

DREDGING OF SEDIMENTS FROM THE PUNT DAL GALL BOTTOM OUTLET

PROJECT TITLE

Damm of Punt dal Gall



CLIENT

**EKW Engadiner
Kraftwerke**



LOCATION

**Zernez,
Switzerland (CH).**



YEAR OPERATION

2026



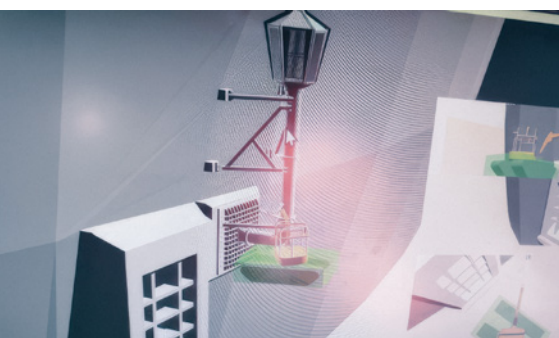
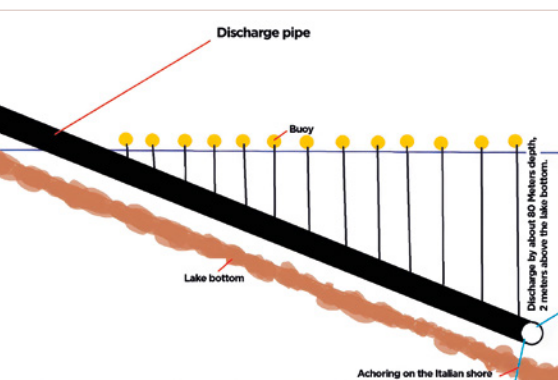
PROJECT OVERVIEW

The Punt dal Gall dam is located at an altitude of approximately 1,800 meters, in the heart of the Swiss and Italian national parks. The dam is operated by the company EKW. The company could no longer operate its bottom outlet, as PCB contamination had occurred in 2016. The accumulated sediments therefore represented an urgent problem that needed to be resolved in order to keep the bottom outlet clear and functional, without re-contaminating the Spöl River with PCB-laden sediments.

These sediments were removed over the course of one month of intensive work, before winter, and deposited in an excavation at the bottom of the lake using a technique that minimized their dispersion.

TECHNICAL APPROACH & IMPLEMENTATION

The operation required 3D remodelling by the Watertracks team of the environment surrounding the bottom outlet, located 100 meters below the waterline. It also required a very precise operating procedure for the lifting operations, which were made difficult by the need to place the Lisie system in the water 120 meters below the dam crest using a crane, as well as by very tight spatial constraints.



This allowed the team to model and determine the exact location of the bottom outlet and to define, in three-dimensional space, a shaft that would enable the safe deployment of the Lisie system—both for the system itself and, in particular, for the intake screen—while positioning it precisely over the sediment area to be dredged.

After 404 hours of pumping at 77% efficiency, operating 24 hours a day, 6 days a week, the team freed the bottom outlet before the critical winter period. This enabled the operator to achieve administrative compliance while ensuring that the sediments were deposited in a controlled manner, thereby preventing any pollution of the Spöl River downstream. A challenge that was both technical and ecological, aimed at ensuring the continued production of low-carbon energy.

« The Lisie system proved to be the only solution capable of reaching great depths beneath the dam to free the bottom outlet within a reasonable time for the client. Its flexibility, reliability, and medium size were decisive, as was the expertise of the multilingual Watertracks specialist teams, which was crucial in achieving the client's objectives. »

RESULTS & PERFORMANCE

- > **1,400m³** dredged sediments.
- > **404 hours** totally precise underwater dredging work with **73%** efficiency.
- > **100m** work deepness.
- > **Work day and night, 6/7.**
- > **Zero** accidents.