

Dear colleagues,

The main purpose of this **newsletter** is to provide information on follow-up activities, upcoming events, publications, etc. related to dam engineering and risk analysis applied to dam safety management.

The next number of the IWRDD-News will be issued by **September 2017**. All of you are kindly invited to submit information that may be included in the next bulletin. We are looking forward to receiving your contributions.

Kind regards,

Ignacio Escuder-Bueno, Jessica Castillo-Rodríguez and Adrián Morales-Torres



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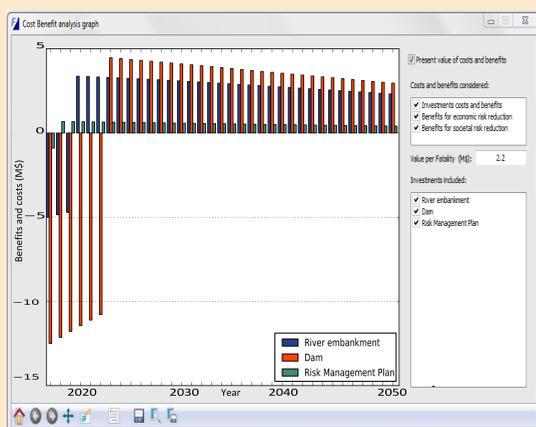
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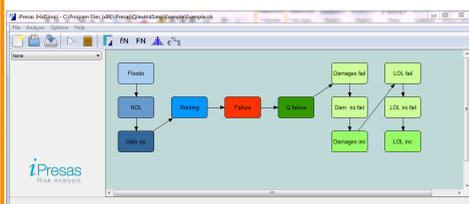
New iPresas software appliance

iPresas Flood is a simplified version of iPresas software, developed to compute societal and economic flood risk, including risks due to dam failure of upstream dams. Quantitative risk results can be used to perform a Cost Benefit Analysis of potential flood risk reduction investments.

This innovative tool has a user-friendly graphical interface and it is useful to analyze the benefits of flood risk reduction investments over time, and to be compared with construction and maintenance costs, justifying the need for such investments and promoting a more robust flood risk management.



Don't forget to upgrade to the 2017 versions of iPresas HidSimp & iPresas UrbanSimp!



Updated versions are available at www.ipresas.com

1. Sharing experiences on dam safety: latest events

- The **2017 USSD Conference** was held in Anaheim (California) from **3 to 7 April 2017**.

The theme for this edition of the conference was "It's a Small World: Managing Our Water Resources".

On Tuesday April 4, two sessions on **Risk** were conducted, including presentations on consequence estimation, individual risk evaluation, geotechnical aspects, common cause adjustment and failure mode analysis, uncertainty analysis and risk assessment for levee design.

Ignacio Escuder presented the paper "*Epistemic vs Natural Uncertainty in Dam Safety Decision Making: Is it Fair Play?*", as part of this session.

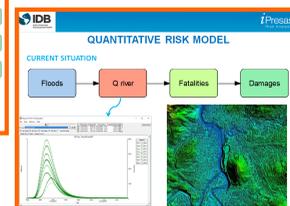
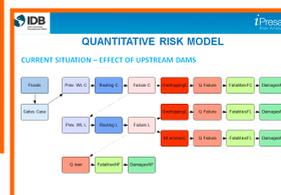
The detailed **program** can be found in this [link](#).

- The **2017 Global Platform for Disaster Risk Reduction** was held in Cancun, Mexico, from **22 to 26 May 2017**, organized by the United Nations Office for Disaster Risk Reduction (UNISDR).

It is the world's foremost gathering of stakeholders committed to reducing disaster risk and building the resilience of communities and nations.

During this event, Adrián Morales presented "*Quantifying flood risks to support decision-making: The Tegucigalpa case*", as part of the IGNITE STAGE session.

Further information can be found in this [link](#).



- The event **Innovation in Engineering and Safety of Multi-Purpose Hydraulic Infrastructures** took place in Termas de Río Hondo, Argentina, on **7 June 2017**, organized by the Dam Safety Regulatory Agency of Argentina (ORSEP).

A successful event on sharing experiences on dam engineering and safety management. During this event, Adrián Morales presented "*Dam safety risk analysis: concepts and current state-of-the-practice*" during Session II (Dam engineering).

Further information can be found in this [link](#).

2. Boosting a risk-informed dam safety culture

Training activities

- The second edition of the regional course "Dam safety in Latin America" was held in Tucumán (Argentina) on **18 - 25 June 2017**. The course was organized by the International Centre for Hydropower (ICH, Norway), the World Bank and ORSEP.

More than 30 participants from 11 countries attended this 6-day course. Lectures included basic concepts and best practices on dam safety in different countries, including a presentation by Jessica Castillo with title "*Risk-informed dam safety management*".

For further information, you may visit www.cadp.org.ar



Regional course Dam safety in Latin America II
Tucumán (Argentina)
June 2017

Recent publications on the application of quantitative risk analysis include:

- **A combined risk analysis approach for complex dam–levee systems**

Castillo-Rodríguez, J.T., Needham, J.T., Morales-Torres, A., & Escuder-Bueno, I. Structure and Infrastructure Engineering, 2017.

DOI: 10.1080/15732479.2017.1314514

50 free downloads are available at this [link](#)

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- **A new risk reduction indicator for dam safety management combining efficiency and equity principles**

Serrano-Lombillo, A., Morales-Torres, A., Escuder-Bueno, I., & Altarejos-García, L. Structure and Infrastructure Engineering, 2016.

doi: 10.1080/15732479.2016.1245762

50 free downloads are available at this [link](#)

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- **Overcoming failure in infrastructure risk governance implementation: large dams journey**

Escuder Bueno, I. & Halpin, E.

Journal of Risk Research, 2016 ISSN: 1366-9877 (Print) 1466-4461 (Online)

doi: 10.1080/13669877.2016.1215345

[Link](#) to the **journal paper (Open Access)**

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- **The suitability of risk reduction indicators to inform dam safety management**

Morales-Torres, A., Serrano-Lombillo, A., Escuder-Bueno, I., & Altarejos-García, L. Structure and Infrastructure Engineering, Vol. 12, Issue 11, 2016.

doi: 10.1080/15732479.2015.1136830

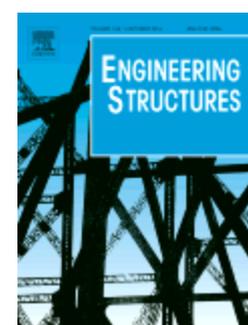
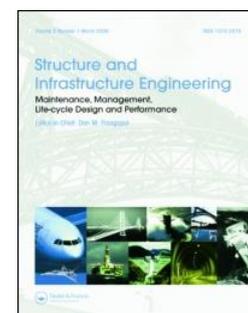
[Link](#) to the journal

- **Building fragility curves of sliding failure of concrete gravity dams integrating natural and epistemic uncertainties**

Morales-Torres, A., Escuder-Bueno, I., Altarejos-García, L., & Serrano-Lombillo, A. Engineering Structures, 125 (2016), 227-235. 2016.

doi:10.1016/j.engstruct.2016.07.006

[Link](#) to the journal



3. ICOLD follow-up activities

- The **85th Annual Meeting of International Commission on Large Dams (ICOLD)** will be held in Prague on July 3-7, 2017.

The key event of the technical agenda of the Annual Meeting will be a one day symposium called "Knowledge Based Dam Engineering".

Other important items will be the discussions of the Technical Committees, Working Groups, regional clubs and other groups of ICOLD.

A specific topic on "Uncertainties and risk-informed decision making in dam design, construction and operation" is defined as part of the technical programme.

In addition, a Technical Workshop on *Survey of International Dam Safety Risk Approaches and Practices* is scheduled on July 7.

Meetings of ICOLD Working Groups on *Consequences* and on *Levees and Flood Defences* are also scheduled next week. Further information on the second group can be found in this [link](#).

The bulletin is already available at www.icold2017.cz



- The **14th ICOLD Benchmark Workshop on Numerical Analysis of Dams**, organized by the ICOLD Technical Committee A, will take place in **Stockholm** (Sweden) at KTH Royal Institute of Technology from **6 to 8 September 2017**.

Four themes have been announced and an Open Theme, including Theme D "Risk Analysis—assessment of reliability for concrete dams".

The deadline for submission of conference papers (theme A to D and the Open theme) have been **extended** to July 20th.

Further information can be found at www.icold-bw2017.conf.kth.se

- The Austrian National Committee on Large Dams (ATCOLD) is organizing the **26th ICOLD World Congress** at the Austria Center Vienna from **1 to 7 July 2018**.

The ICOLD World Congress is held every three years. In addition, the 86th ICOLD Annual Meeting and the ATCOLD Symposium Hydro Engineering will be held during this week.

The congress is aimed at companies and professionals involved in the implementation of dam projects for the generation of energy from renewable sources, water supply and water protection structures. The focus of the discussion is the knowledge exchange about dams, as well as high level of practical and scientific competence in the relevant disciplines. The organizers expect more than 2,000 delegates.

Registration starts in **autumn 2017**.

Further information can be found at www.icoldaustria2018.com

4. Other events

Dam Safety 2017 National Conference

Organized by: Association of State Dam Safety Officials (ASDSO)

Date: 10 - 14 September 2017

Venue: San Antonio, TX (United States)

Website: www.damsafety.org

2017 SRA Annual Meeting

Organized by: Society for Risk Analysis (SRA)

Date: 10 - 14 December 2017

Venue: Arlington, VA (United States)

Website: www.sra.org

Theme: *Risk Analysis: The Profession, The Practitioners, The Research.*



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Next bulletin: September 2017

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