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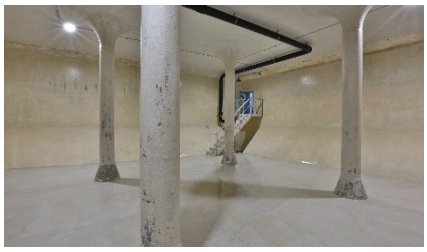
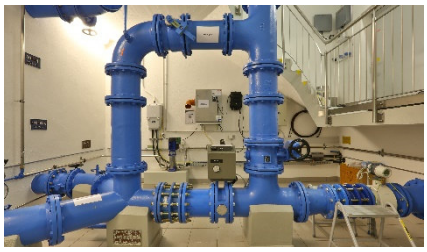
| **Module** | Water Infrastructure Planning & Stormwater Management |
| **Lead** | Prof. Dr. M. Maurer |
| **Title** | **How can a decommissioned drinking water reservoir be repurposed to meet the modern requirements for a sustainable urban water management?** |
| **Description** | The municipality of Würenlos is currently planning the construction of a new drinking water reservoir. This raises the question of how the old reservoir (see pictures below) could be repurposed to make a positive contribution to sustainable urban water management. The main goal of the municipality is to reduce the overall drinking water extraction from their groundwater resources.<br>     <br>The aim of this project is to conduct a feasibility study to identify and evaluate 2-3 potential reuse options for the old reservoir. In the next phase, the best option will be selected and dimensioned. The project will be conducted by a master's student in environmental engineering, in collaboration with one or two architecture students who will approach it as a "Vertiefungsarbeit".<br><br>Research questions for the environmental engineering student include:<br>• What viable reuse options exist for the reservoir?<br>• Which criteria best support selecting the optimal option?<br>• How should the optimal option be dimensioned?<br><br>A key objective is to leverage synergy between environmental engineering and architecture. This interdisciplinary collaboration aims to combine technical feasibility with design excellence, creating a project for a sustainable, functional, and aesthetically integrated urban water infrastructure. |
| **Grading** | Report = 60 %, Presentation = 20 %, Practical work = 20 % |
| **Other** | Organization: ETH (D-BAUG and D-ARCH) / Gemeinde Würenlos<br>Prerequisites: Interest in sustainable urban water management<br>Project period: 14 weeks / 50%<br>Language: English<br>Single / Group work: Group work (1 environmental engineer, 1-2 architects)<br>Contact: Lea Stalder (staldele@ethz.ch) |