

Sharing water: Multi-purpose of reservoirs and innovations
Partager l'eau : Multi-usages des réservoirs et innovations



## Water Management for Dam Construction

Update of Bulletin 48a (1986)

ICOLD Workshop 28 May 2022

Joint Work Group - Committees E and M

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## Workshop Agenda

- Introduction to Workshop (Dan)
- Contractual Obligation/Design Responsibility (Dave)
- Cofferdam Data Evaluation and Risk Assessment (Rachel)
- Professional Requirements(Jean-Pierre, Dan)
- Cofferdam Materials and Construction and Dam Types (Vivek)
- Case Studies (Christine/Vivek/Finn)
- Discussion (All)











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## Introduction - Dan Johnson

- Purpose of Workshop
  - Share initial concepts on bulletin approach
  - Gather information for modifying approach
  - Explore and confirm the content of the new bulletin







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## For each rehabilitation and new project

- Water will be an issue, no matter the project
  - Project wide
    - Groundwater
    - Surface runoff
    - Reservoir pool
  - River diversion, reservoir diversion







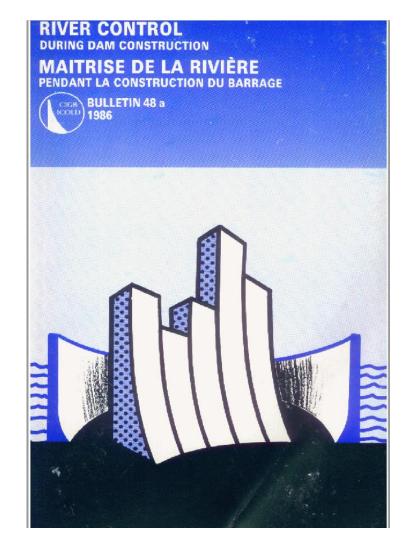


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# Update of Bulletin 48a, 1986 River Control During Dam Construction

- Principally new dams
- Generally large dam projects on major rivers
- Mostly case studies and approaches to design







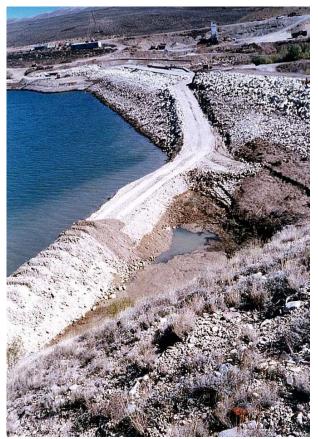


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## Dam Rehabilitation

- Most current dam projects are rehabilitation of existing dams
- Need to access various components of the facility
- Water management can be a significant component of project











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### Issues

- Wide variety of methods for control of water available
- Understanding of risks and responsibility to owner, engineer, contractor, public, downstream population and features
- Site information necessary
  - Watershed and potential for flooding
  - Impacts of flood during each segment of construction







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## Water Management for Dam Construction and Rehabilitation – Initial Outline

- Introduction
- Historic Perspective
- Contractual Obligation/Design Responsibility
- Cofferdam data evaluation and risk assessment
- Design Engineer/Professional Requirements
- Contractor/Professional Requirements

- Cofferdam Materials and Construction
- Instrumentation and Surveillance Cofferdams
- Design and Documentation
- Closing
- Appendix



