OVERVIEW OF THE WORKSHOP ON MONITORING AND FAILURE DETECTION IN EARTHEN EMBANKMENTS

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The Homeland Security Presidential Directive 7 of May 7, 2007, classified dams and levees as one of the 18 critical infrastructure and key resource sectors. These networks of dams and levees are vital to the security, national economic security, public health or safety of the United States. The U.S. National Inventory of Dams currently lists more than 80,000 dams in the USA. Preliminary estimates by the National Committee on Levee Safety indicate there may be more than 100,00 miles of levees across the United States. Due to the extent of the embankment system and the high cost of failure, rapid, low-cost, highly reliable inspection and monitoring technologies are needed. A workshop was held at the US Army Corps of Engineers Waterways Experiment Station 9-12 February 2009 to explore the state-of-the-art in inspection and monitoring, identify technologies that might be applied in the near term, and to define a roadmap for research investment. In this presentation we will provide an overview of the results of the workshop. (Workshop sponsored by the US Army Research Office and the USDA-ARS.)