



## Laboratory Analyst Grade I and II Certification Training

Hosted by California Water Environment Association Monterey Bay Section

### Contact Hours:

CWEA Lab Analyst: 6.5 hours  
SWRCB Drinking Water Treatment/Distribution Operator: 6.5 hours  
SWRCB Waste Water Operator: 6.5 hours

### Instructors:

#### Olivia Woolery

CWEA Laboratory Analyst IV

Olivia is the Laboratory Supervisor at Monterey One Water, with nine years of experience in ELAP-accredited public and private environmental laboratories. Previously, she spent seven years at Monterey Bay Analytical Services as a Laboratory Analyst, performing a variety of chemical and biological analyses. Olivia serves as the Laboratory Committee co-chairperson and Vice President for the CWEA Monterey Bay Section. Olivia holds a B.S. in Environmental Science from CSU Monterey Bay and has presented statewide on topics including ELAP assessments, microbiology, sampling, automation, and advanced instrumentation.

#### David Holland

California State Certified Public Health Microbiologist

David is the owner and founder of Monterey Bay Analytical Services. He has over 30 years' experience performing chemical and biological analyses. He spent 12 years working for the Monterey County Health Department as a Public Health Chemist. He has also taught as an Adjunct Instructor at Hartnell Community College and Gavilan Community College teaching courses in water treatment and distribution.

### Course Description:

This comprehensive training session covers all domains outlined in the CWEA Laboratory Analyst Technical Certification Program Candidate Handbook and the AWWA CA/NV Section Water Quality Laboratory Analyst Certification Candidate Handbook for Grade I and II certifications.

The course is designed for environmental laboratory professionals preparing for Grade I and II certification exams. Attendees will review key concepts, complete practice questions, and learn test-taking strategies to support exam success.

This syllabus is also intended to meet continuing education requirements for the SWRCB Drinking Water Treatment/Distribution Operator and Wastewater Operator certifications.

**Contact:** [olivia@my1water.org](mailto:olivia@my1water.org) (831) 883-6107

### Event Information:

Date: June 12, 2026  
Time: 8:30 AM – 3:30 PM  
Location: City of Watsonville Community Center  
Address: 275 Main St, Watsonville, CA 95076  
Capacity: 50 Attendees  
Light breakfast and lunch will be provided.

**Registration Fees:**

Non-member: \$75

CWEA Member: \$65

CWEA MBS Member: \$50

**Methods of Instruction:**

Lecture, discussion, demonstration (calculations), audiovisuals.

	<b>Student Learning Outcomes</b>	<b>Activity</b>	<b>Approximate Duration (hours)</b>
1.	Understand sample types, collection techniques, preservation and hold time requirements, and chain-of-custody procedures.	Discussion with PowerPoint, use of printed reference	0.5
2.	Understand the importance of legal defensibility, documentation and traceability best practices, laboratory ethics, and the ability to identify potential fraud.	Discussion with PowerPoint	0.5
3.	Understand the relationships between regulations and regulatory bodies (e.g., CWA, SDWA, CCR, CFR; SWRCB, RWQCB, NPDES, DDW, ELAP) and their impact on laboratory operations and permit requirements.	Discussion with PowerPoint	0.5
4.	Understand OSHA requirements in a Laboratory and PPE requirements as they relate to hazards in a laboratory and sampling setting.	Discussion with PowerPoint	0.5
5.	Understand units, significant figures, and data reduction; discuss basic QA/QC requirements and data management systems (e.g., LIMS, SCADA).	Discussion with PowerPoint, practice data reduction and conversion calculations	0.5
6.	Differentiate between regulatory and process control requirements and understand how process control data informs operational decisions in treatment plants.	Discussion with PowerPoint	1
7.	Describe water characteristics and identify common chemical and bacteriological parameters tested in water and wastewater. Provide an overview of analytical methods, equipment, and maintenance requirements.	Discussion with PowerPoint	3

**Class Evaluation:** Students will be evaluated on attendance and participation. Attendees must be present for the full duration of the class to receive a certificate of completion.



**Referenced Text/Materials:**

Laboratory Analyst Candidate Handbook – LAB Certification [v05.01.23.02] (2023)  
California Water Environment Association (CWEA)  
Oakland, CA: CWEA. ([cwea.org](http://cwea.org))

Standard Methods for the Examination of Water and Wastewater, 24<sup>th</sup> Edition  
American Public Health Association (APHA), American Water Works Association (AWWA),  
and Water Environment Federation (WEF)  
Washington, DC: APHA. ([www.apha.org](http://www.apha.org))

Water Quality Laboratory Analyst 2020 Certification Candidate Handbook [issued 10/20/20] (2020)  
American Water Works Association (AWWA) California-Nevada Section  
Rancho Cucamonga, CA: AWWA. ([ca-nv-awwa.org](http://ca-nv-awwa.org))