LISIE
AND PENDULAR DREDGING

RELEASE OF THE BOTTOM GATE LAGO DI SPECCHERI

PROJECT TITLE
Speccheri Dam

CLIENT
AGSM

LOCATION
Martini,
Italy (IT).

YEAR OPERATION
2026

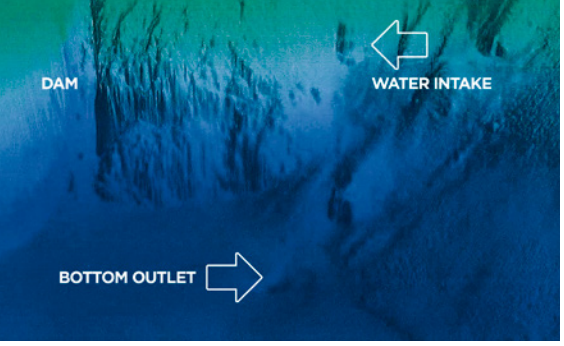
PROJECT OVERVIEW

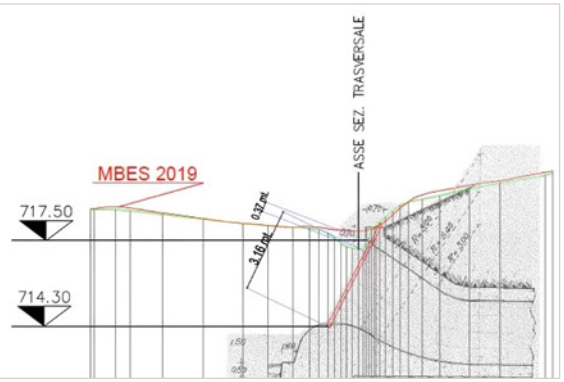
The Speccheri dam is located at an altitude of 810 meters in a steep valley of the Trentino province. Remote and difficult to access, mobilizing the worksite on the water can only be achieved with the support of a Super Puma helicopter following a three-stage logistical operation. The goal is to clear the bottom outlet gate buried under sediment and to create a dredged, sediment-free area of 770 m^2 in front of the bottom outlet gate while pushing the sediment upstream into the lake.

The presence of walls dating back to the dam's original construction adds to the complexity of the project. Strict adherence to ecological specifications—particularly regarding turbidity and the required recovery time for the underwater environment—was also a major challenge at Speccheri.

TECHNICAL APPROACH & IMPLEMENTATION

Following a meticulously planned logistical operation, Lisie was deployed at a depth of approximately 85 meters under intense winter conditions.
The project's objective was to clear the bottom outlet gate by pushing sediment through an oblique pipe into a fissure located 300 meters upstream, and to recreate a 330 m^2 area at the base of the bottom outlet gate, as well as a 770 m^2 area with a slope of approximately 1:2.





The underwater operation required operators to precisely locate numerous critical points in order to position Lisie, and then the pendular system, for effective dredging. As dredging progressed, the unexpected discovery of walls not accounted for in the preliminary plans introduced a new challenge, requiring rapid adaptation.

Ecological specifications and expectations demanded a gradual increase in dredging resources to continuously monitor and assess the impact on the lake's environment. This ensured strict compliance with turbidity standards and the protection of underwater life. The project thus represented both a technical and ecological challenge, essential for maintaining the continuity of operations and the production of decarbonized energy.

« The expertise of Watertracks teams in managing complex mobilization and in finding, adapting, and implementing diverse dredging solutions enabled the successful completion of the project. The Lisie system, due to its size, once again proved decisive, allowing precise and careful access and dredging to clear the bottom outlet gate, thereby demonstrating its significant added value.. »

RESULTS & PERFORMANCE

- **3,600m³** dredged sediments.
- About **577** dredging hours.
- **85m** work deepness.
- **Work day and night, 6/7**.
- **Zero** accidents.

TEASER – Photos credit: Watertracks – 02/2026

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