



WASTEWATER AND AQUATIC BIOLOGY

COURSE OVERVIEW

Instructors:	Steve Lundt Senior Water Quality Scientist
	Jordan Parman Senior Water Quality Scientist
Date:	June 20, 2024
Location:	Metro Water Recovery 6450 York Street Denver, CO 80229
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Course Description

- The course is designed to give teachers an overview of the treatment process at Metro Water Recovery and highlights the environmental benefits to the South Platte River. The program will include an activity along the river and tours of both the treatment facility and Metro's lab.
- Water quality scientists will present an overview of aquatic life assessment techniques, including introductions to fish and macroinvertebrate sampling. Habitat and water quality assessments will also be discussed. Participants will get hands-on field experience conducting a macroinvertebrate survey.
- The course is designed primarily for teachers of biology, environmental science, earth science, chemistry, and related sciences but is open to teachers at all levels.

Graduate Credit and Grading Policy

- To earn an **A** in the course, teachers must participate in all program activities and incorporate aspects of the day's events into a lesson plan appropriate for individual grade levels. Various formats will be accepted. All lesson plans should be submitted to Kelley Merritt (kmerritt@metrowaterrecovery.com) within one week of completing the class.
- To earn a **B** in the course, teachers must participate in all program activities.

Course Goals and Learning Objectives

- Provide teachers with background knowledge to help students become global stewards of the environment.
- Demonstrate the science behind decisions that affect the wastewater treatment process and aquatic life/habitat improvement projects.
- Provide hands-on field experiences with practical classroom applications.

Schedule

8:00 a.m. – 8:30 a.m.	Breakfast and history of Metro
8:30 a.m. – 9:00 a.m.	Introduction to the science and practice of wastewater treatment
9:00 a.m. – 9:15 a.m.	Travel to project site
9:15 a.m. – 11:30 a.m.	Visit a river site with Metro's water quality scientists (discussion and hands-on activities)
11:30 a.m. – 11:45 a.m.	Travel back to the Metro
11:45 a.m. – 12:45 p.m.	Lunch will be provided by Metro, with continued discussion of downstream water quality and habitat/watershed projects
12:45 p.m. – 1:45 p.m.	Tour of the 170-acre Robert W. Hite Treatment Facility
1:45 p.m. – 2:45 p.m.	Tour of the on-site laboratory
2:45 p.m. – 3:45 p.m.	Q&A with the subject-matter experts who participated in the activities and tours.
3:45 p.m. – 4:15 p.m.	Review of Metro's educational materials
4:15 p.m. – 5:00 p.m.	Course feedback and paperwork for continuing education credit available through Colorado School of Mines

Dress Code and Safety Procedures

- Metro is a highly industrialized work environment and **closed-toed shoes are required**.
- Many of the activities will be conducted outside in the sun. Hats, sunscreen, and insect repellent are recommended.
- Metro provides reasonable accommodations for tours (and any other public programs) in accordance with the Americans with Disabilities Act. Please let us know if anyone in your group has a disability-related need for accommodation. To ensure consideration of specific accommodation requests, visitors must contact Metro at least **14 days in advance of the site visit or tour** (kmerritt@metrowaterrecovery.com).