



William J. "Mickey" Conway, District Manager

WASTEWATER AND RENEWABLE RESOURCES

Instructor: Orren West
Director of Resource Recovery and Reuse

Date: June 5, 2019

Location: Metro Wastewater Reclamation District
6450 York Street
Denver, CO 80229

Email: kmerritt@mwr.dst.co.us

Website: www.metrowastewater.com

Course Description

- The course is designed to give teachers an overview of the wastewater treatment process at the Metro Wastewater Reclamation District. A biosolids management discussion will include information about land application of solid materials and the production of electricity from the biosolids digestion process.
- Tours of the 52,000 acre METROGRO Farm, the wastewater treatment facility, and the on-site laboratory are on the agenda.
- The class is open to teachers at all levels but is designed primarily for teachers of agriculture, biology, environmental science, earth sciences, chemistry, and related sciences.

Graduate Credit and Grading Policy

Continuing education credit is available through Colorado School of Mines. The Metro District will pay for the 0.5 semester hour credit.

- 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@mwr.dst.co.us) within one week of completing the site visit.
- 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 biosolids management
- Provide hands-on field experiences with practical classroom applications

Program Agenda

8:00 a.m. – 8:15 a.m.	History of the Metro District
8:15 a.m. – 8:30 a.m.	Introduction of subject-matter experts and introductory quiz
8:30 a.m. – 9:00 a.m.	Introduction to the science and practice of wastewater treatment
9:00 a.m. – 10:00 a.m.	Depart for the METROGRO Farm, with continued instruction in van
10:00 a.m. – 10:15 a.m.	Break
10:15 a.m. – 11:15 a.m.	Biosolids application demonstration and instruction in the field
11:15 a.m. – 12:00 p.m.	Lunch
12:00 p.m. – 12:30 p.m.	Mini-tour of the METROGRO Farm
12:30 p.m. – 12:45 p.m.	Break
12:45 p.m. – 1:45 p.m.	Return trip to RWHTF, with continued discussion
1:45 p.m. – 2:00 p.m.	Break
2:00 p.m. – 2:45 p.m.	Tour RWHTF
2:45 p.m. – 4:00 p.m.	Tour of the RWHTF laboratory and follow-up discussion
4:00 p.m. – 4:30 p.m.	Wastewater Jeopardy and review of educational materials
4:30 p.m. – 5:00 p.m.	Course feedback and paperwork for continuing education credit

Dress Code and Safety Procedures

- The Metro District is a highly industrialized work environment and **closed-toe shoes are required.**
- Many of the activities will be conducted outside in the sun for an extended period of time. Long pants, long-sleeved shirts, hats, and sunscreen are recommended.
- The Metro District 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 the Metro District at least **14 days in advance of the requested tour.**