

**Join us each Monday as the Clean Water Team shares resources on water quality monitoring. This Monday we are featuring the SWAMP Field Methods Course.**

Field measurements are an excellent way to enhance understanding of current conditions in a waterbody. Whether out taking samples for lab analysis or attempting to determine the presence of a certain parameter in a waterbody, field measurements can be both cost effective and immediate while providing data users a more robust and detailed understanding of information that comes from the lab.

Water quality field measurements are determinations of physical and chemical properties that must be measured onsite, as close as possible in time and space to the medium being sampled. Onsite measurements are necessary to preserve sample integrity and ensure data accuracy. These measurements also provide a snapshot of habitat conditions of aquatic organisms. By following consistent practices and, focusing on ensuring sample integrity and data quality, field measurements will accurately represent the physical and chemical properties of the surface water being studied. Because of how valuable this information is, it is important to consistently execute sound procedures. In order to collect data that represents water conditions at the time of sampling, it is necessary to have well trained personnel, select collection devices appropriate to site conditions and study needs, and use appropriate methods to make accurate field measurements of known quality.

An accessible and important way to ensure the quality of information collected with field measurements is the adequate training of those conducting the measurements. The SWAMP Field Methods Course was created to help in this effort. This narrated video course introduces the concepts used in SWAMP sample collection and field analysis. The course includes the following seven modules: Reconnaissance, Water Quality Measurements, Flow Measurements, Water Sampling, Sediment Sampling, Sample Handling and Shipping, and Biological & Physical Assessments.

**SWAMP FIELD METHODS DISTANCE LEARNING COURSE Modules 1- 6**

[www.youtube.com/watch?v=g3O0hhaVDgM&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf](http://www.youtube.com/watch?v=g3O0hhaVDgM&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf)

**MODULES:**

**Module 1: Reconnaissance** [www.youtube.com/watch?v=g3O0hhaVDgM&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=1](http://www.youtube.com/watch?v=g3O0hhaVDgM&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=1)

## **Module 2: Water Quality Measurements**

[www.youtube.com/watch?v=TgxGln4c0Qo&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=2](http://www.youtube.com/watch?v=TgxGln4c0Qo&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=2)

**Module 3: Flow Measurements** [www.youtube.com/watch?v=NBTdfRkE7\\_M&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=3](http://www.youtube.com/watch?v=NBTdfRkE7_M&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=3)

**Module 4: Water Sampling** [www.youtube.com/watch?v=wJGNiYInsRA&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=4](http://www.youtube.com/watch?v=wJGNiYInsRA&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=4)

**Module 5: Sediment Sampling** [www.youtube.com/watch?v=o2TXRfUXw6A&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=5](http://www.youtube.com/watch?v=o2TXRfUXw6A&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=5)

## **Module 6: Sample Handling & Shipping**

[www.youtube.com/watch?v=QuIdIR0oEO0&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=6](http://www.youtube.com/watch?v=QuIdIR0oEO0&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=6)

## **Module 7: Biological and Physical Habitat Assessments**

[www.youtube.com/watch?v=kdUMHPjnEYM&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=7](http://www.youtube.com/watch?v=kdUMHPjnEYM&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=7)

## **COMMON ELEMENTS:**

**Common Element A. Health & Safety** [www.youtube.com/watch?v=yTcJAt3AatI&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=7](http://www.youtube.com/watch?v=yTcJAt3AatI&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=7)

**Common Element B. Quality Assurance** [www.youtube.com/watch?v=JqbpP5iC-Zg&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=8](http://www.youtube.com/watch?v=JqbpP5iC-Zg&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=8)

## **Common Element C. Representativeness**

[www.youtube.com/watch?v=mJfxQ8szat0&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=9](http://www.youtube.com/watch?v=mJfxQ8szat0&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=9)

**Common Element D. Information Management** [www.youtube.com/watch?v=pm-Z4j1inRg&list=PLMSa5d-ill6OnEHUbybDqeGRRui\\_t3kMf&index=10](http://www.youtube.com/watch?v=pm-Z4j1inRg&list=PLMSa5d-ill6OnEHUbybDqeGRRui_t3kMf&index=10)

-----  
**ADDITIONAL RESOURCES:**

- **SWAMP IQ Field Measurements**
  - [www.waterboards.ca.gov/water\\_issues/programs/swamp/swamp\\_iq/field\\_measurements.html](http://www.waterboards.ca.gov/water_issues/programs/swamp/swamp_iq/field_measurements.html)
- **SWAMP Bioassessment Resources**

- [www.waterboards.ca.gov/water\\_issues/programs/swamp/bioassessment/](http://www.waterboards.ca.gov/water_issues/programs/swamp/bioassessment/)
- **CWT Guidance Compendium**
  - [www.waterboards.ca.gov/water\\_issues/programs/swamp/cwt\\_guidance.html](http://www.waterboards.ca.gov/water_issues/programs/swamp/cwt_guidance.html)
- **CWT Tool Box for Citizen Monitoring Programs**
  - [www.waterboards.ca.gov/water\\_issues/programs/swamp/cwt\\_toolbox.html](http://www.waterboards.ca.gov/water_issues/programs/swamp/cwt_toolbox.html)

-----  
Erick Burres

[Clean Water Team Coordinator](#)

[California Water Quality Collaboration Network Facilitator](#)

[Safe to Swim Network Co-facilitator](#)

[erick.burres@waterboards.ca.gov](mailto:erick.burres@waterboards.ca.gov)

213 712 6862 mobile

Mailing address:

Erick Burres – Clean Water Team

C/O SARWQCB

3737 Main Street, Suite 500

Riverside, CA 92501-3348

