

ICOLD2026 Guadalajara, Mexico, International Symposium
Theme | Water, Energy, and Society: The Evolving Role of Dams in a Changing World
ABSTRACT TEMPLATE

PAPER TITLE (Capitalize the first letter of all major words)

**Controllability of Threats, Tolerability of Consequences, and Acceptability of Risks
as Policy Determinants for the Safety of Dams**

Relevant Topic: (Highlight Selected Topic in Bold font)

- *Water Planning, Water Management, and Climate Resilience*
- ***Dam Safety Policy and Governance***
- *Dam Construction and Rehabilitation: Innovation and Lifecycle Extension*
- *Dam Performance Monitoring*
- *Flood Resiliency in Developed and Developing Countries*
- *Sedimentation Management and Reservoir Longevity*
- *Fish Passage, Biodiversity & Environmental Integration*
- *Community Engagement in Dam Development*
- *Tailings Dam Safety*
- *Dam Decommissioning & Removal*

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ABSTRACT: Abstract shall be no more than 300 words and cannot include figures, tables, drawings, references, or equations. Abstracts should provide a brief overview of the paper, highlighting relevance to the selected topic, key findings/conclusions, and significance to the industry. Provide Spanish translation of abstract in the provided space to aid in review and selection.

PRESENTATION & PUBLISHED PAPER

or

~~**PRESENTATION ONLY**~~

(Highlight Choice of Presentation & Published Paper or Presentation Only in Bold font)

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ENGLISH VERSION OF ABSTRACT:

Dams, like all other technological systems are designed, constructed, and operated to meet a broad range of economic, social, industrial, and other objectives and purposes. These objectives and purposes may change over the life of the dam in response to a wide range of influences. At the same time, ageing and deterioration, while intended to occur very slowly over the long life of the dam, cannot be avoided. This reality suggests an expansion of the concepts of 'design criteria', and pre-determined inspection, testing and maintenance schedules, to include various approaches to the management of dam safety with a broader 'adaptive asset management' framework. Consideration of dam safety and the need to preserve safety and overall functionality within such an 'adaptive asset management' framework has been anticipated by ICOLD Committee H - Dam Safety to involve the setting "safety goals" as an expansion of the established dams engineering practices that have evolved over many decades and are well documented in guidance and technical bulletins published by ICOLD and its National Committees.

This paper, set in the ICOLD context, outlines a philosophy and approach to establishing 'safety goals' for all phases of the life-cycles of water dams and appurtenances, and to tailings dams and waste lagoons. The philosophy and approach to establishing safety policy determinants, while based on the work of Committee H since 2005 are intended to be relevant to and consistent with and ICOLD bulletins that address the safety of dams.

SPANISH TRANSLATION OF ABSTRACT:

Las presas, al igual que todos los demás sistemas tecnológicos, se diseñan, construyen y explotan para cumplir una amplia gama de objetivos y fines económicos, sociales, industriales y de otro tipo. Estos objetivos y fines pueden cambiar a lo largo de la vida útil de la presa en respuesta a una amplia gama de influencias. Al mismo tiempo, el envejecimiento y el deterioro, aunque se pretende que se produzcan muy lentamente a lo largo de la larga vida útil de la presa, no pueden evitarse. Esta realidad sugiere una ampliación de los conceptos de «criterios de diseño» y de los programas predeterminados de inspección, ensayo y mantenimiento, para incluir diversos enfoques de la gestión de la seguridad de las presas con un marco más amplio de «gestión adaptativa de activos». La consideración de la seguridad de las presas y la necesidad de preservar la seguridad y la funcionalidad general dentro de ese marco de «gestión adaptativa de activos» ha sido anticipada por el Comité H de la ICOLD (Seguridad de Presas) para incluir el establecimiento de «objetivos de seguridad» como una ampliación de las prácticas de ingeniería de presas establecidas que han evolucionado a lo largo de muchas décadas y están bien documentadas en las guías y boletines técnicos publicados por la ICOLD y sus comités nacionales.

Este documento, enmarcado en el contexto de la ICOLD, describe una filosofía y un enfoque para establecer «objetivos de seguridad» para todas las fases del ciclo de vida de las presas y sus elementos accesorios, así como para las presas y lagunas de residuos mineros. La filosofía y el enfoque para establecer los determinantes de la política de seguridad, aunque se basan en el trabajo del Comité H desde 2005, pretenden ser pertinentes y coherentes con los boletines de la ICOLD que tratan de la seguridad de las presas.