

**Training Evaluation Request**  
**Oregon Environmental Services Advisory Council**  
**Watura**  
**Urban Hydraulics**

**Course title:** Urban Hydraulics

**Total meeting hours:** 1.5

**Course target discipline(s):** W

**Instructor bio:** Maelle LIMOUZIN

**Course description:** This course presents the basic concepts of hydraulics in relation to drinking water distribution systems. First, some central quantities in hydraulics are described, followed by an outline of different negative phenomena that occur in distribution systems, such as backflow and water hammer. Afterwards, the role of static pressure in distribution systems and associated tools are explored, notably topographic maps.

**Learning goals:**

- Distinguish between the different components of drinking water distribution systems
- Identify the different phenomena that occur in a water distribution system
- Apply the notion of altitude in drinking water distribution systems

**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: Urban Hydraulics

<b>Initial Test</b>		12 min
<b>1. Hydraulic Functioning of a Drinking Water Distribution System</b>	1.1. Components of a Drinking Water Distribution System	8 min
	1.2. Flow Rate	6 min
	1.3. Pressure	7 min
	1.4. Backflow	8 min
	1.5. Water Hammer	8 min
	1.6. Cavitation	6 min
	<b>Chapter final test</b>	8 min
<b>2. Static Pressure</b>	2.1. Altitude	5 min
	2.2. Determining Altitude	6 min
	2.3. Using Maps to Determine Static Pressure	7 min
	<b>Chapter final test</b>	4 min
<b>Total Learning Time</b>		85 min
<b>Requested Contact Hours</b>		1.5 h