

Challenges and Limits - The Feasibility of Underwater Rehabilitation Work

C. HEITEFUSS, Ruhrverband (Ruhr River Association), Essen, Germany

H.-J. KNY, Ruhrverband (Ruhr River Association), Essen, Germany

U. MOSCHNER, Ruhrverband (Ruhr River Association), Essen, Germany

SYNOPSIS. The bottom outlet facilities of many dams all over the world will have to undergo rehabilitation within the near future. Not only the early dams, built in the 19th or in the beginning of the 20th century are affected. Even large hydraulic structures, designed and built in the second half of the 20th century are faced with this problem. Due to various reasons a complete draw down of a reservoir for inspection and rehabilitation purposes has to be considered as not feasible in most cases. That requires manned or unmanned underwater inspection and rehabilitation techniques at the submerged structures of a dam. The paper describes the experiences gained during the underwater rehabilitation activities of the Ruhr River Association and how these experiences can be applied to other projects in Europe at water depths between 20 and 120 meters.