

The AAS training has three of those four levels (Knows, Knows how, and Shows how). This document is about the fourth layer (Does), which we have in our own WQ testing program:

1. Actually doing the tests in the field is different from a training situation.
2. Our conditions are sufficiently different from other locations that our testers often encounter extreme cases or what may be normal here but is not elsewhere: blackwater rivers with tannic acid blocking sunlight below a few feet, warm river water, rapid changes in levels and flow, multiple related creeks and rivers, permeable limestone substrate exchanging surface water with groundwater, more frequent testing, etc.
3. We have multiple sources and types of contamination that we are trying to sort out: manure runoff from cattle, horses, pigs, etc., septic tanks, apparent illegal dumping, and sewage spills.
4. Testing by government agencies is so sparse that WWALS is often the first to discover a new water quality phenomenon.
5. Last but probably most important: our testers need support so they're not individually going out on a limb when they may be the first to detect something important.

For all these reasons our testers need to support each other in details of how to test and especially in interpreting test results. Anyone can make a mistake, so many eyes review.

This is why all our testers are added to the WWALS Testing Committee and its email list, wwals-testing@googlegroups.com (the testing list). And it is why we use that list to coordinate testing support, including mutual review of results.

Credibility

The credibility of WWALS for water quality testing is hard-won, and we cannot afford to squander it. See *Current Situation of Water Quality Testing, Suwannee River Basin 2020-08-02*.

<http://wwals.net/2020/08/02/current-situation-of-water-quality-testing-suwannee-river-basin-2020-08-02/>

These days, relations with the City of Valdosta are cordial, so the anecdote below may be considered ancient history, merely to illustrate the hard-won aspect.

Suzy Hall got **4,966** cfu/100 mL E. coli on the Withlacoochee River at Knights Ferry on December 21, 2019 and **6,766** on December 24. Those are both well above the AAS 1,000 alert limit. The City of Valdosta really did not want to believe those numbers. However, when FDEP got **3,667** at State Line on December 26, that seemed to us like confirmation.

Nonetheless, Valdosta got (we discovered weeks later and only after more than one open records request) 295 at Knights Ferry on December 26, and misinterpreted that as evidence against those WWALS results, not realizing that contamination washes downstream rapidly.

We helped persuade Lowndes County to test at Knights Ferry, Nankin, and State Line. When Lowndes got sky-high results at all three locations on January 6, and the Florida