

International Working Group on Overflowing and Overtopping Erosion









Context

Embankment dams and levees

- Overflowing erosion causes near the half of failures
- Engineering tools are very limited to predict the erosion processes
- High consequences decisions are often based on crude analysis

Coastal levees

- Very similar situation...
- Forecast of sea level rise => increasing risk of sea levee failures by overtopping?

Concrete dams and spillways

- Prediction capabilities of engineering methods are limited
- Need to gather data and better understand the physical processes at scale 1 to better predict.



Main objectives of this WG

- Sharing issues and problems to solve exposed by dam and levee owners, in all locations and load situations
- Sharing current state of practice and gaps in the toolbox available to practicing engineers
- Sharing progress and advances from academic research and helping to pilot this research from the practioner's perspectives and needs
- Sharing the state of the art of the protection technology in order to increase the safety of dams and levees in overtopping scenarios
- Facilitating international collaboration to speed-up research progress and help dissemination of results.



Although this working group is hosted by the European Club of ICOLD, it is open to owners, flood risk managers, consulting engineers and academic researchers **from all over the world**.

Dissemination of knowledge and the most recent results of research to practitioners **from developing countries** is also an important objective of this working group.



The organization of the IWGOOE

Hosted by the European Club of ICOLD

IWGOOE Chair: J.-R. Courivaud

Sub-Group 1

Embankment dams and levees

Co-chairs: S. Bonelli, M. Morris

Sub-Group 2

Concrete dams and Spillways

Co-chairs: F. Laugier, M. George

Sub-Group 3

Coastal levees

Co-chairs: M. Van Dame, T. Pullen Sub-Group 4

Protections

Co-chairs: M.Á. Toledo, R. Moran



Next steps

- Dissemination of the information about this WG is under progress
- Draft of ToR has been written
- Launch meeting on Friday 14 June 14:00 16:00 room
 203 at the Shaw centre.
 - Draft of ToR will be discussed
 - Main issues and objectives for each sub-group will be presented
 - Frequency of meetings will be discussed
- Protections conference series will be the regular meetings of this WG. Next conference will be held in Madrid 11-13 November 2020.

Protections 2020

4th International Seminar on Dam Protection against Overtopping

Madrid, Spain 11-13 November, 2020

Overflow Erosion Erosion Protection Physical Modeling Numerical Modeling Innovative Solutions
Case Histories

Embankments Levees SpillwaysSea Dikes

