

Training Evaluation Request
Oregon Environmental Services Advisory Council
Watura
Water Reuse

Course title: Water Reuse

Drinking Water CEUs: 0 h

Wastewater CEUs: 2.0 h

Instructor bio: With 20 years of experience in water treatment across both private and public sectors, **Lorenzo GUIDOLIN's** career began in seawater desalination before expanding to work with Fortune 100 companies on optimizing water usage through chemical and equipment solutions—particularly in cooling towers, steam generators, and oil-water separators within the energy industry. Later, as general manager of operations and maintenance (O&M) at water reuse facilities in Southern California, Lorenzo supported municipalities in recycling water for groundwater replenishment and industrial applications, reducing reliance on potable water. This journey has built deep expertise in customizing water treatment technologies, leading O&M teams, and developing process monitoring plans, asset management programs, and operational strategies to ensure seamless execution.

Course description: Water reuse, often referred to as water recycling, is the process of collecting wastewater and treating it so it can be safely used again. It is driven by three key factors: water scarcity, environmental protection, and regulatory pressures. This course introduces the main applications and regulatory frameworks of water reuse, examines advanced treatment processes like microfiltration, reverse osmosis, and advanced oxidation processes, and highlights daily operations and real-world case studies.

Learning goals:

- Explain the purpose and applications of water reuse
- Describe key treatment processes and their role in producing safe, high-quality water
- Explain how to operate, maintain, and troubleshoot a water reuse system

Tracking attendance method:

The e-learning platform offers a highly interactive experience designed to engage learners at every stage. It begins with an initial test to assess knowledge and tailor the learning journey. The course includes short, focused videos interspersed with mandatory training quizzes that reinforce key concepts and ensure active participation. Students are required to watch every video entirely and to answer practice questions before advancing to the next course module. Students cannot skip course content. A final quiz at the end of each chapter evaluates overall comprehension and certifies the learner's mastery of the material. Students must obtain a minimum score of 70% for every chapter's final quiz to successfully complete the course and obtain the certificate of attendance. The platform automatically tracks each learner's learning time. The real learning time is indicated alongside the delivered credits in the course completion certificate.

Course outline: Water Reuse

Initial Test		7 min
1. Purpose and Regulations of Water Reuse	1.1. Course Overview	1.5 min
	1.2. Purpose of Water Reuse	6 min
	1.3. Water Reuse Applications & End Uses	6 min
	1.4. Potable Reuse: Indirect and Direct	6 min
	1.5. Activity - Potable Reuse	1 min
	1.6. Regulatory and Public Health Frameworks	6 min
	1.7. Chapter 1 - Fact Sheets	1.5 min
	Chapter final test	5 min
2. Stages of Water Reuse Treatment	2.1. Stages of Water Reuse Treatment	6 min
	2.2. Microfiltration/Membrane Bioreactors	8 min
	2.3. Reverse Osmosis	6 min
	2.4. Advanced Oxidation Processes	6 min
	2.5. Additional Treatment Processes	6 min
	2.6. Chapter 2 - Fact Sheets	1.5 min
	Chapter final test	8 min
3. O&M and Case Studies	3.1. Operations and Maintenance of Reuse Systems	7 min
	3.2. Case Studies and Lessons from the Field	6 min
	3.3. Groundwater Replenishment System - Virtual Tour (Courtesy of OCWD)	20 min
	3.4. Course Glossary	5 min
	3.5. Chapter 3 - Fact Sheets	1 min
	Chapter final test	2 min
Total Learning Time		122.5 min
Requested Contact Hours		2 h