

CAMPO MORO AND ALPE GERA BASINS

We are on the path a few meters above the Zoia Hut. From here you can see Campo Moro lake, a hydroelectric basin dammed by two distinct dams, each of them with peculiar features, and over it, at 2,128 m of altitude, the imposing dam of Alpe Gera lake.

Alpe Gera barrage is very important in the history of dam technology: in fact, it was built between 1961 and 1964 as a large, straight gravity dam, testing the new Italian technology of roller compacted concrete, a method now widely used all around the world for this kind of structures.

The dam is 530 m long and 174 m high, as a 58-storey building; its volume of 1,685,000 m³ is enough for hosting the whole cathedral of Milan! Ten galleries - connected by one of the highest lifts in Europe - run longitudinally through its body; technical instruments for safety controls of the whole structure are located along them.

The reservoir behind the barrage contains up to 68×10^6 m³ of water; after driving the turbines and electric generators of Campo Moro underground power plant, 133 m lower, they are released in the lower Campo Moro basin.

Looking to this latter, on the right, you can distinguish a quite arcuate concrete gravity structure, while on the left a straight rockfill dam stops water flow. Both are older than Alpe Gera dam, being built between 1956 and 1958, with a traditional technology. The flooding of the basin submerged the little hamlet of Alpe Campo Moro: their buildings resurface when the lake is emptied for maintenance.

An 8 km long underground waterway drives waters from Campo Moro reservoir through two penstocks to Lanzada power plant, with a hydraulic jump of about 1000 m! Here, three hydroelectric generator groups produce up to 280,000 kWh in a year, the annual power supply for about 135,000 families.

Coming out from Lanzada powerhouse, waters run to Sondrio one, then they are given back to Adda basin.

Hydroelectric system of Valmalenco provides green energy, allowing you to enjoy an exceptional panorama, where you can see the Pizzo Scalino, Monte Disgrazia and several other peaks of the Bernina massif. Moreover, people can also cross the valley on dam crests and educational visits are periodically organized by the dams' managers.

Finally, from June to October it is also possible to practice sport fishing in both basins, upon obtaining the fishing license of the Province of Sondrio.