

## **Marmarik Dam Investigations and Remedial Works**

L. SPASIC - GRIL, Jacobs, Reading, UK

J. R. SAWYER, Jacobs, Reading, UK

---

**SYNOPSIS.** Marmarik dam is a multipurpose embankment dam on the Sevan – Hrazdan cascade in Armenia. The dam is situated in one of the most seismically active regions in Armenia and in the vicinity of the reservoir numerous landslides could be seen. The dam was commissioned in January 1975 and twenty days later significant subsidence of the clay core occurred causing 14m settlement of the dam crest. The dam has never been rehabilitated and the reservoir has never been impounded.

The dam was investigated by JacobsGIBB ltd as part of the World Bank funded ‘Technical Investigation of 60 Dams’. In addition to the slope failure, further issues include high regional seismicity, landslides adjacent to the dam and reservoir, inadequate spillway capacity, rehabilitation of the derelict outlet works and concerns regarding the foundation cut-off.