://storet.dep.state.fl.us>)
- STORET Legacy (<http://www.epa.gov/storet/legacy>)

Figure 2-13 identifies the locations of the surface water quality stations within the Withlacoochee River (below Highway 200) and Lake Rousseau with metadata in Appendix A.

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Due to the number of stations with data collected over varying time periods, water quality stations were spatially grouped into the following locations to make the data more manageable.

- River (Hwy200-RR): Withlacoochee River downstream of Highway 200 and confluence with Rainbow River
- River (RR-LR): Withlacoochee River downstream of the confluence with the Rainbow River to Lake Rousseau
- Lake (East): Lake Rousseau East
- Lake (West): Lake Rousseau West
- River (Bypass Channel): Lake Rousseau Bypass Channel discharge
- Lake (Inglis Dam): Lake Rousseau Inglis Dam discharge
- Lake (Inglis Lock): Lake Rousseau at the Inglis Lock
- River (LR-CFBC): Withlacoochee River downstream of Inglis Dam and Cross Florida Barge Canal
- River (Lower): Lower Withlacoochee River downstream of Bypass Channel
- Canal: Cross Florida Barge Canal
- Estuary: Estuary at the mouth of the Withlacoochee River

These water quality data are summarized in Table 2-4 which provides decadal averages (if available) for the above station locations. Period-of-record statistics for available water quality parameters are provided in Appendix A.

Lower Withlacoochee River Study

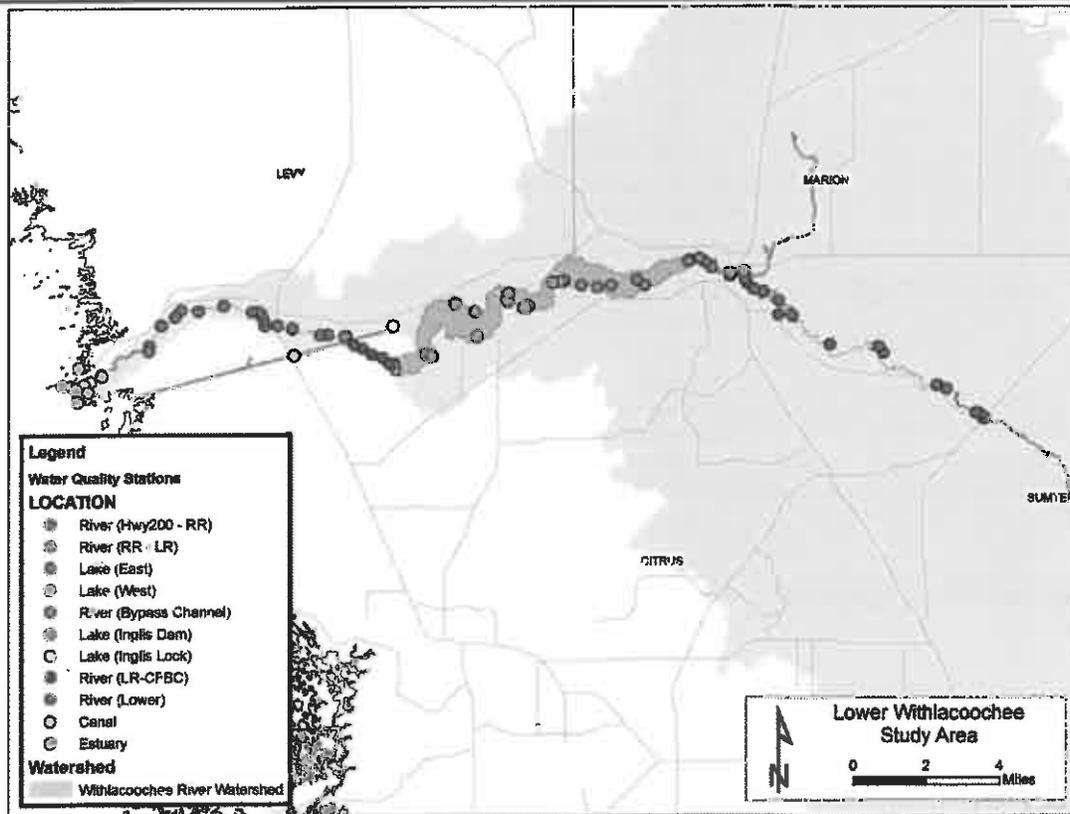


Figure 2-13. Water Quality Stations identified by station type and location within the Lower Withlacoochee River

Lower Withlacoochee River Study

Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River (T = total and D = dissolved)

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade						
				1950	1960	1970	1980	1990	2000	2010
BIOLOGICAL	Chl-a corr	µg/L	River (Hwy200 - RR)	---	---	---	---	3.26	2.61	2.67
			River (RR - LR)	---	---	---	---	---	2.50	2.77
			Lake (East)	---	---	---	---	---	1.52	---
			Lake (West)	---	---	---	---	15.2	6.47	27.6
			Lake (Inglis Dam)	---	---	---	---	---	---	34.5
			River (LR-CFBC)	---	---	---	---	---	1.63	---
			River (Lower)	---	---	---	---	---	5.47	5.32
			Canal	---	---	---	---	---	11.1	---
			Estuary	---	---	---	---	---	4.87	2.23
DISSOLVED OXYGEN	DO	%	River (Hwy200 - RR)	---	77.9	63.2	65.8	64.5	54.6	64.0
			River (RR - LR)	---	80.8	71.6	68.4	76.5	83.9	74.5
			Lake (East)	---	72.9	---	---	---	79.8	---
			Lake (West)	---	---	---	---	70.5	86.5	---
			River (Bypass Channel)	---	74.0	83.0	65.7	85.0	---	---
			Lake (Inglis Dam)	---	99.5	65.0	81.1	124	---	---
			Lake (Inglis Lock)	---	---	49.8	---	---	---	---
			River (LR-CFBC)	---	---	---	---	---	70.7	---
			River (Lower)	---	102	101	85.3	93.5	93.5	---
	Estuary	---	---	---	78.7	89.0	85.4	---		
	DO	mg/L	River (Hwy200 - RR)	---	6.57	5.72	5.97	6.06	5.91	5.53
			River (RR - LR)	---	6.91	6.36	6.27	6.43	6.13	6.14
			Lake (East)	---	6.22	---	---	---	6.48	---
			Lake (West)	---	---	---	---	6.27	7.98	8.36
			River (Bypass Channel)	---	6.00	6.94	5.21	7.23	---	---
			Lake (Inglis Dam)	---	8.45	6.05	7.12	10.3	---	8.36
			Lake (Inglis Lock)	---	---	4.11	---	---	---	---
			River (LR-CFBC)	---	---	---	---	---	6.18	---
River (Lower)			---	8.80	8.68	7.36	6.66	8.05	8.40	
Canal	---	---	---	---	---	5.62	5.20			
Estuary	---	---	---	7.04	7.72	7.08	6.93			
GENERAL INORGANIC	Alk	mg/L as CaCO ₃	River (Hwy200 - RR)	99.7	98.5	103	111	109	109	118
			River (RR - LR)	---	110	105	110	90.7	112	114
			Lake (West)	---	---	---	---	103	---	112
			River (Bypass Channel)	---	92.0	97.7	95.3	---	---	---
			Lake (Inglis Dam)	---	104	129	---	---	---	114
			Lake (Inglis Lock)	---	---	138	---	---	---	---
			River (Lower)	---	108	102	---	99.3	106	116
			Canal	---	---	---	---	---	116	121
			Estuary	---	---	---	---	---	---	---
	Cl-T	mg/L	River (Hwy200 - RR)	8.92	8.35	9.48	9.16	9.26	9.35	10.8
			River (RR - LR)	---	7.07	7.00	8.34	6.24	7.60	8.25
			Lake (East)	---	---	---	---	---	7.36	---
			Lake (West)	---	---	---	---	7.35	7.46	7.98
			River (Bypass Channel)	---	8.00	9.41	10.6	---	---	---
			Lake (Inglis Dam)	---	7.56	214	---	---	---	8.30
			Lake (Inglis Lock)	---	---	5,697	---	---	---	---
			River (LR-CFBC)	---	---	---	---	---	154	---
			River (Lower)	---	6.67	26.0	---	7.18	7.64	8.40
Canal	---	---	---	---	---	3,710	---			
Estuary	---	---	---	---	---	836	---			

Lower Withlacoochee River Study

Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade								
				1950	1960	1970	1980	1990	2000	2010		
GENERAL INORGANIC	SO ₄	mg/L	River (Hwy200 - RR)	26.4	23.6	26.0	25.8	29.5	51.5	42.2		
			River (RR - LR)	---	16.0	9.60	17.1	13.3	22.9	24.2		
			Lake (East)	---	---	---	---	---	22.5	---		
			Lake (West)	---	---	---	---	14.7	21.3	15.6		
			River (Bypass Channel)	---	14.0	20.8	20.8	---	---	---		
			Lake (Inglis Dam)	---	16.3	---	---	---	---	17.7		
			River (LR-CFBC)	---	---	---	---	---	46.2	---		
			River (Lower)	---	13.7	17.0	---	19.9	21.0	23.7		
			Canal	---	---	---	---	---	58.1	---		
			Estuary	---	---	---	---	---	15.1	---		
GENERAL ORGANIC	TOC	mg/L	River (Hwy200 - RR)	---	18.0	12.1	12.4	10.7	14.5	16.2		
			River (RR - LR)	---	---	8.50	10.0	10.8	8.05	7.02		
			Lake (East)	---	---	---	---	---	7.44	---		
			Lake (West)	---	---	---	---	8.35	8.01	---		
			River (Bypass Channel)	---	---	11.4	14.8	---	---	---		
			Lake (Inglis Dam)	---	---	6.25	15.2	---	---	---		
			Lake (Inglis Lock)	---	---	8.32	---	---	---	---		
			River (LR-CFBC)	---	---	---	---	---	10.1	---		
			River (Lower)	---	---	---	---	9.61	8.43	6.99		
			Canal	---	---	---	---	---	8.33	7.63		
Estuary	---	---	---	---	---	11.0	10.5					
METAL	Ca-D	mg/L	River (Hwy200 - RR)	45.0	44.8	47.5	47.9	53.2	39.7	60.1		
			River (RR - LR)	---	46.5	41.0	44.0	---	49.4	50.7		
			Lake (West)	---	---	---	---	49.0	---	46.6		
			River (Bypass Channel)	---	35.0	40.1	40.0	---	---	---		
			Lake (Inglis Dam)	---	42.1	41.0	---	---	---	48.0		
			Lake (Inglis Lock)	---	---	18.7	---	---	---	---		
			River (Lower)	---	39.0	43.0	---	47.9	45.5	47.9		
			Canal	---	---	---	---	---	87.4	98.0		
			Ca-T	mg/L	River (Hwy200 - RR)	---	---	---	---	54.1	61.3	60.6
					River (RR - LR)	---	---	---	52.2	43.0	49.4	50.7
	Lake (East)	---			---	---	---	---	48.9	---		
	Lake (West)	---			---	---	---	53.3	45.6	46.6		
	Lake (Inglis Dam)	---			---	---	---	---	---	48.0		
	River (LR-CFBC)	---			---	---	---	---	49.1	---		
	River (Lower)	---			---	---	---	53.5	45.7	47.9		
	Canal	---			---	---	---	---	96.9	---		
	Estuary	---	---	---	---	---	71.1	---				
	Fe-T	µg/L	River (Hwy200 - RR)	275	120	225	374	285	677	---		
			River (RR - LR)	---	100	---	139	49.0	---	---		
			Lake (West)	---	---	---	100	222	---	95.4		
			River (Bypass Channel)	---	---	40.0	---	---	---	---		
			Lake (Inglis Dam)	---	---	---	---	---	---	58.5		
	Hg-T	µg/L	River (Hwy200 - RR)	---	---	0.230	0.186	0.050	---	---		
			River (RR - LR)	---	---	---	0.221	0.200	---	---		
			River (Bypass Channel)	---	---	0.250	0.223	0.200	---	---		
			Lake (Inglis Dam)	---	---	---	0.194	0.200	---	---		

Lower Withlacoochee River Study

Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade						
				1950	1960	1970	1980	1990	2000	2010
METAL	K-D	mg/L	River (Hwy200 - RR)	0.394	0.554	0.419	0.622	0.578	1.31	0.717
			River (RR - LR)	---	0.300	0.100	0.200	---	0.462	0.469
			Lake (West)	---	---	---	---	0.450	---	0.370
			River (Bypass Channel)	---	0.200	0.320	0.350	---	---	---
			Lake (Inglis Dam)	---	0.314	---	---	---	---	0.400
			River (Lower)	---	0.250	0.600	---	0.785	0.457	0.465
			Canal	---	---	---	---	---	41.6	49.2
			K-T	mg/L	River (Hwy200 - RR)	---	---	---	---	0.628
	River (RR - LR)	---	---	---	1.62	1.35	0.464	0.426		
	Lake (East)	---	---	---	---	---	0.551	---		
	Lake (West)	---	---	---	---	0.426	0.510	0.370		
	Lake (Inglis Dam)	---	---	---	---	---	---	0.400		
	River (LR-CFBC)	---	---	---	---	---	4.47	---		
	River (Lower)	---	---	---	---	2.21	0.484	0.424		
	Canal	---	---	---	---	---	78.7	---		
	Estuary	---	---	---	---	---	---	27.8		
	Mg-D	mg/L	River (Hwy200 - RR)	4.06	4.01	4.38	4.50	5.00	3.02	5.10
	River (RR - LR)	---	6.72	4.00	5.00	---	5.23	5.48		
	Lake (West)	---	---	---	---	5.03	---	5.13		
	River (Bypass Channel)	---	3.80	4.72	4.88	---	---	---		
	Lake (Inglis Dam)	---	4.43	4.55	---	---	---	5.12		
	Lake (Inglis Lock)	---	---	5.07	---	---	---	---		
	River (Lower)	---	6.33	5.70	---	4.80	5.13	5.50		
	Canal	---	---	---	---	---	140	168		
	Mg-T	mg/L	River (Hwy200 - RR)	---	---	---	---	4.52	5.58	5.60
	River (RR - LR)	---	---	---	6.56	4.85	5.21	5.55		
	Lake (East)	---	---	---	---	---	5.08	---		
	Lake (West)	---	---	---	---	4.47	5.02	5.13		
	Lake (Inglis Dam)	---	---	---	---	---	---	5.12		
	River (LR-CFBC)	---	---	---	---	---	16.8	---		
	River (Lower)	---	---	---	---	11.8	5.08	5.57		
	Canal	---	---	---	---	---	293	---		
	Estuary	---	---	---	---	---	---	96.2		
Na-D	mg/L	River (Hwy200 - RR)	5.04	4.72	5.23	5.12	5.42	5.09	6.33	
River (RR - LR)	---	3.80	4.20	3.60	---	4.38	4.64			
Lake (West)	---	---	---	---	4.24	---	4.55			
River (Bypass Channel)	---	4.10	5.14	6.58	---	---	---			
Lake (Inglis Dam)	---	4.10	---	---	---	---	4.75			
River (Lower)	---	4.00	16.0	---	5.46	4.37	4.69			
Canal	---	---	---	---	---	---	1,077	1,315		

Lower Withlacoochee River Study

Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade						
				1950	1960	1970	1980	1990	2000	2010
NITROGEN	NH4-N	mg/L	River (Hwy200 - RR)	---	0.081	0.024	0.038	0.023	0.071	0.034
			River (RR - LR)	---	0.005	---	0.080	0.030	0.031	0.022
			Lake (West)	---	---	---	0.00	0.039	---	0.004
			River (Bypass Channel)	---	---	0.046	0.039	---	---	
			Lake (Inglis Dam)	---	---	0.146	---	---	---	0.004
			Lake (Inglis Lock)	---	---	0.106	---	---	---	---
			River (Lower)	---	0.035	---	---	0.052	0.048	0.051
			Canal	---	---	---	---	---	0.054	0.030
	NO3-N	mg/L	River (Hwy200 - RR)	0.171	0.093	0.062	0.131	0.168	---	---
			River (RR - LR)	---	---	---	0.332	0.110	---	---
			Lake (West)	---	---	---	---	0.270	---	---
			River (Bypass Channel)	---	---	0.064	0.102	---	---	---
			Lake (Inglis Dam)	---	0.142	0.065	---	---	---	---
			Lake (Inglis Lock)	---	---	0.016	---	---	---	---
River (Lower)	---	---	---	---	0.228	---	---			
NITROGEN	NOx-N	mg/L	River (Hwy200 - RR)	---	---	0.073	0.123	0.170	0.168	0.216
			River (RR - LR)	---	0.215	---	---	0.743	0.730	0.955
			Lake (East)	---	---	---	---	---	0.727	---
			Lake (West)	---	---	---	---	0.215	0.343	0.360
			River (Bypass Channel)	---	---	0.083	0.101	---	---	---
			Lake (Inglis Dam)	---	---	0.079	---	---	---	0.021
			Lake (Inglis Lock)	---	---	0.031	---	---	---	---
			River (LR-CFBC)	---	---	---	---	---	0.273	---
			River (Lower)	---	0.770	---	---	0.205	0.309	0.396
			Canal	---	---	---	---	---	0.184	0.202
	Estuary	---	---	---	---	---	0.175	0.320		
	OrgN	mg/L	River (Hwy200 - RR)	---	0.793	0.550	0.577	0.546	---	---
			River (RR - LR)	---	---	0.305	0.410	0.343	---	---
			River (Bypass Channel)	---	0.730	0.449	0.387	---	---	---
			Lake (Inglis Dam)	---	0.735	0.458	---	---	---	---
			Lake (Inglis Lock)	---	---	0.459	---	---	---	---
	River (Lower)	---	---	0.230	---	---	---	---		
	TKN	mg/L	River (Hwy200 - RR)	---	---	0.538	0.662	0.585	0.858	0.889
			River (RR - LR)	---	0.335	---	0.490	0.146	0.290	---
			Lake (East)	---	---	---	---	---	0.517	---
			Lake (West)	---	---	---	---	0.634	0.628	---
			River (Bypass Channel)	---	---	0.450	0.414	---	---	---
			Lake (Inglis Dam)	---	---	0.664	---	---	---	---
			Lake (Inglis Lock)	---	---	0.495	---	---	---	---
			River (LR-CFBC)	---	---	---	---	---	0.375	---
			River (Lower)	---	0.610	---	---	0.589	0.623	---
			Estuary	---	---	---	---	---	0.937	0.630
	TN	mg/L	River (Hwy200 - RR)	---	1.17	0.644	0.733	0.717	1.14	1.18
River (RR - LR)			---	---	---	---	0.940	1.15	1.27	
Lake (East)			---	---	---	---	0.678	0.973	0.973	
Lake (West)			---	---	---	---	0.534	1.01	0.758	
River (Bypass Channel)			---	---	0.570	0.516	---	---	---	
Lake (Inglis Dam)			---	---	0.714	---	---	---	0.475	
Lake (Inglis Lock)			---	---	0.566	---	---	---	---	
River (Lower)			---	---	---	---	0.619	0.697	0.747	
Canal			---	---	---	---	---	0.750	0.627	
Estuary			---	---	---	---	0.600	0.588	---	

Lower Withlacoochee River Study

Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade						
				1950	1960	1970	1980	1990	2000	2010
OXYGEN DEMAND	BOD5	mg/L	River (Hwy200 - RR)	--	1.17	0.725	0.880	1.17	--	--
			River (RR - LR)	--	1.17	0.567	1.26	1.04	--	--
			Lake (East)	--	0.981	--	--	--	0.958	--
			Lake (West)	--	--	--	--	--	1.64	--
			River (Bypass Channel)	--	0.400	0.948	1.08	1.27	--	--
			Lake (Inglis Dam)	--	0.858	1.12	1.42	1.10	--	--
			Lake (Inglis Lock)	--	--	1.33	--	--	--	--
			River (Lower)	--	1.46	--	--	1.20	--	--
	cBOD5	mg/L	River (Hwy200 - RR)	--	--	--	--	--	0.827	--
			Lake (East)	--	--	--	--	--	1.03	--
			Lake (West)	--	--	--	--	--	1.61	--
			River (LR-CFBC)	--	--	--	--	--	0.825	--
			River (Lower)	--	--	--	--	--	0.673	--
			Estuary	--	--	--	--	--	0.978	--
PHOSPHORUS	OrthoP	mg/L	River (Hwy200 - RR)	--	0.019	0.021	0.080	0.026	0.038	0.035
			River (RR - LR)	--	--	--	0.033	0.023	0.033	0.031
			Lake (East)	--	--	--	--	--	0.050	--
			Lake (West)	--	--	--	--	0.026	0.037	0.007
			River (Bypass Channel)	--	--	0.024	0.028	0.015	--	--
			Lake (Inglis Dam)	--	0.025	0.058	0.028	0.010	--	0.003
			Lake (Inglis Lock)	--	--	0.056	--	--	--	--
			River (LR-CFBC)	--	--	--	--	--	0.076	--
			River (Lower)	--	--	--	0.029	0.032	0.030	0.018
			Canal	--	--	--	--	--	0.030	0.017
			Estuary	--	--	--	0.030	--	0.054	--
			TP	mg/L	River (Hwy200 - RR)	--	0.028	0.031	0.046	0.096
	River (RR - LR)	--			--	--	0.087	0.062	0.061	0.048
	Lake (East)	--			--	--	--	0.045	0.051	0.045
	Lake (West)	--			--	--	--	0.054	0.070	0.046
	River (Bypass Channel)	--			--	0.040	0.045	--	--	--
	Lake (Inglis Dam)	--			--	0.081	--	--	--	0.055
	TP	mg/L	Lake (Inglis Lock)	--	--	0.076	--	--	--	--
River (LR-CFBC)			--	--	--	--	--	0.123	--	
River (Lower)			--	--	--	--	0.047	0.048	0.045	
Canal			--	--	--	--	--	0.062	0.064	
Estuary			--	--	--	--	0.073	0.070	0.068	
Estuary			--	--	--	--	0.073	0.070	0.068	
PHYSICAL	Color	CPU	River (Hwy200 - RR)	66.5	68.3	55.4	15.0	70.9	102	118
			River (RR - LR)	--	15.6	25.0	60.8	12.6	70.7	48.0
			Lake (East)	--	19.0	--	--	--	55.9	--
			Lake (West)	--	--	--	--	74.5	57.6	67.9
			River (Bypass Channel)	--	30.0	31.4	55.7	40.0	--	--
			Lake (Inglis Dam)	--	36.6	30.9	65.7	26.7	--	68.0
			Lake (Inglis Lock)	--	--	20.4	--	--	--	--
			River (LR-CFBC)	--	--	--	--	--	99.6	--
			River (Lower)	--	20.4	30.0	49.4	49.0	62.2	44.5
			Canal	--	--	--	--	--	64.3	43.5
			Estuary	--	--	--	39.4	14.5	61.6	80.7

Lower Withlacoochee River Study

Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade						
				1950	1960	1970	1980	1990	2000	2010
PHYSICAL	pH	SU	River (Hwy200 - RR)	7.44	7.50	7.51	7.64	7.53	7.42	7.28
			River (RR - LR)	--	7.51	7.21	7.34	7.09	7.51	7.55
			Lake (East)	--	7.43	--	--	--	7.50	--
			Lake (West)	--	--	--	--	7.28	7.78	7.69
			River (Bypass Channel)	--	7.10	7.62	7.30	7.46	--	--
			Lake (Inglis Dam)	--	7.74	7.67	7.50	7.77	--	8.10
			Lake (Inglis Lock)	--	--	7.54	--	--	--	--
			River (LR-CFBC)	--	--	--	--	--	7.47	--
			River (Lower)	--	7.79	7.00	7.28	7.53	7.37	7.80
			Canal	--	--	--	--	--	7.64	7.63
	Estuary	--	--	--	7.69	8.10	7.85	8.01		
	Salinity	ppt	River (Hwy200 - RR)	--	--	--	--	0.140	0.162	0.047
			River (RR - LR)	--	--	--	--	--	0.140	0.152
			Lake (East)	--	--	--	--	--	0.133	--
			Lake (West)	--	--	--	--	0.109	0.129	0.134
			Lake (Inglis Dam)	--	--	--	--	--	--	0.135
			River (LR-CFBC)	--	--	--	--	--	1.44	--
			River (Lower)	--	--	--	--	2.79	1.99	0.145
			Canal	--	--	--	--	--	6.07	--
			Estuary	--	--	--	6.95	6.05	8.78	8.90
			SpCond	u.mhos/cm	River (Hwy200 - RR)	270	265	289	286	301
	River (RR - LR)	--			270	276	257	254	302	316
	Lake (East)	--			301	--	--	--	307	--
	Lake (West)	--			--	--	--	253	301	292
	River (Bypass Channel)	--			222	270	260	259	--	--
	Lake (Inglis Dam)	--			268	531	380	232	--	268
	Lake (Inglis Lock)	--			--	16,378	--	--	--	--
	River (LR-CFBC)	--			--	--	--	--	2,475	--
	River (Lower)	--			296	276	2,755	440	282	303
	Canal	--			--	--	--	--	15,164	14,409
	Estuary	--	--	--	13,929	--	22,874	23,204		
	Turb	NTU	River (Hwy200 - RR)	--	1.11	2.05	1.03	1.22	2.06	1.81
			River (RR - LR)	--	--	3.00	1.58	0.637	0.868	0.971
			Lake (East)	--	--	--	--	--	1.44	--
			Lake (West)	--	--	--	--	2.71	1.85	2.18
			River (Bypass Channel)	--	27.0	2.79	1.21	0.897	--	--
Lake (Inglis Dam)			--	20.0	6.62	1.44	1.00	--	8.80	
Lake (Inglis Lock)			--	--	8.06	--	--	--	--	
River (LR-CFBC)			--	--	--	--	--	1.56	--	
River (Lower)			--	--	5.00	1.32	1.32	1.19	1.67	
Canal			--	--	--	--	--	2.20	4.17	
Estuary	--	--	--	2.83	11.3	2.32	2.68			

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Table 2-4. Average water quality summary by decade for stations in the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	Decade						
				1950	1960	1970	1980	1990	2000	2010
SOLID	TDS	mg/L	River (Hwy200 - RR)	169	166	177	178	193	237	235
			River (RR - LR)	---	169	146	161	157	189	192
			Lake (East)	---	---	---	---	---	178	---
			Lake (West)	---	---	---	---	163	170	---
			River (Bypass Channel)	---	148	158	150	---	---	---
			Lake (Inglis Dam)	---	150	---	---	---	---	---
			River (LR-CFBC)	---	---	---	---	---	307	---
			River (Lower)	---	142	193	---	155	179	185
			Canal	---	---	---	---	---	3,710	4,294
	TSS	mg/L	River (Hwy200 - RR)	---	---	---	---	2.86	3.12	3.35
			River (RR - LR)	---	---	---	3.21	1.59	1.43	1.49
			Lake (East)	---	---	---	---	---	3.00	---
			Lake (West)	---	---	---	---	6.03	3.39	3.11
			Lake (Inglis Dam)	---	---	---	---	---	---	6.96
			River (LR-CFBC)	---	---	---	---	---	2.79	---
			River (Lower)	---	---	---	---	2.30	1.75	2.46
			Canal	---	---	---	---	---	3.89	8.06
			Estuary	---	---	---	---	---	8.65	---
			TEMPERATURE	Wtr Temp	C	River (Hwy200 - RR)	23.5	23.4	22.2	22.8
River (RR - LR)	---	24.0				23.0	22.6	23.0	22.6	22.7
Lake (East)	---	23.9				---	---	---	23.4	---
Lake (West)	---	---				---	---	23.1	22.7	26.3
River (Bypass Channel)	---	27.0				25.0	23.0	24.7	---	---
Lake (Inglis Dam)	---	23.0				24.0	23.2	25.4	---	26.2
Lake (Inglis Lock)	---	---				25.6	---	---	---	---
River (LR-CFBC)	---	---				---	---	---	23.6	---
River (Lower)	---	23.5				23.9	23.8	23.8	23.6	25.0
Canal	---	---				---	---	---	23.4	23.4
Estuary	---	---				---	23.5	23.0	23.8	23.6

The Withlacoochee River upstream of the confluence with the Rainbow River had moderately high levels of color (82 cpu) and nutrients (TN = 0.84 mg/L, TP = 0.06 mg/L) over the period-of-record. About 78 percent of total nitrogen was in the organic form. The dissolved nutrients including orthophosphorus and nitrate averaged 0.03 mg/L and 0.15 mg/L, respectively. The average specific conductance for this river segment was 319 umhos/cm and salinity averaged 0.15 ppt. Turbidity and suspended solids averaged over the period-of-record was 1.8 NTU and 3.1 mg/L, respectively.

Withlacoochee River water quality below the confluence with the Rainbow River reflects the inflows of these two sources. During periods with low water levels in the Withlacoochee River, water quality conditions downstream of the confluence would be more representative of conditions in the Rainbow River. In comparison to the upstream river segment stations, a decrease was observed in color (60 cpu), turbidity (0.9 NTU), suspended solids (1.6 mg/L), and specific conductance (293 umhos/cm) over the period-of-record. Total phosphorus and orthophosphorus concentration remained about the same (TP = 0.06 mg/L, OrthoP = 0.03 mg/L). Total nitrogen increased (1.2 mg/L), however only about 30% was in the organic form. Nitrate showed a substantial increase to 0.78 mg/L over the period-of-record due to inputs from the Rainbow River.

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Rainbow Springs has experienced a significant increase in nitrate concentrations over the past four decades (Southwest Florida Water Management District, 2008). Nitrate concentrations reported from the main spring pool during March 1927 were 0.08 mg/L (Ferguson, Lingham, Love, & Vernon, 1947). Recent nitrate concentrations at the Rainbow Springs complex (RR1) are consistently above 2.2 mg/L, an increase of about 2,650% (Figure 2-14).

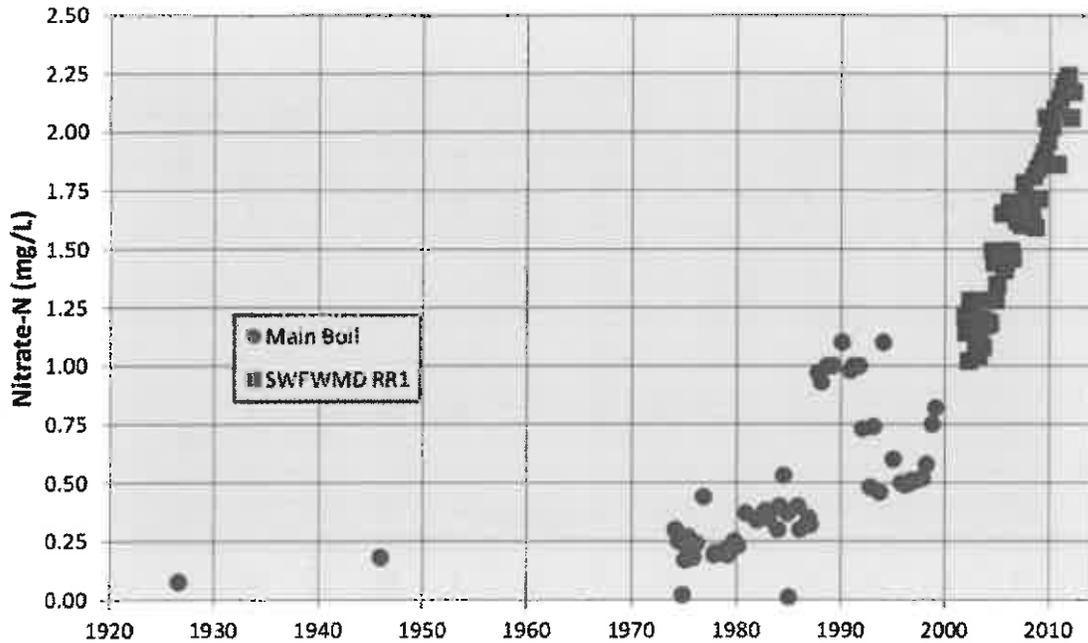


Figure 2-14. Nitrate concentrations in the vicinity of the Main Boil at Rainbow Spring from 1927-2012. Average nitrate concentrations have risen by 27 fold since the 1920s (Wetland Solutions, Inc., 2013).

Water quality in Lake Rousseau reveals the transition from a riverine to a reservoir system. Period-of-record average chlorophyll-a concentrations were much higher in Lake Rousseau (West - 12.6 ug/L) and nitrate lower (East - 0.73 mg/L, West - 0.29 mg/L, Dam - 0.07 mg/L) in comparison to upstream river stations. Mean total nitrogen concentrations ranged from 0.68 mg/L (Dam) to 0.91 mg/L (East) in Lake Rousseau over the period-of-record with approximately 70% in an organic form. Total phosphorus concentrations increased with distance through Lake Rousseau (East = 0.049 mg/L, West = 0.061 mg/L, Dam = 0.077 mg/L) while orthophosphorus concentrations were variable (East = 0.050 mg/L, West = 0.027 mg/L, Dam = 0.036 mg/L).

Lower Withlacoochee River water quality data had an observed decrease in chlorophyll-a (5.5 mg/L), an increase in specific conductance (506 umhos/cm) and salinity (2.0 ppt), and little change in nutrients (TN = 0.66 mg/L, TP = 0.047 mg/L) over the period-of-record in comparison to Lake Rousseau. As freshwater from the Lower Withlacoochee River flows into the Withlacoochee Bay Estuary, lower nitrate concentrations (0.20 mg/L) and higher total

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phosphorus concentrations (0.071 mg/L), specific conductance (18,900 umhos/cm), salinity (7.6 ppt), turbidity (7.5 NTU), and suspended solids (8.6 mg/L) were observed.

Figure 2-14 to Figure 2-17 provide water quality results from surface water samples collected by Frazer *et al.* (2001) along transects in the Lower Withlacoochee River below the Bypass Channel from August 1998 to January 2001. Nitrogen concentrations showed little change with distance downstream below the Inglis Bypass Channel until the river increased in salinity and mixed with waters in the Withlacoochee Bay Estuary where nitrate decreased and organic nitrogen increased (Figure 2-15).

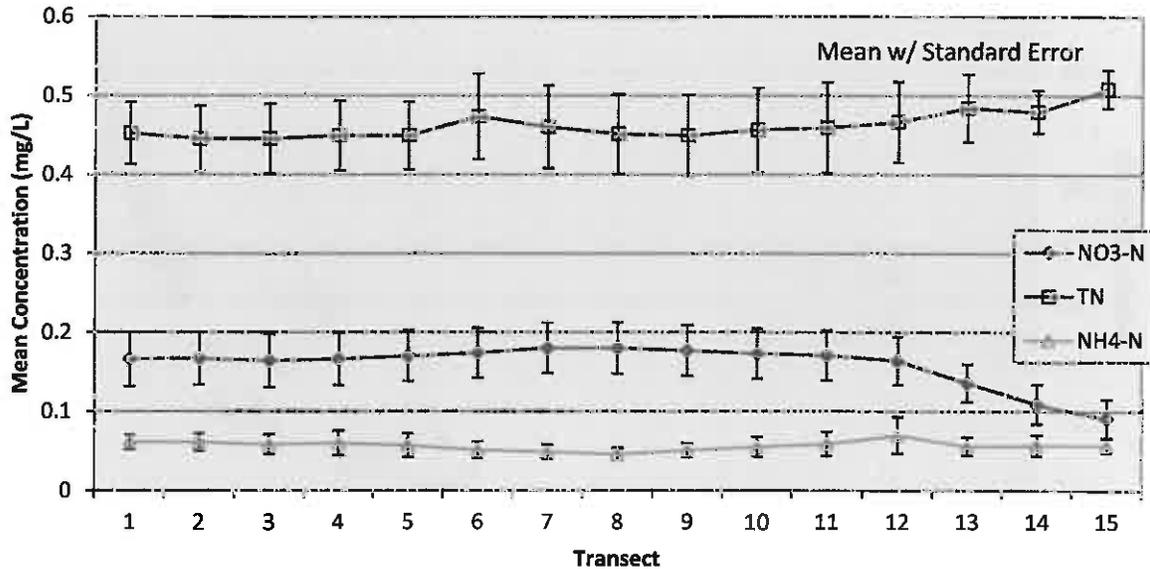


Figure 2-15. Nitrogen concentration (mg/L) measured along transects within the Withlacoochee River below the Inglis Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

Total and soluble reactive phosphorus were generally consistent with distance below the Inglis Bypass Channel until the river increased in salinity and mixed with waters in the Withlacoochee Bay Estuary, where TP increased and SRP decreased (Figure 2-16).

Mean salinity was 0 ppt for the upper section of the Withlacoochee River below the Inglis Bypass Channel and increased sharply in the Withlacoochee River Estuary (Figure 2-17). Average chlorophyll concentrations were generally stable (4 ug/L) and increased as the river flowed through the marsh and into the estuary.

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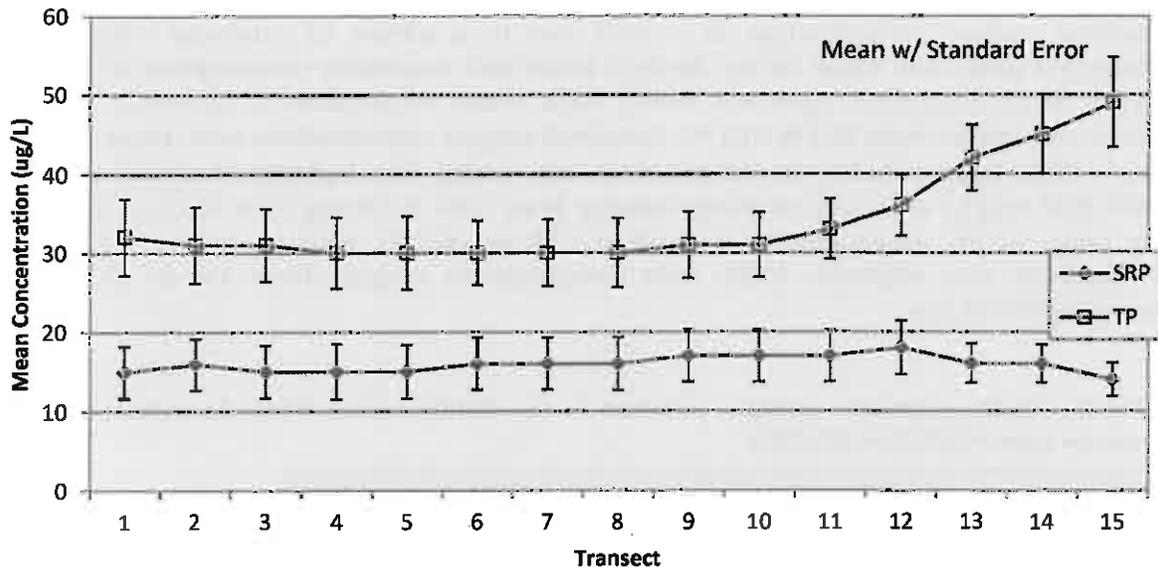


Figure 2-16. Phosphorus concentration (ug/L) measured along transects within the Withlacoochee River below the Inglis Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

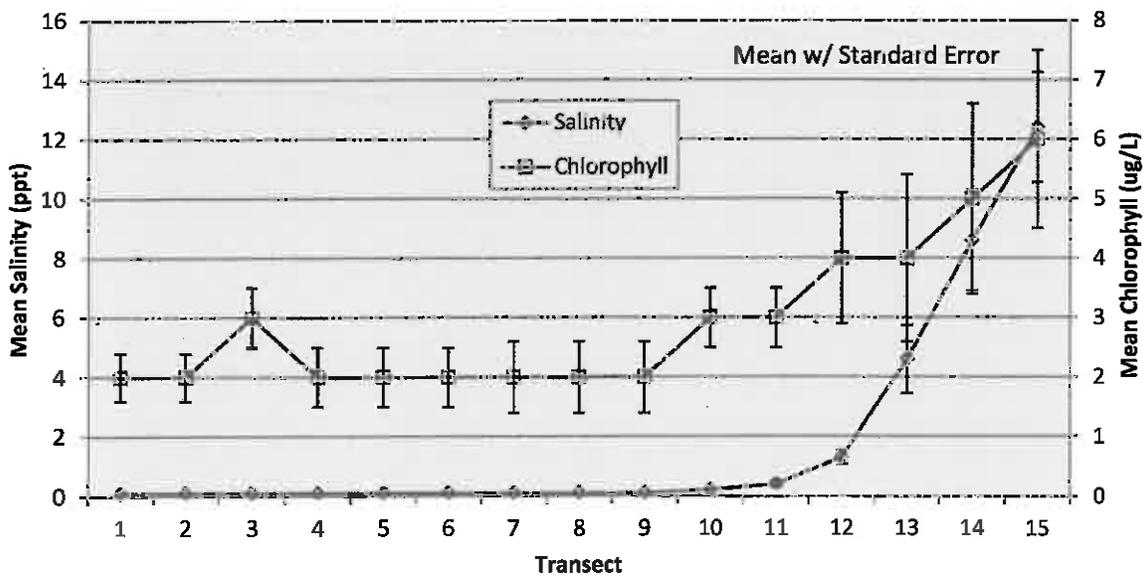


Figure 2-17. Salinity (ppt) and Chlorophyll concentrations (ug/L) measured along transects within the Withlacoochee River below the Inglis Bypass Channel (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

Table 2-5 and Figure 2-18 present results from a multi-parameter water quality data sonde deployed by WSI to collect measurements every 30 minutes in the Withlacoochee River

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downstream of Lake Rousseau from 5/30/2013 to 6/19/2013. A distinct diurnal pattern of dissolved oxygen concentrations is evident due to a release of produced oxygen from submerged plants and algae during daylight hours and respiratory consumption of dissolved oxygen by all submerged organisms during night. Water temperature at this station averaged 28.6 °C and ranged from 26.1 to 31.1 °C. Dissolved oxygen concentrations were super-saturated (DO > 100%) approximately 96 percent of the time during this deployment period, averaging 108% (8.37 mg/L) with concentrations ranging from 118% (9.10 mg/L) to 91.7% (7.37 mg/L). The range in pH measurements were from 7.78 to 8.67 SU with an average of 8.27 SU. Conductivity was relatively stable with concentrations ranging from 198 to 220 uS/cm, averaging 207 uS/cm.

Table 2-5. Field parameter summary collected in the Withlacoochee River downstream of Lake Rousseau from 5/30/2013 to 6/19/2013.

Parameter	Average	Minimum	Maximum	Std Dev	Count
Temperature (C)	28.6	26.1	31.1	1.2	983
DO (mg/L)	8.37	7.37	9.10	0.32	943
DO (%)	108.0	91.7	118.5	4.4	943
pH (SU)	8.27	7.78	8.67	0.17	983
Sp Cond (uS/cm)	207.1	198.0	220.0	3.9	983

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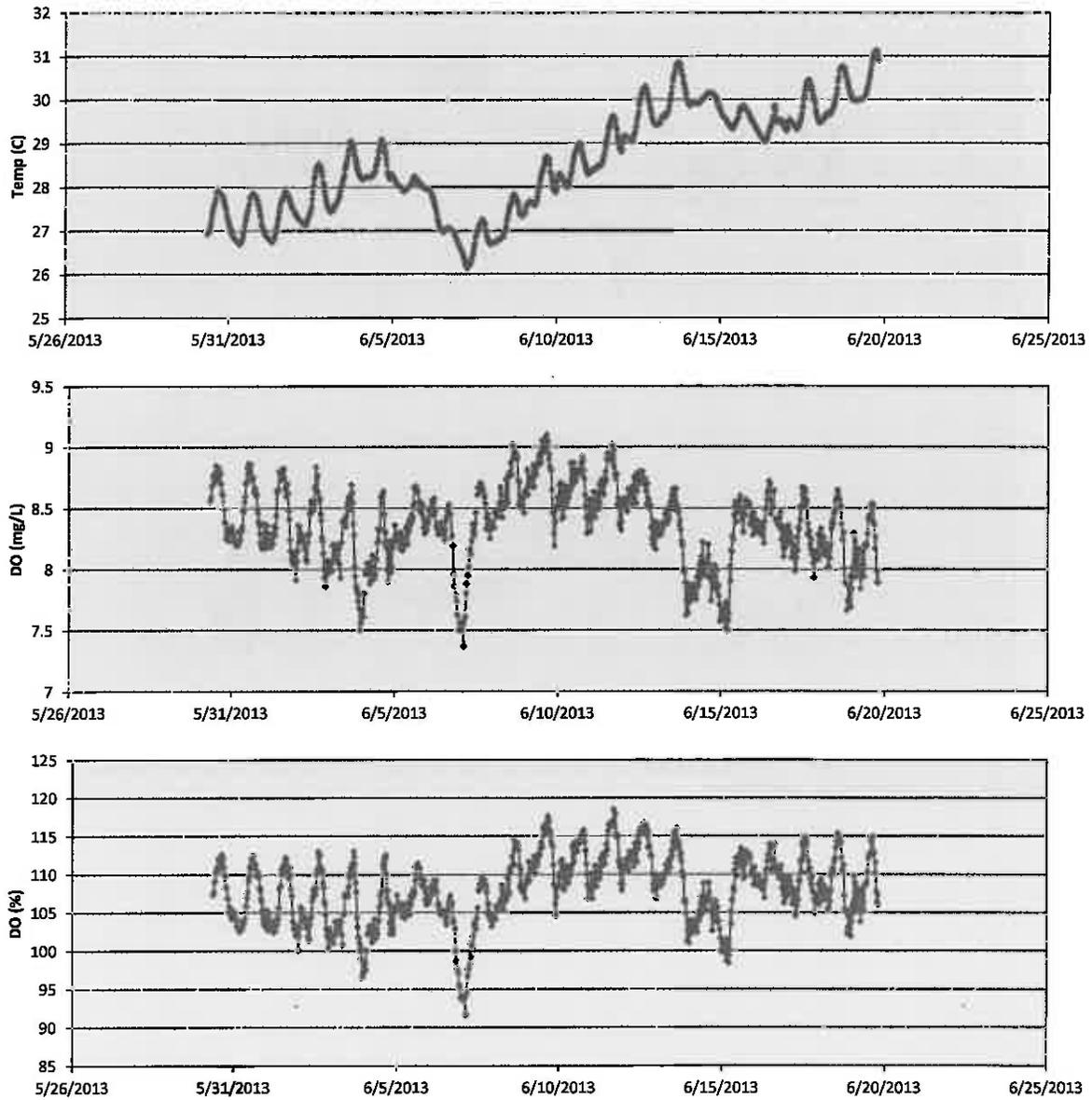


Figure 2-18. Field parameter measurements collected in the Withlacoochee River downstream of Lake Rousseau from 5/30/2013 to 6/19/2013.

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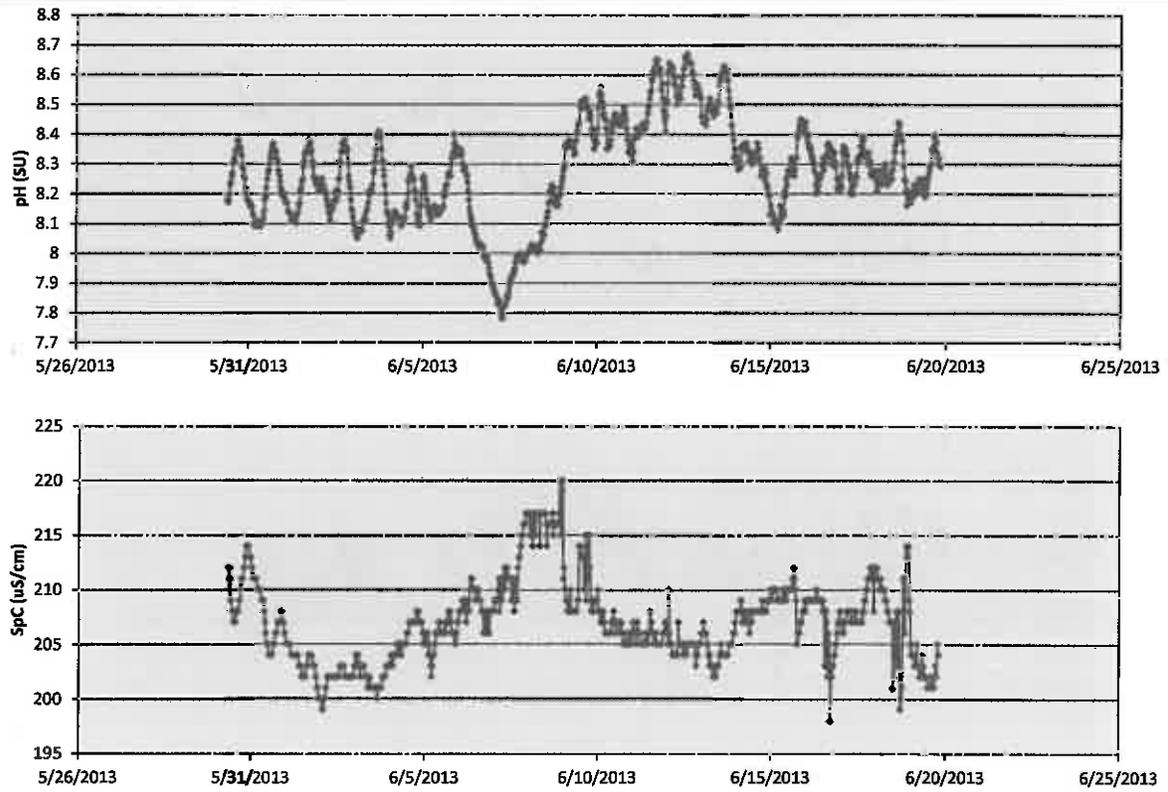


Figure 2-18. Field parameter measurements collected in the Withlacoochee River downstream of Lake Rousseau from 5/30/2013 to 6/19/2013.

2.2.3 Light Attenuation

Water column light attenuation is affected by water quality conditions such as turbidity or suspended solids and color (dissolved organic matter). These factors can also have a seasonal pattern in response to biological activity. Frazer *et al.* (2001) measured light attenuation in the Withlacoochee River below the Inglis Bypass Channel and found the highest attenuation in the upper transects (below Inglis Bypass Channel) and just below U.S. 19 (Figure 2-19). The remaining stations were relatively similar (1.0 - 1.1 m^{-1}).

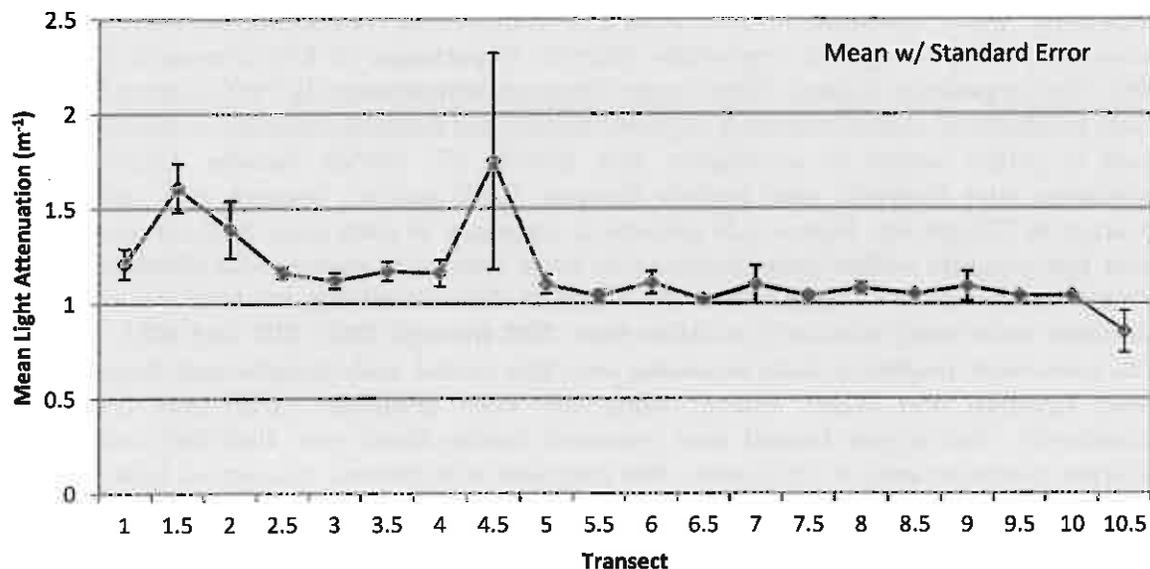


Figure 2-19. Mean light attenuation (m^{-1}) measured along transects within the Withlacoochee River below the Inglis Bypass Channel - August 1998 (Frazer, Hoyer, Notestein, Hale, & Canfield, Jr., 2001).

2.2.4 Biological

Very little submerged aquatic vegetation is currently present in the Lower Withlacoochee River below the Inglis Bypass Channel, although there are a number of anecdotal observations that submerged plants, including hydrilla, were abundant in the river at least as recently as the 1980s. Submerged aquatic plants listed in the river in the mid-1970s by Hartman (1974) included: hydrilla, milfoil, tapegrass, coontail, four varieties of pondweed, southern naiad, and widgeon grass. Floating aquatic plants that were listed included: water hyacinth, common salvinia, water lettuce, and duckweed (Hartman 1974).

By the late 1990s, Frazer *et al.* (2001) reported a lack of submerged aquatic plants in this river segment, and infrequent occurrences of filamentous algae growing attached to rocks. Frazer *et al.* (2001) concluded that the combination of limited light transmittance due to water depth (4m) and limited suitable substrate areas for plant colonization makes the presence of submerged aquatic plants in this reach uncommon. Shading by terrestrial canopy coverage was not considered a significant factor in limiting submerged aquatic plant growth for this area (Frazer *et al.* estimated seven percent coverage in 1998).

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No submerged aquatic plants were observed in the Lower Withlacoochee River segment below the Inglis Spillway during field visits in 2013. However, fragmented macrophytes including hydrilla (*Hydrilla verticillata*), water lettuce (*Pistia stratiotes*), and water hyacinth (*Eichhornia crassipes*) were observed floating downstream in this river segment during 2013, presumably coming over the spillway from Lake Rousseau.

Lake Rousseau contains excessive aquatic weed growth, including hydrilla and water hyacinth, and periodically receives state-funded herbicide treatments for control. Aquatic plant management of water hyacinth on the Withlacoochee River was required as early as the 1920s. Historically, water hyacinths formed expansive mats on the Withlacoochee River and Lake Rousseau making navigation impossible (Florida Department of Environmental Protection, 2006). The Cooperative Aquatic Plant Control Program administered by FWC in Florida's public waters produces an annual summary of plants treated and funding necessary to manage aquatic plants in public waters in accordance with §369.22 (7), Florida Statutes. Herbicides and application rates typically used include Reward (0.375 gal/ac), Sunwet (0.25 gal/ac), and Accuracy (0.125 gal/ac). Figure 2-20 presents a summary of data since 2001 for areas treated under this program within Lake Rousseau by fiscal year and target species (Florida Fish and Wildlife Conservation Commission, 2013). Detailed data identifying the total treated area by individual water body was only available from 2001 through 2007, 2011 and 2012. A total of 6,752 acres were treated in Lake Rousseau over this period with hydrilla and floating plants (water hyacinth and water lettuce) being the most abundant (3,638 and 2,978 acres, respectively). The largest treated area occurred during fiscal year 2005-2006 with a total herbicide treatment area of 2,533 acres. This coincides with historic imagery of Lake Rousseau in May 2005 when the majority of the reservoir can be seen covered with aquatic vegetation presumed to be topped-out hydrilla (Appendix B). Appendix B includes a summary of historic aerial imagery of Lake Rousseau from 1944 (prior to the construction of the Cross-Florida Barge Canal) and from 1994 to 2011.

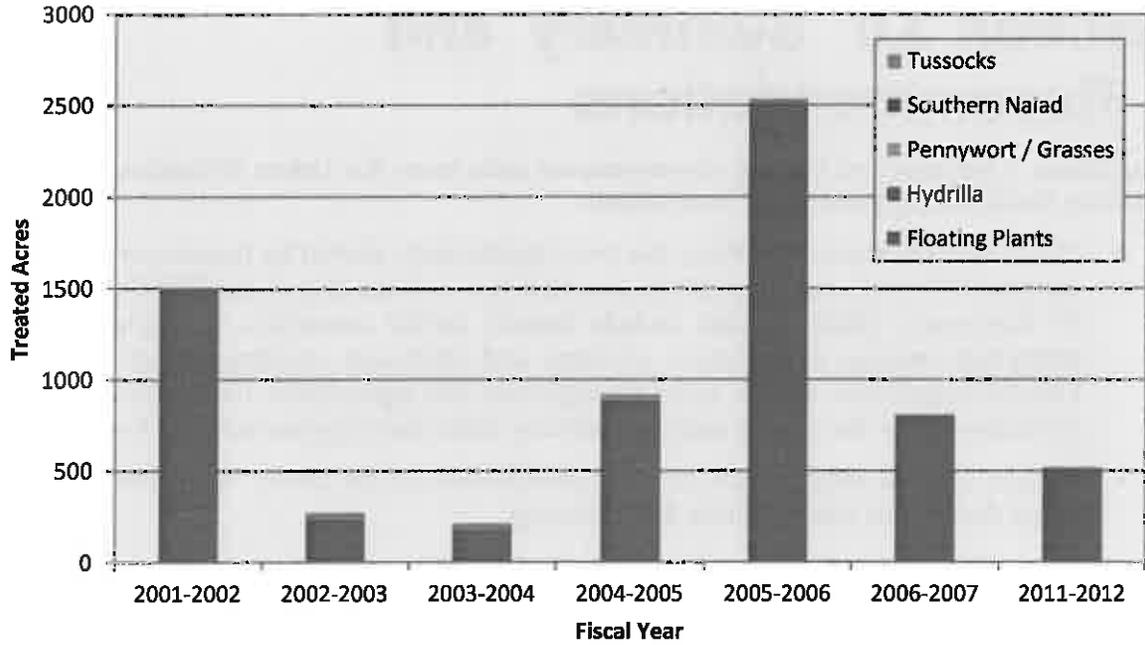


Figure 2-20. Aquatic plant treatment areas in Lake Rousseau by Fiscal Year under the FWC aquatic plant management program.

Section 3.0 Summary and Recommendations

This Phase 1 summary of existing environmental data from the Lower Withlacoochee River provides the following preliminary conclusions:

- The Lower Withlacoochee River has been significantly altered by human activities over the past 100+ years and very likely since the first colonization of the Gulf Coastal Plain by Europeans. Major impacts include historic timber extraction, dredging, ditching, phosphate mining, construction of dams and spillways, construction of the Cross-Florida Barge Canal, aquatic weed management, and agricultural, residential, and urban developments in the surface and groundwater basin that supplies water to the river.
- Specific impacts affecting the existing environment in the Lower Withlacoochee River noted during this study include the following:
 - Creation and maintenance of a dredged channel connecting the mouth of the lower river to the Gulf of Mexico
 - Construction of the Inglis Dam and lock in 1904
 - Alterations in water quality and the physical aquatic environment with the conversion of 5.7 miles of the historic river and floodplain wetlands to Lake Rousseau
 - Diversion of historic high flows from the lower river to the Cross Florida Barge Canal in December 1969
 - Significant long-term (1960s to present) flow reduction in all portions of the system on the order of 40 to 60%
 - Increasing concentrations of nitrate nitrogen, a plant-growth nutrient, entering the Rainbow River from groundwater sources and traveling downstream to the lower river
 - Proliferation of native and non-native aquatic plants in the Rainbow River and Lake Rousseau, leading to state-funded eradication efforts, and
 - Releases of dead plant matter, herbicides, and high densities of microscopic planktonic algae to Lake Rousseau and the lower river, with creation eutrophic conditions, and wide swings in concentrations of dissolved oxygen and pH.
 - Apparent eradication of submerged aquatic vegetation with associated declines in fish, manatees, and other wildlife

Studies by Frazer *et al.* (2001) from the University of Florida indicate that there was little to no submerged aquatic vegetation in the Lower Withlacoochee River for at least the past 15 years, if not longer. However, there is a paucity of biological data from the lower river. No algal, macroinvertebrate, fish, reptile/amphibian, bird, or mammal population data were located for this analysis. This data gap, both past and present, makes development of conclusions concerning causation of current conditions highly speculative.

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Two additional Phases of study/synthesis are recommended to guide some measure of restoration of the Lower Withlacoochee River. These include Phase 2 to conduct a comprehensive baseline evaluation of existing conditions and Phase 3 to develop a plan for specific restoration needs, costs, and responsible entities. These activities are only recommended for a limited area, namely the 10 miles (16 km) of the lower river from the Inglis Spillway to the outlet of the river.

Phase 2 should include collection of synoptic data over a one to three-year period to better characterize the existing environmental resources in Lower Withlacoochee River. Recommended study components include the following:

- Physical Setting
 - Land use of the surface watershed (including waterfront houses and septic systems)
 - Water balance (inflows and outflows of surface and ground water)
 - River bathymetry
 - Flow regime (velocity profiles)
 - Sediment sampling (5 stations) for grain size, organic content, and occurrence of trace metals and organics
- Water Quality (5 stations)
 - Light transmittance (secchi depth and underwater photometer)
 - Field parameters vertical profiles and continuous (temperature, pH, dissolve oxygen, specific conductance)
 - General analytical monthly surface, mid-depth, and bottom (chloride, salinity, sulfate, iron, chlorophyll a, nitrate-nitrite, total ammonia, and organic nitrogen, ortho-phosphorus, total phosphorus, fecal coliforms, total coliforms)
- Biological (5 transects)
 - Algal taxonomy and biovolume
 - Benthic macroinvertebrates (Ponar dredge)
 - Fish (species and biomass)
 - Other fauna (herptiles, birds, mammals)
- Human Use
 - Creel/fishing survey
 - Boating survey

Phase 3 of the Lower Withlacoochee Environmental Study would result in the development of a restoration plan based on the results and findings of Phases 1 and 2, and on community input. This restoration plan should include specific actions and projects needed to achieve a realistic level of restoration.



Lower Withlacoochee River Study

It is recommended that W.A.R. lobby the Florida Department of Environmental Protection, Southwest Florida Water Management District, and Citrus and Marion counties to assist with funding for the Phase 2 and Phase 3 studies.

Section 4.0 References

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Appendix A

Water Quality Summary



Lower Withlacoochee River Study

Appendix A-1. Water Quality Stations within the Lower Withlacoochee River

STATION ID	STATION NAME	SOURCE	ORG ID	STN TYPE	LATITUDE	LONGITUDE
Withlacoochee River (Between Hwy 200 and Rainbow River Confluence)						
3513	WITHLACOOCHEE RIVER AT STOKES FERRY	FL STORET	21FLGW	River/Stream	28.988548	-82.349844
17945	SWA-LR-1002 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.001891	-82.371286
17956	SWA-LR-1017 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.044301	-82.458168
22927	WITHLACOOCHEE RIVER NR HOLDER	SWFWMD	---	River/Stream	28.988800	-82.349600
22927	WITHLACOOCHEE RIVER NR HOLDER	FL STORET	21FLSWFD	River/Stream	28.988547	-82.349845
32789	SW4-LR-2012 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.039151	-82.449663
32795	SW4-LR-2021 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.018141	-82.419640
32805	SW4-LR-2037 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.017215	-82.397728
32812	SW4-LR-2049 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.001893	-82.370966
37002	Z4-LR-3017 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.029614	-82.436741
37007	Z4-LR-3033 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.014741	-82.395473
37943	Z4-LR-3017R WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.029443	-82.436672
37948	Z4-LR-3033R WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.014701	-82.395481
40208	Z4-LR-5016 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.040456	-82.454316
40769	Z4-LR-5016R WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.040259	-82.454065
42216	Z4-LR-6005 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.035673	-82.442770
110350	WITHLACOOCHEE R SR 200 E HOLDER	STORET Legacy	1113S050	River/Stream	28.983333	-82.350000
2313000	WITHLACOOCHEE RIVER NEAR HOLDER, FL	USGS	---	River/Stream	28.988868	-82.349541
2313090	WITHLACOOCHEE RI AB BLUE RUN NR DUNNELLON FLA.	USGS	---	River/Stream	29.042754	-82.457322
23010465	WITHLACOOCHEE R.BASIN	STORET Legacy	21FLA	River/Stream	28.989139	-82.350389
28592788221124	TP319-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	28.991056	-82.353445
29000218222013	TP318-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.000583	-82.367028
285918489220591	TP320-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	28.988445	-82.349750
CIT506LR	WITHLACOOCHEE RIVER NEAR 4949 SPRUCE DRIVE (WBID 1329C)	FL STORET	21FLWQSP	River/Stream	28.990501	-82.351781
CIT-WI-SPRINGS	CITRUS-WITHLACOOCHEE RIVER-CITRUS SPRINGS-1	FL STORET	21FLKWAT	River/Stream	29.029833	-82.443000
FLO0090	WITHLACOOCHEE RV. @ STOKES FERRY	STORET Legacy	21FLSWFD	River/Stream	28.991667	-82.354722
FLO0090	WITHLACOOCHEE RV. @ STOKES FERRY	STORET Legacy	21FLGW	River/Stream	28.988333	-82.348889
Withlacoochee River (Between Rainbow River Confluence and Lake Rousseau)						
23414	WITHLACOOCHEE RIVER @ HWY 41	FL STORET	21FLSWFD	River/Stream	29.045658	-82.464749
23414	WITHLACOOCHEE AT HWY 41	SWFWMD	---	River/Stream	29.045700	-82.464800
32802	SW4-LR-2033 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.047180	-82.458635
110285	WITHLACOOCHEE R HWY 41 DUNNELLON	STORET Legacy	1113S050	River/Stream	29.050000	-82.450000
2313200	WITHLACOOCHEE RIVER AT DUNNELLON, FL	USGS	---	River/Stream	29.046087	-82.464544
23010404	WITHLACOOCHEE R. BASIN	STORET Legacy	21FLA	River/Stream	29.049639	-82.448194
3CFB10014	WITHLACOOCHEE RIVER AT SR 41	STORET Legacy	11COEJAX	River/Stream	29.045556	-82.465000
MAR-WI-UNNELLON	MARION-WITHLACOOCHEE RIVER-DUNNELLON-1	FL STORET	21FLKWAT	River/Stream	29.046500	-82.464833
Lake Rousseau (East)						
32800	SW4-LR-2030 WITHLACOOCHEE RIVER	FL STORET	21FLGW	Lake	29.051227	-82.483519
33463	SW4-LL-2019 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.040749	-82.524704
33471	SW4-LL-2052 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.043854	-82.506839
110225	INGLIS RESERVOIR 7.5M S DUNELLON	STORET Legacy	1113S050	Lake	29.050000	-82.466667
110275	INGLIS RESERVOIR 0.7 MI S DNLLON	STORET Legacy	1113S050	Lake	29.050000	-82.466667
23010435	LAKE ROUSSEAU OFF N BEARLE TERRACE	STORET Legacy	21FLA	Lake	29.041667	-82.518667
29022978231064	TP240-LAKE ROUSSEAU	FL STORET	21FLTPA	Lake	29.041583	-82.518445
CIT-ROUSSEAU-1	CITRUS-ROUSSEAU EAST-1	FL STORET	21FLKWAT	Lake	29.049050	-82.473250
CIT-ROUSSEAU-2	CITRUS-ROUSSEAU EAST-2	FL STORET	21FLKWAT	Lake	29.041617	-82.503200
CIT-ROUSSEAU-3	CITRUS-ROUSSEAU EAST-3	FL STORET	21FLKWAT	Lake	29.041550	-82.531717
MAR-E RIVER-1-1	MARION-WITHLACOOCHEE RIVER-1-1	FL STORET	21FLKWAT	Lake	29.051056	-82.476306
MAR-E RIVER-2-1	MARION-WITHLACOOCHEE RIVER-2-1	FL STORET	21FLKWAT	Lake	29.052528	-82.478611
MAR-E RIVER-3-1	MARION-WITHLACOOCHEE RIVER-3-1	FL STORET	21FLKWAT	Lake	29.051750	-82.483056
Lake Rousseau (West)						
22952	LAKE ROUSSEAU 4	SWFWMD	---	Lake	29.014400	-82.635400
22962	LAKE ROUSSEAU 3	SWFWMD	---	Lake	29.025800	-82.660600
22973	LAKE ROUSSEAU 2	SWFWMD	---	Lake	29.038100	-82.564700
22985	LAKE ROUSSEAU	FL STORET	21FLSWFD	Lake	29.033333	-82.555833
22985	LAKE ROUSSEAU 1	SWFWMD	---	Lake	29.033300	-82.555800
33464	SW4-LL-2022 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.034287	-82.588623
33474	SW4-LL-2059 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.031050	-82.579902
33476	SW4-LL-2065 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.032598	-82.557943
33482	SW4-LL-2080 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.013989	-82.601369
33484	SW4-LL-2085 LAKE ROUSSEAU	FL STORET	21FLGW	Lake	29.034813	-82.564778
758327	LAKE ROUSSEAU SOUTH-CENTRAL	SWFWMD	---	Lake	29.021200	-82.579100
758327	LAKE ROUSSEAU SOUTH-CENTRAL	FL STORET	21FLSWFD	Lake	29.021194	-82.579083
23010434	LAKE ROUSSEAU OFF N PEELER POINT	STORET Legacy	21FLA	Lake	29.025333	-82.588333
29004758235572	TP238-LAKE ROUSSEAU	FL STORET	21FLTPA	Lake	29.013194	-82.599222



Lower Withlacoochee River Study

Appendix A-1. Water Quality Stations within the Lower Withlacoochee River

STATION ID	STATION NAME	SOURCE	ORG ID	STN TYPE	LATITUDE	LONGITUDE
Lake Rousseau (West)						
29020848233558	TP239-LAKE ROUSSEAU	FL STORET	21FLTPA	Lake	29.035667	-82.565500
CIT-ROUSSEAU-1	CITRUS-ROUSSEAU-1	FL STORET	21FLKWAT	Lake	29.043611	-82.539945
CIT-ROUSSEAU-2	CITRUS-ROUSSEAU-2	FL STORET	21FLKWAT	Lake	29.043028	-82.541833
CIT-ROUSSEAU-3	CITRUS-ROUSSEAU-3	FL STORET	21FLKWAT	Lake	29.042722	-82.544667
STA0084	LAKE ROUSSEAU	STORET Legacy	21FLGW	Lake	29.033333	-82.555833
STA0084	LAKE ROUSSEAU	STORET Legacy	21FLSWFD	Lake	29.033333	-82.555833
STA0085	LAKE ROUSSEAU	STORET Legacy	21FLGW	Lake	29.038056	-82.564722
STA0085	LAKE ROUSSEAU	STORET Legacy	21FLSWFD	Lake	29.038056	-82.564722
Lake Rousseau - Bypass Channel						
2313250	WITHLACOOCHEE R BYPASS CHANNEL NR INGLIS FLA	USGS	---	River/Stream	29.021085	-82.637882
2313251	WITHLACOOCHEE R BYPASS CH BEL STR NR INGLIS, FLA	USGS	---	River/Stream	29.021085	-82.638715
3CFB10013	BYPASS CANAL AT INGLES LOCK	STORET Legacy	11COEJAX	River/Stream	29.023056	-82.646389
Lake Rousseau - Inglis Dam						
22954	INGLIS DAM UPSTREAM (LAKE ROUSSEAU)	SWFWMD	---	Lake	29.007600	-82.615600
22954	INGLIS DAM UPSTREAM (LAKE ROUSSEAU)	FL STORET	21FLSWFD	Lake	29.007611	-82.615583
110210	WITHLACOOCHEE R AT INGLIS DAM	STORET Legacy	1113S050	Lake	29.033333	-82.666667
2313229	LAKE ROUSSEAU NR DUNNELTON, FLA.	USGS	---	Lake	29.010253	-82.616492
2313231	WITHLACOOCHEE R BL INGLIS DAM NR DUNNELTON, FLA.	USGS	---	Lake	29.009975	-82.616770
23010032	WITHLACOOCHEE R AT TOP SDE OF DA	STORET Legacy	21FLA	Lake	29.013333	-82.611667
3CFB10012	LAKE ROUSSEAU ABOVE DAM	STORET Legacy	11COEJAX	Lake	29.010000	-82.616667
Lake Rousseau - Inglis Lock						
2313237	BARGE CANAL AT INGLIS LOCK NR INGLIS, FLA.	USGS	---	Lake	29.025252	-82.616492
Withlacoochee River (Between Lake Rousseau Inglis Dam and Cross Florida Barge Canal)						
29003728237070	TP254-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.010333	-82.618611
29004518237180	TP253-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.012528	-82.621667
29004958237352	TP252-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.013750	-82.626445
29005858237498	TP251-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.016250	-82.630500
29010308238033	TP250-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.017500	-82.634250
Cross Florida Barge Canal						
23434	CROSS-FLORIDA BARGE CANAL	SWFWMD	---	Canal	29.013500	-82.661500
Withlacoochee River (Lower)						
22965	WITHLACOOCHEE RIVER AB BAY	SWFWMD	---	River/Stream	29.014700	-82.727200
23409	WITHLACOOCHEE CITRUS 2	SWFWMD	---	River/Stream	29.025000	-82.721700
23409	WITHLACOOCHEE-2	FL STORET	21FLPCSW	River/Stream	29.025000	-82.721667
23410	WITHLACOOCHEE CITRUS 3	SWFWMD	---	River/Stream	29.025000	-82.675000
23410	WITHLACOOCHEE-3	FL STORET	21FLPCSW	River/Stream	29.025000	-82.675000
23411	WITHLACOOCHEE RIVER AT YANKEETOWN WQ	SWFWMD	---	River/Stream	29.025300	-82.669200
23411	WITHLACOOCHEE RIVER @ YANKEETOWN	FL STORET	21FLSWFD	River/Stream	29.025148	-82.669062
32784	SW4-LR-2004 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.030847	-82.705055
32787	SW4-LR-2008 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.021587	-82.649922
32796	SW4-LR-2023 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.028439	-82.715395
32806	SW4-LR-2039 WITHLACOOCHEE RIVER	FL STORET	21FLGW	River/Stream	29.027480	-82.675439
110175	WITHLACOOCHEE R HWY 19 INGLIS	STORET Legacy	1113S050	River/Stream	29.033333	-82.666667
110200	WITHLACOOCHEE R BELOW INGLIS DAM	STORET Legacy	1113S050	River/Stream	29.016667	-82.666667
2313265	WITHLACOOCHEE RIVER AT CRACKERTOWN, FLA.	USGS	---	River/Stream	29.030529	-82.677883
23010405	WITHLACOOCHEE R.BASIN	STORET Legacy	21FLA	River/Stream	29.026083	-82.669028
29012558239447	TP333-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.023750	-82.662417
29014508240340	TP335-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.029167	-82.676111
29015068240504	TP334-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	River/Stream	29.030722	-82.680667
CIT-WI-RIVER-1	CITRUS-WITHLACOOCHEE RIVER-1-1	FL STORET	21FLKWAT	River/Stream	29.021667	-82.646375
CIT-WI-RIVER-2	CITRUS-WITHLACOOCHEE RIVER-2-2	FL STORET	21FLKWAT	River/Stream	29.024167	-82.662217
CIT-WI-RIVER-3	CITRUS-WITHLACOOCHEE RIVER-3-3	FL STORET	21FLKWAT	River/Stream	29.033050	-82.693617
CIT-WI-RIVER-4	CITRUS-WITHLACOOCHEE RIVER-4-4	FL STORET	21FLKWAT	River/Stream	29.031117	-82.712783
CIT-WI-RIVER-5	CITRUS-WITHLACOOCHEE RIVER-5-5	FL STORET	21FLKWAT	River/Stream	29.016950	-82.726950
FLO0092	WITHLACOOCHEE RIVER @ YANKEETOWN	STORET Legacy	21FLSWFD	River/Stream	29.025278	-82.669167
FLO0092	WITHLACOOCHEE RIVER @ YANKEETOWN@ HWY	STORET Legacy	21FLGW	River/Stream	29.025278	-82.669167
WITH-1	WITHLACOOCHEE RIVER-1; UP FROM DREDGED CANAL	STORET Legacy	21FLSWFD	River/Stream	29.018333	-82.726111
WITH-2	WITHLACOOCHEE RIVER-2; UP FROM BENNETTS CREEK	STORET Legacy	21FLSWFD	River/Stream	29.014444	-82.728611
WITHLACOOCH1A	WITHLACOOCH 1A CITRUS CO	STORET Legacy	21FLKWAT	River/Stream	29.021667	-82.646389
WITHLACOOCH1B	WITHLACOOCH 1B CITRUS CO	STORET Legacy	21FLKWAT	River/Stream	29.024167	-82.662222
WITHLACOOCH1C	WITHLACOOCH 1C CITRUS CO	STORET Legacy	21FLKWAT	River/Stream	29.031111	-82.712778
WITHLACOOCH1D	WITHLACOOCH 1D CITRUS CO	STORET Legacy	21FLKWAT	River/Stream	29.033056	-82.693611
WITHLACOOCHR1	WITHLACOOCH_R1_CITRUS_CO	STORET Legacy	21FLKWAT	River/Stream	29.016944	-82.726944



Lower Withlacoochee River Study

Appendix A-1. Water Quality Stations within the Lower Withlacoochee River

STATION ID	STATION NAME	SOURCE	ORG ID	STN TYPE	LATITUDE	LONGITUDE
Estuary						
22971	WITHLACOOCHEE LEVY 6	SWPWMD	---	Estuary	29.008300	-82.758300
2313272	WITHLACOOCHEE R AT CHAMBERS IS NEAR YANKEETOWN FL	USGS	---	Estuary	29.001109	-82.765788
2313274	WITHLACOOCHEE R AT BUNGALOW PASS AT PORT INGLIS FL	USGS	---	Estuary	28.994696	-82.758996
28595468245153	TP330-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	Estuary	28.998500	-82.754250
29000318245439	TP329A-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	Estuary	29.000861	-82.762195
29000958245117	TP331-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	Estuary	29.002639	-82.753250
29001798244531	TP332-WITHLACOOCHEE RIVER	FL STORET	21FLTPA	Estuary	29.004972	-82.748083
34010SEAS	WITHLACOOCHEE RIVER AT BENNETS CREEK	STORET Legacy	21FLA	Estuary	29.016667	-82.733333
34020SEAS	WITHLACOOCHEE RIVER CM# 43	STORET Legacy	21FLA	Estuary	29.005000	-82.748333
34040SEAS	WITHLACOOCHEE RIVER CM# 38	STORET Legacy	21FLA	Estuary	29.000000	-82.768333
34SEAS010	WITHLACOOCHEE RIVER AT BENNETS CREEK	FL STORET	21FLSEAS	Estuary	29.005333	-82.748333
34SEAS020	WITHLACOOCHEE RIVER CM# 43	FL STORET	21FLWQA	Estuary	29.001333	-82.756166
34SEAS020	WITHLACOOCHEE RIVER CM# 43	FL STORET	21FLSEAS	Estuary	29.001333	-82.756167
WAC200127	WACCASASSA - WITHLACOOCHEE BAY	FL STORET	21FLFMRI	Estuary	29.000000	-82.760000
WITH-3	WITHLACOOCHEE RIVER-3;B	STORET Legacy	21FLSWFD	Estuary	29.012500	-82.739444
WITH-4	WITHLACOOCHEE RIVER-4; AT PATS ELBOW	STORET Legacy	21FLSWFD	Estuary	29.007778	-82.741667
WITH-5	WITHLACOOCHEE RIVER-5; AT MARKER 43	STORET Legacy	21FLSWFD	Estuary	29.005278	-82.747778
WITH-6	WITHLACOOCHEE RIVER-6; AT MARKER 40A	STORET Legacy	21FLSWFD	Estuary	29.001389	-82.757778
WITH-7	WITHLACOOCHEE RIVER-7; BOAT RAMP AT MOUTH	STORET Legacy	21FLSWFD	Estuary	29.000833	-82.762222

Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDEV	N	N BDL	PERIOD OF RECORD		
BACTERIOLOGICAL	E.coli	#/100ml	River (Hwy200 - RR)	21.4	86.0	2.00	20.3	38	0	1/4/2000 6/5/2001		
			River (Hwy200 - RR)	207	5,300	1.00	705	240	1	1/4/2000 2/6/2012		
	Enterococci	#/100ml	River (RR - LR)	1,500	1,500	1,500	---	1	0	7/25/2007 7/25/2007		
			Lake (East)	15.0	33.0	3.00	15.6	3	0	5/17/2007 11/27/2007		
			Lake (West)	3.60	3.00	1.00	2.93	5	1	11/13/2007 12/10/2007		
			River (Lower)	22.6	430	4.00	223	4	0	5/15/2007 7/24/2007		
			Estuary	89.3	1,400	1.00	130	396	2	11/16/1983 11/15/2012		
	FC	#/100ml	River (Hwy200 - RR)	56.1	1,200	0.00	110	335	1	10/10/1974 2/6/2013		
			River (RR - LR)	57.5	133	12.0	34.7	11	0	2/23/1993 7/25/2007		
			Lake (East)	17.5	50.0	5.00	13.5	11	0	3/2/2004 8/4/2009		
			Lake (West)	54.6	2,000	0.00	250	64	13	12/15/1992 10/6/2009		
			River (Bypass Channel)	29.6	140	0.00	48.6	12	0	1/20/1975 12/10/1975		
			Lake (Inglis Dam)	11.3	50.0	0.00	13.5	12	0	1/21/1975 12/10/1975		
			Lake (Inglis Lock)	10.0	60.0	0.00	18.5	12	0	1/20/1975 12/10/1975		
			River (LR-CFBC)	13.3	60.0	1.00	13.2	23	0	3/2/2004 12/6/2004		
			River (Lower)	17.2	270	0.00	49.5	51	4	12/15/1992 7/24/2007		
			Estuary	89.3	1,400	1.00	130	396	2	11/16/1983 11/15/2012		
			TC	#/100ml	River (Hwy200 - RR)	51.1	17,000	0.00	1,545	178	0	5/16/1969 10/11/2004
					River (RR - LR)	414	1,300	40.0	346	20	0	4/3/1967 4/12/1995
					Lake (East)	123	250	60.0	87.3	6	0	3/2/2004 10/5/2004
	Lake (West)	305			2,500	1.00	561	38	0	9/27/1995 10/5/2004		
	River (Bypass Channel)	160			1,000	10.0	205	25	0	5/20/1970 5/24/1977		
	Lake (Inglis Dam)	529			6,600	0.00	1,376	26	0	5/20/1970 5/24/1977		
	Lake (Inglis Lock)	212			750	0.00	204	25	0	5/20/1970 5/24/1977		
	River (LR-CFBC)	90.3			270	1.00	90.0	23	0	3/2/2004 12/6/2004		
	River (Lower)	234			1,340	20.0	255	51	0	4/3/1967 10/18/2004		
	Estuary	412			1,200	20.0	314	17	0	3/9/2004 10/15/2004		
	BIOLOGICAL	Chl-a conc			µg/L	River (Hwy200 - RR)	2.65	57.0	0.275	5.71	190	91
			River (RR - LR)	2.54		13.0	0.500	2.20	150	19	12/3/2002 4/3/2012	
			Lake (East)	1.52		2.90	0.425	0.840	11	4	3/2/2004 2/4/2009	
Lake (West)			12.6	175		0.340	24.2	59	6	6/27/1995 10/12/2010		
Lake (Inglis Dam)			34.5	47.4		21.5	18.3	2	0	6/1/2010 10/12/2010		
River (LR-CFBC)			1.63	10.0		0.425	2.12	23	14	3/2/2004 12/6/2004		
River (Lower)			5.48	33.0		0.425	6.23	309	49	12/9/2002 4/3/2012		
Canal			11.1	46.5		0.500	12.8	40	2	12/9/2002 4/3/2012		
Estuary			4.73	22.9		0.425	4.94	57	15	7/5/2001 1/10/2013		
Chl-b			µg/L	River (RR - LR)		0.544	1.90	0.300	0.204	76	74	12/9/2002 4/3/2012
				Lake (West)		0.577	2.35	0.015	0.620	54	24	6/27/1995 5/29/1998
		River (Lower)		0.553	1.52	0.500	0.190	76	70	12/9/2002 2/6/2006		
		Canal		0.584	1.80	0.500	0.267	35	35	12/9/2002 4/3/2012		
Chl-c conc		µg/L	River (RR - LR)	0.556	1.30	0.500	0.225	75	70	12/9/2002 1/10/2006		
			Lake (West)	1.28	4.39	0.050	1.26	34	17	6/27/1995 9/29/1998		
			River (Lower)	0.554	1.52	0.500	0.191	75	66	12/9/2002 4/3/2012		
			Canal	1.56	7.10	0.500	1.67	34	21	12/9/2002 4/3/2012		
Chl-T		µg/L	River (Hwy200 - RR)	1.60	24.0	0.425	3.47	71	54	11/2/1999 5/4/2010		
			River (RR - LR)	2.27	12.5	0.500	2.11	115	16	12/9/2002 2/4/2013		
			Lake (West)	12.4	152	0.090	21.2	46	6	12/15/1992 10/12/2010		
			Lake (Inglis Dam)	34.5	47.4	21.5	18.2	2	0	6/1/2010 10/12/2010		
			River (Lower)	3.61	31.5	0.400	3.38	308	33	6/16/1993 2/4/2013		
			Canal	14.4	234	0.500	14.0	114	7	12/9/2002 2/4/2013		
Phos-a		µg/L	River (Hwy200 - RR)	0.736	6.40	0.00	0.742	257	157	11/2/1999 2/6/2013		
			River (RR - LR)	1.34	8.20	0.500	1.06	227	34	12/9/2002 2/4/2013		
			Lake (East)	0.710	1.10	0.00	0.285	11	4	3/2/2004 2/4/2009		
			Lake (West)	2.93	62.6	0.00	7.81	72	13	12/15/1992 10/12/2010		
			Lake (Inglis Dam)	6.52	2.17	4.87	1.31	4	0	6/1/2010 10/12/2010		
			River (LR-CFBC)	0.420	0.950	0.00	0.326	23	14	3/2/2004 12/6/2004		
			River (Lower)	3.93	15.4	0.120	3.01	215	23	3/16/1993 2/4/2013		
	Canal		4.19	54.5	0.500	5.44	114	12	12/9/2002 2/4/2013			
	Estuary		0.590	2.20	0.00	0.425	20	15	3/9/2004 1/10/2013			

Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD			
DISSOLVED OXYGEN	DO	%	River (Hwy200 - RR)	64.0	97.6	5.90	19.5	177	0	5/17/1965	12/19/2012		
			River (RR - LR)	72.5	105	37.0	14.5	91	0	4/3/1967	10/18/2010		
			Lake (East)	74.7	133	5.40	18.7	36	0	4/3/1967	2/4/2009		
			Lake (West)	75.6	159	2.44	37.1	63	0	12/15/1992	10/6/2009		
			River (Bypass Channel)	75.9	120	25.4	21.6	79	0	9/23/1969	9/25/1990		
			Lake (Ingls Dam)	77.6	125	7.00	25.5	108	0	4/3/1967	9/23/1990		
			Lake (Ingls Lock)	49.8	96.0	11.0	24.4	25	0	5/20/1970	5/24/1977		
			River (LR-CFBC)	70.7	107	20.5	26.6	28	0	3/2/2004	12/6/2004		
			River (Lower)	92.0	111	60.7	12.5	116	0	4/3/1967	10/18/2004		
			Estuary	86.8	146	21.5	16.7	560	0	1/5/1984	10/15/2004		
	DO	mg/L	River (Hwy200 - RR)	5.87	14.2	0.200	2.30	751	0	5/17/1965	2/6/2013		
			River (RR - LR)	6.19	13.2	0.900	1.43	770	0	4/3/1967	4/7/2013		
			Lake (East)	6.32	10.8	0.440	1.70	44	0	4/3/1967	8/4/2009		
			Lake (West)	6.99	14.2	0.200	3.17	141	0	12/15/1992	10/12/2010		
			River (Bypass Channel)	6.44	11.4	2.06	1.69	91	0	9/23/1969	9/25/1990		
			Lake (Ingls Dam)	6.80	10.6	1.60	2.07	121	0	4/3/1967	10/12/2010		
			Lake (Ingls Lock)	4.11	8.40	0.960	1.89	31	0	5/20/1970	5/24/1977		
			River (LR-CFBC)	6.18	10.5	1.67	2.78	28	0	3/2/2004	12/6/2004		
			River (Lower)	7.95	16.5	2.60	1.70	1,189	0	4/3/1967	4/2/2013		
			Canal	5.52	13.8	0.090	2.60	252	0	12/9/2002	4/2/2013		
Estuary	7.41	12.4	1.70	1.85	1,384	0	11/16/1983	11/15/2012					
GENERAL INORGANIC	Alk	mg/L as CaCO3	River (Hwy200 - RR)	104	151	25.0	21.9	382	0	1/1/1950	5/4/2010		
			River (RR - LR)	110	266	7.50	23.9	163	0	5/31/1966	2/4/2013		
			Lake (West)	104	139	58.6	14.8	46	0	12/15/1992	10/12/2010		
			River (Bypass Channel)	97.1	121	66.0	14.1	22	0	9/23/1969	5/29/1981		
			Lake (Ingls Dam)	120	357	90.0	53.4	22	0	5/21/1963	10/12/2010		
			Lake (Ingls Lock)	132	148	123	7.97	14	0	1/19/1971	1/10/1975		
			River (Lower)	106	153	55.6	16.4	160	0	4/4/1967	2/4/2013		
			Canal	117	143	71.9	16.2	115	0	12/9/2002	2/4/2013		
			Cl-D	mg/L	River (Hwy200 - RR)	8.91	11.0	7.10	1.21	12	0	6/26/1995	5/4/2010
					River (RR - LR)	7.79	10.6	6.00	0.81	114	0	1/8/2003	2/4/2013
	Lake (West)	7.12			12.0	5.14	1.56	36	0	1/15/1992	10/12/2010		
	Lake (Ingls Dam)	3.50			6.60	9.00	0.424	2	0	6/1/2006	10/12/2010		
	River (Lower)	28.0			2,600	5.37	228	129	0	12/15/1992	2/4/2013		
	Canal	2,079			5,060	5.36	1,765	114	0	1/8/2003	2/4/2013		
	Cl-T	mg/L			River (Hwy200 - RR)	9.28	58.0	9.00	2.50	657	0	1/1/1950	2/6/2013
					River (RR - LR)	7.67	17.0	3.20	1.90	168	0	5/31/1966	4/3/2013
					Lake (East)	7.36	9.10	6.50	0.977	9	0	3/2/2004	3/4/2009
					Lake (West)	7.49	9.00	6.50	0.753	32	0	2/9/1998	10/12/2010
			River (Bypass Channel)	9.51	59.0	4.50	7.48	34	0	9/23/1969	4/29/1982		
			Lake (Ingls Dam)	158	3,300	4.50	580	37	0	3/21/1963	10/12/2010		
Lake (Ingls Lock)			5,697	12,000	100	2,638	26	0	5/20/1970	5/24/1977			
River (LR-CFBC)			156	360	1.00	273	22	0	3/2/2004	12/6/2004			
River (Lower)			7.74	26.0	4.00	1.76	155	0	4/3/1967	4/3/2012			
Canal			3,710	3,710	3,710	—	1	0	12/9/2002	12/9/2002			
Estuary	836	5,400	2.30	1,693	17	1	3/9/2004	10/15/2004					
CO2	mg/L	River (Hwy200 - RR)	8.09	70.0	0.700	7.96	314	0	1/1/1950	1/4/18/2012			
		River (RR - LR)	9.57	17.0	1.60	5.77	6	0	5/31/1966	4/14/1981			
		River (Bypass Channel)	13.7	192	0.800	41.1	21	0	9/23/1969	6/29/1982			
		Lake (Ingls Dam)	6.41	28.0	1.60	6.58	20	0	3/21/1963	12/10/1975			
		Lake (Ingls Lock)	3.69	21.0	1.70	4.67	14	0	1/19/1971	12/10/1975			
		River (Lower)	10.9	21.0	3.90	3.34	3	0	5/18/1967	5/25/1970			
F-D	mg/L	River (Hwy200 - RR)	0.150	0.500	0.00	0.088	297	0	1/1/1950	9/7/1985			
		River (RR - LR)	0.233	0.300	0.250	0.052	6	0	5/31/1966	4/14/1981			
		River (Bypass Channel)	0.200	0.300	0.100	0.094	10	0	9/23/1969	6/29/1982			
		Lake (Ingls Dam)	0.257	0.300	0.200	0.052	7	0	3/21/1963	9/23/1969			
		River (Lower)	0.233	0.300	0.200	0.058	5	0	5/18/1967	5/20/1970			
F-T	mg/L	River (Hwy200 - RR)	0.113	0.260	0.050	0.034	204	45	6/26/1995	2/6/2013			
		River (RR - LR)	0.120	0.170	0.090	0.018	234	0	2/4/1982	2/4/2013			
		Lake (East)	0.105	0.170	0.098	0.011	8	0	3/2/2004	3/4/2009			
		Lake (West)	0.100	0.221	0.050	0.036	60	15	12/15/1992	10/6/2009			
		River (LR-CFBC)	0.119	0.180	0.085	0.024	23	0	3/2/2004	12/6/2004			
		River (Lower)	0.117	0.230	0.050	0.023	767	13	12/15/1992	2/4/2013			
		Canal	0.221	0.430	0.050	0.081	116	0	12/9/2002	2/4/2013			
		Estuary	0.205	0.510	0.110	0.136	17	0	3/9/2004	10/15/2004			

Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDEV	N	N BDL	PERIOD OF RECORD			
GENERAL INORGANIC	Hardness	mg/L as CaCO ₃	River (Hwy200 - RR)	156	284	14.0	31.6	293	0	1/1/1950 2/6/2013			
			River (RR - LR)	149	399	31.0	73.1	49	0	5/21/1966 8/25/1990			
			River (Bypass Channel)	125	230	88.0	23.3	34	0	9/23/1969 6/29/1982			
			Lake (Inglis Dam)	181	1,400	13.0	232	55	0	3/21/1963 5/10/1977			
			Lake (Inglis Lock)	2,045	3,400	190	825	35	0	5/20/1970 5/14/1977			
			River (Lower)	120	130	74.5	18.1	14	0	4/4/1967 9/25/1992			
	Ca-D	mg/L	River (Hwy200 - RR)	6.56	68.0	0.300	4.24	327	0	1/1/1950 12/18/2012			
			River (RR - LR)	5.69	8.20	2.30	1.65	10	0	5/31/1966 11/30/1982			
			River (Bypass Channel)	5.81	8.40	2.90	1.53	17	0	9/23/1969 6/29/1982			
			Lake (Inglis Dam)	4.90	7.40	2.40	1.46	16	0	3/21/1963 9/17/1972			
			Lake (Inglis Lock)	4.61	6.30	3.00	1.09	7	0	5/15/1972 9/17/1973			
			River (Lower)	3.85	5.00	2.60	1.05	4	0	5/18/1967 5/4/1971			
	SO ₄	mg/L	River (Hwy200 - RR)	36.2	330	3.20	37.5	614	0	1/1/1950 2/6/2013			
			River (RR - LR)	21.0	76.6	3.20	12.0	157	0	5/31/1966 4/3/2012			
			Lake (East)	22.5	36.0	6.70	8.40	8	0	3/2/2004 8/4/2003			
			Lake (West)	18.5	23.0	7.10	6.52	32	0	2/9/1993 10/11/2010			
			River (Bypass Channel)	20.1	32.0	11.0	7.67	10	0	9/23/1969 6/29/1982			
			Lake (Inglis Dam)	16.6	24.0	13.0	2.74	9	0	3/21/1963 10/12/2010			
			River (LR-CFBC)	46.2	170	6.80	50.5	23	0	3/2/2004 12/6/2004			
			River (Lower)	21.1	57.2	5.65	10.3	145	0	4/5/1967 4/5/2012			
			Canal	531	581	—	—	1	0	12/9/2002 12/9/2002			
			Estuary	151	760	1.10	236	17	0	2/9/2004 10/18/2004			
			SO ₄ -D	mg/L	River (Hwy200 - RR)	23.9	47.0	4.80	12.6	12	0	9/26/1995 5/4/2010	
	River (RR - LR)	22.9			73.6	5.45	12.7	114	0	1/8/2003 2/4/2013			
	Lake (West)	17.4			44.0	6.10	7.44	56	0	12/15/1992 10/12/2010			
	Lake (Inglis Dam)	17.7			20.6	14.7	4.17	2	0	6/1/2010 10/12/2010			
	River (Lower)	23.5			390	5.65	23.3	131	0	12/15/1992 2/4/2013			
	Canal	312			1,200	5.82	240	114	0	1/8/2003 2/4/2013			
	GENERAL ORGANIC	DOC	mg/L	River (Hwy200 - RR)	14.9	43.0	2.50	10.6	15	0	1/25/1978 12/18/2012		
		TOC	mg/L	River (Hwy200 - RR)	13.6	56.0	0.00	10.2	431	2	9/25/1968 2/6/2013		
				River (RR - LR)	8.22	33.0	0.00	7.05	306	0	6/14/1978 2/4/2013		
				Lake (East)	7.44	13.0	1.30	6.11	9	0	3/2/2004 2/4/2003		
				Lake (West)	3.25	24.0	1.98	5.95	60	0	12/15/1992 10/6/2008		
				River (Bypass Channel)	11.7	154	0.00	24.0	30	0	9/23/1971 6/29/1982		
				Lake (Inglis Dam)	7.97	22.0	1.00	5.63	31	0	5/15/1972 6/29/1982		
				Lake (Inglis Lock)	2.32	34.0	1.00	8.21	25	0	5/20/1970 5/14/1977		
River (LR-CFBC)				10.1	20.0	5.10	5.00	23	0	3/2/2004 12/6/2004			
River (Lower)				9.25	23.1	1.79	6.51	267	0	12/15/1992 2/4/2013			
Canal				8.14	26.4	2.20	6.07	115	0	12/9/2001 2/4/2013			
Estuary				10.3	24.0	3.10	7.55	20	0	3/9/2004 1/10/2013			
METAL				Ag-D	µg/L	River (Hwy200 - RR)	0.462	1.00	0.00	0.187	52	55	1/25/1978 9/7/1995
				Ag-T	µg/L	River (Hwy200 - RR)	0.333	2.00	0.00	0.561	14	12	1/25/1978 8/31/1982
	Al-D	µg/L	River (Hwy200 - RR)	15.6	79.3	5.00	17.1	45	21	11/5/1982 9/7/1995			
			River (Lower)	57.0	57.0	57.0	—	1	0	12/10/1997 12/10/1997			
	Al-T	µg/L	River (Hwy200 - RR)	44.7	135	0.00	45.3	7	6	5/1/1970 10/1/2008			
			River (RR - LR)	51.5	240	1.00	95.5	6	0	2/2/1982 8/30/1983			
	River (Bypass Channel)	—	—	—	—	0	0	6/1/1978 -6/1/1978					
	As-D	µg/L	River (Hwy200 - RR)	1.34	10.0	0.00	2.31	65	27	5/1/1970 9/4/1991			
	As-T	µg/L	River (Hwy200 - RR)	1.72	12.0	0.00	2.17	48	9	5/16/1972 7/7/2011			
			River (RR - LR)	1.57	2.00	0.00	0.579	32	0	2/4/1982 9/25/1990			
	River (Bypass Channel)	1.00	1.00	1.00	—	1	0	6/1/1978 6/1/1978					
	Ba-D	µg/L	River (Hwy200 - RR)	19.0	130	0.00	24.9	63	7	1/25/1978 9/7/1995			
	Ba-T	µg/L	River (Hwy200 - RR)	54.2	100	0.00	28.3	18	12	1/25/1978 9/3/1982			
	Be-D	µg/L	River (Hwy200 - RR)	0.298	0.900	0.00	0.135	27	25	11/5/1982 9/4/1991			
	Ca-D	mg/L	River (Hwy200 - RR)	46.2	85.0	16.0	9.92	517	0	1/1/1950 12/18/2012			
			River (RR - LR)	43.5	71.4	30.2	7.04	121	0	5/31/1966 2/4/2013			
			Lake (West)	48.2	65.5	27.0	7.60	12	0	6/2/1995 10/12/2010			
			River (Bypass Channel)	39.7	50.0	20.0	4.54	14	0	9/23/1969 6/29/1982			
Lake (Inglis Dam)			42.7	43.0	37.0	3.75	13	0	3/21/1963 10/12/2010				
Lake (Inglis Lock)			187	140	140	41.6	3	0	5/21/1976 5/14/1977				
River (Lower)			45.1	66.5	26.6	7.05	122	0	5/18/1967 2/4/2013				
Canal			90.2	201	31.9	37.7	116	0	1/8/2003 2/4/2013				



Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD
METAL	Ca-T	mg/L	River (Hwy200 - RR)	59.9	146	22.3	20.0	303	0	6/26/1995 2/6/2013
			River (RR - LR)	50.1	236	28.0	17.5	142	0	2/4/1982 4/3/2012
			Lake (East)	48.9	55.0	31.7	7.47	8	0	3/2/2004 8/4/2009
			Lake (West)	50.7	98.9	17.0	17.0	64	0	12/15/1992 10/12/2010
			Lake (Inglis Dam)	48.0	49.0	17.0	1.41	2	0	6/1/2010 10/12/2010
			River (LR-CFBC)	49.1	68.8	31.4	11.2	23	0	3/2/2004 12/6/2004
			River (Lower)	47.5	97.7	26.0	10.6	149	0	12/15/1992 4/2/2012
			Canal	96.9	96.9	96.9	—	1	0	12/9/2002 12/9/2002
			Estuary	71.1	185	32.9	43.2	17	0	3/9/2004 10/13/2004
			Cd-D	µg/L	River (Hwy200 - RR)	0.750	7.00	0.00	1.07	42
Cd-T	µg/L	River (Hwy200 - RR)	2.44	50.0	0.00	10.1	24	33	5/16/1972 7/7/2011	
		River (RR - LR)	0.462	3.20	0.100	0.595	33	0	2/4/1982 9/25/1990	
		River (Bypass Channel)	—	—	—	—	0	1	6/1/1978 6/1/1978	
Co-D	µg/L	River (Hwy200 - RR)	1.29	4.00	0.00	0.759	61	65	5/18/1971 9/7/1995	
Co-T	µg/L	River (Hwy200 - RR)	1.07	10.0	0.00	2.51	15	18	5/16/1972 8/31/1992	
		River (RR - LR)	4.33	20.0	1.00	7.69	6	0	2/4/1982 8/26/1983	
Cr-D	µg/L	River (Hwy200 - RR)	2.96	20.0	0.500	4.35	42	44	10/10/1974 9/4/1991	
Cr-T	µg/L	River (Hwy200 - RR)	9.08	20.0	0.00	6.38	42	17	5/2/1970 7/7/2011	
		River (RR - LR)	1.63	3.80	1.00	1.13	6	0	2/4/1982 8/30/1983	
Cu-D	µg/L	River (Hwy200 - RR)	1.35	10.0	0.00	2.97	33	19	5/2/1970 8/23/1992	
		River (Bypass Channel)	1.00	1.00	1.00	—	1	1	6/1/1978 6/1/1978	
Cu-T	µg/L	River (Hwy200 - RR)	2.18	30.0	0.00	8.14	14	13	5/16/1972 7/7/2011	
		River (RR - LR)	1.88	12.0	0.500	2.02	33	0	2/4/1982 9/25/1990	
		Lake (West)	0.00	0.00	0.00	0.00	2	0	6/10/1967 8/10/1987	
Pb-D	µg/L	River (Hwy200 - RR)	90.3	640	0.00	125	239	1	1/1/1950 9/7/1995	
		River (RR - LR)	37.5	90.0	0.00	38.6	4	0	5/31/1966 5/2/1969	
		Lake (West)	95.4	132	62.3	31.8	4	0	6/1/2010 10/12/2010	
		River (Bypass Channel)	45.0	50.0	40.0	7.07	2	0	9/23/1969 6/1/1978	
		Lake (Inglis Dam)	69.6	910	0.00	111	7	0	3/21/1963 10/12/2010	
		River (Lower)	107	152	10.0	87.3	3	0	5/18/1967 12/10/1997	
Fe-T	µg/L	River (Hwy200 - RR)	286	1,200	0.00	224	82	0	9/21/1954 10/12/2010	
		River (RR - LR)	129	675	11.0	123	34	0	4/2/1967 9/25/1990	
		Lake (West)	128	310	62.3	77.5	8	0	8/10/1987 10/12/2010	
		Pivots (Bypass Channel)	40.0	40.0	40.0	—	1	0	5/1/1978 6/1/1978	
		Lake (Inglis Dam)	58.5	95.4	21.5	52.3	2	0	6/1/2010 10/12/2010	
		River (Lower)	138	200	140	43.1	4	0	4/2/1967 5/15/1996	
Hg-D	µg/L	River (Hwy200 - RR)	0.656	24.0	0.00	3.26	56	37	9/23/1970 9/4/1991	
Hg-T	µg/L	River (Hwy200 - RR)	0.210	0.800	0.00	0.142	41	30	5/19/1971 5/21/1992	
		River (RR - LR)	0.219	1.10	0.00	0.260	33	0	2/4/1982 9/25/1990	
		River (Bypass Channel)	0.222	1.20	0.010	0.195	21	1	6/1/1978 9/25/1990	
		Lake (Inglis Dam)	0.195	0.500	0.010	0.111	33	0	2/4/1982 9/25/1990	
K-D	mg/L	River (Hwy200 - RR)	0.495	8.50	0.00	0.632	305	0	1/1/1950 12/4/2011	
		River (RR - LR)	0.454	1.86	0.100	0.265	123	5	5/31/1966 2/4/2012	
		Lake (West)	0.422	0.200	0.200	0.170	12	0	6/27/1995 10/12/2010	
		River (Bypass Channel)	0.320	0.500	0.100	0.175	10	0	9/23/1969 6/29/1982	
		Lake (Inglis Dam)	0.332	1.10	0.00	0.346	9	0	3/21/1963 10/12/2010	
		River (Lower)	0.487	1.73	0.125	0.261	121	13	5/18/1967 2/4/2013	
		Canal	45.5	155	0.590	36.1	116	0	1/8/2002 2/4/2013	
K-T	mg/L	River (Hwy200 - RR)	0.711	2.10	0.150	0.277	303	5	6/26/1995 2/6/2013	
		River (RR - LR)	0.706	16.0	0.125	1.43	142	5	2/4/1982 4/3/2012	
		Lake (East)	0.551	1.50	0.150	0.550	8	2	5/2/2004 8/4/2009	
		Lake (West)	0.446	1.70	0.150	0.275	64	5	12/15/1992 10/12/2010	
		Lake (Inglis Dam)	0.400	0.900	0.400	0.00	2	0	6/1/2010 10/12/2010	
		River (LR-CFBC)	0.47	19.3	0.280	6.17	23	0	3/2/2004 12/6/2004	
		River (Lower)	0.775	44.1	0.125	2.53	149	13	12/15/1992 4/2/2012	
		Canal	75.7	75.7	75.7	—	1	0	12/9/2002 12/9/2002	
		Estuary	27.9	146	1.30	43.5	17	0	3/9/2004 10/13/2004	
Mg-D	mg/L	River (Hwy200 - RR)	4.28	8.90	1.00	1.24	325	0	1/1/1950 12/15/2012	
		River (RR - LR)	5.35	12.0	1.66	1.18	123	0	5/31/1966 2/4/2013	
		Lake (West)	5.08	5.22	4.90	0.105	2	0	7/2/1997 10/12/2010	
		River (Bypass Channel)	4.70	6.00	3.70	0.866	14	0	9/23/1969 6/29/1982	
		Lake (Inglis Dam)	4.57	5.30	3.80	0.905	13	0	3/21/1963 10/12/2010	
		Lake (Inglis Lock)	5.07	650	310	176	3	0	5/21/1976 5/24/1977	
		River (Lower)	5.28	19.0	2.72	0.984	123	0	4/10/1967 2/4/2013	
		Canal	147	517	2.84	317	113	0	1/8/2002 2/4/2013	



Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD	
METAL	Mg-T	mg/L	River (Hwy200 - RR)	5.40	21.8	1.82	7.10	302	0	6/7/1995	2/6/2013
			River (RR - LR)	5.54	40.0	2.40	3.41	142	0	2/4/1982	4/5/2013
			Lake (East)	5.08	6.04	3.00	0.982	9	0	3/2/2004	8/4/2009
			Lake (West)	4.68	6.02	2.28	0.875	60	0	12/15/1992	10/12/2010
			Lake (Inglis Dam)	5.12	5.28	4.96	0.226	2	0	6/1/2010	10/12/2010
			River (LR-CFBC)	16.8	67.1	3.00	11.5	23	0	3/2/2004	12/6/2004
			River (Lower)	6.25	183	2.33	14.7	147	0	12/15/1992	4/3/2012
			Canal	293	293	293	---	1	0	12/9/2002	12/9/2002
			Estuary	96.2	494	5.30	148	17	0	3/9/2004	10/18/2004
			Mn-D	µg/L	River (Hwy200 - RR)	7.45	33.0	0.00	6.23	77	21
River (RR - LR)	5.00	10.0			0.00	7.07	2	0	5/17/1967	5/3/1968	
River (Bypass Channel)	5.00	5.00			5.00	---	1	1	2/1/1978	6/1/1978	
Lake (Inglis Dam)	0.00	0.00			0.00	---	1	0	5/16/1967	5/13/1967	
River (Lower)	0.00	0.00			0.00	---	1	0	5/18/1967	5/18/1967	
Mn-T	µg/L	River (Hwy200 - RR)	14.4	60.0	2.50	13.3	97	15	5/15/1972	8/21/1992	
		River (RR - LR)	4.45	15.2	0.00	5.71	6	0	4/3/1967	8/30/1983	
		River (Bypass Channel)	5.00	5.00	5.00	---	1	1	2/1/1978	6/1/1978	
		River (Lower)	50.0	100	0.00	70.7	2	0	4/3/1967	4/10/1967	
Mn-D	µg/L	River (Hwy200 - RR)	5.00	5.00	5.00	0.00	45	45	11/5/1982	9/7/1995	
Na-D	mg/l	River (Hwy200 - RR)	5.10	11.0	1.80	0.870	507	0	1/1/1950	12/18/2012	
		River (RR - LR)	4.42	6.45	2.20	0.540	121	0	5/21/1966	2/4/2013	
		Lake (West)	4.32	5.10	3.60	0.477	14	0	6/27/1995	10/12/2010	
		River (Bypass Channel)	6.11	15.0	3.20	4.70	10	0	9/25/1969	6/19/1982	
		Lake (Inglis Dam)	4.24	5.20	3.40	0.583	9	0	3/21/1963	10/12/2010	
		River (Lower)	4.59	16.0	3.56	1.22	124	0	5/18/1967	2/4/2013	
		Canal	1,139	4,160	3.74	949	115	0	1/8/2003	2/4/2013	
Na-T	mg/L	River (Hwy200 - RR)	5.50	7.50	3.57	0.764	303	0	6/26/1995	2/6/2013	
		River (RR - LR)	4.52	21.0	2.70	1.56	142	0	1/4/1962	4/3/2012	
		Lake (East)	4.27	4.99	3.76	0.520	9	0	3/2/2004	2/4/2009	
		Lake (West)	3.92	6.40	0.005	1.12	57	2	12/15/1992	10/12/2010	
		Lake (Inglis Dam)	4.75	4.92	4.58	0.240	2	0	6/1/2010	10/12/2010	
		River (LR-CFBC)	110	551	3.62	151	22	0	3/2/2004	12/6/2004	
		River (Lower)	14.0	3,400	2.00	116	146	0	12/15/1992	4/3/2012	
		Canal	2,190	2,190	2,190	---	1	0	12/9/2002	12/9/2002	
		Estuary	473	2,900	1.15	950	17	0	3/9/2004	10/18/2004	
		Ni-D	µg/L	River (Hwy200 - RR)	0.795	5.00	0.00	0.994	45	33	11/27/1979
River (Hwy200 - RR)	0.500			1.00	0.00	0.402	4	3	5/21/1975	9/21/1982	
Pb-D	µg/L	River (Hwy200 - RR)	3.94	100	0.00	16.7	35	26	5/2/1970	3/21/1992	
		River (Bypass Channel)	---	---	---	---	0	1	6/1/1978	6/1/1978	
Pb-T	µg/L	River (Hwy200 - RR)	15.3	200	0.100	57.7	12	13	5/16/1972	7/7/2011	
		River (RR - LR)	1.64	8.00	1.00	1.79	35	6	2/4/1982	9/25/1990	
		Lake (West)	0.00	0.00	0.00	0.00	2	0	8/10/1987	2/10/1987	
		River (Bypass Channel)	---	---	---	---	0	0	6/1/1978	6/1/1978	
SAR	mg/L	River (Hwy200 - RR)	0.198	0.500	0.100	0.035	506	6	1/1/1950	12/18/2012	
		River (RR - LR)	0.150	0.300	0.100	0.055	6	0	5/21/1966	4/14/1981	
		River (Bypass Channel)	0.250	0.600	0.100	0.150	10	0	9/23/1969	6/29/1982	
		Lake (Inglis Dam)	0.171	0.300	0.100	0.049	7	0	3/21/1963	3/23/1966	
		River (Lower)	0.343	0.600	0.250	0.251	8	0	5/18/1967	5/20/1970	
Se-D	µg/L	River (Hwy200 - RR)	0.475	1.00	0.00	0.163	74	67	10/16/1974	9/7/1995	
Se-T	µg/L	River (Hwy200 - RR)	0.597	0.500	0.00	0.206	22	23	10/16/1974	5/31/1982	
Sr-D	µg/L	River (Hwy200 - RR)	300	1,300	190	136	90	0	5/17/1965	12/18/2012	
		River (RR - LR)	243	397	125	105	6	2	5/17/1967	2/3/2005	
		River (Bypass Channel)	202	240	170	24.4	9	0	5/20/1970	6/29/1992	
		Lake (Inglis Dam)	260	260	260	---	1	0	5/18/1967	5/18/1967	
		River (Lower)	221	408	125	117	5	2	5/18/1967	2/3/2003	
		Canal	265	405	125	196	2	1	1/2/2005	2/3/2003	
Sr-T	µg/L	River (Hwy200 - RR)	260	260	260	---	1	0	12/9/1997	12/9/1997	
V-D	µg/L	River (Hwy200 - RR)	3.11	8.00	3.00	0.745	45	44	12/5/1982	9/7/1995	
		River (Hwy200 - RR)	17.7	90.0	1.50	18.8	55	24	5/2/1970	8/21/1992	
Zn-D	µg/L	River (Hwy200 - RR)	10.0	10.0	10.0	---	1	1	6/1/1978	6/1/1978	
		River (Bypass Channel)	10.0	10.0	10.0	---	1	1	6/1/1978	6/1/1978	
Zn-T	µg/L	River (Hwy200 - RR)	19.3	140	0.00	24.8	38	17	5/16/1972	7/7/2011	
		River (RR - LR)	33.5	269	1.00	52.6	32	0	2/4/1982	9/25/1990	
		Lake (West)	0.00	0.00	0.00	0.00	2	0	8/10/1987	8/10/1987	



Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD		
NITROGEN	NH3-N	mg/L	River (Hwy200 - RR)	0.049	0.450	0.0001	0.066	167	10	12/9/1997	2/6/2013	
			River (RR - LR)	0.031	0.230	0.0000	0.023	148	3	6/29/1982	4/5/2013	
			Lake (East)	0.043	0.160	0.022	0.038	12	0	5/2/2004	8/4/2009	
			Lake (West)	0.034	0.180	0.004	0.045	27	10	3/2/2004	10/12/2010	
			Lake (Inglis Dam)	0.004	0.004	0.004	0.00	2	2	6/1/2010	10/12/2010	
			River (LR-CFBC)	0.082	0.230	0.020	0.074	23	0	3/2/2004	12/6/2004	
			River (Lower)	0.051	0.380	0.0001	0.049	142	1	2/23/1993	4/3/2012	
	Estuary	0.076	0.180	0.030	0.056	17	0	3/9/2004	10/18/2004			
	NH4-N	mg/L		River (Hwy200 - RR)	0.038	0.670	0.00	0.061	274	23	9/23/1968	5/4/2010
				River (RR - LR)	0.038	0.230	0.00	0.040	159	5	4/3/1967	2/4/2013
				Lake (West)	0.035	0.170	0.00	0.034	47	14	8/10/1987	10/12/2010
				River (Bypass Channel)	0.044	0.140	0.010	0.025	49	0	5/15/1972	3/2/1983
				Lake (Inglis Dam)	0.134	2.00	0.004	0.401	24	4	5/15/1972	10/12/2010
				Lake (Inglis Lock)	0.106	0.270	0.010	0.067	21	0	5/15/1972	5/24/1977
				River (Lower)	0.050	0.231	0.005	0.029	158	4	4/3/1967	2/4/2013
	Canal	0.048	0.211	0.002	0.042	113	13	12/9/2002	2/4/2013			
	Estuary	0.019	0.015	0.019	---	1	0	7/31/2001	7/31/2001			
	NO2-N	mg/L		River (Hwy200 - RR)	0.007	0.030	0.00	0.005	173	40	7/31/1968	5/4/2010
				River (RR - LR)	0.007	0.093	0.001	0.004	160	33	2/4/1982	2/4/2013
				Lake (West)	0.007	0.012	0.0005	0.004	10	2	12/11/1995	10/12/2010
				River (Bypass Channel)	0.009	0.100	0.00	0.014	49	5	5/15/1972	3/2/1983
				Lake (Inglis Dam)	0.010	0.070	0.002	0.012	26	3	5/15/1972	10/12/2010
				Lake (Inglis Lock)	0.009	0.010	0.002	0.003	21	4	5/15/1972	5/24/1977
				River (Lower)	0.008	0.036	0.0005	0.004	230	28	12/27/1995	2/4/2013
Canal	0.008	0.036	0.002	0.005	116	22	12/9/2002	2/4/2013				
NO3-N-D	mg/L		River (Hwy200 - RR)	0.006	0.020	0.00	0.004	60	44	12/30/1977	12/18/2012	
			Lake (West)	0.003	0.013	0.0005	0.003	16	15	3/14/1996	10/6/1997	
			River (Lower)	0.002	0.005	0.0005	0.002	7	7	3/11/1996	10/2/1997	
NO2-N	mg/L		River (Hwy200 - RR)	0.115	1.60	0.00	0.149	355	0	1/1/1950	10/2/1997	
			River (RR - LR)	0.319	1.04	0.019	0.263	32	0	2/4/1982	9/15/1990	
			Lake (West)	0.270	0.476	0.002	0.146	22	1	12/11/1995	10/6/1997	
			River (Bypass Channel)	0.076	0.250	0.00	0.058	50	0	5/4/1971	3/2/1983	
			Lake (Inglis Dam)	0.079	0.210	0.00	0.077	27	0	3/21/1963	5/20/1977	
			Lake (Inglis Lock)	0.016	0.110	0.00	0.026	21	0	5/15/1972	5/24/1977	
			River (Lower)	0.223	0.474	0.041	0.165	11	0	12/27/1995	10/2/1997	
NO3-N	mg/L		River (Hwy200 - RR)	0.154	0.710	0.00	0.115	406	12	6/27/1974	2/6/2013	
			River (RR - LR)	0.777	2.00	0.140	0.288	244	0	4/3/1967	2/4/2013	
			Lake (East)	0.727	1.00	0.070	0.234	11	0	4/5/2004	2/4/2009	
			Lake (West)	0.292	0.810	0.00	0.118	53	2	12/15/1992	10/12/2010	
			River (Bypass Channel)	0.089	0.330	0.010	0.063	43	0	9/16/1974	3/2/1983	
			Lake (Inglis Dam)	0.066	0.130	0.005	0.051	11	1	9/16/1974	10/12/2010	
			Lake (Inglis Lock)	0.031	0.120	0.010	0.030	16	1	9/16/1974	5/24/1977	
			River (LR-CFBC)	0.272	1.20	0.00	0.239	23	0	3/2/2004	12/6/2004	
			River (Lower)	0.319	1.50	0.002	0.195	273	2	4/3/1967	2/4/2013	
			Canal	0.189	0.485	0.003	0.121	116	1	12/9/2002	2/4/2013	
			Estuary	0.196	0.460	0.012	0.106	23	0	7/31/2001	1/10/2013	
NOx-N-D	mg/L		River (Hwy200 - RR)	0.158	0.380	0.070	0.071	75	13	12/30/1977	12/18/2012	
			OrgN	0.560	3.30	0.00	0.329	125	4	9/23/1968	9/7/1965	
			River (RR - LR)	0.392	1.69	0.00	0.334	34	0	4/30/1970	3/20/1997	
			River (Bypass Channel)	0.337	1.50	0.010	0.269	54	0	9/23/1968	3/2/1983	
			Lake (Inglis Dam)	0.476	1.70	0.160	0.343	30	0	3/23/1969	5/20/1977	
			Lake (Inglis Lock)	0.459	0.350	0.160	0.171	25	0	5/20/1970	5/24/1977	
			River (Lower)	0.330	0.230	0.230	0.00	2	0	5/20/1970	5/24/1977	
TPN	mg/L		River (Hwy200 - RR)	0.740	2.90	0.190	0.468	460	0	6/27/1974	2/6/2012	
			River (RR - LR)	0.374	1.51	0.010	0.245	46	1	4/3/1967	7/25/2007	
			Lake (East)	0.517	1.70	0.170	0.456	11	0	4/5/2004	8/4/2009	
			Lake (West)	0.632	1.80	0.040	0.368	63	1	12/15/1992	10/6/2009	
			River (Bypass Channel)	0.483	0.900	0.040	0.201	43	0	9/16/1974	3/2/1983	
			Lake (Inglis Dam)	0.664	3.70	0.220	0.510	17	0	9/16/1974	5/20/1977	
			Lake (Inglis Lock)	0.495	0.750	0.360	0.113	16	0	9/16/1974	5/24/1977	
			River (LR-CFBC)	0.875	1.80	0.310	0.467	23	0	3/2/2004	12/6/2004	
			River (Lower)	0.600	1.52	0.140	0.252	55	0	4/3/1967	7/24/2007	
			Estuary	0.306	1.60	0.555	0.402	20	1	3/9/2004	1/10/2013	
TPN-D	mg/L	River (Hwy200 - RR)	0.592	1.60	0.060	0.340	44	0	2/22/1978	12/18/2012		

Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD		
NITROGEN	TN	mg/L	River (Hwy200 - RR)	0.844	3.40	0.160	0.433	292	10	9/23/1968 3/11/2012		
			River (RR - LR)	1.18	2.30	0.620	0.220	377	0	3/30/1997 2/4/2013		
			Lake (East)	0.906	1.61	0.220	0.238	92	0	12/1/1996 1/25/2010		
			Lake (West)	0.792	2.28	0.230	0.357	171	0	6/17/1996 10/12/2010		
			River (Bypass Channel)	0.554	1.70	0.120	0.271	43	0	5/15/1972 3/2/1983		
			Lake (Inglis Dam)	0.677	3.80	0.300	0.678	26	0	5/15/1972 10/12/2010		
			Lake (Inglis Lock)	0.566	0.950	0.390	0.141	21	0	5/15/1972 5/24/1977		
			River (Lower)	0.661	2.05	0.030	0.299	1,410	0	3/15/1990 2/4/2012		
			Canal	0.718	1.69	0.170	0.274	116	0	12/9/2002 2/4/2013		
			Estuary	0.592	2.00	0.200	0.280	135	0	11/19/1996 12/23/2009		
			OXYGEN DEMAND	BOD5	mg/L	River (Hwy200 - RR)	0.828	2.76	0.00	0.577	94	0
River (RR - LR)	1.16	6.20				0.100	0.905	53	2	4/3/1967 7/5/1995		
Lake (East)	0.973	2.90				0.100	0.572	33	0	4/3/1967 9/1/2009		
Lake (West)	1.64	2.70				0.990	0.595	10	0	2/10/2003 10/6/2009		
River (Bypass Channel)	1.01	2.40				0.200	0.524	60	0	9/23/1969 9/25/1990		
Lake (Inglis Dam)	1.17	2.90				0.300	0.606	93	0	4/3/1967 3/25/1990		
Lake (Inglis Lock)	1.35	4.10				0.200	0.849	25	0	5/20/1970 5/24/1977		
River (Lower)	1.37	2.70				0.800	0.474	30	1	4/3/1967 7/5/1995		
rBOD5	mg/L	River (Hwy200 - RR)				0.327	2.40	0.100	0.279	12	1	3/23/2004 10/11/2004
		Lake (East)				1.03	3.10	0.100	1.35	4	1	3/2/2004 10/5/2004
		Lake (West)				1.61	4.20	0.310	1.58	8	0	9/2/2004 10/5/2004
		River (LR-CFBC)		0.825	2.60	0.100	0.924	22	4	8/2/2004 12/6/2004		
		River (Lower)		0.673	2.12	0.100	0.570	12	4	3/9/2004 10/18/2004		
		Estuary		0.978	2.32	0.100	0.712	17	2	3/9/2004 10/18/2004		
		COD		mg/L	River (RR - LR)	15.0	15.0	15.0	---	1	0	2/4/1982 2/4/1982
					River (Bypass Channel)	11.0	11.0	11.0	---	1	0	2/4/1982 2/4/1982
Lake (Inglis Dam)	2.00				2.00	2.00	---	1	0	2/4/1982 2/4/1982		
PHOSPHORUS	OrthoP	mg/L		River (Hwy200 - RR)	0.034	2.50	0.00	0.117	476	21	5/23/1963 12/18/2012	
				River (RR - LR)	0.032	0.165	0.003	0.022	240	2	2/4/1982 2/4/2013	
			Lake (East)	0.050	0.190	0.011	0.059	8	0	3/2/2004 8/4/2009		
			Lake (West)	0.027	0.210	0.002	0.037	61	15	8/22/1996 10/12/2010		
			River (Bypass Channel)	0.026	0.090	0.006	0.016	77	0	5/15/1972 9/25/1990		
			Lake (Inglis Dam)	0.036	0.700	0.003	0.089	60	4	3/21/1963 10/12/2010		
			Lake (Inglis Lock)	0.056	0.100	0.020	0.021	21	0	5/15/1972 5/24/1977		
			River (LR-CFBC)	0.076	0.240	0.005	0.031	23	0	3/2/2004 12/6/2004		
			River (Lower)	0.027	0.192	0.003	0.028	281	31	1/5/1984 2/4/2013		
			Canal	0.026	0.187	0.003	0.027	115	13	12/9/2002 2/4/2013		
			Estuary	0.038	0.150	0.014	0.022	52	0	1/5/1984 10/18/2004		
			TDP	mg/L	River (Hwy200 - RR)	0.077	2.50	0.005	0.310	103	6	12/30/1977 12/18/2012
			TP	mg/L	River (Hwy200 - RR)	0.059	2.20	0.00	0.130	631	4	5/3/1963 2/6/2012
	River (RR - LR)	0.061			0.396	0.010	0.051	370	0	2/4/1982 2/4/2013		
	Lake (East)	0.046			0.350	0.024	0.035	154	0	12/1/1996 1/25/2010		
	Lake (West)	0.061			0.361	0.002	0.053	238	5	12/15/1992 10/12/2010		
	River (Bypass Channel)	0.041			0.090	0.015	0.016	49	0	5/15/1972 5/2/1992		
	Lake (Inglis Dam)	0.077			0.740	0.014	0.141	26	0	5/15/1972 10/12/2010		
Lake (Inglis Lock)	0.076	0.150			0.018	0.034	21	0	5/15/1972 5/24/1977			
River (LR-CFBC)	0.125	0.340			0.028	0.106	25	0	9/2/2004 12/6/2004			
River (Lower)	0.047	0.269			0.009	0.026	1,467	2	3/15/1990 2/4/2012			
Canal	0.062	0.266			0.023	0.033	115	0	12/3/2002 2/4/2013			
Estuary	0.071	0.372			0.015	0.051	154	0	11/19/1996 1/10/2012			
PHYSICAL	Alk-D	mg/L as CaCO3			River (Hwy200 - RR)	121	159	76.0	16.6	19	0	11/12/1957 12/18/2012
	Color	PCU			River (Hwy200 - RR)	83.1	600	0.0	90.0	593	5	1/1/1950 2/6/2013
					River (RR - LR)	67.4	400	0.00	78.8	280	14	5/31/1966 2/4/2013
					Lake (East)	34.6	500	5.00	52.7	26	0	4/4/1967 3/4/2009
			Lake (West)	70.7	500	2.50	90.6	115	2	12/15/1992 10/12/2010		
			River (Bypass Channel)	45.6	280	0.00	47.9	63	0	9/25/1969 9/25/1990		
			Lake (Inglis Dam)	46.3	250	0.00	49.1	79	0	5/21/1963 10/12/2010		
			Lake (Inglis Lock)	20.4	20.0	0.00	19.2	26	0	5/20/1970 5/24/1977		
			River (LR-CFBC)	39.6	300	10.00	95.9	25	0	3/2/2004 12/6/2004		
			River (Lower)	55.1	400	2.50	77.7	690	12	4/4/1967 2/4/2012		
			Canal	55.9	350	5.00	74.9	116	1	12/9/2002 2/4/2013		
			Estuary	52.7	365	4.00	65.6	125	0	1/5/1964 1/10/2013		



Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD			
PHYSICAL	Depth	m	River (Hwy200 - RR)	1.25	4.52	0.050	0.868	255	0	9/16/1992 10/12/2010			
			River (RR - LR)	1.80	6.08	0.500	1.22	386	0	2/25/1993 4/2/2013			
			Lake (West)	1.63	5.00	0.100	0.330	140	0	12/15/1992 10/12/2010			
			Lake (Inglis Dam)	1.42	2.60	0.500	0.799	6	0	6/1/2010 10/12/2010			
			River (Lower)	1.97	6.00	0.250	1.64	901	0	12/15/1992 4/2/2013			
			Canal	1.64	3.62	0.500	0.934	369	0	12/9/2002 4/2/2013			
			Estuary	0.583	1.90	0.025	0.418	221	0	11/19/1996 12/29/2009			
	ORP	mV	River (RR - LR)	233	420	133	32.8	31	0	2/4/1982 9/25/1990			
			River (Bypass Channel)	232	403	122	83.4	28	0	2/4/1962 9/25/1990			
			Lake (Inglis Dam)	219	391	124	81.6	31	0	2/4/1962 9/25/1990			
	pH	SU	River (Hwy200 - RR)	7.46	8.50	6.42	0.257	372	0	1/1/1950 2/6/2013			
			River (RR - LR)	7.47	8.40	5.20	0.320	622	0	5/31/1966 4/2/2013			
			Lake (East)	7.46	8.22	6.93	0.222	43	0	4/3/1967 5/4/2009			
			Lake (West)	7.52	5.72	5.91	0.610	110	0	12/15/1992 10/12/2010			
			River (Bypass Channel)	7.42	6.40	6.00	0.552	109	0	9/23/1969 9/25/1990			
			Lake (Inglis Dam)	7.64	8.94	6.16	0.473	153	0	3/21/1962 10/12/2010			
			Lake (Inglis Lock)	7.54	8.20	7.00	0.271	26	0	5/20/1970 5/24/1977			
			River (LR-CFBC)	7.47	7.96	6.95	0.274	28	0	3/2/2004 12/6/2004			
			River (Lower)	7.81	5.09	5.70	0.403	947	0	4/3/1967 4/2/2013			
			Canal	7.63	8.42	6.36	0.284	351	0	12/9/2002 4/2/2013			
			Estuary	7.86	2.90	5.70	0.392	532	0	11/16/1988 11/15/2012			
			Salinity	ppt	River (Hwy200 - RR)	0.154	0.400	0.00	0.062	165	0	6/26/1965 10/12/2010	
					River (RR - LR)	0.142	0.210	0.080	0.025	320	0	12/9/2002 4/3/2012	
	Lake (East)	0.133			0.160	0.030	0.020	10	0	3/2/2004 3/4/2009			
	Lake (West)	0.120			0.200	0.090	0.026	65	0	6/27/1995 10/12/2010			
	Lake (Inglis Dam)	0.135			0.140	0.130	0.005	6	0	6/1/2010 10/12/2010			
	River (LR-CFBC)	1.44			12.1	0.090	5.16	26	0	3/2/2004 12/6/2004			
	River (Lower)	2.03			25.5	0.00	5.12	225	0	6/27/1995 4/3/2012			
	Canal	6.07			22.8	0.060	7.04	76	0	12/9/2002 12/5/2005			
	Estuary	7.69			50.1	0.060	7.57	502	0	11/16/1988 11/15/2012			
	SpCond	umho/cm			River (Hwy200 - RR)	319	893	102	92.2	1,299	0	1/1/1950 2/6/2013	
					River (RR - LR)	252	804	70.0	51.7	817	0	5/31/1966 4/2/2013	
					Lake (East)	202	377	184	32.9	46	0	4/3/1967 8/4/2009	
					Lake (West)	270	712	45.0	61.4	168	0	12/15/1992 10/12/2010	
			River (Bypass Channel)	263	530	170	46.4	113	0	9/23/1969 9/25/1990			
			Lake (Inglis Dam)	407	11,300	155	699	221	0	3/21/1965 10/12/2010			
			Lake (Inglis Lock)	15,378	28,600	632	6,940	26	0	5/20/1970 5/24/1977			
			River (LR-CFBC)	2,476	20,399	185	5,398	25	0	3/2/2004 12/6/2004			
			River (Lower)	506	17,638	151	1,468	666	0	4/3/1967 4/2/2013			
			Canal	14,973	42,567	121	11,275	252	0	12/9/2002 4/2/2013			
			Estuary	18,890	44,500	216	11,565	348	0	1/5/1984 10/4/2011			
			Turb	NTU	River (Hwy200 - RR)	1.78	10.0	0.00	1.41	525	2	6/27/1966 2/6/2013	
					River (RR - LR)	0.566	14.0	0.040	1.24	273	68	5/26/1971 4/4/2013	
	Lake (East)	1.44			5.30	0.450	1.35	11	0	3/2/2004 8/4/2009			
	Lake (West)	2.50			14.0	0.100	2.61	115	0	12/15/1992 10/12/2010			
	River (Bypass Channel)	2.25			27.0	0.100	3.76	79	0	9/23/1969 9/25/1990			
	Lake (Inglis Dam)	4.61			90.0	0.00	11.3	68	0	9/23/1968 10/12/2010			
	Lake (Inglis Lock)	8.08			25.0	2.00	5.36	25	0	5/20/1970 5/24/1977			
	River (LR-CFBC)	1.56			4.30	0.600	1.06	23	0	3/2/2004 12/6/2004			
	River (Lower)	1.22			5.28	0.003	1.11	300	41	5/20/1970 4/4/2013			
	Canal	2.71			21.0	0.040	3.42	115	19	12/9/2002 2/6/2013			
	Estuary	7.52			100	0.00	12.3	596	0	11/16/1988 3/7/2012			
	SOLID	TDS			mg/L	River (Hwy200 - RR)	393	512	0.805	60.0	901	0	1/1/1950 2/6/2013
						River (RR - LR)	185	280	1.7	27.2	269	0	5/31/1966 4/4/2013
			Lake (East)	173		210	145	15.5	9	0	3/2/2004 3/4/2009		
			Lake (West)	166		356	2.33	43.5	54	0	6/27/1995 10/6/2009		
			River (Bypass Channel)	154		267	104	24.5	20	0	9/23/1969 6/29/1982		
			Lake (Inglis Dam)	150		216	62.0	36.0	12	0	3/21/1962 9/25/1990		
			River (LR-CFBC)	307		1,920	1.12	397	28	0	3/2/2004 12/6/2004		
			River (Lower)	178		254	1.77	29.5	263	0	5/12/1967 2/4/2013		
			Canal	3,260		14,300	147	2,190	117	0	12/9/2002 2/4/2013		
			Estuary	1,554		10,800	1.02	2,595	17	0	3/9/2004 10/18/2008		



Lower Withlacoochee River Study

Appendix A-2. Water Quality Summary within the Lower Withlacoochee River

PARAMETER GROUP	PARAMETER	UNITS	STATION GROUP	AVERAGE	MAXIMUM	MINIMUM	STDDEV	N	N BDL	PERIOD OF RECORD
SOLID	TSS	mg/L	River (Hwy200 - RR)	3.11	74.0	0.005	4.62	302	200	6/26/1995 2/6/2013
			River (RR - LR)	1.64	16.0	0.240	1.97	269	9	3/4/1982 2/4/2013
			Lake (East)	9.00	7.00	2.00	2.00	9	7	3/2/2004 8/4/2003
			Lake (West)	4.96	85.8	0.369	10.8	66	20	12/15/1992 10/12/2010
			Lake (Inglis Dam)	6.96	9.58	4.53	2.50	4	0	6/1/2010 10/12/2010
			River (LR-CFBC)	2.79	7.00	2.00	1.75	28	23	3/2/2004 12/6/2004
			River (Lower)	1.96	15.0	0.960	1.73	275	28	12/15/1992 2/4/2013
			Canal	4.96	46.4	0.250	6.55	117	2	12/9/2002 2/4/2013
			Estuary	8.65	40.0	2.00	9.61	17	4	3/3/2004 10/18/2004
			TEMPERATURE	Wtr Temp	C	River (Hwy200 - RR)	23.0	33.1	10.0	4.90
River (RR - LR)	22.9	32.0				11.0	3.12	792	0	1/6/1967 4/2/2013
Lake (East)	25.7	31.9				19.3	2.12	44	0	4/3/1967 8/4/2009
Lake (West)	23.6	30.4				14.5	4.50	140	0	12/15/1992 10/12/2010
River (Bypass Channel)	24.2	30.5				13.7	4.28	109	0	9/23/1989 9/25/1990
Lake (Inglis Dam)	23.9	32.0				16.5	4.67	209	0	5/31/1966 10/12/2010
Lake (Inglis Lock)	25.8	31.5				15.0	4.13	32	0	5/20/1970 5/24/1977
River (LR-CFBC)	23.6	29.8				16.6	4.99	28	0	3/2/2004 12/6/2004
River (Lower)	23.6	32.4				10.3	5.23	1,042	0	4/3/1967 4/2/2013
Canal	25.4	31.8				11.4	5.42	253	0	12/9/2002 4/2/2013
Estuary	25.3	34.3				9.60	5.39	1,641	0	11/16/1993 11/15/2012

Appendix B

Historic Imagery of Lake Rousseau

Lower Withlacoochee River Study

Appendix B. Historic imagery of Lake Rousseau (Source: UF George A Smathers Library - Digital Collections)



Lower Withlacoochee River Study

Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



Lower Withlacoochee River Study

Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



Lower Withlacoochee River Study

Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



Appendix B. Historic imagery of Lake Rousseau (Source: Google Earth)



INGLIS

Population (2010) = 1,325

(2000) = 1,501

% change = -11.73

Housing units = 823

Vacant = 203 (25%)

Residents below poverty level (2013) = 22.3%

Business patterns:

50 establishments (2013)

480 employees

Retail trade (11 total) followed by construction (9) and accommodation/food services (6) largest employers

YANKEETOWN

Population (2010) = 502

2000 = 629

% change = -20.19

Population below poverty level = 12.5%

Housing units = 466

Vacant = 226 (48.5%)

Business patterns:

6 establishments (2013)

11 employees

Healthcare/social assistance (2) largest employer, followed by retail, arts/entertainment, accommodation/food, real estate

LEVY COUNTY

2010 population = 40,801

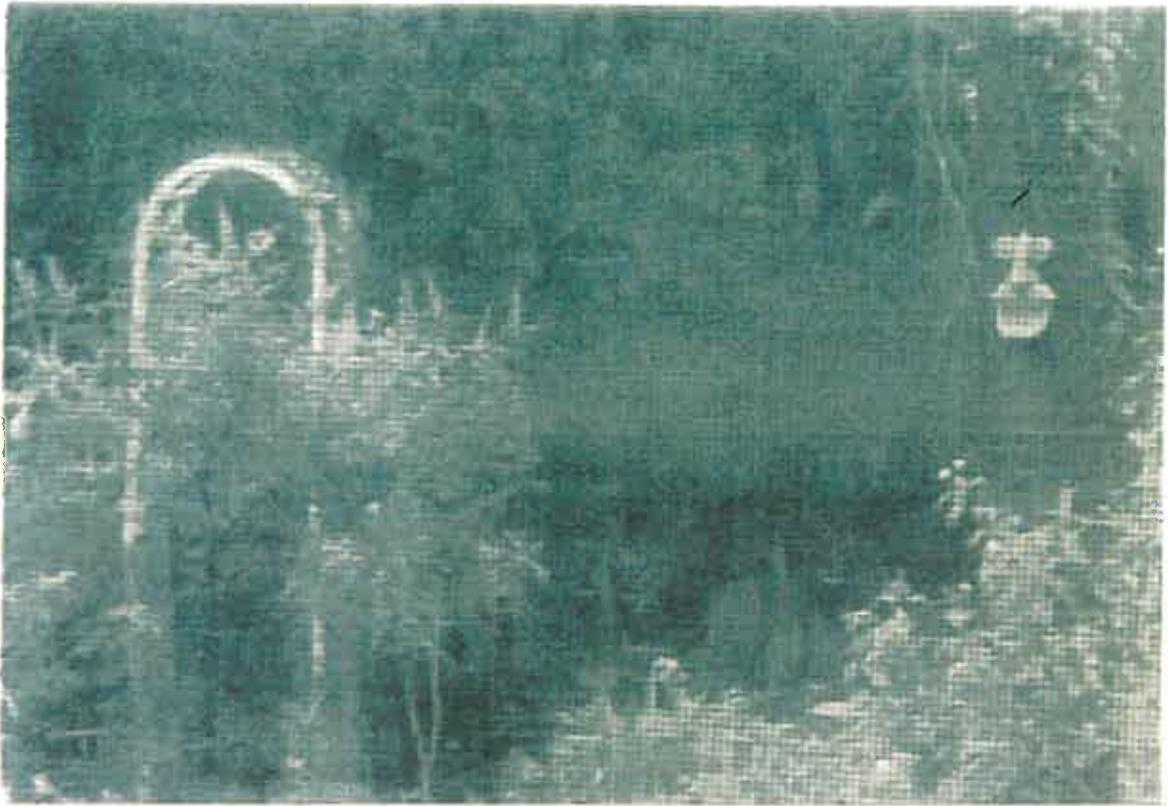
2000 = 34,460

% change = 18.40

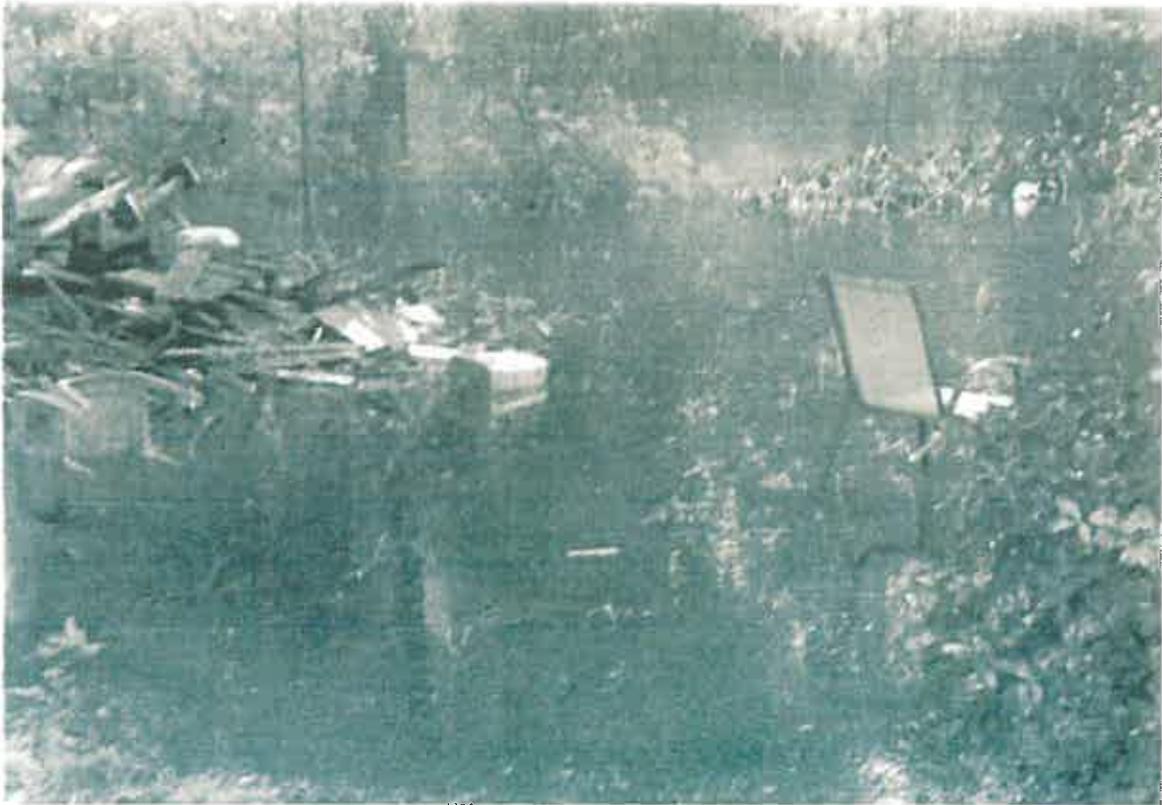
C40A



C40A



C40A



SE 193 PL







Riverside Drive





=: hello

Wilbur Dean
Anne Brown
Carl - Mozzuc
446-0137
447-6016

Subject: Re: hello
From: ELDRIDGE FOWLER <eldridgefowler@bellsouth.net>
Date: 9/18/2015 6:49 PM
To: Pam Willis <pam@campwillis.com>, "jim.mashburn@yahoo.com"
<jim.mashburn@yahoo.com>

OK, Thanks, I will look for a possible date. Review this and see if you notice any mistakes, make any changes you deem necessary.

My 9/14/15 0830 hrs.

Eldridge Fowler, Gary Jones, Jim Mashburn and Pam Willis met with county officials Wilbur Dean and county attorney Anne Brown.

The county provided 5 pages of which only one really pertained to the Project #13 ditch of 1961-62. That page was one paragraph long and did provide limited information.

Anne stated she could not do anymore research until she had more direction from the commissioners. She also said the definition I provided of the word "PUBLIC" really did not or may not apply in our specific reference to the printed statement on plat map of the Foxwood subdivision. The definition I provided came from the dictionary but she was inferring legally the word may mean just the people of Yankeetown.

Wednesday 9/16/15 Afternoon

Eldridge Fowler, Jim Mashburn and Pam Willis met in Inglis with FDOT officials from the Chiefland office. We toured the exact same areas we intend on showing county officials tomorrow (see below).

The DOT officials were extremely willing to assist us in obtaining more information about the #13 ditch. Their intent was to go back to Chiefland and provide resources to obtain the information and then get that information to us. They did not deny or confirm who may have dug the ditch in 1961-62. As of this time DOT officials

have been the most co operable and willing to research who actually dug the ditch.

Thursday 9/17/2015 0730hrs.

Eldridge Fowler, Gary Jones, Jim Mashburn and Pam Willis met with county officials Mike Joyner and Wilbur Dean.

We toured the big box culverts on US 19 north of C-40A, culverts ¼ mile north of C40A on Butler road, culverts on Maple Ridge/Stephens road, and observed a small bottleneck 5ft. wide in Foxwood subdivision. This was all relating to the mosquito control ditch Project #13 dug in 1961-62.

It appeared both county officials recognized we had a justified serious problem and realized pretty much what would be required in order to reduce the flooding of the Yankeetown/Inglis area. The following actions were to take place:

1. Wilbur Dean will meet with county attorney Anne Brown to authorize her to proceed with obtaining information as to who previously dug the ditch in 1961-62.
2. Possible options to funding will be looked into or at least contemplated. It was stated the county does not have the money and would have to consider other state and federal agency's to do the funding or grants.
3. Wilbur Dean will provide the same tour to John Meeks to help him better understand our concern and observe the problem for himself.
4. Mr. Joyner made it clear any action such as actual cleaning or digging on the ditch is a long time off. And who will actually be responsible for doing that work will take time to determine.
5. Everyone agreed that for the time being it is not necessary for us to attend another county commissioners meeting. Our group will on our own still pursue any related Information we can from the town of Yankeetown and Inglis, Florida DOT or any other

source available.

6. Everyone agreed that once we obtain a little more information it would be very advantageous to support Levy County by writing personal letters to our state representatives, Ted Yoho and Charlie Dean, Perhaps even the governor Rick Scott.

7. Mike and Wilbur were wondering if there was any way for them to find out a possible cost estimate on fixing the ditch.

8. Our group on our once we obtain more information will consider setting up a meeting with DAB Contractors to see if they are interested in giving an estimate on the ditch repairs.

9. Our group will still research right-of-way on plum creek property.

Senator Charles S. "Charlie" Dean

Capitol Office:

311 Senate Office
Building
404 South Monroe Street
Tallahassee, FL
32399-1100
Phone: (850) 487-5005

District Office:

315 Southeast 25th Avenue
Ocala , FL 34471-2689
Phone: (352) 873-6513

Representative Theodore Scott Yoho

Washington Office:

511 Cannon House Office Building
Washington, DC 20515
Phone: (202) 225-5744

On Friday, September 18, 2015 1:46 PM, Pam Willis <pam@campwillis.com> wrote:

Hey there, heres my address, and i also found the petition for a few years back, but there is no date on it, so maybe you can look on your computer for a date!

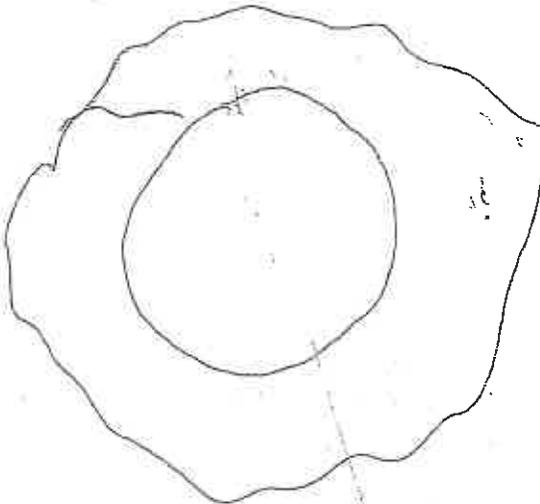
Thanks
Pam

LEVY COUNTY MOSQUITO CONTROL
Bronson, Florida

Proposed Permanent Project No. 13,
Inglis - Yankeetown, for fiscal year 1960 - 61

This project is located in the Inglis-Yankeetown area and will extend about $\frac{1}{2}$ miles from U.S. 19 eastward, north of and roughly parallel to Fla. 60 and will run into Savas Creek and Kithiawachee Bay. This is a series of natural low areas through fresh water swamps. This area when flooded by rains backs water into populated areas of Inglis and Yankeetown and breeds mosquitoes. The soil conditions are muck, sand, and in some areas lime rock.

It is proposed to use the district's bull dozer and backhoe and to contract use of a $\frac{3}{4}$ yd. dragline to accomplish this job. This is provided in the budget for this year. Total length of ditch is approximately $\frac{1}{2}$ miles with additional laterals as needed. Ditches will be about 12 ft. wide on upper end and 16-20 ft. on lower end.



homes and other structures are included. A detailed operation and maintenance plan is also provided.

1.1 Characterization of Existing Drainage System

As mentioned, there is little in the way of drainage infrastructure for Yankeetown. There are no closed drainage systems, nor are there very many roadside swales and culverts. Based on SINGHOFEN & ASSOCIATES', INC. (SAI) numerous site visits to the area and a thorough review of aerial photogrammetry, field surveys, personal accounts of residents and other available information, the drainage system can be characterized into three classes. Figure 1.2 depicts the general geographic boundaries of each drainage class. These are described in the following sections.

1.1.1 Class I Drainage

Class I drainage areas include lands immediately adjacent to the Withlacoochee River. Drainage to the river is either by direct overland sheetflow or by sheetflow to large finger canals connected directly to the river. Water levels in the canals are expected to be the same as the river. Class I drainage areas may include small isolated flooding problems in depressions or experience backwater effects from the Withlacoochee River.

1.1.2 Class II Drainage

Class II drainage areas are upland areas with no defined positive outfall. Drainage is generally overland to low-lying depression areas. Stormwater collects in these depressions and must either percolate and/or evaporate. High water table conditions will aggravate flooding conditions by reducing storage and potentially damaging roads.

Site inspections and a thorough review of the aerial photogrammetry indicate that Yankeetown has many small isolated depression areas. Hydraulic connections from these isolated depressions (should they fill and spill over to other areas) depend on topographic features, storage characteristics, physical features and the rate and amount of stormwater runoff entering and leaving each depression.

1.1.3 Class III Drainage

Class III drainage areas include those areas served by a positive outfall or drainage way. A small canal or ditch, north of County Road 40A, was constructed in 1960 and 1961 for mosquito control and drainage purposes. This ditch is shown in Figure 1.2 and is referred to as "Project 13". Based on memoranda, newspaper articles and personal accounts, the area north of County Road 40A apparently flowed south through Yankeetown and into the Withlacoochee River. Project 13 intercepted most of this flow and directed it to the Gulf of Mexico. County Road 40A was constructed some

time after 1966 according to notes provided to SAI from Yankeetown officials, and further inhibited southerly flow.

Subsequent to the completion of Project 13, a lateral ditch (Project 13-B) was constructed to drain a low area (approximately 20 acres) immediately south of County Road 40. Apparently the low area held water about six months each year and was thought to be a heavy breeder of freshwater mosquitoes. Project 13-B was approved by the State Board of Health on January 18, 1965 and constructed shortly thereafter.

Based on notes provided to SAI from Yankeetown officials, the Knotts family constructed a drainage ditch that runs north and south between County Roads 40 and 40A prior to 1966. This ditch connects to Project 13 to the north. Other drainage features constructed in the 60's according to these notes include Lake Richard and Lake Sadie. Lake Richard was apparently dug by the Knott's family to alleviate flooding on Riverside Drive. It is located between 56th and 59th Streets south of County Road 40. Lake Sadie is bounded by County Road 40 on the north and Riverside Drive on the south between 66th and 67th Streets.

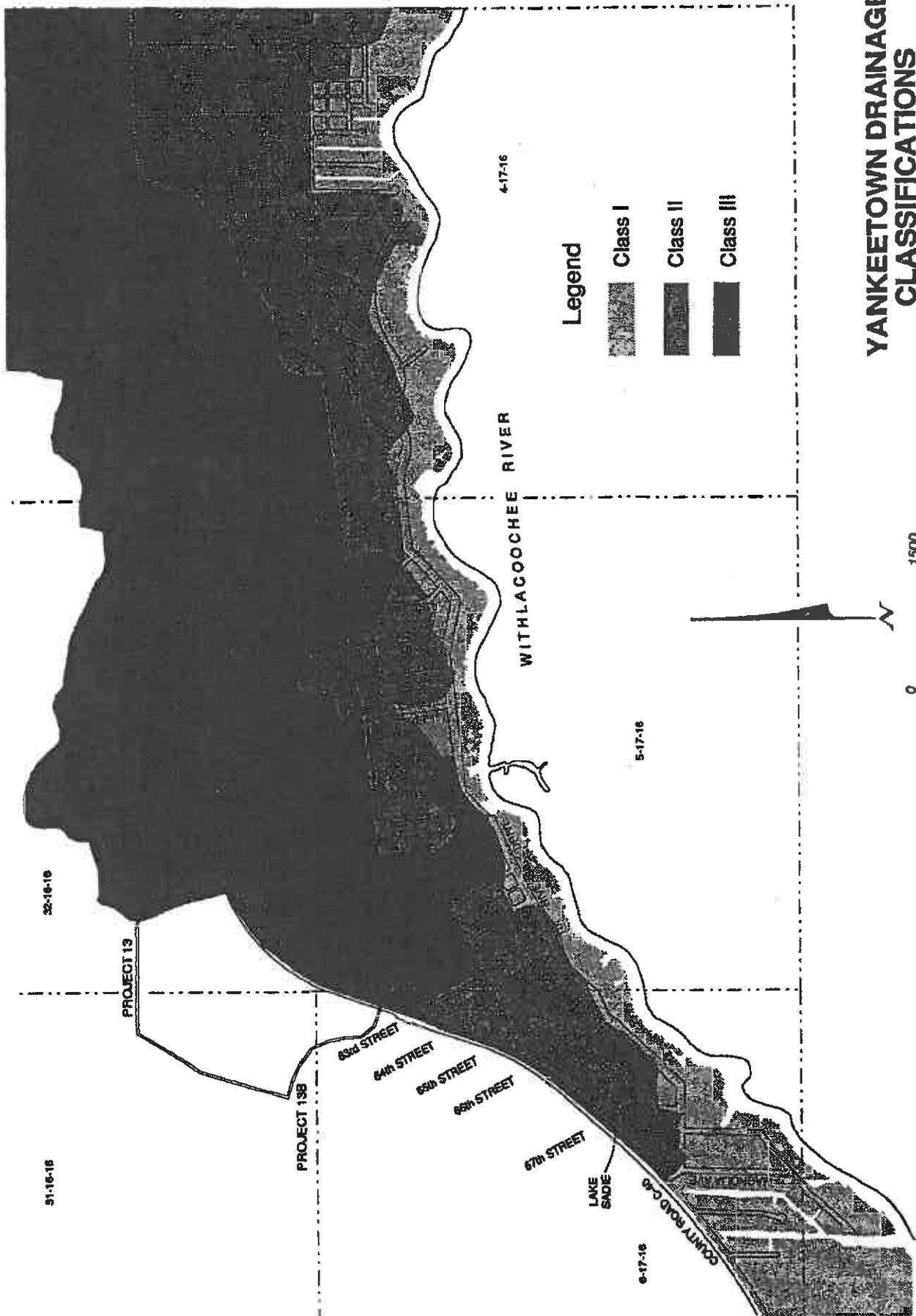
1.2 Topography

Yankeetown is gently sloped from east to west. Elevations range from about 10 feet NGVD at the eastern edge of town to sea level on the coast. The Southwest Florida Water Management District (SWFWMD) has aerial topography (photogrammetry) available for Yankeetown at 1-inch equals 200 feet scale and 1-foot contour intervals.

A review of the SWFWMD photogrammetry reveals that Yankeetown proper can be grouped into four topographic categories as shown in Figure 1.3. The first category covers all areas below elevation 6 feet NGVD. The southwestern portion of Yankeetown proper falls into this category. These areas are subject to frequent inundation due to abnormal tidal surge. Tidal records for the Withlacoochee River near Yankeetown indicate that flood levels exceed 5 feet NGVD 10 out of 21 years or almost 50 percent of all years for which records were kept. A detailed discussion of tidal surge, past floods and flood frequencies is presented in Chapter 2.

The second topographic category corresponds to all lands between elevations 6 and 8 feet NGVD. Most of the land north of County Road 40 between 63rd Street and the eastern corporate limit fall into this category. This area gently undulates between 6 and 8 feet NGVD. The undulations are aligned in a north south direction. Flooding of these areas occurs mostly from excessive rainfall rather than tidal surges. Most of this land category has a high water table and is poorly drained.

Areas greater than elevation 8 feet NGVD are generally located east of 56th Street and south of County Road 40. Approximately 60 percent of this area is between 8 feet NGVD and 10 feet NGVD. The remaining 40 percent of the land in this area



YANKEETOWN DRAINAGE CLASSIFICATIONS

Figure 1.2

Additional Options

Search Sales

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Area Tool

Measure

Center On Parcel

Zoom To Parcel

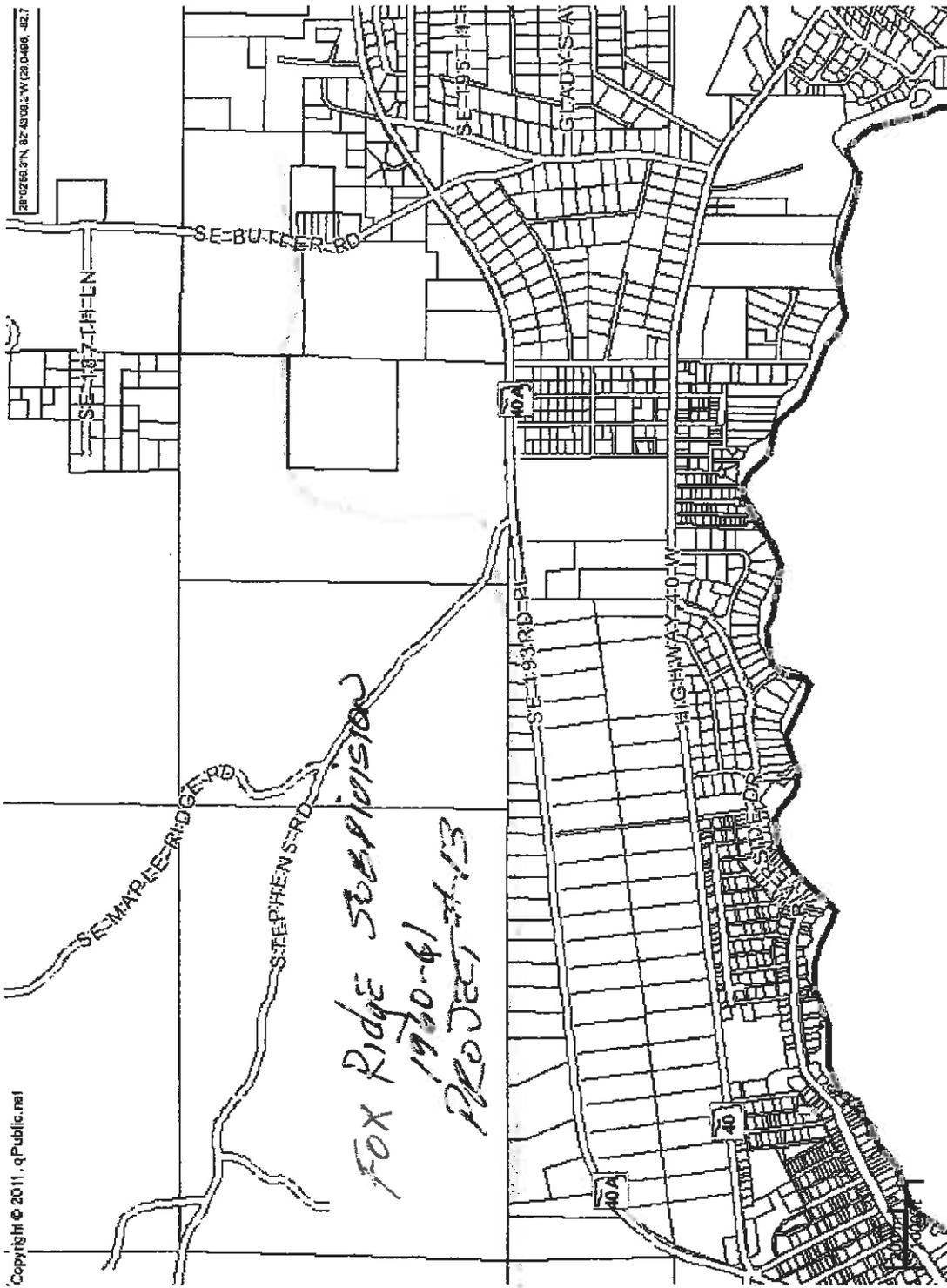
Get Info

Print Map

Zoom In

Zoom Out

Home

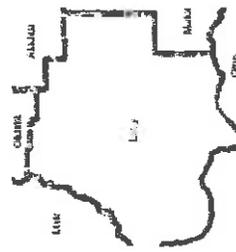


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Controls

Available Layers

- Parcels
- Parcel Numbers
- Lakes & Rivers
- Roads
- Railroads
- Yearly Sales
- Sec-Twn-Rng
- Block
- Lot
- Dimensions
- Voting Precincts
- Commissioner Districts
- School Board Districts
- Aerials (2013)
- Aerials (2011)



Show Scale

*FOX RIDGE SUBDIVISION
1960-61
PROJECT #13*

Levy County makes every effort to produce the most accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use or interpretation. The assessment information is provided for informational purposes only. The assessment information is not to be used for any other purpose. The assessment information is not to be used for any other purpose. The assessment information is not to be used for any other purpose.

DRAINAGE DITCH

Plant #
()

SCHEDULE B

6
Agent/Brai
(B152*15)

Policy Number: 182698

This policy does not insure against loss or damage by reason of the following exceptions:

1. Rights or claims of parties in possession not shown by the Public Records.
2. Encroachments, overlaps, boundary lines disputes, and other matters which would be disclosed by and accurate survey and inspection of the premises.
- ~~3.~~ Easements or claims of easements not shown by the Public Records.
4. Taxes or special assessments which are not shown as existing liens by the Public Records.
5. Taxes and assessments for the year 1991 and subsequent years.
6. Restrictions, easements and limitations, not voided by law, as contained in instrument dated September 18, 1989, filed September 19, 1989 and recorded in Official Record Book 369, page 317 of the Public Records of Levy County, Florida.
7. Thirty foot (30.0') drainage easement as shown on plat of subject property as recorded in Plat Book 8, page 21, Public Records of Levy County, Florida.
8. Building set-back requirements as shown on plat of subject property as recorded in Plat Book 8, page 21, Public Records of Levy County, Florida.
9. Riparian and/or littoral rights are not guaranteed or insured and title to no portion of the herein described land lying below ordinary high water marks of the canal, or within any portion of the herein described land which has been dredged and filled, is hereby insured; also subject to the rights of the State and Federal Government.

NOTE: This policy consists of Insert pages labeled Schedules A and B. This policy is of no force and effect unless all pages are included along with any added pages incorporated by reference.

() Original

() Home Office Copy

() Agent's Copy

() Plant Copy

Copy from U.S. Eldridge Fowler 7
Page 1 of 3

SECTION 34050-2510
STATE ROAD 55(U. S. 19)
COUNTY Levy
FAP NO.

ask about
weed killer

~~DRAINAGE EASEMENT~~ CULVERTS ON US19

THIS EASEMENT made this 17th day of August, A. D. 1971,

between Georgia-Pacific Corporation, a Georgia Corp.

a corporation organized and existing under the laws of the State of _____, as the first party, and the STATE OF FLORIDA, for the use and benefit of the State of Florida Department of Transportation, as party of the second part.

WITNESSETH: That the first party, in consideration of the sum of One Dollar and other valuable considerations paid, the receipt of which is hereby acknowledged, hereby grants unto the second party, its successors and assigns, a perpetual easement and right of way for the purpose of clearing, excavating, ~~constructing and maintaining~~ ~~canals and drainage ditches~~ and drains in, upon and through the following described land in Levy County, Florida, to-wit:

SECTION 34050-2510 STATE ROAD NO. 55 (U. S. 19) LEVY COUNTY

PARCEL NUMBER 800 DRAINAGE EASEMENT

LATERAL DITCH LEFT OF STATION 224+76.91

That part of:

N 1/2 of NW 1/4 of Section 35, Township 16 South, Range 16 East, and S 1/2 of SW 1/4 of SW 1/4 of Section 26, Township 16 South, Range 16 East,

Lying left of and within 65 feet and right of and within 25 feet of a lateral ditch survey line, said survey line being described as follows:

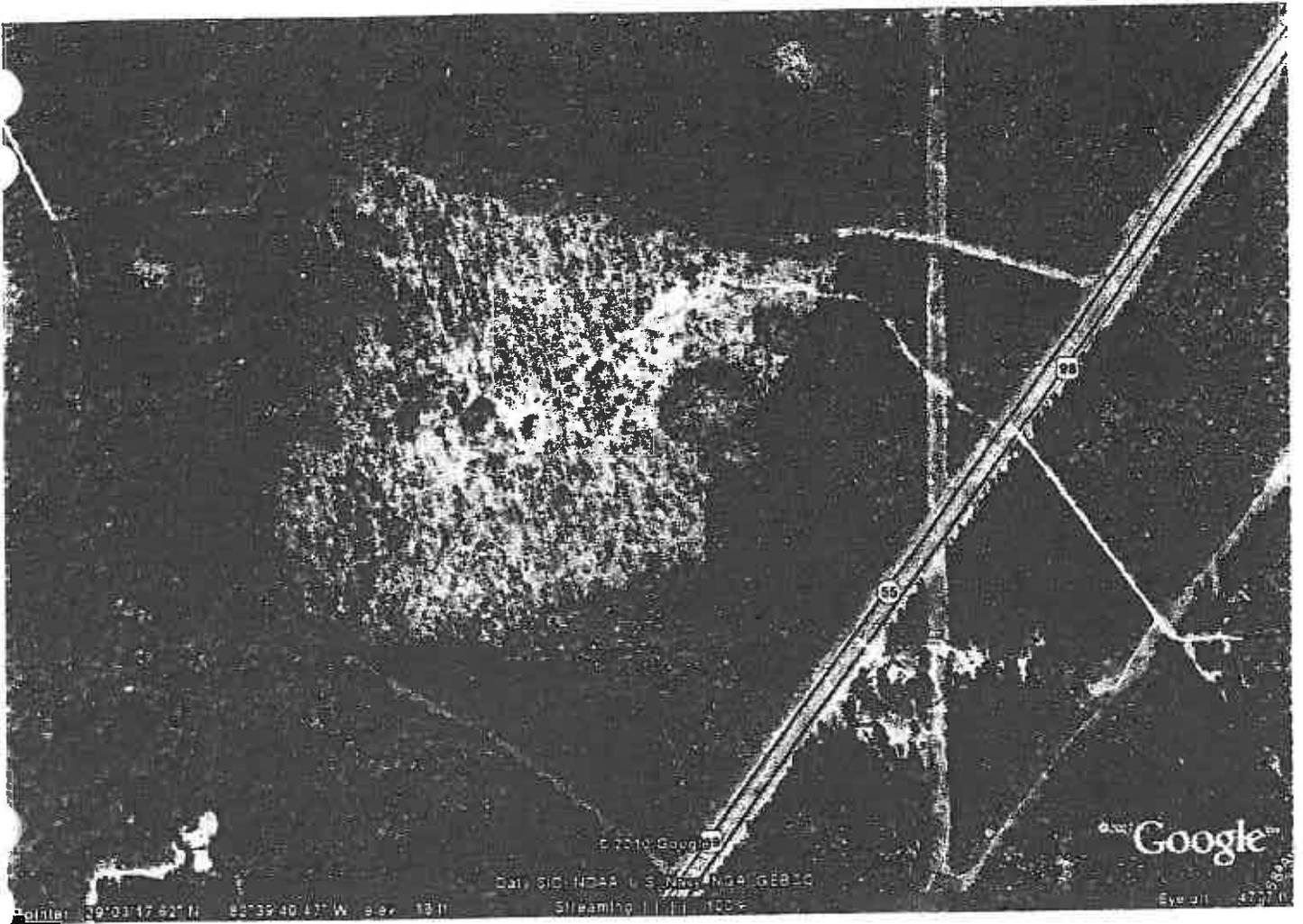
Commence on the East line of the NW 1/4 of Section 35, Township 16 South, Range 16 East, at a point 808.02 feet Scutherly from the Northeast corner of said NW 1/4, run thence South 36°59'26" West, 192.45 feet to the point of beginning of said ditch survey line, run thence North 53°00'34" West, 1,000 feet, run thence North 59°12'34" West, 881.57 feet, (Crossing the North line of Said Section 35, into Section 26, Township 16 South, Range 16 East), run thence North 69°16'34" West, 168.43 feet to the end of said ditch survey line,

Containing 3.91 Acres, more or less, exclusive of existing road and ditch right of way.

ALSO:

30F3

9



↑
Our house +
area North of
Ditch tree stand
after logging

LEVY COUNTY MOSQUITO CONTROL

P. O. BOX 248

BRONSON, FLORIDA

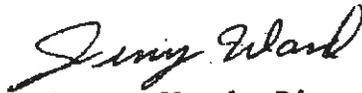
December 1, 1975

PROJECT 9 MAINTENANCE, INGLIS

Since submitting this project for approval on November 7, 1975, the Department of Transportation decided to do the work, accepting it into their highway maintenance program.

When this work is completed by the D. O. T. and if additional maintenance is needed for Mosquito Control purposes, a request will be submitted for your approval.

Respectfully Submitted,



Jerry Ward, Director

LEVY COUNTY MOSQUITO CONTROL

P. O. BOX 248

BRONSON, FLORIDA

November 7, 1975

PROJECT 9 MAINTENANCE, INGLIS

This project originally approved in July 1957. It is located east of U. S. 19 and on each side of Highway 40 in Inglis. Dirt and debris has accumulated through the years in certain places cutting off drainage from low areas in and around a subdivision recently developed in this area causing great mosquito breeding.

This entire project will not have to be re-worked, we will concentrate our work primarily around $\frac{1}{2}$ mile north and south of highway 40.

We will use both the dragline and D4 dozier for this work. It will take approximately 10 working days to complete.

The City of Inglis is to acquire all Department of Environmental Regulation permits. Field inspectors from the Department of Environmental Regulation has seen this project and the City of Inglis has started work on the necessary permits.

Respectfully Submitted



Jerry Ward
Director

Stat DOT. to do Work

Bronson Area Property Owner Pleads for County Help with Flooding

By Terry Witt

Senior Staff Writer www.levyjournalonline.com 22 May 2014

Judith Hall didn't get any help from the Levy County Commission Tuesday when she asked for help with flooding of her property in Lake Johnson Estates, but it wasn't the first time. Hall lives along a ditch that the county mosquito control district once maintained with permission from individual landowners, but the county no longer claims any responsibility for the ditch, which runs through private property. Hall said recent heavy rains caused the worst flooding on the property since they have owned the land. The ditch overflowed. "If we get into the rainy season we're really going to be in trouble," she said. Commission Chairman Ryan Bell repeated statements he made to Hall in earlier commission meetings that the county is waiting for Bronson to complete a storm water master plan before it makes any decision on the issue. Bell said the final solution is likely to involve some responsibility on the part of Hall and her husband as landowners along the ditch, but he said the county could reach out to Bronson. He said that's all commissioners can do at this point. Longtime residents and old newspaper stories say the ditch was constructed in the 1930s by the Civilian Conservation Corps as part of an economic recovery program during the Great Depression. In later years, county mosquito control occasionally removed blockages when the ditch filled with sediment. Permission from private property owners along the ditch was needed for the maintenance. Part of the ditch lies within Bronson's municipal limits and part in the county. Bronson Councilman Berlon Weeks said one landowner has built a road through the ditch and blocked water flow in the portion that lies within the county. Jones Edmunds, an engineering firm, published a watershed evaluation report that identified how the water flows into the ditch from a six square mile area surrounding it, much of it swamp or wetlands. Weeks said the company is nearly finished with a study that will show that the ditch was designed to carry water out of Bronson to Chunky Pond and to the Waccasassa River. Once the report is complete, Weeks said he hopes to convince his fellow council members of the need to approach the county about maintaining its portion of the ditch. He said most of the Bronson portion still flows as it should, but may need limited maintenance.

Levy County Comprehensive Plan

There are some one hundred fifty [150] culverts or multiple culvert structures under the major roads of the CZ with an average length of 85.7 feet and a total cross sectional area of 3,085 square feet. Locations and dimensions of these culverts are listed in the Technical Document accompanying the Comprehensive Plan (WHERE AS I CAN'T FIND IT).

Drainage ditches have also been created in the past twenty [20] years to discourage the transient shallow flooded areas which are optimum for mosquito breeding because they never remain flooded long enough for mosquito predators to establish themselves. Map 4-18 shows such ditches in the Yankeetown area.

WHERE IS MAP 4-18? . in the Technical Document accompanying the Comprehensive Plan?

Levy County Comprehensive Plan

7-112 The state, County, local government and developers all have the responsibility of keeping the drainage facilities in a functional condition.

The geographic service area of the drainage control is limited to the Levy County boundaries.

The current drainage system has a level of service which could handle a 25-year storm Event.

7-100 flooding.

Mosquito control ditches have been installed to help drain major flood areas in several cities within Levy County

[Map 7-8].

7-105 Design Capacity And Current Demand

The only drainage facility for the County is the infrastructure built to drain roads and highways.

As shown per Table 7-18, County roads are drained by some six hundred sixtysix [666] miles of roadside ditches which can hold some 2,419 acre-feet [788 million gallons].

Aiding this drainage are some eight point five [8.5] miles of side drains, seven hundred forty-two [742] pipes under two [2] feet in diameter, one hundred thirtyone [131] pipes three [3] feet in diameter, forty-one [41] pipes over four [4] feet in diameter, one hundred eighty-seven [187] box culverts [two (2) to ten (10) foot] and one eleven (11) to nineteen (19) foot box culvert.

TABLE 7-18

DRAINAGE FACILITY SUMMARY

Description

Measure

- 1.Length of Roads 486
- 2.Roadside Ditches a.Length in Mile 666 b.Total Volume in Acre Feet 2,419
- 3.Median Ditches a.Length in Miles 40 b.Number of Catch Basins 171
- 4.Outfall Ditches, Piped Length in Feet 112
- 5.Cross drains, Side Drain Pipe Length in Feet 44,910

Drainage Problems And Opportunities For Replacement,

No drainage problems exist in Levy County other than periodic riverine flooding which is more of an inconvenience than a problem.

The Levy County Road Department has not identified any County-owned and maintained facilities in need of replacement or expansion, and no new facilities are needed during the initial planning period [1995] or the second planning period [2020].

Existing And Projected Needs -Due to the rural-urban population and the insignificant number of large commercial businesses, the present drainage facilities are adequate.

Based on the size of the culverts and pipes, the design capacity is adequate compared to current demand during a normal rainfall.

Rather than facilities, the Board needs to concentrate on upgrading

Drainage

The geographic service area of the drainage control was limited to the boundaries of Levy County. Drainage facilities to provide services to other local jurisdictions, including Bronson and Otter Creek, and the facilities shared with the Department of Transportation. State, county, local government and private developers all have the responsibility of keeping the drainage facilities in a functional condition (LCCP: 7-61). County owned and maintained drainage facilities were under the jurisdiction of the Levy County Road Department.

Town of Inglis



14

P. O. DRAWER 429 - INGLIS, FLORIDA 32649 - (904) 447-2203
(904) 447-2204

March 11, 1983

The Town of Inglis Commission has my approval
to clean out the ditch behind my property
between Hudson Rd. and Palm Dr.

Nelson M. Green
Signature

PALM POINT DITCH

PUBLIC NOTICE



INGLIS & YANKEETOWN FLOOD PROBLEM

A PUBLIC MEETING ADDRESSING INGLIS / YANKEETOWN FLOODING WILL BE HELD AT THE INGLIS TOWN HALL ON 5TH SEPT. 2015 AT 9 AM.

THE MEETING IS EXPECTED TO LAST ABOUT AN HOUR AND IS A PREPARATION FOR A COUNTY COMMISSIONERS MEETING SCHEDULED FOR 8TH SEPT. 2015 AT 9 AM AT THE LEVY COUNTY COURTHOUSE.



Approval of Minutes

August 4, 2015

Adjourn

Should any agency or person decide to appeal any decision made by the Board with respect to any matter considered at this meeting, such agency or person will need a record of the proceedings, and for such purpose, may need to insure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be based.

Meeting agendas are now available on our website:

<http://levycounty.org>

In accordance with the Americans with Disabilities Act, persons needing a special accommodation or an interpreter to participate in this proceeding should contact the County Clerk's Office at (352) 486-5266, or the Office of the Board of County Commissioners at (352) 486-5217, at least two (2) days prior to the date of the meeting. Hearing impaired persons can access the foregoing telephone number by contacting the Florida Relay Service at 1-800-955-8770 (Voice) or 1-800-955-8771 (TDD).

Inglis/Yankeetown Flood Meeting

September 5, 2015

Welcome all concerned citizens we appreciate your support. We plan to keep this meeting as simple as possible but provide you with the information of what we are trying to accomplish as citizens.

Here is what we expect to accomplish today:

- Establish the core issue of flooding in the Inglis/Yankeetown Hammock area
- Present presentation and pictures of recent flooding to uncover key areas
- Keep residents informed of progress of resolutions

This is an information session and there will be many meetings to follow for open forum. If time allows we will open up floor for suggestions. If you do have major concern, keep in mind, we are on the agenda at the county commissioners meeting on Tuesday, September 8 at 9:00am in Bronson.

Thank you for your attendance. We as responsible citizens can work through this and stick together to solve the issues.

MEETING NOTES:

1. Introduce Myself and Pam Willis (we are not elected officials)
2. Introduce Johnny McDonald (Levy County Emergency Management)
3. Introduce Inglis / Yankeetown Mayors

4. QUESTION: IS THERE ANY COUNTY OR OTHER GOVERNMENT OFFICIAL PRESENT?

RULE'S -- Please do not interrupt the speaker as questions/replies and comments will be addressed after our presentation.

5. Introduce the reasons for the meeting:

A. Every time our area gets in excess of around 10 inches of rain in a 48 hour period too many residents get flooded. The water levels appear to be increasing.

B. We are having this meeting because our elected officials have not followed through with their words. Otherwise this meeting would not be necessary. (Read the excuses)

C. We have to have a starting point for any recommended corrective actions to address the flooding AND the priority for action must consider the majority of flooded victims first.

6. Have Pam show her pictures/presentation.

7. Display and explain the enlarged map.

8. Ask if Johnny McDonald if he wishes to show any pictures or describe what his thoughts were when he inspected the mosquito control ditch.

9. Describe what action we expect from the county.

A. Clean out from Butler Rd. West to end of ditch starting in Yankeetown.

B. Build a bridge at Butler road where the culverts are presently installed.

C. Replace the culverts on Maple Ridge Rd. with larger culverts.

Note! When the county bridge washed out on Yankeetown dump Road it was replaced immediately, the same when bird creek bridge had major erosions during a storm ...money appeared to be no problem in each instance.

10. These requested actions should help most primarily everyone from Bone Slough Southward to just north of the food ranch area. This WILL NOT fix the flooding problem but will make a noticeable difference beyond any doubt.

11. We expect to see some progress (or plans) on these requested actions in the next few months. By around 15 April 2016 we expect the mosquito ditch cleaning to have been started or we will have no other choice but to obtain a lawyer to get the flooded residents of south levy county some flood relief.

12. We have a petition sheet that we are requesting people to sign if they support the requested action that we have outlined.

13. We are open to questions and comments at this time.

14. Thank you for attending and we will be addressing the county commissioners at 9AM on the 8th of September at the county courthouse.

DATED 5TH SEPT. 2015

INGLIS/YANKEETOWN FLOOD PROBLEM PETITION

The individuals listed below request and expect action to address the habitual flooding of the area.

Name

Name

Kathy Woodham	Bernadette Hanson
Leon Woodham	Candy Stanley
Debra Weiss	Charbi. RECTOR
James Mashburn	Bruce Hoffman
Shawn Mashburn	Rose Ugraski
Grace Mc Gown	Tandy J. Willis
Annie Fowler	Ron [unclear]
Joyce Freyman	Amy Jones
Shirley Siebold	Bill O. Bray
Julio & Harrison Sandi St	David Walker
[unclear]	Susan Shea
Cecilia Christopherson	St Warner
Richard Hawthorn	Gwen Roof
Cary Jones	MAURICE MYERSONS
W. Schone	Lynne Tate
James K. Fowler	Glen B. Norton

DATED 5TH SEPT. 2015

INGLIS/YANKEETOWN FLOOD PROBLEM PETITION

The individuals listed below request and expect action to address the habitual flooding of the area.

Name

Name

Carolyn Nator	Daniel J. ...
Shelley Alumbaugh	Jehi White
Paula ...	Ellen ...
Cardace Hudson	Dennis Maitte L.
Melissa Booker	David ...
Carl Roof Jr	Paul Harding
Juanita Roof	Betsy Webb
Carl Roof Jr	Alicia Lowe
Kyle Fitch	Pete Vladyka
Juanita Patten	Juanita Gomez
W.L. Busto	Bobby Gomez
Brockie Archibald	Marvin Gwyn
James ...	Ann Morin
May Spinkman	CoA Chubb
Jean ...	RANDY CHUBB
DA ...	Ed ...



DATED 5TH SEPT. 2015

INGLIS/YANKEETOWN FLOOD PROBLEM PETITION

The individuals listed below request and expect action to address the habitual flooding of the area.

Name

Name

George Deslins	
Chris Padukiewicz	
Megale Jones	
Jason Jones	
Carol Gibson	
Montyce Vanness	
Mason Cummings	
Jonah Jones	
PAT TULLY	
Helen Ciarella	
LARRY FELTHUSERS	
Daniel Harty	
John W. Jones	
Robert Aldrin	
JAMES A. PARKER III	
Laura Wynn	

Levy County Board of County Commissioners

Agenda Item Summary

1. NAME/ORGANIZATION/TELEPHONE:

PAM WILLIS / ELDRIDGE FOWLER 352-302-6621 / 352-536-0938

2. MEETING DATE:

8th September 2015

3. REQUESTED MOTION/ACTION:

REQUESTING BETTER FLOOD CONTROL SOUTH LEVY COUNTY (PRECISELY C40A & BUTLER RD AREA IN INGLIS.

4. Agenda Presentation

Time Requested: 15 MIN

Request will be granted if possible)

ALLOTTED TIME NOT

MORE THAN 15 MINUTES

5. IS THIS ITEM BUDGETED (IF APPLICABLE)?: YES ___ NO ___ IF NO, STATE ACTION REQUIRED

BUDGET ACTION:

FINANCIAL IMPACT SUMMARY STATEMENT:

DETAILED ANALYSIS ATTACHED?: YES ___ NO ___ BUDGET OFFICER APPROVAL ___ DATE

6. BACKGROUND: (WHY IS THE ACTION NECESSARY, AND WHAT ACTION WILL BE ACCOMPLISHED)

ACTION IS NEEDED BECAUSE THIS AREA FLOODS REPEATEDLY EVERYTIME WE GET IN EXCESS OF ABOUT 10 INCHES OF RAIN IN A 48 HOUR PERIOD. MANY HOUSES ARE FLOODED (NOT JUST YARDS)

ACTION NEEDED:

1. CULVERTS LOCATED .4 MILES NORTH FROM C40A ON BUTLER ROAD NEED REPLACED WITH A BRIDGE OR 60 INCH CULVERTS (Bridge is preferred)
2. CLEAN OUT THE (2) MOSQUITO CONTROL DRAINAGE DITCH'S LOCATED .2 AND .7 MILES NORTH OF C40A ON US19. THEY HAVE NOT BEEN CLEANED SINCE BUILT IN 1962. NEEDS CLEANED WITH AN EXCAVATOR STARTING NEAR THE SALT MARSH IN YANKEETOWN CONTINUEING TO THE TWO US19 DOT DITCHES.

7. RECOMMENDED APPROVAL AND DATE (YES & NO BLOCK INDICATE IF APPROVAL IS/IS NOT REQUIRED)

DEPARTMENT DIRECTOR	OTHER	OTHER	OTHER	COUNTY ATTORNEY	COUNTY COORDINATOR
YES ___ NO	YES ___ NO	YES ___ NO	YES ___ NO	YES ___ NO	YES ___ NO

8. COMMISSION ACTION:

APPROVED

DENIED

DEFERRED DATE TO BRING BACK:

OTHER SPECIFY:

~~XXXXXXXXXX~~

**SUPPLEMENTAL INFORMATION TO SOUTH LEVY COUNTY FLOOD PROBLEM
SUBMITTED BY PAM WILLIS / ELDRIDGE FOWLER ON 8TH SEPTEMBER 2015.**

At US19 the two manmade ditches 25 foot wide each (minimum) go in a West-South-Westerly direction for approx .4 miles where they both combine into one semi-natural drainage system. From there to the gulf of México Levy County and the DOT excavated many areas connecting ponds to create what was then called the mosquito control drainage, this was 1962. It has not been cleaned out since 1962.

Every 3 to 5 years or less when there is major flooding of homes in the area residents are given promises by the Levy County Officials. Examples in the last 3 years have been such as:

1. This area of the county has been declared a disaster area by our governor and we now have the funds to do this work...we just need to wait until it dries up some.
2. We have 60" culverts ready and staged, just have to wait until it dries up so we can install them at the location mentioned on butler road.
3. Our county engineer has looked at the presently installed culverts and they are satisfactory and can handle the water.
4. We are ready to install the 60" culverts but we are going to do it at the same time we repave butler road. That was 2 or 3 years ago ...not done yet!
5. At a previous meeting Inglis Mayor Carolyn Risher, County Commissioner Sam Yearty, Representative from SWFWMD, other officials and Eldridge Fowler met for a meeting at the Inglis community center to discuss cleaning of the ditch. The SWFWMD representative stated Levy county "does not" need a permit to clean out the ditch to the original depth dug in 1962 (It is called routine maintenance).

We could go on and on with the excuses offered in the past. Excuse examples such as these would appear to indicate in a court of law incompetence, neglect, or misrepresentation at the least toward South levy county residents.

It does appear now all the residents of the area are ready and willing that if we don't see immediate action by our government officials we have no choice but to obtain a class action lawsuit. A lawsuit is not our desire but if forced into that undesirable action we intend to sue not only for attorney fees but also neglect, damages, and mental anguish or stress, etc. We are pleading with you to take immediate action as we have requested and we thank you for allowing us to express our grievance.

Thank you for listening,

Pam Willis 352-302-6621
Eldridge Fowler 352-536-0938



John Meeks
District 1

Rock Meeks
District 2

Mike Joyner
District 3

Lilly Rooks
District 4

Danny Stevens
District 5

AGENDA
REGULAR MEETING
September 8, 2015

Call to Order
Invocation
Pledge to Flag

Public Comments -Issues related to Agenda items
-Complete public comment form and submit to clerk
-State your full name and address
-Discussion must be limited to a maximum of three (3) minutes per person

9:00 a.m. - **Public Hearing**
Development, Bill Hammond Director
a. Request the Board to proceed to Approve Hardship Variance Ha. Va. 15-05 for John McGowan II.
b. Request the Board to proceed to adopt Resolution 2015-41 for Ronald and Linda Gillman
c. Request the Board to proceed to adopt the Order to Approve for Frank A. Marion, Jr and Scott P. McKinley, Trustee. (SE 15-03).

9:15 a.m. - **South Levy Residents**
Ms. Pam Willis and Mr. Eldridge Fowler
Request more assistance with flood control in Inglis, South Levy County (County Road 40A and Butler Road).



DEPARTMENT REPORTS

County Coordinator - Fred Moody

- a. Presenting proposed addition to "Assistant to the County Coordinator" job description.
- b. Request approval to partner with Town of Bronson in paving of NE 80th St. also known as "School Street".
- c. Request approval of Renewal and Amendment of Lease made as of October 1, 2015 between Hudson Properties, Inc. and Levy County, for Guardian Ad Litem.

Assistant to the County Coordinator - Wilbur Dean

Request approval to donate a surplus vehicle to AMVETS of Levy County, District 16. Asset #6697, VIN# 1FDWE35S95HA30285, 2005 Ford, formerly LCT14.

Clerk of the Court - Danny J. Shipp

Update on Value Adjustment Board, (VAB).

County Agent - Albert Fuller, Director

Requesting a donation from the County Commissioners for Building an apiary education exhibit at the Levy County Extension Office address.

Development - Bill Hammond, Director

Request signature of Chairman for the NFIP, AW 214 Annual re-certification.

Grants Coordinator- Tisha Whitehurst,

Ratify the approval and submittal by Fred Moody, County Coordinator, of the application for Planning Assistance for the RESTORE Act Direct Component-Non-Construction Activities, and authorize the County Coordinator to approve and approve and submit any amendments to the application.

Library - Lisa Brasher, Director

Request approval of State Aid to Libraries Grant Agreement for F.Y. 2015/16.



- Public Safety** - David Knowles, Director
- a. Presenting Public Safety quarterly report.
 - b. Requesting approval of the Board for FY2014-2015 third quarter write-offs.
 - c. Requesting approval for the purchase of a server from Dell for \$3,819.42.

Road - Bruce Greenlee, Administrative Road Superintendent
Request permission of the Board to seek Right of Way for SE 160th Ave.

County Attorney - Anne Bast Brown
Request approval of requirement of SS.122.313 (7), Fla. Stat. for Chris Cowart and Marilyn Ladner as member of the RESTORE Act Advisory Committee.

- Public Comments**
- Complete public comment form and submit to clerk
 - State your full name and address
 - Discussion must be limited to a maximum of three (3) minutes per person

COMMISSIONERS' REPORTS

- Commissioner J. Meeks
- a. Discuss videotaping Board Meetings.
 - b. Legislative updates.

Commissioner R. Meeks

Commissioner Joyner

Commissioner Rooks

Commissioner Stevens

Approval of Expenditures

Knowles is carrying forward about \$1.3 million cash into next year's budget for the Emergency Medical Services (ambulance department) and about \$800,000 cash in the fire

and could discuss lowering the EMS special assessments at a Sept. 14 public hearing if they close to do so. Commissioner Danny Stevens, who oversees both budgets as an advisor to Knowles, said

because there was slight growth in property values, the millage represents an increase in tax revenues, which is a tax increase. Levy County's property tax millage rate is lower than neighboring Dixie or Gilchrist

continued to page 5A

South Levy Group Frustrated With Flooding, Lack of County Cooperation

By Terry Wike
Senior Staff Writer

Two of the recent flooding victims in the Butler Road area north of Yanketown and Inglis told county commissioners Tuesday they are weary of being given excuses for why the problems are never resolved.

Pam Willis and Eldridge Fowler plan to meet with County Attorney Anne East Brown to discuss legal issues related to curing the flood problems including cleaning out an old ditch

that may have more than one private owner. "We need some action other than promises we find out don't come to pass," Fowler said. Fowler said if the South Levy Group doesn't get good answers this time around they may have to resort to legal action.

Willis said she and other members of the group continued their research after Tuesday's county commission meeting and discovered more interesting information on maps in the Property Appraiser's map room. Fowler said action is needed because the

Butler Road area floods repeatedly each time there is about 10 inches of rain in a 48-hour period. He said it's not just yards that flood, but houses.

Fowler said culverts located four-tenths of a mile north from County Road 40A need to be replaced with a bridge or 60 inch culverts.

Fowler added that a mesquite control drainage ditch north of C40A needs to be cleaned out. It hasn't been cleaned out since it was built in 1962. He said it needs to be cleaned with an excavator

continued to page 3A



county commission meetings, but neither made out for bids or check on the pricing of a camera.

Group Frustrated With Flooding, Lack of County Cooperation *continued from page 1A*

the salt marsh in Yanketown to a pair of along U.S. 19, thing needs to be done about two manmade 3 feet wide that funnel water into a "mosquito c" that needs to be excavated.

led a long list of promises that he said were County officials in the last three years, but lled. He said one promise was that the declared a disaster they just needed to wait

erasion, said Levy officials told him 60 inch adly and stalled, but the county wanted to to dry up before they installed the culverts on

Rock Meeker told Willis and Fowler the on private property to improve drainage, but are not asking the county to do that.

area that floods is also taking quite a bit of hough the State Forest where logging is taking every tree that is taken no longer soaks up

carpet would have to be ripped up to install the equipment and he has a call into Staley Construction, the contractor.

Private Commission in Levee meetings to be a Sunshine Law violation. County Attorney Brown said nothing when Stevens made his remark to Meeks.

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No Changes. \$20,
10¢ Each Additional Word.

Email classifieds@levyjjournal.com



Keith Fowler of south Levy County uses a funnel to demonstrate how high volumes of water pour down toward his neighborhood and are channeled into smaller culverts and clogged ditches that can't handle the water. Photo by Terry Witt.

Commissioners assigned Brown to consult with the South Levy Group about the flooding issues.

BUDGET SUMMARY

Levy County Board of County Commissioners - 2015-2016

REVENUES	GENERAL FUND	SPECIAL REVENUE	TRANSPORTATION ROAD/BRIDGE	DEBT SERVICE	CAPITAL PROJECTS	ENTERPRISE FUND	MSBU FUNDS	TOTAL FUNDS
Millage Per \$1000								
8.2741	13,292,188	0	0	0	0	0	0	13,292,188
Ad Valorem	100,000	0	0	0	0	0	0	100,000
	0	0	1,220,000	0	0	0	0	1,220,000
Allocations	2,750,000	0	0	0	0	0	0	2,750,000
Development	205,000	0	0	0	0	0	0	205,000
9 & Special Assessments	0	190,000	0	0	0	0	0	190,000
	242,000	4,720,890	4,500	0	0	506,175	297,718	5,771,283



Pam

From: "MARSHA DREW" <marshaedrew@bellsouth.net>
Date: Wednesday, August 17, 2011 8:46 AM
To: "Pam" <pam@campwillis.com>
Subject: Re: Butler rd

Hi Pam,

I hope it helps you guys out there. I don't know what will happen with road/ culvert work in the next few years. Things are extremely tight with money and our road work is mainly funded through state programs. It's anybody's guess how much they'll give us this year and next, which I'm hearing will be as bad, if not worse, than this year.

I'll do what I can to keep everyone dry out there until we can do a major overhaul.

Marsha

Marsha Drew
 Levy County Commissioner, District 3
 6 Magnolia Ave
 Yankeetown, FL 34498
 352 447-5827 begin_of_the_skype_highlighting 352 447-5827 end_of_the_skype_highlighting
marshaedrew@bellsouth.net

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From: Pam <pam@campwillis.com>
To: MARSHA DREW <marshaedrew@bellsouth.net>
Sent: Wed, August 17, 2011 8:20:09 AM
Subject: Re: Butler rd

COUNTY ROAD DEPT.

Thank you, for having ~~DOT~~ get on these culverts! It can only help, of coarse we still need to follow through with the creek/drainage ditch and culvert replacements, lets not put it in the back of the file of things to do, PLEASE! have a great week! I will keep in touch, thank Bruce for me as well!

Best Regards

Pam Willis

From: MARSHA DREW
Sent: Thursday, August 11, 2011 10:14 AM
To: pam@campwillis.com
Subject: Butler rd

Hi Pam,

Bruce will be contacting you regarding the culvert cleaning. They're trying to get there monday. Sorry for the delay!

Marsha

Marsha Drew

1 Copy: 1 original paper 3-hole punch



No later than 10:00 AM

leuycountyschool.org

5 Minutes 2nd @ 12

September 9th 2015

@ 9 board Room

Jessica Engel

352-484-5218

Key Co. Proj 10

To Bldgs. Fla 40

~~THUR~~

Yanketown

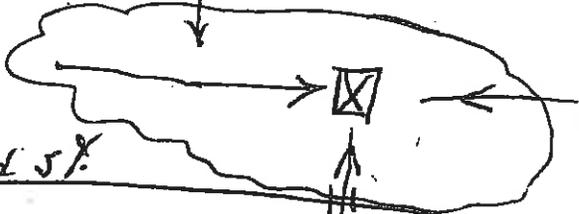
spots where ~~the~~ Sink Holes Proposed

W. Thelacoochee R.

River
side
BLVD.



64th St



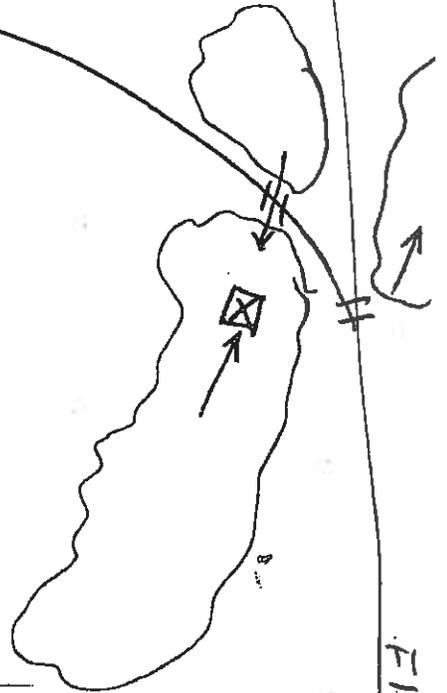
63rd St

62nd St



61st St

To existing Tidal Pits



Fla 40

To Trngls

BEAM
10 11/4

XXXXXXXXXXXXXX
Tampa 10, Fla.
March 3, 1958

Mr. Paul Hunt, Entomologist,
P.O. Box 210
Jacksonville, Fla.

Subject: Recommendation of Entomological Approval for
Project No. 10, Yankeetown, Levy County, for
Permanent Mosquito Control.

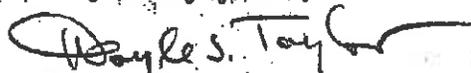
Dear Paul :

A sketch of the area in the town of Yankeetown is enclosed showing the area directly to the north of the Post Office, where Earnie had previously recommended a ditch system to eliminate the problem, but Basil May has said that too much money would be required to carry out this program and he has discussed the possibility of opening up old sink holes which according to old timers once drained the area. I checked the area with him and it is in my belief a worthy project, as far as an entomological view point is concerned. Basil says that these holes can be opened at very little expense with either dynamite or auger used for digging holes for power line poles.

We figured that three holes as indicated would be sufficient, with possibly a fourth adjacent to 64th st. would be sufficient to drain off the water.

An Adult Anopheles quadrimaculatus was collected on the day we reviewed the project, Feb. 28, 1958. I hereby recommend that this project be approved.

Very Truly yours.

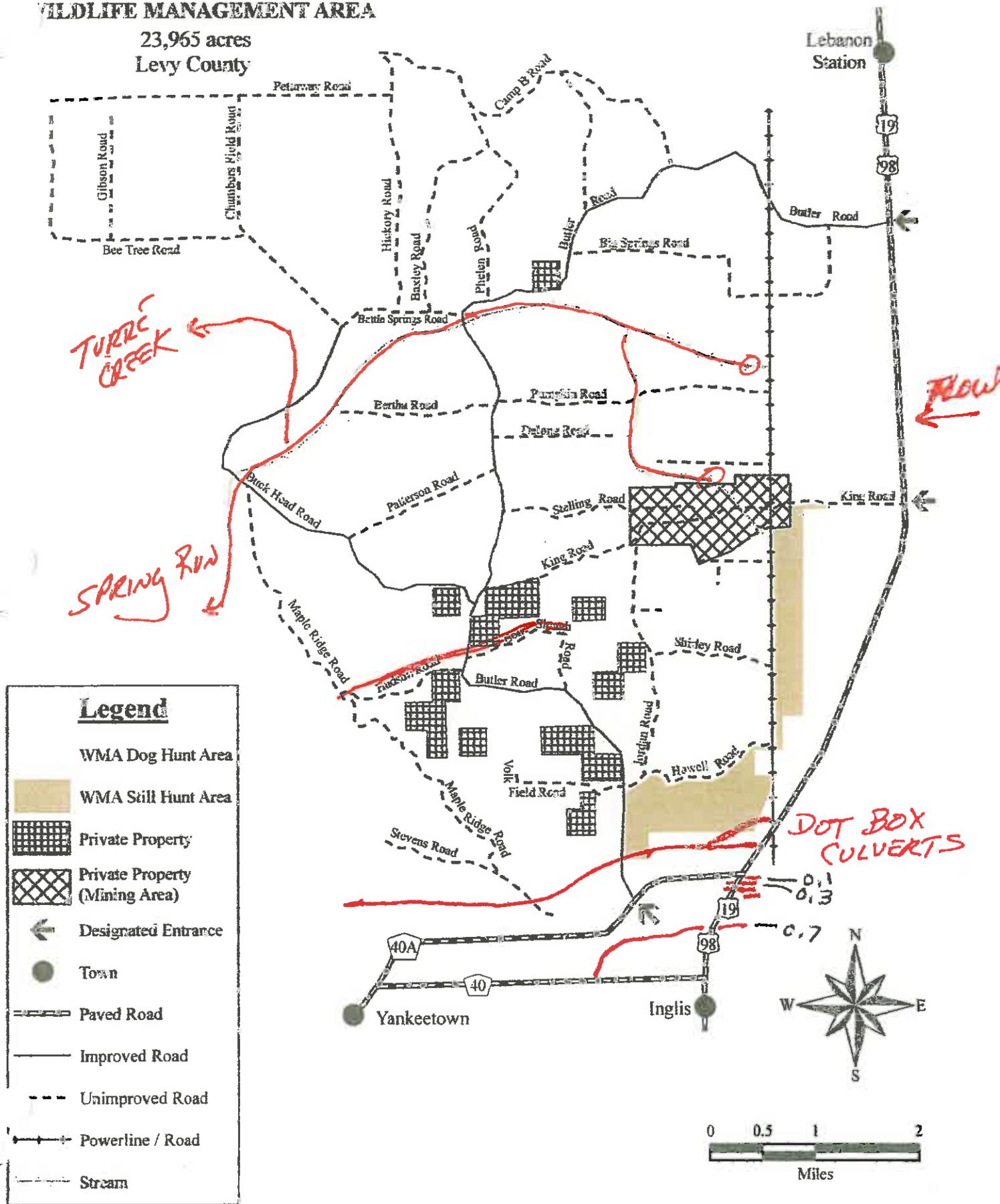

Doyle J. Taylor
Reg. Entom.

cc: Mr. Basil May.

101

GULF HAMMOCK WILDLIFE MANAGEMENT AREA

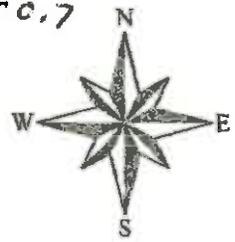
23,965 acres
Levy County



Legend

- WMA Dog Hunt Area
- WMA Still Hunt Area
- Private Property
- Private Property (Mining Area)
- ← Designated Entrance
- Town
- Paved Road
- Improved Road
- - - Unimproved Road
- Powerline / Road
- Stream

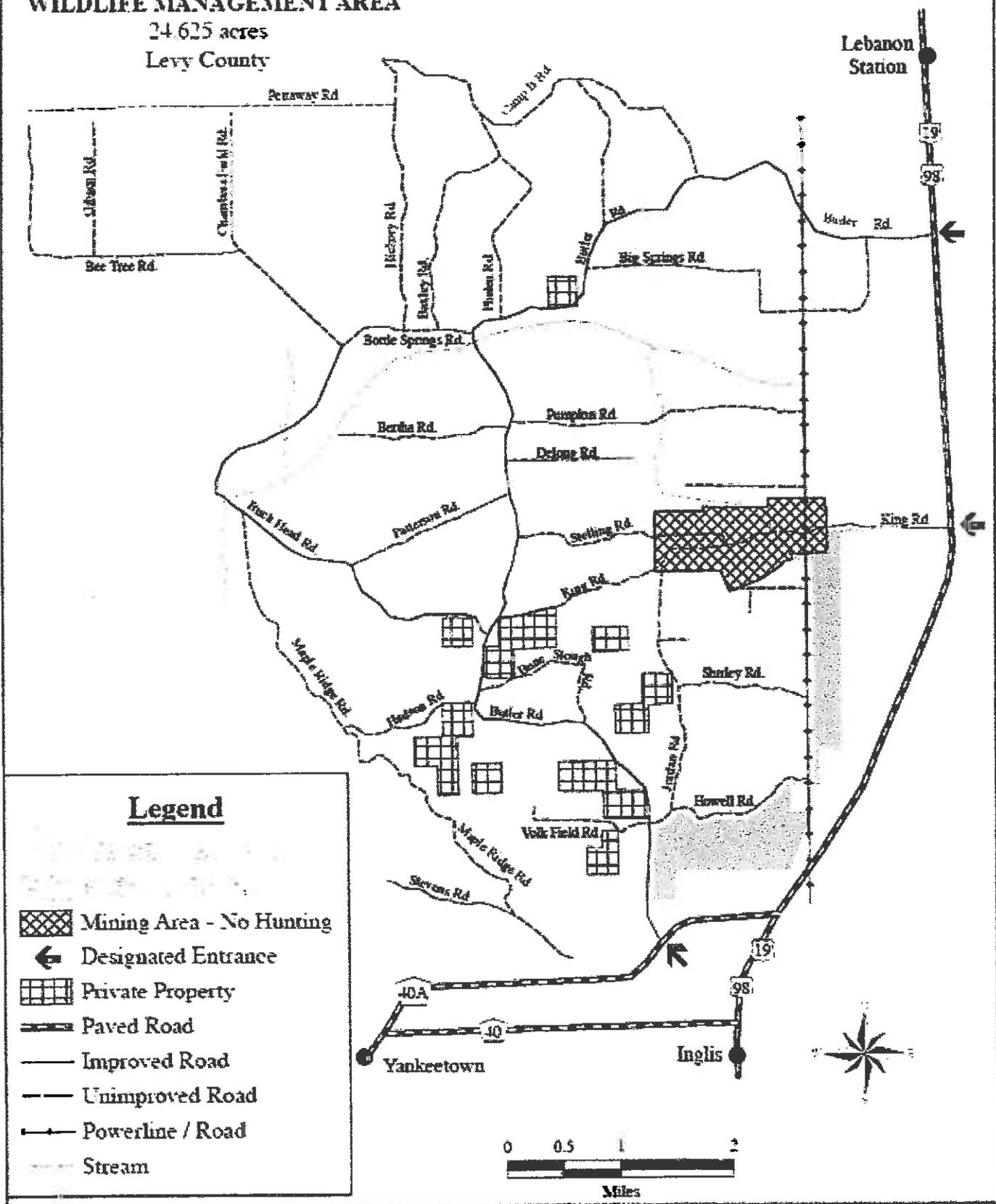
DOT BOX
CULVERTS



146

GULF HAMMOCK WILDLIFE MANAGEMENT AREA

24,625 acres
Levy County

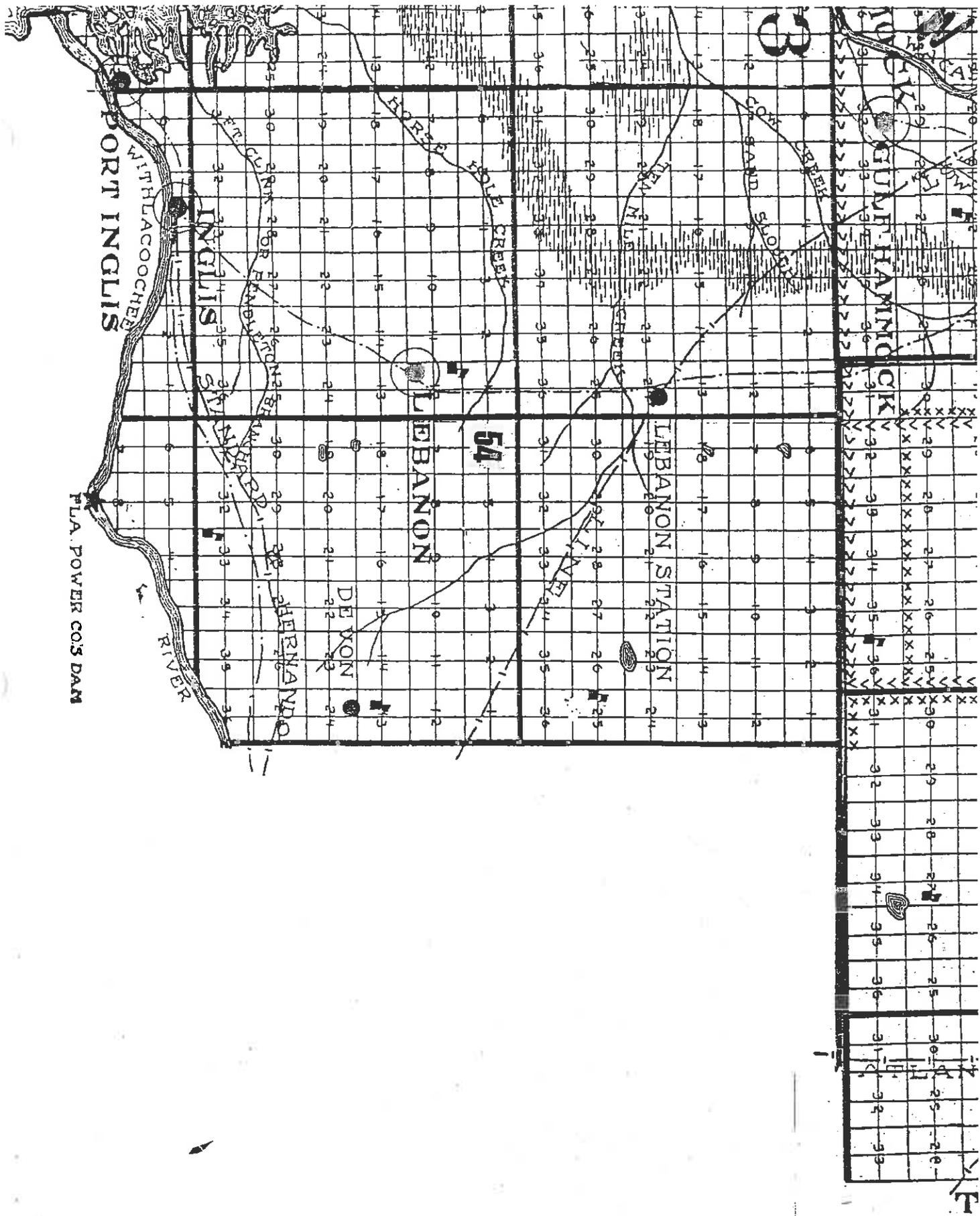


Legend

-  Mining Area - No Hunting
-  Designated Entrance
-  Private Property
-  Paved Road
-  Improved Road
-  Unimproved Road
-  Powerline / Road
-  Stream



95



100

Butler Road Area Flood Victims Reach Out to County Commission

By Terry Witt
Senior Staff Writer

Four residents of the Butler Road area near Yankeetown have begun meeting with Levy County officials in hopes of convincing them to find a solution to the floods that sweep through their neighborhood.

Eldridge Fowler, James Mashburn and Gary Jones, all lifelong residents of the Butler Road area, and Pam Willis, one of their neighbors, said a flash flood on Aug. 1 convinced them something needs to be done soon to correct the problem or it will get worse.

Willis lives close to a manmade ditch that is at the heart of the problem.

The ditch empties into six culverts under Butler Road near Willis's home. The culverts aren't large enough to carry the full volume of water being discharged through six large concrete culverts built under U.S. 19 a mile to the east. Butler Road belongs to the county.

The U.S. 19 culverts carry storm water from the 54,000-acre Goethe State Forest under U.S. 19 and discharge the water into a cypress swamp and the ditch that runs under Butler Road. Willis said she saw the flood waters creeping toward

continued to page 3

www.levyjournalonline.com

Butler Road Area Flood continued from page 1A

her home and notified Fowler and others on Aug. 1. The U.S. 19 culverts were built and are maintained by the Florida Department of Transportation.

During the Aug. 1 flood, Willis said the swamp overflowed Butler Road at 17 locations in a 3.5 mile area. She said the six small culverts that take water from the ditch were more than 4 feet underwater when the flood hit. The water backed up and flowed out the ditch, sending two feet of water into her front yard. It flooded a nearby home belonging to a former Florida Highway Patrol officer.

"I've never seen the water come through this fast and I've lived here all my life," Jones said.

Willis said she knew the neighborhood was in trouble when the flood waters swept southeast through her yard and under her slightly elevated home, and then a short time later began flowing back north. She said the water switched directions when the flooding breached the road.

The four residents met with County Attorney Anne Bast Brown and Assistant County Coordinator Wilbur Dean on Monday and arranged to give County Commissioner Mike Joyner the same tour Thursday that they gave a Journal reporter last Friday. Willis said Brown and Dean told them they take their orders from the county commission and can't do anything without board approval.

The reasons for the flooding become more apparent by taking the tour. Willis said they will continue inviting other county commissioners to take the tour with them.

Part of the tour involved stopping at Fowler's home to see an earthen embankment he built around his home to keep the flood waters out. He said the earthen berm worked. The water crept up a half a foot on the berm but never breached it.

The four residents say part of the problem are the concrete culverts on U.S. 19 that dump millions of gallons of water into the ditch during heavy rains, but other half of the problem are the six small culverts under Butler Road near Willis's home. The culverts aren't large enough to handle the flow of water and sometimes are blocked by floating debris. They would prefer to see a bridge built over the ditch.

They also hope to meet with Florida Department of Transportation officials concerning

1001



Eldridge Fowler built this earthen berm around his home to prevent flooding in his home. The berm worked. Water surrounded the berm but never topped it. Photo by Terry Witt.



Eldridge Fowler watches as Pam Willis uses her right foot to show how high the water reached above the six culverts under Butler Road when her neighborhood was flooded in August. With her is Gary Jones. The flood waters backed up when the culverts could no longer carry the water, causing flooding throughout the neighborhood. Neighbors say a bridge is needed to allow the water to flow freely to the other side of the road. Photo by Terry Witt.

the two concrete culverts along U.S. 19. Each concrete installation has three 5-foot high by 10-foot wide openings to convey water toward a cypress swamp. The water flows toward Butler Road and the Gulf of Mexico.

Fowler, Mashburn and Fowler also noted that County Road 40A, which runs along the north side of Inglis and Yankeetown didn't exist until the late 1960s. They say the road is part of the flooding problem because it serves a large berm to stop flood waters flowing from the ditch. They point out that the ditches along the paved road are not continuous. They pointed to embankments in the ditches that stop water from flowing westward. The road was designed and built by two developers.

Some of the culverts on C40A are too small to carry much water. The water can't flow westward toward the Gulf of Mexico due to earthen banks in the ditches.

Willis said their meeting with Brown and Dean Monday was just a first step in the process of resolving the flooding problem.

"It's baby steps. It's not something that's going to happen real fast," she said.

throughout the county pay \$119 annually for Emergency Medical Services (ambulance service).

Sheriff Bobby McCallum, like sheriffs before him, will have the largest individual budget among county elected officials -- \$11.3 million. He also runs emergency dispatch and 911 services with a budget of \$150,000.

The sheriff operates the county jail, criminal investigations, patrol and communications.

Public Safety Director David Knowles is expected to carry forward \$1.3 million cash in his EMS budget and \$800,000 cash in the fire budget.

Some residents believe the county commission should lower its assessments if Knowles has that much cash to carry forward into the new budget year.

The commission's financial officer, Sheila Rees, said county departments try to carry as much cash forward as possible to provide for a stable budget in the new fiscal year.

It is the size of Knowles' cash reserves that has caught the eye of his critics.



Three of these concrete culverts along U.S. 19 just north of Inglis convey water from the 54,000-acre Goethe State Forest to a cypress swamp that dumps water under Butler Road. Each of the spans is 10 feet wide and about 5 feet high. Residents in the Butler Road area

OFFICE
COPY.

Yankeetown Stormwater Runoff Investigation

Prepared for

**THE SOUTHWEST FLORIDA
WATER MANAGEMENT DISTRICT,
THE WITHLACOOCHEE BASIN BOARD AND
THE TOWN OF YANKEETOWN**

Prepared by

**SINGHOFEN & ASSOCIATES, INC.
Stormwater Management and Civil Engineering**

June, 1992

MS

31-16-18

32-16-18

33-16-18

YANKEETOWN LIMITS

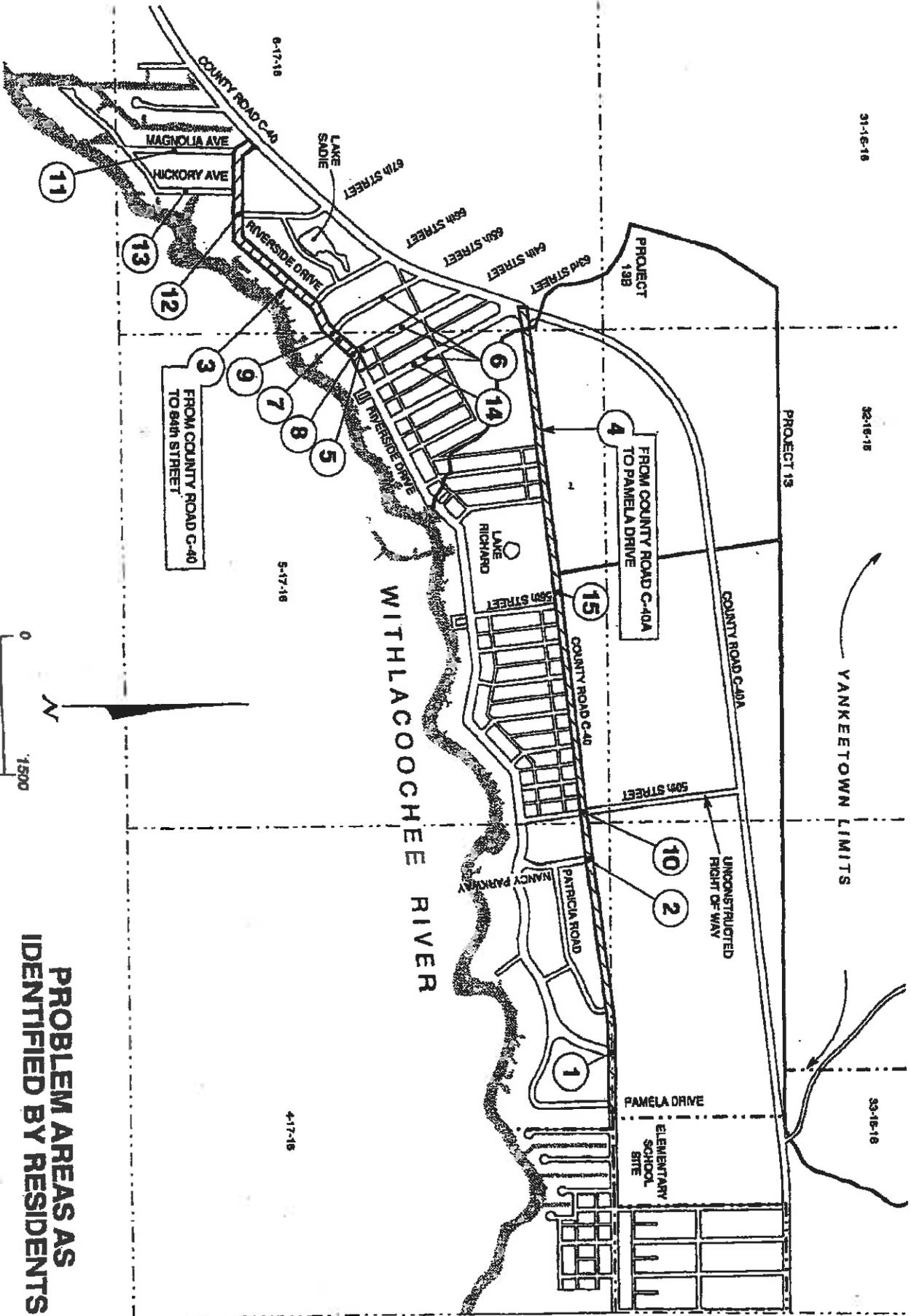
PROJECT 13

PROJECT 198

UNCONSTRUCTED
RIGHT-OF-WAY

ELEMENTARY
SCHOOL
SITE

WITLACOCHEE RIVER



PROBLEM AREAS AS IDENTIFIED BY RESIDENTS

SINGHOFFEN & ASSOCIATES, INC.
Stormwater Management and Civil Engineering

Figure 5

MLB

3.3.1 Land Use

Land use for the study area was derived primarily from the aerial photogrammetry provided by SWFWMD. Land use was delineated on the aerials to various levels in accordance with FDOT's Land Use, Forms, and Cover Classification System: A Technical Manual. Level I is the broadest of the levels while level III is the most refined. The level of refinement was determined by potential hydrologic impact of the particular land use. Land use information for the entire study area was electronically digitized into the data base system for Valence.

3.3.2 Soils

Soil types within Yankeetown were discussed in Chapter 1. Processing soils information was achieved in a similar manner to that of land use. Pre-publication soil maps were obtained from the Levy County Soil Conservation Service office. All soils in the study area were electronically digitized into the data base. A relationship was developed between soil type and soil hydrologic group. For purposes of this study, all mixed hydrologic groups (e.g., B/D) were assumed to have the more conservative (i.e., the least amount of soil storage) hydrologic condition. A soil classified as a B/D group was placed into the type D hydrologic group.

3.3.3 Drainage Sub-Basins

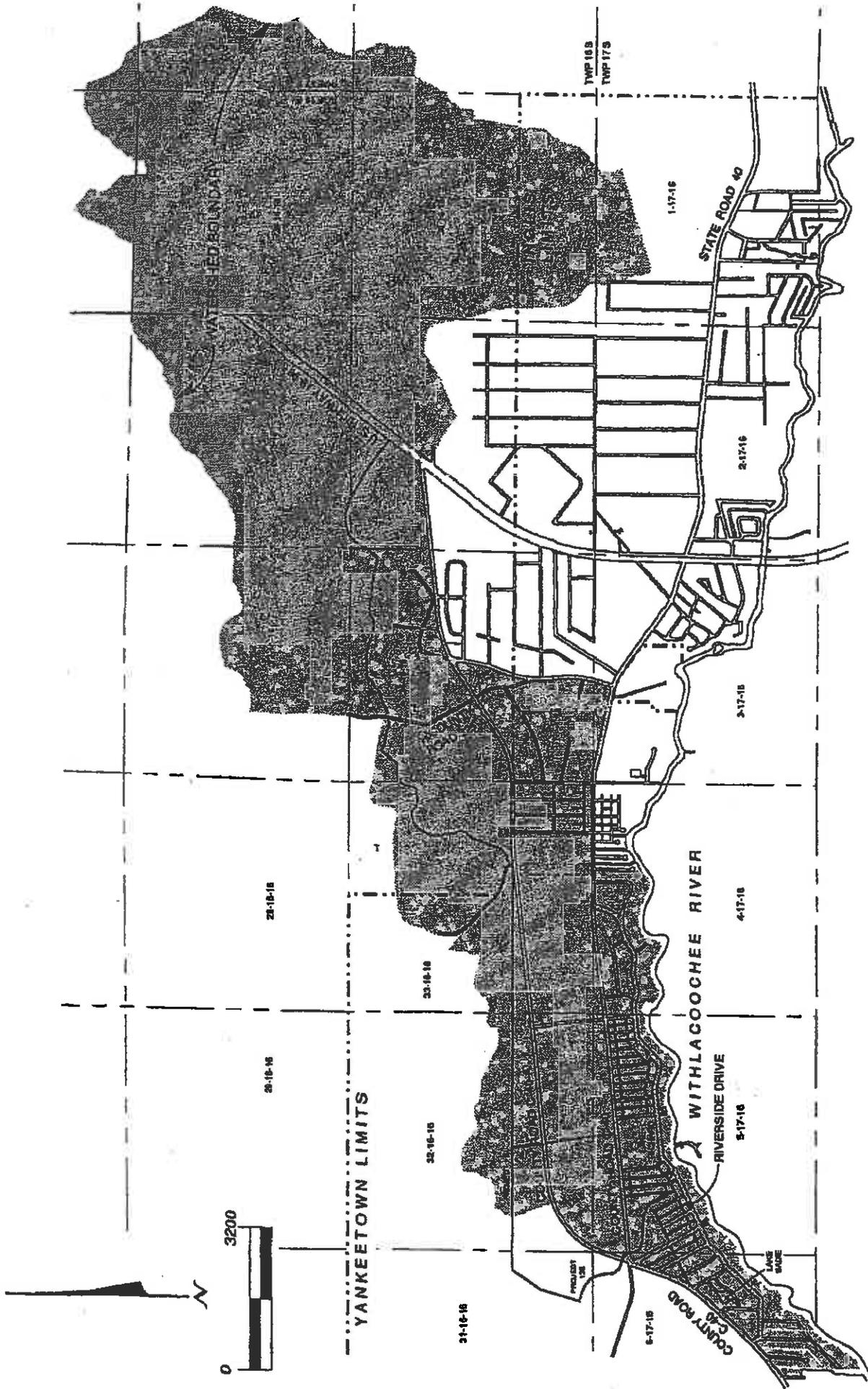
The Project 13 ditch has a contributing watershed as far east as four miles beyond the Yankeetown corporate boundary as shown in Figure 3.3. The computer model was extended to the watershed boundary. The study area was delineated into over 100 drainage sub-basins. These were based on 1 inch equals 200 feet scale aerial contour maps provided by SWFWMD. These were loaded into the data base system and areas were calculated by Valence. A runoff hydrograph was calculated for each sub-basin and assigned to a specific location in the hydraulic model as discussed in subsequent sections.

3.3.4 Times of Concentration

Times of concentration were computed by determining the path of longest travel time within each of the sub-basins. Flow velocities were estimated from slopes and land cover.

The time of concentration is the time it takes runoff to travel from the hydraulically most distant part of a catchment area. This parameter is needed for each sub-basin in the study area. The equation for time of concentration is as follows:

$$T_c = T_1 + T_2 + \dots + T_n$$



**YANKEETOWN WATERSHED
BOUNDARY**

Figure 3.3

M

4.3 Drainage Patterns

The Project 13 ditch located north of County Road 40A was constructed in the early 1960's. The purpose of this ditch was for mosquito control and drainage. Prior to construction of the ditch and County Road 40A, surface runoff flowed through Yankeetown towards the Withlacoochee River. The ditch now intercepts most of this runoff and directs it to the Gulf. County Road 40A also prevents surface runoff from flowing freely through Yankeetown.

A slight ridge is located along the north shore of the Withlacoochee River and generally follows Riverside drive. The land between this ridge and County Road 40 between Pamela Drive and 60th Street is slightly depressional with no outlets. During heavy rainfalls the soil column becomes saturated and water tends to pond on the surface until it either evaporates or percolates into the ground. If enough rain falls, the depressions fill up until a road or some other low spot overtops. Stormwater then flows overland to the next depression and the process is repeated.

There are several areas where County Road 40 is overtopped and stormwater flows from the south to the north, albeit very shallow flow. These are near Patricia Road, 50th Street, and 53rd Street. The land north of County Road 40 and south of County Road 40A east of 56th Street tends to flow from east to west and from south to north. There are several culverts under County Road 40A which provide some relief for this area. However, the area is still very flood prone because of poor soils and the relatively flat topography. Stormwater continues north into the Project 13 ditch and then to the Gulf.

There are a few places along County Road 40 where water can flow from north to south during extreme rainfall events. These are located at 59th Street and northeast of Lake Richard. Low spots along County Road 40 are at about elevation 6.5 feet NGVD. As water levels north of County Road 40 exceed this elevation, stormwater flows across the highway and into Lake Richard. When Lake Richard reaches approximately elevation 5.6 feet NGVD, water flows overland to the south, across Riverside Drive and into the Withlacoochee River.

A wetland slough is located immediately southeast of the County Road 40 and 40A intersection. A ditch was constructed (Project 13B) in the mid 1960's to drain this area (previously seen on Figure 4.1). The land is very low at about elevation 2 feet NGVD. Frequent tidal exchanges are anticipated in this system. There are two outlets for this slough. One is to the north through the Project 13B ditch and culvert system. The second is to the south through a series of small culverts into the Withlacoochee River. All areas west of this slough are tidally influenced.

There are several other land locked depressions in Yankeetown. Three are situated between 56th Street and 54th Street. Each of these are independent of one another and the bottom elevations are at about 5 feet NGVD. Another system of depressions is located between 61st Street and 65th Street. This system is situated

The Levy County Journal

Your Locally-Owned County Paper of Record since 1923

Tara Holland Fundraiser 6A
Rx Buy Back 2A
Captain Barr's Marlin 3A
Bronson Football 1B
Williston Middle Football 8B
Pet of the Week 8B

VOL. 92, NO. 11

THURSDAY, SEPTEMBER 17, 2015

50 CENTS

County Elected Officials Vote to Replace Aging Courthouse but Funding Remains an Issue

By Terry Witt
Senior Staff Writer

Citing serious safety concerns for judges, juries and the public, the Levy County Space and Projects Committee last week voted 9-1 to proceed with replacing the Levy County Courthouse with a new criminal and civil complex at some point in the future, but members were not specific about how they would accomplish the task.

The committee said it also wants to investigate what should be done with the existing 78-year-old courthouse when the new facility is completed, but the overriding question was how the Levy County Commission would fund such a project.

County Commission Chairman John Meeks was the only committee member to vote against the motion to proceed with the new facility, but he was the only committee member who raised the possibility of paying for the future civil and criminal facility by imposing an additional 1 cent sales tax.

continued to page 5A

Public Safety Director Claims Rumor Concerning Consultant Untrue

By Terry Witt
Senior Staff Writer

Levy County Public Safety Director David Knowles said last week it was nothing more than a newspaper rumor that he was planning to hire Government Services Group to conduct a study of changing the boundaries of fire districts and developing a new formula for funding city fire departments.

City fire chiefs were concerned that if Knowles hired GSG, a Levy County Commission consultant, to study how to change the boundaries

Bronson Volleyball Wins Again



Witt

Commission Races

By Terry Witt
Senior Staff Writer

Terry Witt



Rock Meeks enjoys his apparent win over County Commissioner Chad Johnson as the vote totals scroll next to him on a television screen. Photo by Terry Witt.

If the closest Levy County Commission races in history were nail-biters Tuesday night and the won't be final until 14 provisional ballots are counted on Thursday.
District 2 candidate Rock Meeks was the apparent winner over County Commissioner Chad Johnson in their cleanly fought race with Meeks leading 1,739 to 1,701. Johnson won't be able to overcome Meeks' 38 vote lead.
District 4 challenger Lilly Rooks was leading County Commissioner Ryan Bell by 5 votes when the unofficial tally was recorded. Rooks captured 1,726 votes to Bell's 1,721. Provisional ballots could determine the winner.

continued to page 3A

Communication Foul-Ups Slow Response to Fatal University Oaks Fire



Burned belongings and ash are the remnants of the mobile home that burned and killed two University Oaks on Wed. Aug. 20.

By Terry Witt
Senior Staff Writer

State Fire Marshal investigators are sifting through the melted steel and ash of a mobile home in University Oaks that burned to the ground in the early morning hours of Aug. 20 killing a great-grandmother and her great-granddaughter, hoping to determine the cause. But, the more fiery issue that lit up social media Monday was why firefighters arrived late to the scene of the inferno.
Sheriff's officials said Bronson firefighters were dispatched to the wrong address based on information from the original cell phone caller, and to make matters worse, the call was accidentally sent to the Alachua County Sheriff's Office rather than the Levy County Sheriff's Office, apparently because the

closest cell tower in the Archer area picked up the signal and relayed it to Gainesville.
The phone call to the Alachua County Sheriff's Office was made by an unidentified man at 2:17 a.m. He thought he was talking to the Levy County Sheriff's Department, according to Alachua County dispatch records.
Caller: "Yes, uh, I'm in Archer, in between Archer and Bronson in University Oaks. Has anyone called about a fire?"
Dispatcher: "Not that I'm aware of. Do you know where you are specifically?"
Caller: "I'm off 105th and 122."
Dispatcher interrupts: "You're actually in Levy County."
Caller: "Right."
Dispatcher: "This is Alachua County. Let

continued to page 5A

Morriston Man Killed by Mystery Driver

Updated

By Terry Witt
Senior Staff Writer

A hit and run driver struck and killed a Morriston man walking near the center of County Road 337 late Saturday night. The driver has not been identified.
The victim was James Thomas Lowman, 70, of Morriston.
The front left of the unidentified vehicle struck Lowman and threw him to the east shoulder several feet away from the roadway. The Florida Highway Patrol said the crash occurred at 11 p.m. at the intersection of CR 337 and SE 40th St.
The body wasn't found until much later. The area is poorly lit and no one noticed the body during the hours of darkness. A passerby saw the body and called to report seeing the body, FHP said.
Lowman was pronounced dead on Aug. 24 at 8:02 a.m. by Levy County Emergency Medical Service Paramedic Mandy Willis.
Florida Highway Patrol Cpl. Shawn Lattinville said the driver of the hit and run vehicle left the scene before the arrival of troopers.
The hit-and-run vehicle is possibly

continued to page 3A

Bronson Still Fighting to Prove Ditch Isn't a Flood-Prone Stream

By Terry Witt
Senior Staff Writer

A drainage ditch dug in the mid-1930s along the west side of Bronson will be examined once more by the Federal Emergency Management Agency as part of an overall look at the Waccasassa River basin, but the problem for Bronson is that FEMA continues to call the ditch the Magee Branch Tributary, suggesting it is a natural stream prone to flooding.
FEMA currently lists a small portion of the downtown business district in Bronson as being flood prone, something the town disputes. The town says there are no records suggesting the downtown area has ever flooded. But because FEMA flood maps show part of downtown as flood prone, business owners there would be required to buy federal flood insurance to insure their property.
Aside from the inconvenience and cost of

purchasing federal flood insurance, the town disputes FEMA's claim that the downtown area is flood prone or that a natural stream flows along the west side of Bronson called the Magee Branch Tributary. They object to FEMA assigning a name to a ditch to justify federal flood maps.
Last year the Bronson Town Council members commissioned a study of the drainage ditch and the area it flows into, which is Chunky Pond, to prove that the ditch was created to drain excess water away from Bronson, but the study won't be finished until June of next year. The town wants FEMA to hold off on the federal study until Bronson concludes its study.
But convincing a federal agency the size of FEMA that the ditch is actually a ditch and the federal study should be delayed would be a formidable task. The town instead met with U.S. Rep. Ted Yoho's staff last week in Gainesville to see what he could

continued to page 5A



Chiefland Pushes to Extend Dead-End Street

By Terry Witt
Senior Staff Writer

NW 11th Drive has been a largely forgotten street in Chiefland for many years, but with a new hospital on the horizon and the city's renewed interest in economic development, the

street is back in the spotlight.
NW 11th Drive probably should have been extended from Barbeque Bill's into the area of the Wal-Mart Supercenter years ago, but the project was never authorized by the Chiefland City Commission. Cost was a factor. The city was unable to obtain a grant.

A drainage canal bisects the street behind Barbeque Bill's restaurant and between O'Reilly's Auto Parts and the Days Inn Motel on the other side of the canal.
Traffic exiting Wal-Mart, Walgreens, CVS and other stores in that section of town can't use

continued to page 3A

Canvassing Board Gets Early Start Counting

41

Rhiannon Rickmeyer, 10, who were living with Carolyn Bright, grandmother of the child. Rhiannon was a Bronson Elementary School student. The sheriff's office said the grandmother was at work at the time of the fire and came home to total devastation.

"Our hearts pour out to the grandmother. She wasn't at home when she was notified. She didn't just lose a child. She lost her entire family. She lost everything," said Sheriff's Lt. Scott Tummond.

Tummond wasn't certain, but he believes the parents live in Orlando. He said the grandmother was the primary caretaker of the child.

Two volunteer Bronson firefighters sleeping at the fire house near Town Hall in Bronson responded within two minutes of receiving the call. They notified dispatch when they arrived at the original address and found no fire. The sheriff's office received a second call at 2:39 a.m., apparently from a person living a short distance from the fire, giving them the correct address at 12331 N.E. 105th Ave.

said they were able to find the fire within three minutes of receiving the correct address.

Criticism and praise for Bronson Fire Rescue flooded the sheriff's office Facebook site. Some residents were angry at the amount of time it took for firefighters to arrive at the scene and while others were disturbed by the finger pointing at firefighters whom they believed did nothing wrong.

Tummond said the firefighters were only about a half mile from the fire when they arrived at the wrong address provided by the first caller, but he said the burning mobile home was surrounded by trees that blocked their view of the flames.

"Our firefighters went right to where they were told to go," Tummond said. "There's a clique of people that want to Monday morning quarterback, but they don't consider that these are volunteers who spent the weekend sleeping at the fire house just to provide security over the weekend."

forces for "Hands Across the Border," an annual traffic safety campaign. Law enforcement officers will crack down on unsafe driving through saturation patrols and checkpoints throughout the week.

On Wednesday, August 27, 2014, officers from the two states will meet and pledge to work together this holiday weekend to ensure drivers are maintaining safe speeds, not drinking and driving and always using their safety belts.

Law enforcement officers from both states will meet at the Florida Welcome Center at 9:45 am and caravan to the Georgia Welcome Center as a sign of mutual support in their efforts to reducing DUI crashes and fatalities during the Labor Day weekend.

10:00 A.M.

Wednesday, August 27, 2014

I-75 (Northbound) Georgia Welcome Center
Lake Park, Georgia

Bronson Still Fighting to Prove Ditch Isn't a Flood-Prone Stream *continued from page 1A*

do for the town. Yoho contacted the Suwannee River Water Management District, which sent representatives to Bronson Wednesday for a 10 a.m. meeting at Town Hall.

SRWMD has a role to play if FEMA is to be convinced that the ditch is not something formed by nature eons ago. SRWMD acts as the contact agency with FEMA.

One of the key pieces of evidence the town has in its possession is an Ocala Star-Banner story dated March 14, 1966 announcing that preliminary engineering studies were underway on the "Waccasassa Basin Chunky Pond project just south of Bronson." The cost of the project was to be shared by the Florida Fresh Water Fish and Game Commission and the Southwest Florida Water Management District.

The 48-year-old newspaper story said the study would be an effort to eliminate back flooding of the Bronson area when Chunky Pond is full during and after the rainy season.

The story noted that a low level dam existed at the south end of the pond with a gated spillway at a road crossing. The existing canal that leads to the low level dam was to be enlarged and improved.

The gated spillway (low level dam) referred to in the story still exists but is in disrepair. The dam has two large gates that can be manually opened and closed to allow water from Chunky Pond to flow under a nearby roadway and into a manmade ditch that crosses through farmland, then through Deer Pen Slough and eventually empties into the Waccasassa River.

The original ditch built during Works Progress Administration (WPA) days in the 1930s started north of Bronson and drained under State Road 24, then along the west side of Bronson to Chunky Pond, according to old timers like Dogan Cobb who lived through the era and remember construction of the ditch.

The gates of the low level dam that

connects to south Chunky Pond acted as a relief valve to prevent flooding. The gates were opened during the 1997-98 El Niño event when portions of Lake Johnson Estates on the edge of Chunk Pond flooded. The county commission ordered the gates opened. The flooding subsided in Lake Johnson Estates south of Bronson. The town didn't flood.

Today the county commission makes no effort to maintain the aging structure. One of the gates is frozen wide open by rust. The other is partially open and once again frozen in that position by rust. The dam remains standing.

The Ocala Star-Banner story said county mosquito control funds were used to cover the cost of the 1966 project above those obtained from state sources. The story said the drainage ditch would begin carrying water from south of Chunky Pond through Deer Pen Slough into Magee Branch and into the ditch dug by Owens Illinois and

finally into the Waccasassa River.

The mosquito control ditch was described as four miles long, 12 feet wide with an average width of four feet.

The town's study by Jones Edmunds extends to Chunky Pond but doesn't include the canal leading to the small dam or the ditch that was dug south of the dam to channel flood water away from Bronson. The town didn't have the funds to extend the study to the canal or beyond. But Bronson Councilman Berlon Weeks said it's obvious when someone tours the ditch, as was done a couple years back with SRWMD in attendance, that the ditch along the west side of Bronson is all part of the same manmade drainage system that extends to Chunky Pond and south to the Waccasassa River.

"So why are we calling it Magee Branch Tributary when we know it's a manmade structure," Weeks said.

Grim Reaper vs ALS *continued from page 4A*

given to the County to spend supposedly on EMS and Fire and pay for all ALS equipment, training and personnel.

Once all the road blocks have been eliminated and the County purchases the equipment (the City asked why the County cost analysis was way higher than the City's) will it be from a non-conflict-of-interest company or will it be from one that is picked by Director David Knowles?

I'm not trying to be an instigator on this issue by pressing municipalities into doing something, I'm just trying to save some lives.

Thank You.

Dane A. Wilson, Chiefland, FL

"Lore, Lies and Legends of the Suwannee"

Stories about Old-Time Life in Suwannee River Country

Seatout, Sturgeon & Mullet Fishing, Crabbing & TONGING,
Alligator & Hog Hunting, Cow Hunting, Logging, Moonshining
& All That Good Ole Hard-Work Stuff

A Community Event at the Dixie County Cultural Center
Old Town, Florida - with Civil War & Settler Living History



Last Week's Crossword

C	O	S	L	O	B	A	R	S	T	R	A	W		
L	A	H	E	N	U	R	E	G	R	E	M	E		
A	K	A	W	A	R	M	E	L	O	O	E	D		
P	A	L	A	D	I	N	A	T	T	E	N	D		
P	E	T	R	E	L	I	C	H	Y	D	E			
S	P	O	O	K	T	H	I	R	K	S	E	E	D	
A	L	I	N	E	S	O	L	I	O					
T	E	L	E	P	H	O	N	E	N	U	M	B	E	R
G	O	D	S	R	E	S	T	G	O	N	D	E		
A	R	I	L	P	D	S	E	R	T	R	A			
S	I	L	A	C	E	R	A	D	I	A	N	T		
B	O	U	T	O	N	T	I	E	R	E	C	G	I	
A	L	T	E	R	O	L	D	E	N	L	E	D		
G	E	E	S	E	G	L	O	R	Y	E	R	E		

Last Week's Word Search

C	A	R	E	D	I	F	I	E	X	C	E	P	T
O	V	S	G	O	F	U	N	N	I	E	R	V	
M	N	T	S	U	C	C	E	S	S	I	V	E	J
P	A	I	N	T	S	T	I	N	E	V			
E	B	M	S	A	C	S	E	S	A	A	R	E	E
T	R	E	U	Y	V	H	S	E	M	A	D	Y	L
E	O	S	S	C	L	O	G	S	P	E	N	D	U
L	A	G	E	N	C	I	S	S	E	R	T	H	
O	D	D	E	D	H	A	C	C	O	S	I	E	
N	R	M	S	E	R	S	T	A	T	O	R		
G	I	D	G	L	I	S	O	C	K	S	Y	N	P
E	A	C	E	R	E	C	T	A	N	G	L	A	R
B	X	M	E	R	U	T	T	E	R	A	L	E	R
E	N	T	E	R	T	A	I	N	M	E	N	T	A

Word Search

S	P	Y	M	E	N	T	I	O	N	B	C	B	X	W
C	E	U	S	P	A	C	E	S	D	O	H	A	U	N
O	A	E	L	E	I	S	O	N	S	O	A	R	E	O
B	Y	R	S	P	T	R	E	N	T	M	R	S	S	T
E	S	I	G	H	E	T	O	S	I	H	A	T	L	H
A	I	M	S	O	M	R	R	N	D	R	C	X	I	I

~~DATE~~ 9-25-15
MCM

**RE: COUNTY MONEY TO ADDRESS
FLOODING ISSUES**

A VIEW FROM THE SWAMP

"We The People" addressed the on-going flooding issues in the Inglis-Yankeetown area recently by involving our county government. After presenting documented evidence, photos and solutions to the county commission concerning flooding and drainage their response was "The county is broke". County help was offered for drainage easement research and information on an existing mosquito control ditch. It was suggested we seek outside help and outside funds from the state to help solve the problems.

As "We The People" considered this response, a timely article in the Levy County Journal stated that county officials just voted to build a new courthouse because of security concerns. This project would likely be funded by a one cent tax. All commissioners voted to support this venture except one, chairman John Meeks.

As "We The People" reflect on this decision while our homes are flooding and our roads are in ill-repair, maybe we missed something. Meanwhile it seems the biggest problem in county government is what to do with the old courthouse. (*See article in Levy Journal on Sept. 17, 2015, Vol. 92, No. 11.*)

"We The People" think the old courthouse might need a study done and perhaps a security upgrade instead of multi-million dollar replacement. We feel if a one cent tax were imposed the money would be better spent to help voters with solutions for flooding and drainage issues that diminish property values and quality of life.

"We The People" should demand accountability from our county government concerning "our" tax dollars. Please be informed when voting this year.

"We The People"

James H. Mashburn
PO Box 605
Inglis, Fl. 34449
352-447-2111



Levy County, Florida



Search Site

Road Department

Go
Custom Search

Quick Links:

Residents & Business

Workers

Road Department

The Levy County Road Department maintains County Roads that are dedicated to the public and provides such services as grading, paving, re-surfacing, mowing, and tree trimming/removal on County Right of Ways.

The Road Department is responsible for road closings, plat reviews, subdivision inspection, and right of way surveying. We work with the Levy County Development Department to provide driveway permit inspections, and we work with telephone companies for permitting and the installation of phone lines on County Right of Way. All 911 address signs, speed limit, county road number, and many more signs for the County are constructed and placed throughout the County as well as channel markers that are placed in the Waccasassa by the Road Department. We also do general maintenance and sign placing on bridges throughout the County. In order to have roads resurfaced in a cost effective manner for the County, we apply for and have been awarded numerous grants from the State of Florida to help in the maintenance of County Roads. The Levy County Road Department welcomes the general public with any questions and comments they may have.

Levy County Road Department
660 N. Hathaway Ave., Bronson, FL 32621
Phone: (352) 486-5124 Fax: (352) 486-5139

Kelly Jarrels, Construction Superintendent
Bruce Greenlee, Administrative Superintendent

Mailing Address:
P.O. Box 336
Bronson, FL 32621

Street Address:
660 N. Hathaway Ave.
Bronson, FL 32621

Telephone: (352) 486-5124
Fax: (352) 486-5139
Email: rd@levycounty.org

Updated as of 3/9/15

Main Office Hours: Monday- Thursday 7:00 a.m. to 5:30 p.m.

*Look for actual
County Job Scope/
and Job description
concerning culverts
+ drainage maint.*

REGULAR MEETING

At a Regular Meeting of the Board of County Commissioners held in and for Levy County in the Courthouse in Bronson on this the 18th day of June, A. D., 1963, the following Commissioners were present:

John F. Yearty, Chairman
Carroll W. Gilbert
David W. Meeks
R. B. Davis
Wardell R. Fugate

Also present was D. D. Allen, former member of the Board of County Commissioners.

G. C. Perdue, Jr., opened the meeting with prayer.

Minutes of the past regular meeting were read and approved.

Bills presented to the Board in the following amounts were approved and authorized paid from the respective funds of the County's Depositories as follows:

General Revenue Fund	\$1268.77
Permanent Mos. Control	170.00
Road and Bridge Fund	2,842.70
Capital Outlay Reserve	27,887.60

Jack Cornett, Levy County Farm Forester, came before the Board and gave an oral report of the activities of the Farm Forester for the past six months.

James Senterfitt and G. M. Owens of the Levy County Soil Conservation District discussed with the Commissioners their budget requests for the 1963-64 budget year.

Mrs. Bessie Gibbs asked permission to take one of the old roll top desks in the Courthouse to her Island Hotel in Cedar Key and put it on display as an antique of Levy County.

Mrs. Gibbs said she would have the desk re-finished and would also use it for exhibit purposes. The Commissioners agreed to check into said request and let Mrs. Gibbs know at a later date.

Mr. Willard Ayres, Attorney, presented to the Commissioners the Petition of Elizabeth S. Jay to Vacate a portion of an Unnamed street in T. B. Wilson Subdivision as per plat recorded in Plat Book 2, Page 51, Public Records of Levy County, Florida.

After considering said petition, the Commissioners requested that Commissioner R. B. Davis take the map on said proposal and discuss the matter with all parties concerned in the above mentioned subdivision and report back to the Board at the next regular meeting.

Mrs. Betty Berger of Inglis came before the Commissioners regarding the drainage ditch leading across the Pat Mac Lands and terminating on her property at the Busbee Lake. She stated that the work had stopped on said Mosquito Control Drainage

ditch because of a mis-understanding.

The Commissioners assured Mrs. Berger that the ditch would continue on as soon as the controversy could be ironed out.

Mrs. Berger also requested the extension of the road from the Berger property to highway 19 which would also serve as a school bus road and the ditches serve as drainage ditches.

C. M. Griffin, Right of way Agent was requested to prepare said deeds for the right of way on said project.

Mr. Alvin Mikell, School Superintendent, advised the Commissioners that the Board of Public Instruction had agreed to give the right of way on State Road #55, U. S. #19 and Alternate 27 in front of the school in Chiefland.

Mr. Mikell also expressed appreciation of the Board of Public Instructions for its new quarters in the Courthouse.

Mr. C. D. Tummond, Tax Collector, came before the Commissioners and requested an increase in the insurance on money and securities. He stated that the coverage was not sufficient at the present time for the transportation of money to the depositories.

The Commissioners at this time refused to increase the amount as requested by the Tax Collector.

Mr. Dogan Cobb, Tax Assessor, also came before the Commissioners in regard to the aerial photographs of Levy County as prepared by the Federal Government. \$1300.00 has been previously budgeted for said photographs, but the Assessor said that the price at this time was \$619.05 instead of the budgetted amount.

The Commissioners approved the invoice of \$619.05 for said photographs.

The Chairman announced that at this time the bids for the front end loader would be opened which had been previously advertised in accordance with law. Thereupon the following bids were opened:

Florida Equipment Company	\$19,997.50
Ring Power Corporation	21,504.56
Alternate	16,686.12
Square Deal Machinery	21,488.50
Alternate	20,110.75
State Tractor & Equipment Co., Inc.	18,439.00
Additional for Drott 4-in-1 bucket in lieu of Standard Bucket	1,249.00
Alternate	20,204.00
Addition for Drott 4-in-1 Bucket	1,700.00

After reading each bid and considering same, the Chairman appointed, G. C. Perdue, Jr. and L. W. Moring, Road Engineer to tabulate each bid and report back to the Commissioners.

ORDINANCE NO. 160

12' EAST 103.04 FEET TO A POINT, THENCE RUN NORTH
5° 15' EAST 510.74 FEET TO A POINT THENCE RUN NORTH
1° 47' WEST 692.70 FEET TO A POINT THENCE RUN SOUTH
88° 12' WEST 210.00 FEET TO A POINT THENCE RUN SOUTH
1° 47' EAST 692.70 FEET TO THE POINT OF BEGINNING ALL,
LYING IN THE EAST HALF OF THE NORTHWEST QUARTER OF
SECTION 5, TOWNSHIP 13, RANGE 19, EAST, LEVY
COUNTY, FLORIDA, CONTAINING 5.103 ACRES MORE OR LESS
TOGETHER WITH THE RIGHT OF WAY OF ALL STREETS AND
ROADS BOUNDING THIS TRACT AND NOT NOW INCLUDED?
WITHIN THE CORPORATE LIMITS OF THE CITY OF WILLISTON.
PAGE 203-204

ORDINANCE NO. 159

AN ORDINANCE ABANDONING, VACATING AND CLOSING THE
EAST 15 FEET OF PINE STREET LYING BETWEEN BLOCKS 17XXX
AND 22 AND SOUTHERLY OF NOBLE AVENUE IN SAID CITY.
AND CONFIRMING A CONVEYANCE OF A PORTION THEREOF.
PAGE 205-206

RESOLUTION #111

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LEVY
COUNTY, FLORIDA. IN RE: PETITION OF ELIZABETH S. JAY
TO VACATE PORTION OF AN UNNAMED STREET IN T. B. WILSON
SUBDIVISION AS PER PLAT RECORDED IN PLAT BOOK 2, PAGE
51, PUBLIC RECORDS OF LEVY COUNTY, FLORIDA.
PAGE 207-209

RESOLUTION #112

RESOLUTION REQUESTING STATE ROAD DEPARTMENT TO
REOPEN DITCH ADJACENT TO NORTH SIDE OF STATE
ROAD 40 IN TOWNS OF INGLIS AND YANKEETOWN, LEVY
COUNTY, FLORIDA. RECORDED IN DE

PAGE 210-211

RESOLUTION #113

ON MOTION OF COMMISSIONER GILBERT, SECONDED BY
COMMISSIONER YEARTY, THE FOLLOWING RESOLUTION WAS
ADOPTED: WHEREAS, THE STATE ROAD DEPARTMENT OF FLA.
HAS AUTHORIZED AND REQUESTED LEVY COUNTY TO FURNISH
THE NECESSARY RIGHTS OF WAY; BORROW PITS AND EASE-
MENTS FOR THAT PORTION OF SECTION 34506, STATE ROAD
S-343, EXTENDING FROM STATE ROAD S-326 NORTHEASTERLY
TO STATE ROAD 337.

Page 212

RESOLUTION #114-

ON MOTION OF COMMISSIONER MEEKS, SECONDED BY
COMMISSIONER YEARTY THE FOLLOWING RESOLUTION WAS
ADOPTED: WHEREAS, THE STATE ROAD DEPARTMENT OF FLA
HAS AUTHORIZED AND REQUESTED LEVY COUNTY TO FURNISH
THE NECESSARY RIGHTS OF WAY, BORROW PITS AND EASE-
MENTS FOR THAT PORTION OF SECTION 34522, STATE
ROAD S-321, EXTENDING FROM STATE ROAD 49 NORTH
OF CHIEFLAND NORTHERLY TO STATE ROAD S-346-A.

213

RESOLUTION #115

ON MOTION OF COMMISSIONER DAVIS, SECONDED BY COM-
MISSIONER YEARTY THE FOLLOWING RESOLUTION WAS ADOPTED.
WHEREAS, THE STATE ROAD DEPARTMENT OF FLORIDA HAS
AUTHORIZED AND REQUESTED LEVY BOUNTY TO FURNISH
THE NECESSARY RIGHTS OF WAY, BORROW PITS AND EASE-
MENTS FOR THAT PORTION OF SECTION 34070, STATE
ROAD 24 EXTENDING FROM INTERSECTION OF 5th STREET
AND "D" STREET IN CEDAR KEY NORTHEASTERLY APPROXIMATELY
1.041 Miles

214

Oct. 6 1964

RESOLUTION REQUESTING STATE ROAD DEPARTMENT TO
REOPEN DITCH ADJACENT TO NORTH SIDE OF STATE
ROAD 40 IN TOWNS OF INGLIS AND YANKEETOWN, LEVY
COUNTY, FLORIDA.

WHEREAS, a portion of State Road 40 extends from the intersection of State Road 55 (U.S. 19) and State Road 40 in a Westerly and Southwesterly direction to a terminus on the Gulf of Mexico, and

WHEREAS, State Road 40 is a heavily traveled State Highway connecting the Municipalities of Inglis and Yankeetown, Florida with State Road 55 (U.S. 19), and

WHEREAS, from the Schoolhouse in Inglis, Levy County, Florida, to a point approximately two (2) miles Westerly thereof (Cabbage Slough) there exists no drainage ditch on the North side of State Road 40 sufficient to drain water from State Road 40 to prevent said water from flooding areas adjacent to said State Road 40, and

WHEREAS, the Levy County Mosquito Control Unit has opened and deepened Cabbage Slough in a Northerly direction to intersect with a drainage ditch previously constructed by said Levy County Mosquito Control Unit, and

WHEREAS, if said ditch on the Northerly side of said State Road 40 were opened and deepened from said Schoolhouse at Inglis, Levy County, Florida, to said Cabbage Slough (approximately two (2) miles) it would alleviate the water flooding condition now existing in said area, and

WHEREAS, the opening of said ditch as aforesaid would be in keeping with the best interest of Levy County, Florida,

BE IT THEREFORE RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF LEVY COUNTY, FLORIDA, AS FOLLOWS:

(1)

That the State Road Department of the State of Florida open and deepen the ditch on the North side of State Road 40 from a point in the Town of Inglis, Levy County, Florida, in

a Westerly direction approximately two (2) miles to Gabbage Slough to intersect with an existing County drainage ditch.

(2)

That the Cost of said project be charged to the appropriate State Road fund.

DONE AND ORDERED IN REGULAR MEETING THIS 6TH DAY OF OCTOBER, A. D., 1964.

THE BOARD OF COUNTY COMMISSIONERS
LEVY COUNTY, FLORIDA

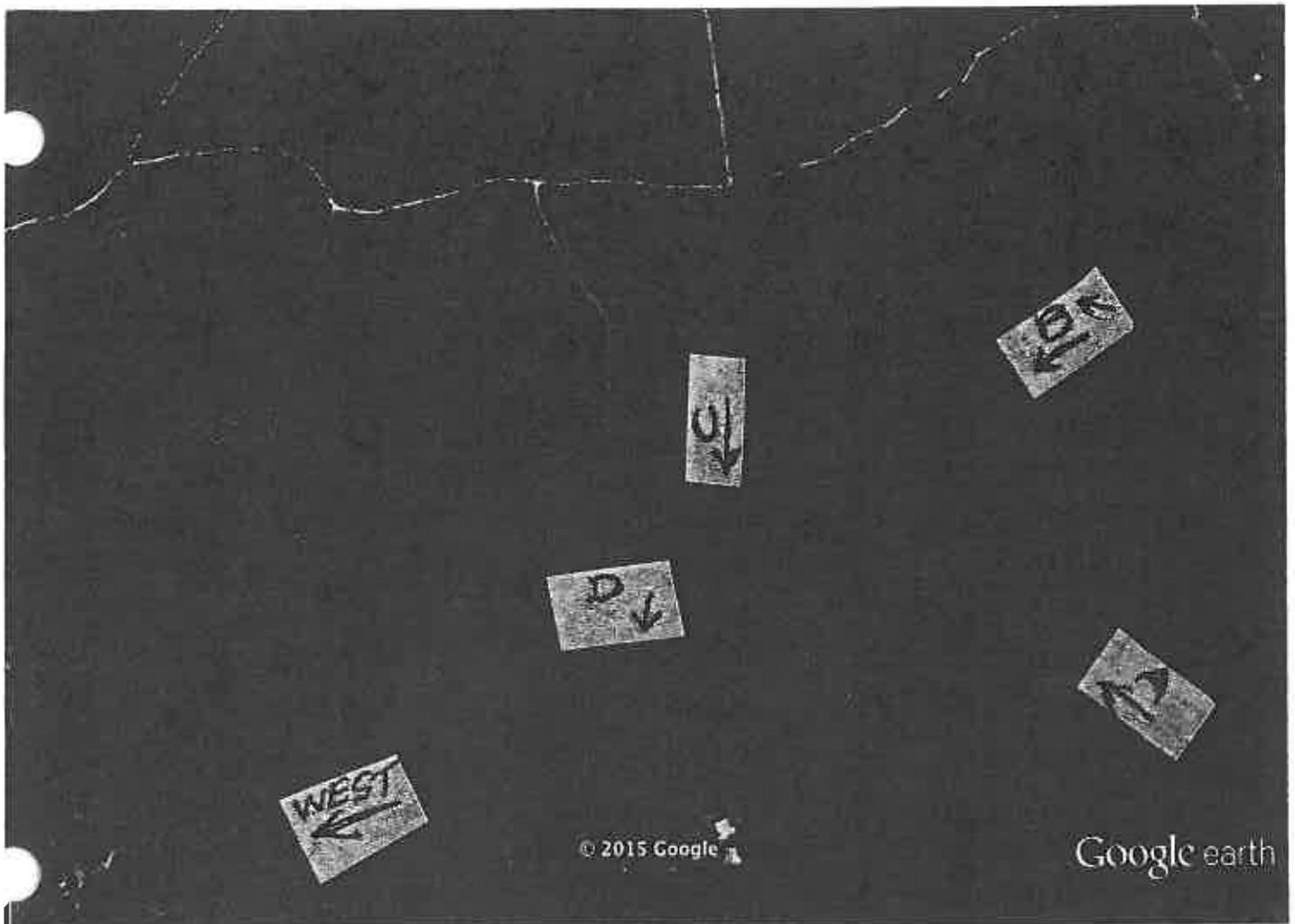
BY: *Richard R. Fugate*
CHAIRMAN

ATTEST:

Ernest Stephens
CLERK

(SEAL)

(Page 2 of 2 Pages)



Google earth

feet 2000
meters 600



- A) DOT DITCH FROM US 19 WEST
- B) DITCH FROM NORTH US 19 TURNING SOUTH TO JOIN FIRST DOT DITCH
- C) NATURAL DRAIN OF PONDS COMING FROM NORTH TO INTERSECT WITH THE ABOVE DITCHES
- D) ALL 3 WATER SOURCES DRAIN INTO BUSBEE LAKE AND CONTINUE WESTWARD TO BUTLER ROAD CULVERT

Betty Berger Book

you might get it. We had a nice ranch-style house that stretched from acre to yonder with floors that required mopping. I'd be mopping away and muttering to God "One room is enough for me." Then I'd picture that one room with concrete walls and a drain in the middle of the floor. I only had to stand there with a garden hose and wash the dirt down the drain. Outside was no lawn to water and weed - it was just sand.

About a year later, I found myself living just outside of Inglis in the one-room house I'd said was enough for me. It only lacked the drain in the floor but it was all sand outside, which I soon tracked inside.

To see the bright lights I had to drive to Dunnellon. During the rainy season, all the water in the state fought to get south to the river or west to the Gulf. That little house and the road to it was right in its path. The old-timers of the neighborhood weren't very reassuring. They said, "The water coming through here will float a horse and wagon off the road."

I needed a ditch to drain that water and a road to the house - higher than the water. This would take more than wishing, it would take action by the Levy County Commissioners. I started going to their meetings every month. These were very friendly people compared to the California politicians. They were all smiles and handshakes compared to the frigid contact in the frozen north of the Mason-Dixon Line and west. It still took me five years to get that ditch and a road to the property line.

A strange ally for that ditch was the pesky mosquito. It was the desire of the Mosquito Control Department to eliminate mosquitoes, that got a ditch dug from Busbee lake to 63rd Street in Yankeetown. It is called ditch No. 13, and benefits a large section of the country.

Years ago we bought a small houseboat in Yankeetown and wanted to get it up to Lake Rousseau where we had property. The trip involved Red and Al Brown, a friend, taking it into the Gulf and going south to the Barge Canal. Then they could travel up the Canal and the lock was operated just for them. I think it used several million gallons of water. About dark I called the Lockmaster. He said, "Yes, I locked them through. The last I saw of them, the houseboat was hung up on four stumps, one under each corner."



LEVY COUNTY
DEPARTMENT OF EMERGENCYMANAGEMENT
POST OFFICE BOX 221
BRONSON, FLORIDA 32621



Russell Morgan
Natural Resources Conservation Service 2614 NW 43rd Street
Gainesville, Florida 32606

September 23, 2015

Dear Mr. Morgan:

We request Federal assistance under the provisions of Section 216 of the Flood Control Act of 1950, Public Law 81-516 or Section 403 of the Agricultural Credit Act of 1978, Public Law 95- 334, to restore damages sustained in Levy County by heavy rains causing the West Central Florida Flooding Events that occurred through the weekend of July 25, 2015. This work is needed to safeguard lives and property from an imminent hazard of flooding of streets and homes.

We understand, as sponsors of an Emergency Watershed Protection (EWP) Program project, that our responsibilities will include acquiring land rights and any permits needed to construct, and if required, to operate and maintain the proposed measures. We are prepared to provide local Contributions of the cost of construction work in dollars or in-kind services.

The names, addresses, and telephone numbers of the administrative and technical contact persons in our organization are as follows:

Fred Moody
Levy County Administrator
PO Box 310, Bronson, Fl. 32621
352-486-5100
moody-fred@levycounty.org
352-486-5167

Wilbur Dean
Assistant Levy County Administrator
PO Box 310, Bronson, Fl. 32621
352-486-5100
Dean-wilbur@levycounty.org
352-486-5167

John MacDonald
Levy County Emergency Management Director
PO Box 221, Bronson, Fl. 32621
352-486-5593
johnmacdonald@levydisaster.com
352-486-5167

Bruce Greenlee
Levy County Road Department Administrative
Superintendent
PO Box 336, Bronson, Fl. 32621
352-486-5124
Greenlee-bruce@levycounty.org
352-486-5167

Please contact Mr. Fred Moody for any additional information that you might need in assessing our request.

Respectfully,

John MacDonald
Director
Levy County Emergency Management

Phone: 352-486-5593 Fax: 352-486-3366
Email: johnmacdonald@levydisaster.com

<p>Fred Moody Levy County Administrator PO Box 310 Bronson, Fl. 32621 352-486-5100 moody-fred@levycounty.org</p>	<p>John MacDonald Levy County Emergency Management Director PO Box 221 Bronson, Fl. 32621 352-486-5593 johnmacdonald@levydisaster.com</p>
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<p>Wilbur Dean Assistant Levy County Administrator PO Box 310 Bronson, Fl. 32621 352-486-5100 Dean-wilbur@levycounty.org</p>	<p>Bruce Greenlee Levy County Road Department Administrative Superintendent PO Box 336 Bronson, Fl. 32621 352-486-5124 Greenlee-bruce@levycounty.org</p>
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S.A.C. ENVIRONMENTAL LABORATORY INC

ANALYTICAL RESULTS

INGLIS

Workorder: INGLIS

Project:

Lab ID: E150797-1

Date Collected: 9/28/15 1015

Sample ID:

Date Received: 9/28/15 1210

Sample Description:

Location: BIKE PATH BRIDGE

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc:				Analytical Method:				
BIKE PATH 1 FECAL	800/100	col/100mL			SM9222-D	1/100	9/28/15 1218	
BIKE PATH 2 FECAL	9,000/100	col/100mL			SM9222-D	1/100	9/28/15 1218	

Sally Ann Camillo
QA Officer

59



S.A.C. ENVIRONMENTAL LABORATORY INC

ANALYTICAL RESULTS

INGLIS

Workorder: INGLIS

Lab ID: E150797
Sample ID:

Date Collected: 9/28/15 1015
Date Received: 9/28/15 1210

Sample Description:

Location: BIKE PATH BRIDGE

Parameters	Results Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc:				Analytical Method:			
TOTAL COLIFORM	col/100mL			SM9222-B	On M-Endo	9/28/15 1218	

BIKE PATH 1

150,000/100 Total Colonies
POSITIVE Total Coliforms
POSITIVE E-Coli

BIKE PATH 2

356,000/100 Total Colonies
POSITIVE Total Coliforms
POSITIVE E-Coli

1:100 DILUTION

60



Sally Ann Connolly
QA Officer



THE FLORIDA SENATE

Tallahassee, Florida 32399-1100

COMMITTEES:
Environmental Preservation and Conservation, *Chair*
Agriculture, *Vice Chair*
Appropriations Subcommittee on General Government
Children, Families, and Elder Affairs
Communications, Energy, and Public Utilities
Community Affairs

SENATOR CHARLES S. DEAN, SR.
5th District

November 18, 2015

The Honorable Alan Hays
320 Senate Office Building
404 South Monroe St.
Tallahassee, FL 32399-1100

Dear Chairman Hays,

The purpose of this letter is to seek your permission to be excused from the scheduled Appropriations Subcommittee on General Government meeting on December 3, 2015. Due to prior commitments, I will not be able to attend.

Should you have any questions concerning this matter, please do not hesitate to contact me personally.

Sincerely,

Charles S. Dean
State Senator District 5

CC: Jamie DeLoach, Staff Director

REPLY TO:

- 405 Tompkins Street, Inverness, Florida 34450 (352) 860-5175
- 311 Senate Office Building, 404 South Monroe Street, Tallahassee, Florida 32399-1100 (850) 487-5005
- 315 SE 25th Avenue, Ocala, Florida 34471-2689 (352) 873-6513

Senate's Website: www.flisenate.gov

ANDY GARDINER
President of the Senate

GARRETT RICHTER
President Pro Tempore



THE FLORIDA SENATE

Tallahassee, Florida 32399-1100

COMMITTEES:
Regulated Industries, *Vice Chair*
Appropriations
Appropriations Subcommittee on General Government
Banking and Insurance
Finance and Tax
Fiscal Policy

SENATOR GWEN MARGOLIS

35th District

December 3, 2015

Senator Alan Hays, Chairman
Senate Appropriations Subcommittee on General Government
Suite 320 Senate Office Building
Tallahassee, Florida 32399-1100

Dear Chairman Hays:

Please excuse my absence from the Appropriations Subcommittee on General Government Committee meeting being held on Thursday, December 3, 2015. Unfortunately, due to circumstances beyond my control, I have had to return immediately to the district and am unable to attend.

Your favorable consideration of my request is very much appreciated.

Sincerely,

State Senator Gwen Margolis
District 35

cc: Ms. Jamie DeLoach

REPLY TO:

- 3050 Biscayne Boulevard, Suite 600, Miami, Florida 33137 (305) 571-5777
- 414 Senate Office Building, 404 South Monroe Street, Tallahassee, Florida 32399-1100 (850) 487-5035

Senate's Website: www.flsenate.gov

ANDY GARDINER
President of the Senate

GARRETT RICHTER
President Pro Tempore

STATE OF FLORIDA
SENATE
RECEIVED
SENATE APPROPRIATIONS
15 DEC -3 AM 9:30

CourtSmart Tag Report

Room: EL 110
Caption: Senate Appropriations Subcommittee on General Government

Case No.:

Type:
Judge:

Started: 12/3/2015 3:43:23 PM

Ends: 12/3/2015 5:21:18 PM

Length: 01:37:56

3:43:23 PM Sen. Hays (Chair)
3:46:30 PM TAB 1 - Presentation on Governor's Fiscal Year 2016-2017 Budget Recommendations
3:46:38 PM Noah Valenstein, Executive Director of the Suwannee River Water Management District
3:48:42 PM Jon Steverson, Secretary, Department of Environmental Protection
3:54:41 PM N. Valenstein
3:56:05 PM Laurie Grasel, Policy Coordinator, General Government Unit
3:57:24 PM Ken Lawson, Secretary, Department of Business & Professional Regulation
3:58:42 PM Tom Delacenserie, Secretary, Department of Lottery
4:00:32 PM Chad Poppell, Secretary, Department of Management Services
4:02:31 PM Jason Allison, Executive Director, Agency for State Technology
4:03:31 PM L. Grasel
4:04:28 PM Sen. Hays
4:05:49 PM TAB 2 - Workshop - Testimony and Discussion on General Government Budget Development Issues (no vote to be taken)
4:05:52 PM Sen. Smith
4:07:00 PM Sen. Abruzzo
4:08:46 PM Carl Zalak, Commissioner, Marion County
4:10:00 PM Brian Lamb, Sheriff, Lafayette County
4:11:24 PM Drinda Merritt and Debra Wiess, Mayors of Inglis and Yankeetown, Towns of Inglis and Yankeetown
4:12:51 PM Wayne Hamlin, Mayor, Town of Mayo
4:13:36 PM Doug Jones, Mayor, City of Archer
4:14:37 PM Bob Solari, Chairman, Indian River County
4:15:44 PM Brigham Shuler, Council Member, City of Bristol
4:17:02 PM Van Royal, Mayor, City of Green Cove Springs
4:18:29 PM Bob Ford, Councilman, City of Port Orange
4:19:31 PM Sen. Gibson
4:21:21 PM Sen. Hays
4:21:48 PM George Vallejo, Mayor
4:22:47 PM Patricia Williams, Commissioner, City of Lauderdale Lakes
4:24:00 PM Beth Lemke, President, Planning Solutions Corporation, City of Daytona Beach
4:25:19 PM Patrick Lehman, Executive Director, Peace River Manasota Regional Water Supply Authority
4:26:18 PM Alex Rey, Town Manager, Town of Miami Lakes
4:27:42 PM James Kinzler, Assistant City Manager, City of Clermont
4:28:53 PM Khalid Resheidat, Assistant City Manager, The City of New Smyrna Beach
4:29:46 PM Edward Labrador, Director, Intergovernmental Affairs & Professional Standards, Broward County
4:30:58 PM Sean Lanier, Director, Public Works Department, City of Ocala
4:31:55 PM Jorge Corzo, Town Engineer, Town of Medley
4:33:15 PM Kelli Walden, Grant Coordinator, City Blountstown and Marianna
4:34:56 PM Debbie Preble, Engineer, City of Monticello
4:36:14 PM Donald Stanley, Project Engineer, City of Graceville and City of Jacob
4:37:29 PM Matthew Chester, Engineering Technician, City of Chattahoochee and City of Quincy
4:38:33 PM Marcia Conwell, CEO of Bread of the Mighty Food Bank
4:39:45 PM Elizabeth Moore, Senior Project Manager, City of Mexico Beach
4:41:00 PM Crystal Weatherington, Engineer with Preble-Rish, Inc., Town of Cinco Bayou
4:42:03 PM Bob Majka, County Manager, Bay County
4:43:06 PM Frank Darabi, Consulting Engineering, Gilchrist County Board of County Commissioners
4:44:59 PM Mike Ulrich, Director, Volusia County Water Resources and Utilities
4:45:11 PM John Locklear, President, Locklear & Associates, Inc., Dixie County Board of County Commissioners
4:45:59 PM Mark Wise, Deputy Director, Okaloosa Water and Sewer, Okaloosa County
4:46:56 PM John Durgan, Special Projects Coordinator, City of Boyton Beach
4:47:45 PM Stacie Greco, Water Conservation Coordinator, Alachua County
4:49:06 PM Kate Parmelee, Community & Stategic Partnerships Manager, Martin County Board of County

Commissioners

4:50:00 PM Dr. Alvin B. Jackson Jr., Economic Development Director, Suwannee County
4:50:41 PM Jerry Sansom, Lobbyist, City of Cape Canaveral, City of Melbourne, City of Cocoa
4:52:10 PM John Dubois, Vice Mayor, Village of Palmetto Bay
4:52:30 PM Corrice Patterson, Public Works Director, Village of Palmetto Bay
4:53:24 PM Diana Arteaga, Director, Government Relations, City of Miami
4:54:42 PM Charles LaPradd, Agriculture Manager, Miami-Dade County
4:55:33 PM Jose A. Bermudez, Consultant, Village of Pinecrest
4:56:28 PM John Regan, P.E., City Manager, City of St. Augustine
4:57:28 PM Chris Marsh, Village Engineer, Village of Royal Palm Beach
4:58:17 PM Carlos Arroyo, Stormwater Utility Manager, City of Doral
4:59:21 PM Greg Netto, Assistant Public Works Director and Arthur H. Sorey III, City Manager, City of North Miami
5:00:31 PM Michael Bailey, Utilities Director/City Engineer, City of Cooper City
5:01:18 PM Bryan Farrow, Engineer, City of Tamarac
5:02:28 PM Robert Sherman, Director, Community Services, City of Aventura
5:03:44 PM Richard Salamon, City Manager, City of Sunrise
5:04:52 PM Antonio Jefferson, City Manager, City of Gretna
5:06:05 PM David Sigerson, City of Margate
5:07:28 PM Christine Dobkowski, Mayor, City of Belleview
5:08:32 PM Jordan Connors, City of Port St. Lucie
5:09:15 PM Tim Caddell, Government Relations Administrator, City of Pinellas Park
5:10:20 PM Joel Ramos, Legislative Assistant, Senator Jeremy Ring
5:11:15 PM Rachel Barnes, Legislative Assistant for Senator Stargel, 2 Waters Projects for Polk County
5:12:18 PM Jeffrey Scala, Legislative Assistant to Senator Eleanor Sobel, Florida Senate District 33
5:12:54 PM Todd Bonlarron, Legislative Affairs Director, Palm Beach County
5:13:32 PM Chris Lyon, Legislative Counsel, St. Lucie County
5:14:27 PM Kirk Pepper, Capitol Insight, City of Deltona
5:15:43 PM Sean Pittman, Lobbyist, City of Riviera Beach
5:16:57 PM Dixie Sansom, Board Member, Cape Canaveral Lighthouse Foundation
5:17:31 PM Bill Rollins, President, Jim Stidham & Associates, Eastpoint Water & Sewer District
5:18:56 PM John Buss, Manager of Water Resources, City of Tallahassee
5:20:04 PM Beth Lemke, President, Planning Solutions Corporation, City of Oakhill
5:21:14 PM Meeting Adjourned
5:21:15 PM
5:21:16 PM
5:21:17 PM
5:21:17 PM
5:21:17 PM