

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

Pictures of WWALS testers in action



Suzy Hall water quality testing, Nankin Boat Ramp, Withlacoochee River, 2020-04-18



Photo: Trudy Cole, of Conn Cole water quality testing, 2020-05-04



Photo: John S. Quarterman,

<u>Denise Shirey, Debbie and Jason</u>

<u>Valinsky</u> 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, 2020-04-18

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.