

DAM SAFETY WEBINAR

Friday, 11 December 2020, 11:00 – 13:00

PROGRAMME

11:00 – 11:05 Welcome

Water Development Department

Cyprus Water Association

11:05 – 11:40 DAM SAFETY IN CYPRUS

Dr Kyriacos Kyrou

Cyprus has the highest concentration of dams in Europe, with 57 large dams included in the Register of the International Commission on Large Dams. Construction of dams in Cyprus started in the early 60s, but the most intense dam construction activity occurred in the 80s when a large number of dams were built, aiming to supply the Cypriot population with both domestic and irrigation water. With the absence of appropriate legislation, dam safety issues were initially addressed by the Engineers of the Water Development Department, having as a guide procedures and practices of more advanced countries. In 2010 the Integrated Water Management Law was passed which includes detailed provisions for dam safety and addresses issues of supervision, construction and independent inspection of dams. The presentation examines the current practices of dam safety issues in Cyprus.

Questions and Answers

11:40 – 12:20 RESERVOIR MONITORING

Neil Harding & Tom Butler

Dam safety depends heavily on a structured regime of monitoring. This allows an understanding of the behaviour of the dam to be developed and provides data from which unusual or unexpected trends can be identified and then acted upon. The presentation will consider the importance of effective monitoring by exploring the legislative framework for dam safety, those with a responsibility to do the monitoring with the benefits of succession planning. What parameters should be measured and why will be explored and the different techniques and equipment available, record keeping and interpretation of and acting on data obtained will be discussed.

Questions and Answers

12:20 – 13:00 RESERVOIR OPERATION AND MAINTENANCE

Neil Harding

Every reservoir has unique characteristics and often provides many functions that require a coordinated maintenance regime to ensure it continues to operate effectively, efficiently and safely. Principal operation and maintenance activities will be discussed together with the importance of those involved, good record keeping and opportunities to optimise the usefulness of the reservoir will be presented.

Questions and Answers

PRESENTERS:

Dr Kyriacos Kyrou, Geotechnical consultant and former Director, Water Development Department (WDD), Cyprus



In his long career at the WDD, Kyriacos had a major contribution and direct involvement in the implementation of the large water development projects of Cyprus, especially in the construction of earthfill and rockfill dams. He served for 10 years as head of the Central Geotechnical Laboratory of WDD and was in charge of a large number of geotechnical and laboratory investigations for engineering and environmental projects in Cyprus. He also headed the dam monitoring Unit of WDD for more than 15 years and served for many years as Secretary and subsequently President of the Cyprus National Committee on Large Dams (CYNCOLD). His interests include, slope instability problems, dam safety as well as the problems caused to the built environment by the expansive soil formations, in Cyprus. He delivered many presentations in the fields of water development, dam safety and geotechnical engineering.

Neil Harding, Director, Reservoir and Water Services, UK



Neil has been a Supervising Engineer since 2009 and currently supervises 86 reservoirs across England and Scotland. He has extensive experience of reservoir surveillance, monitoring, operation and maintenance as well as all the surveying techniques. He has been involved with several major reservoir incidents. Neil has presented several papers to the British Dam Society and also written several articles. He provides training for reservoir owners, their operations and maintenance staff and is currently producing a course for management of reservoir incidents. He has over 41 years of experience within both public and private sectors having worked in local government, several large consultancies and is a Director of Reservoir and Water Services.

Tom Butler, Director, Reservoir and Water Services, UK



Tom has over 11 years of reservoirs experience including design and monitoring. He is working towards qualification as a Supervising Engineer and Chartered Engineer status. Tom is an experienced reservoir surveyor specialising in bathymetric, 3D laser scanning, topographic and deformation surveying techniques and has conducted surveys for the major water companies, multi-national consultancies, government organisations and private individuals across the UK and on Cyprus. He has over 20 years civil engineering experience and has worked in both public and private sectors with extensive knowledge of wastewater, flood defense having been responsible for design, construction, operation and maintenance of a wide range of assets. He is one of two Directors of Reservoir and Water Services.