August 2, 2020









PO Box 88, Hahira, GA 31632 850-290-2350 wwalswatershed@gmail.com www.wwals.net WWALS is an IRS 501(c)(3) nonprofit charity est. June 2012

WWALS Watershed Coalition advocates for conservation and stewardship of the Withlacoochee, Willacoochee, Alapaha, Little, Santa Fe, and Suwannee River watersheds in south Georgia and north Florida through education, awareness, environmental monitoring, and citizen activities. Suwannee RIVERKEEPER® is a program and a paid staff position of WWALS.



To: Potential Partners in helping clean up the Withlacoochee River

Re: Current Situation of Water Quality Testing, Suwannee River Basin

Dear Potential Partner,

Trudy Cole wrote about water quality testing for WWALS:

"We do this so not just our grandchildren, but your grandchildren have clean water to drink, fish, and swim in. "Clean water, it's not just important, it is vital."

We've never found anyone who wants to swim, boat, or fish in dirty water, much less drink it.

One of the main ways to determine whether water is safe for these activities is to measure fecal bacteria that are derived from human and animal waste. They are indicators that contact with the water may cause a variety of diseases. There are well-established regulatory limits on these bacteria (see Attachment C: What do these numbers mean?) Far too often Withlacoochee River water exceeds these limits for safe drinking, swimming, or fishing. Such contamination threatens public health and limits use of the river and may affect nearby water wells.



Photo: Trudy Cole, of <u>Conn and Trudy Cole testing</u> water for WWALS, <u>May 4, 2020</u>

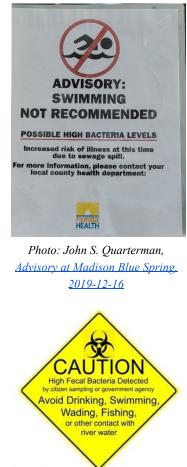
The Withlacoochee River is one of the main tributaries of the Suwannee River. It and its largest tributary the Little River, originate in the flatlands of Southern Georgia, meet just west of Valdosta. The Withlacoochee joins the Suwannee in North Florida. The River's geology includes many high magnitude fresh water springs. The springs and the river itself are magnets for swimming and boating. The underground water that feeds the springs interchanges with river water, and also supplies water for many private wells. Thus bacterial contamination of the river and its springs is a major regional concern.

Raw sewage spills have been a problem for many years, with the biggest ones coming from the City of Valdosta, as recently as December 2019. Yet that is not the only source. One recent contamination episode that did not come from Valdosta went all the way down the Withlacoochee and Suwannee Rivers to the <u>Gulf of Mexico.</u> The good news is that because of much recent testing, we have a much better idea of when our rivers are clean or not and how to identify contamination sources.





Photo: Scotti Jay, of <u>Valdosta</u> <u>Caution sign</u> at Troupville Boat Ramp, 2019-12-21. Someone decorated it with flowers, like a cross at a highway wreck site.





<u>WWALS Caution signs</u> at Knights Ferry, Nankin, and State Line Boat Ramps, <u>since 2020-01-10</u>.

What provoked all this testing was a major sewage spill Valdosta discovered on December 9, 2019, of 7,592,910 gallons of raw sewage, into Sugar Creek. That creek is within the city limits and reaches the Withlacoochee River on the edge of town. Because there had been no rain and creek and river levels were very low, bacterial tests on the Withlacoochee River at the Georgia-Florida line remained very low for two weeks.

Nonetheless, the Florida Department of Health (FDOH) had warning signs up by December 10th, at Madison Blue Spring and even farther downstream on the Withlacoochee River. That sewage moved very slowly but finally reached the state line by December 26, 2019, and again in two more waves a week apart, driven by rain events.

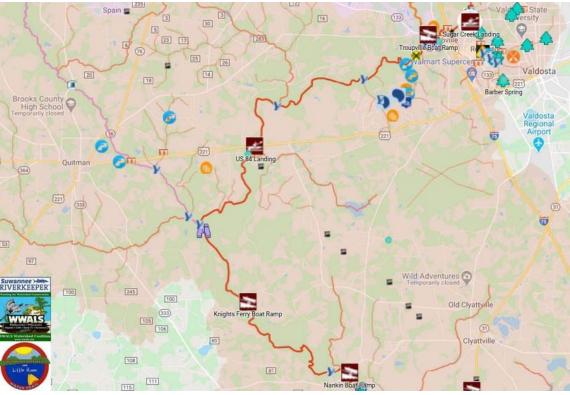
Water well testing by health departments in Madison and Hamilton Counties, Florida, also found bacterial contamination in wells near the Withlacoochee River. While baselines before December are mostly lacking, many of those well owners are convinced Valdosta's sewage spill caused their well problems.



No sewage spills have been reported anywhere in the Suwannee River Basin in Georgia or Florida since that December 2019 Valdosta spill. Yet there continue to be river contamination events.

Photo: Scotti Jay, of <u>Sara Jay preparing to test</u> the Withlacoochee River just above the Little River Confluence, west of Valdosta, GA, 2019-12-21.

High bacteria *(E. coli)* counts often first appear nineteen river miles downstream from Valdosta's Sugar Creek at Knights Ferry Boat Ramp, south of US 84 between Valdosta and Quitman (see map). Suzy Hall for WWALS detected that contamination when there was no other testing there.



Quitman and Valdosta in the WWALS map of the Withlacoochee and Little River Water Trail.



WWALS testing training; <u>Suzy Hall</u> with a Petrifilm. WWALS spends \$10 per test per site. <u>How to donate.</u>

Pictures of WWALS testers in action



Suzy Hall water quality testing, Nankin Boat Ramp, Withlacoochee River, <u>2020-04-18</u>



Photo: Trudy Cole, of Conn Cole water quality testing, <u>2020-05-04</u>



Photo: John S. Quarterman, Denise Shirey, Debbie and Jason Valinsky at Florida Campsites Ramp in Hamilton County, Florida, upstream from FL 6, 2019-12-16.

It seems likely that the contamination is not coming from Valdosta since high bacterial levels first show up that far downstream. Valdosta does have a long history of sewer spills, and more work to do to deal with effects of its early December 2019 spill. But Valdosta is probably not the current river contamination problem. Due to the recent testing, we have an idea what is.

Lowndes County, Georgia (which has its own sewer system that did not spill), took up testing downstream of Valdosta to the state line, out of concern for county citizens who live or boat or fish there. That county testing also showed contamination events starting at Knights Ferry, corroborating what WWALS had found.



Photo: John S. Quarterman: WWALS Testing Committee Chair Suzy Hall, WWALS Outings Committee Chair Bobby McKenzie, WWALS warning signs, Knights Ferry Boat Ramp, <u>2020-04-18</u>

Also, Florida's Suwannee River Water Management District (SRWMD) tested at Knights Ferry and verified those Withlacoochee River results. Valdosta later tested there near the same day as WWALS, and those results were very similar.

After discussions between Lowndes County Chairman Bill Slaughter and Suwannee Riverkeeper John S. Quarterman, both WWALS and the county started testing on the biggest tributary between US 84 and Knights Ferry, which is Okapilco Creek, coming out of Brooks County, GA (see map below).

Testing in Brooks County by Lowndes County, WWALS, and now Valdosta, does show high bacteria levels *(E. coli)* on Okapilco Creek, usually before or during high counts on the Withlacoochee River. That Okapilco contamination cannot be coming from Valdosta, because that's not the way the creek flows (see map below).

Additional tests indicated that the source is not the City of Quitman, even though that Brooks County seat has a Land Application Site (LAS or spray field) next to Okapilco Creek. What is?

The Florida Department of Environmental Protection (FDEP) has done some DNA testing at the state line and downstream into Florida, in an effort to determine the source of the bacterial contamination in the river. These are complex and expensive tests that show whether the bacteria detected in water samples come from humans or animals. This testing showed that after those early waves of Valdosta sewage the human DNA markers were not detectable in nearly all cases. FDEP also tested for several compounds that only humans use, such as the artificial sweetener sucralose. Sucralose levels detected were low, and do not alone indicate sewage spills, since the compound is known to pass through sewage treatment plants unchanged. However, when sucralose levels rise in concert with bacteria (*E. coli*) levels the combination can be an indicator.

#SuwanneeCleanup

You can also pick up trash and post pictures or video with this hashtag.



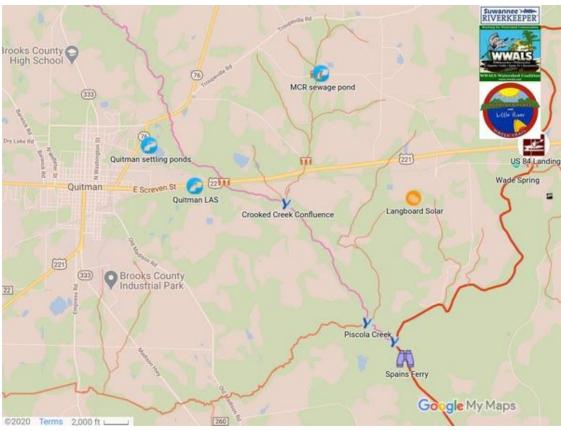
WWALS Executive Director Gretchen Quarterman picked up trash on a road. #SuwanneeCleanup, 2020-04-22



Randy Madison on the Suwannee River in Columbia and Hamilton Counties, Florida, and Clinch County, Georgia, #SuwanneeCleanup, 2020-04-22



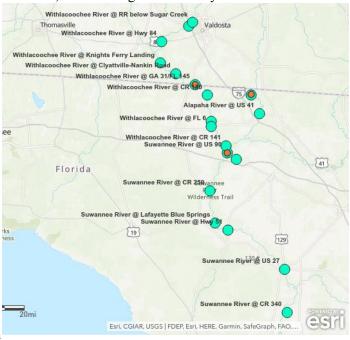
Suwannee Riverkeeper John S. Quarterman at State Line Boat Ramp, Withlacoochee River, for Waterkeepers Florida toast Earth Day <u>2020-04-22</u>



Map: Quitman and Okapilco Creek to Withlacoochee River, Withlacoochee and Little River Water Trail.

While tests for human waste were not definitive, other testing conducted by FDEP showed that

DNA markers for ruminants were often very high at multiple stations at the state line and in Florida. There are not enough deer, sheep, or goats to account for the magnitude of the problem. The only ruminants numerous enough are domestic cattle, Bos taurus, and there are about 10,500 of those in Brooks County. Many are on a creek where WWALS has repeatedly found very high fecal bacterial levels (E. coli) after rain events. But that creek also has low flow and volume compared to Okapilco Creek, so it appears that there is substantial dilution as that water enters Okapilco Creek, and even



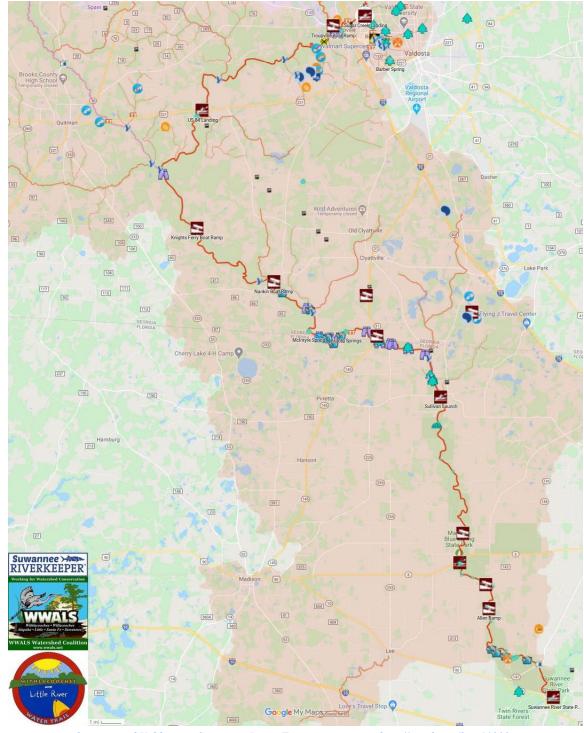
more when it enters the even bigger Withlacoochee River.

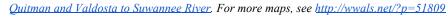
Brooks County is not the only source of contamination. After big rain events, *E. coli* counts often go high upstream of Valdosta on the Withlacoochee and Little Rivers, and upstream of Quitman on Okapilco Creek. Plus there are known and suspected Florida sources of contamination on the Withlacoochee and Suwannee Rivers.

WWALS, Lowndes County, Valdosta, and Madison Health of Madison County, Florida, continue testing. Valdosta now posts its results on the city's own website, and FDEP posts

Florida results on its website. This is a big step forward. WWALS posts a composite spreadsheet of Georgia and Florida water quality results (see Attachment B), as well as analytic reports when significant contamination or a return to cleanliness is detected. <u>wwals.net/issues/testing/</u>.

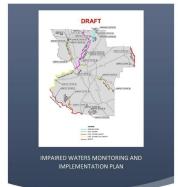
It turns out Valdosta is required to test three times a week to the state line for four years by the Georgia Environmental Protection Division (GA-EPD) in a new <u>Consent Order</u>. As part of that, Valdosta is starting monthly DNA testing, although that has been delayed by the virus pandemic.





Plus <u>Lowndes County has started</u> an apparently weekly series of bacterial, dissolved oxygen, and mercury tests throughout the county, with some DNA tests. We look forward to publication of the results.

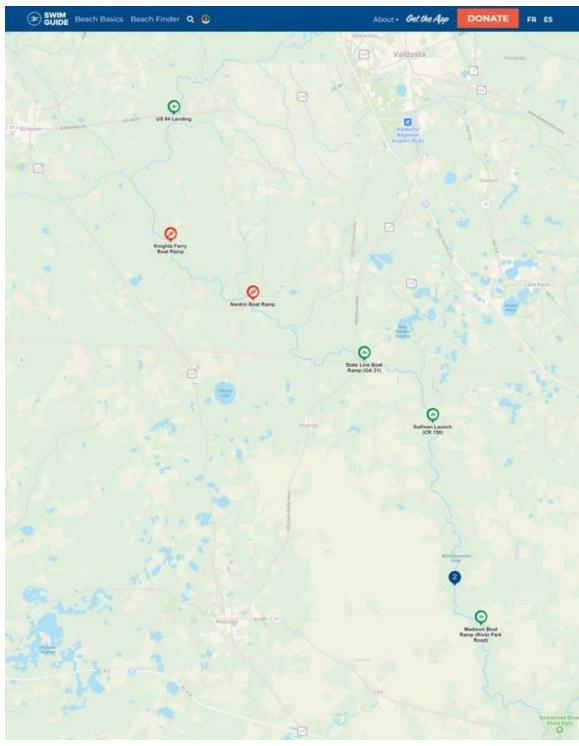
WWALS is also now using all this testing data to post current water quality status in Swim



LEA

850-290-2350

<u>Guide</u>, an international program that posts current water quality conditions at swimming areas and helps ensure that swimmers and boaters are aware of any potentially hazardous conditions from fecal bacteria and other contaminants.



Withlacoochee River "beaches" (canoe and kayak launches and boat ramps) updated by WWALS in Swim Guide

Yet more testing is needed. Increasing the frequency and the number of locations where testing is performed will help to find potential contamination sources or to rule some out. Ongoing testing is also needed to determine whether the application of Best Management Practices (BMPs) such as fencing cattle away from wetlands and creeks are actually helping reduce fecal contamination in our waterways. Further supporting hydrologic (leaching, flow, and dilution), chemical, isotopic, and biologic testing such as DNA are also needed.



Photo: Suzy Hall for WWALS, of Michael and Jacob Bachrach testing for WWALS at Nankin Boat Ramp, Withlacoochee River, <u>2020-07-03</u>

How You Can Help

Suwannee Riverkeeper for WWALS Watershed Coalition, Inc. (WWALS) asks you to partner to detect and clean up bacterial contamination in the Suwannee River Basin.

If your organization is collecting water quality data in the Suwannee River Basin, we ask you to publish it online so everyone can see it.

Or you could partner on a grant application we are working on for next year. WWALS is currently working to identify implementation partners and sites where Best Management Practices (BMPs) might be implemented to reduce bacterial contamination in the River and its tributaries. You may already be doing work that could be counted as in-kind towards the grant match, or you could contribute cash. In order to prepare a competitive and high-quality application, we are starting conversations with partners early.

Perhaps you or your organization would like to contribute to our WWALS Volunteer Water Quality Monitoring Program. This program has directly detected contamination and leads to sources. It has also helped persuade others to test. For example, the City of Valdosta is now testing three times a week, forty river miles down the Withlacoochee River to the state line, plus one location on Okapilco Creek in Brooks County, Georgia. Yet WWALS continues to be the first and only organization testing in new areas, following contamination upstream, as well as on the weekend.

Thanks to a generous grant from Georgia Power, we are buying more testing kits, so we can train more testers and get them testing, in addition to our several new testers in recent months. In addition to the Withlacoochee and Little Rivers and Okapilco and other creeks, we also test on the Alapaha River, and occasionally on the Suwannee, Santa Fe, and the Okefenokee Swamp.

We could use even more kits and supplies than that grant can fund, and that grant doesn't cover other types of equipment that we could use.

Beyond all this, you can help with eco-tourism marketing to show everyone that the situation is improving.

There are also many other ways you can help, many of which don't require money. See Attachment A.

We look forward to working with you and your organization on cleaning up our rivers and repairing the decades-long stigma on them.

For the rivers and the aquifer,

John S. Quarterman, Suwannee RIVERKEEPER®, 229-242-0102 Dr. Tom Potter, Senior Vice President, Chair, Science Committee

Attachments:

- A. Ways you can help
- B. A recent example extract from the WWALS Composite Results Spreadsheet
- C. What do these numbers mean?
- D. Credit Where Credit Is Due

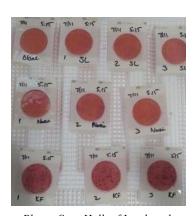


Photo: Suzy Hall, of Incubated PetriFilms for the Withlacoochee River at State Line, Nankin, and Knights Ferry Boat Ramps: 133 (OK), 600 (bad), and 5,233 (horrible) cfu/100 mL E. coli, respectively, Samples collected by Michael and Jacob Bachrach, 2020-07-11

Attachment A: Ways you can help.

- 1. If your organization is collecting water quality data, please publish it online.
- 2. Especially if yours is a governmental organization, consider partnering with us on grant proposals for remediation of agricultural non-point bacterial contamination sources.
- 3. Especially educational and research institutions and water quality agencies, consider helping set up a GIS mapping project for all these water quality results plus rainfall, wastewater and stormwater permits, and other relevant data.
- 4. Floridians, please ask your statehouse delegation and state agencies to test the Withlacoochee, Alapaha, Santa Fe, and Suwannee Rivers all the way from the state line to the Gulf, regularly, at least weekly. If Valdosta can do it, Florida can, too.
- 5. Help with eco-tourism marketing to show everyone that the situation is improving:
 - a. More partners are needed for the <u>Troupville River Camp</u> grant proposal, including in-kind and cash match.
 - b. Sponsors are still welcome for the WWALS water trail brochures and signs.
 - c. Come along on <u>WWALS paddle outings</u>, and post pictures afterwards.
- 6. You can help show people the results WWALS and others are getting. All our testing reports are listed <u>here</u> and new ones appear on the WWALS <u>blog</u> and <u>facebook page</u> and <u>instagram</u> and twitter. Share them around!
- 7. You can report a pollution violation.
- 8. Volunteer to test.
 - a. You can <u>sign up to get trained to test</u>. If you passed high school chemistry, you should be able to pass the training course of a few hours.
 - b. If you passed a training course and you're <u>a WWALS member</u>, you'll be qualified to <u>apply to join</u> the <u>WWALS Testing Committee</u> and test water quality for WWALS!
- 9. You can donate to the WWALS water quality testing program.
 - a. That helps buy bacterial and chemical testing kits at \$300 each,
 - b. or \$420 with nitrogen and phosphorous,
 - c. and supplies, at about \$8/test (PetriFilms, pipettes, tips, gloves, chemicals, etc.).
 - d. Environmental DNA to determine species is \$50-\$150/sample.
 - e. Nitrogen isotope testing to determine sources is \$350/sample.
 - f. One or more \$2,500 fluorometer detectors to enable tracking human waste to its source in real time.
 - g. One or more flow meters at \$3,350 each would be very useful for tracking sources and speed of downstream flow of contamination in feeder creeks.
 - h. \$15,100/year would fund the USGS gauge on Okapilco Creek @ GA 76 in Brooks County, Georgia. We use readings from other USGS gauges all the time, for rainfall, flow, water level, and other metrics, on the Little, Withlacoochee, Suwannee, Santa Fe, and Ichetucknee Rivers, but there is no gauge operational on Okapilco Creek, where we need to get a better handle on downstream movement of bacterial contamination.
 - i. \$45,000/year would fund a WWALS water quality monitoring coordinator.
 - j. Eventually we will need a database and GIS Manager at a similar salary.
- 10. You can support all WWALS programs and projects by becoming a WWALS member.
- 11. Or you can donate to the WWALS general fund.
- 12. You can contribute to other WWALS events or programs.
- 13. WWALS members can also apply to join another WWALS committee or the Board.



New WWALS tester Renee Kirkland (right) receives her kit from WWALS trainer and Executive Director Gretchen Quarterman, <u>2020-06-05</u>



Renee Kirkland's kit she uses to test the Alapaha River for WWALS, 2020-06-05

Attachment B: A recent example extract from the WWALS Composite Results Spreadsheet, http://wwals.net/?p=53091

Composito Posulte	107/2020	Date: 0	7/00/2020	Date: 0		Data: 0	00000	Date: 07	111 12020	Data: 0	0000101	Data: 07	112/2020	Date: 07	11112020
Composite Results by WWALS	107/2020	-	7/08/2020		7/09/2020	-	/10/2020	1	/11/2020		/12/2020	· ·	/13/2020		14/2020
wwals.net/issues/ testing/	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT	FCOLI- MF	ECOLI- 18QT
wwals.net/issues/ testin	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)	(CFU/ 100 mL)	(MPN/ 100 mL)
Georgia Sampling															
@ GA 122 (Hagan Bridge)									W166						
Withlacoochee River @ Skipper Bridge	Rain 0.05"		Rain 0.35"		Rain 0.01"	A	Rain 0.6"		Rain 0.01"						2
Withlacoochee River (a) US 41 (N. Valdosta Rd.) S-5510		V205	V285			V1,000	V90					V75	V80		
Withlacoochee River @ GA 133 S-6593		V650	V375	8		V195	V190					V110	V90		
Little River @ Upper Ty Ty Road (Tifton)	Rain 0.1"		Rain 0.45"				Rain 0.01"								8
Little River @ GA 37 (<u>Adel-Moultrie</u> Landing)	\$ain 0.1"		Rain 0.1"		Rain 0.1"		Rain 0.02'		Rain 0.03"		Rain 0.01"		Rain 0.02"		Rain 0.02"
Little River @ GA 76 (Cook County Boat Ramp) S- 6633			-						W33						4
Little River @ GA 122 (Folsom Bridge)	Rain 0.05"		Rain 0.1"	(Rain 0.01"		Rain 0.15'		W66						Rain 0.01"
Withlacoochee River down @ 84 w S-6603	Rain 0.2"	V920	Rain 0.2", <mark>V245</mark>		Rain 0.0"	V135	<mark>}ain 1.3"</mark> , V75					V40	V40		2
Allen Branch @ UGA weather, 4281 US 84, Dixie, GA	Rain 0.82		Rain 0.05'		Rain 0.01'		Rain 0.15'		Rain 0.0"						Rain 0.01"
Little Creek @ UGA Weather, Spence Field, Moultrie, GA	Rain 0.19'		Rain 0.09'		Rain 0.0"		Rain 0.09'		Rain 0.0"						Rain 0.02"
Okapilco Creek @ US 84 East of Quitman S- 6643		V560	V520			V230	W133, V210								
Crooked Creek @ Devane Road S-6714							W2,100								
Withlacoochee River @ Knights Ferry		V690	V570			V260	V270		W5,233						
Withlacoochee River @ Nankin Boat Ramp		V540	V400			V240	V250		W600						
Withlacoochee River @ GA 31 (CR 145, State Line Boat Ramp, Mozell Spells, Madison Highway)	FDOH 240	V210	V290		FDOH 17)	V320	DOH 226 V280		W133				FDOH 10		
Florida Sampling															
Withlacoochee River @ CR 150 (Sullivan Launch)	FDOH 471		3		FDOH 86		FDOH 185						FDOH 20		
Withlacoochee River @ FL-6 (above Madison Blue Spring)	FDOH 31				FDOH 108		FDOH 414						FDOH 60		
Alapaha River															
Alapaha River @ Navlor Park Beach (Navlor Boat Ramp) S- 6564									W100						

Attachment C: What do these numbers mean for *E. coli*? <u>http://wwals.net/?p=51425#numbersmean</u>

TNTC means Too Numerous to Count, which means many thousands of colony forming units (cfu)/100 mL: avoid that water. **>= 1,000** is cause for high alert: best use gloves and wash clothes afterward.

- >= 410 in one sample is likely to make some people sick: Estimated Illness Rate 36/1,000 (EPA).
- >= 126 multi-day average is not good, and is likely to make some people sick: Estimated Illness Rate 36/1,000 (EPA).
- 0-125 is not likely to make anybody sick.

Cautions derived from any of these numbers have to be advisory, because nobody can predict exactly who or how many will get sick from any level of *E. coli*. However, it seems obvious that the higher the level the more public health danger.



Merrillee Malwitz-Jipson and Kristen Rubin of Our Santa Fe River (OSFR) at Middle and Lower Suwannee River and Withlacoochee River Task Force, 2019-02-28



and Withlacoochee River Task Force passing a Resolution about Valdosta wastewater, 2019-02-28.



Attachment D: Credit Where Credit Is Due

While we like to think WWALS has played a central role, straddling the GA-FL line, so many other individuals and organizations did much work that we can name only a few more here. Back on February 5, 2019, Merrillee Malwitz-Jipson asked FDEP to test for DNA markers and chemical tracers such as sucralose. WWALS assisted by publishing her request and FDEP's answer, which said FDEP had monitored for sucralose in 2012 and 2015. She and WWALS and others continued asking. FDEP decided to do those tests, with very useful results thus far.

Unfortunately, FDEP's answer to Merrillee also included this:

"Under Chapters 514 and 381, Florida Statutes, FDOH has jurisdiction to issue public health advisories, but they do not allow for enforcement actions directed at the source of sanitary sewer overflows, nor for routine water quality surveillance for sources of river water contamination."

So there is more work to be done in the Florida legislature, to authorize and fund regular, frequent, closely-spaced river water quality monitoring, and to detect sources of contamination.

On February 28, 2019, a dozen downstream Florida counties, banded together in the Middle and Lower Suwannee River and Withlacoochee River Task Force "to address the issue of raw sewage spills by the City of Valdosta into the Withlacoochee River and Mud Creek", passed a Resolution requesting meaningful enforcement action by the state of Georgia and Florida state agencies. They

Middle and Lower Suwannee River asked Valdosta to meet with the Task Force. Valdosta initially refused. So delegates from all dozen counties planned to speak for three minutes each in the March 21, 2019, Valdosta City Council Regular Session. Before then, Valdosta agreed to meet with the Task Force on April 10, 2019. The Task Force presented the Resolution, and quarterly meetings were scheduled.

> Florida State Senator Bill Montford scheduled a Workshop on Valdosta Sewage Spills for March 20, 2019, as Chair of the Committee on Environment and Natural Resources. It was very useful but inconclusive, because of the state line. This was not the first such meeting, and not the last. On January 8, 2020, Sen. Montford held a meeting in Madison, FL, attended by members of the

Task Force, the Madison BOCC, Florida state representatives Chuck Brannan and Jason Shoaf, staffers from Congressman Al Lawson and U.S. Senator Marco Rubio, and personnel from FDEP,

FL state Sen. Montford in Madison FDOH, SRWMD, and U.S. EPA. GA-EPD declined to attend, either in person or by telephone. about Valdosta sewage 2020-01-08. Task Force Chair Rick Davis read a letter requesting assistance.



Florida Task Force meeting with Valdosta City Council, 2020-01-08.



James McBrayer tells SRWMD has E. coli, he thinks from the Withlacoochee River, 2019-02-12. Photos: John S. Quarterman for WWALS.

Later that same day, the Task Force met with the Valdosta City Council. Tom Mirti of SRWMD revealed to Valdosta that a wave of contamination was moving downstream right then. Many opinions and personal stories were heard from both states. Suwannee County Commissioner Don

Hale said the initial report he got from Valdosta about the December spill didn't mention any creek, so he told people the spill did not get into waterways, and "I had crap on my face."

Incoming Valdosta Mayor Scott James Matheson asked everyone to attend the Mayor's Paddle organized by WWALS, which went well on January 18, 2020, with people from the Task Force and SRWMD paddling. Thanks to Scott James for introducing us to Joe Brownlee, new Southwest District Director of Georgia Power, which just provided <u>a generous grant</u> to WWALS for testing.

James McBrayer of Hamilton County, Florida, spoke at many SRWMD board meetings and continued lobbying by email. Thanks to FDEP for publishing all Florida test results online for the Suwannee River Basin. Thanks to SRWMD for testing and analysis. Thanks to Madison and Hamilton Counties, Florida, for allocating funds for river and well testing, and to Lowndes County, GA, Health Department for free well tests. Thanks to Valdosta Public Information Officer

Ashlyn Johnson for publishing Valdosta's thrice-weekly test results online in time to advise Board his well in Hamilton Co., FL, boaters, swimmers, and fishers.

> Special thanks to the staff of GA-EPD for a Consent Order issued without anybody suing. Inside WWALS, the entire Board, the Testing Committee, Chair Suzy Hall, and the Science <u>Committee</u>, Chair Dr. Tom Potter, are instrumental and essential in our work on this matter.