

Geologic, Hydrogeologic, Sedimentologic and Geochemic Features of Butrinti Lake and Area Surrounding it.

XHEMO, Enkelejda; HALLACI, Halil Geological Research Institute
Tirana, Albania E-mail : ispgj@ingeol.tirana.al

The Butrinti Region is located in the southwestern part of Albania, near the Greek Border. The south part of Butrinti region was formed by the anticline of Bogazi - Saranda, which is divided into two parts as a result of an eruption of the evaporitic diapir (Xara diapir). The Xara evaporite is extended in the central part of the Bogazi - Saranda carbonatic anticline and in Butrinti antic city. The Butrinti region is located as a graben. Butrinti lake has a surface of about 20 km². Its length is 7 km and the width is about 3 km. The maximum depth of the lake is 21 m. It is of Quaternary age, while the Ionian Sea is found in the beginning of Pliocene time. The Butrinti lake water is salty. In the East of Butrinti Lake is the sulfidic Bui Lake. It is fed from a spring located on the contact between evaporite formations, in the border of the Xara diapir.

The Butrinti Lake and the Bui Lake communicate with each other, with the Bui lake lying 6 m above the Butrinti Lake.

Concerning the Butrinti region, following problems have to be solved in the future:

1. Relationship between the Butrinti Lake and the Ionian Sea, as well as Bui Lake and the Bistrica River.
2. Mapping of the bathymetry and salinity of the Butrinti Lake.
3. Lithological and stratigraphical investigations on the lake bottom deposits.
4. Study of the nature and the environmental conditions of the coast from Butrinti to Saranda.
5. Investigations on Pavlo River delta deposits and their relationship with the Ionian Sea.
6. Determination of the Butrinti Lake Contamination.