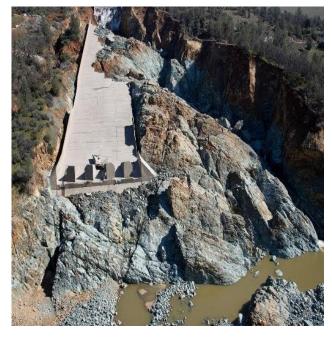




# International Workshop on overflowing erosion of dams and dikes

11 – 14<sup>th</sup> December 2017 - AUSSOIS, FRANCE Programme and List of attendees







Supported by



# International Workshop on overflowing erosion of dams and dikes

## 11-14 December 2017 - Aussois - France - Agenda

### Part 1 - Embankment Dams and Dikes

# Sunday 10th December

Taxi transfer from Modane railway station to Aussois resort

19:30: Dinner offered at the resort

# **Monday 11th December**

07:30 - 08:15: Breakfast offered at the resort

08:40 - 08:50: Welcome address. J.-R. Courivaud

08:50 - 09:00: Goals of the workshop on embankment dams and dikes overtopping erosion. J.-R.

Courivaud

09:00 - 15:30: Session 1: The Dam Owners' Perspectives: Issues and Engineering Needs

Moderator: Jean-Robert Courivaud

09:00 – 09:20: Hydro Quebec perspective (Annick Bigras/Judith Bouchard)

09:20 – 09:40: Environment Agency perspective (Christabel Mitchell)

09:40 – 10:00: EDF perspective (Jean-Robert Courivaud)

10:00 - 10:30: Coffee Break

10:30 – 10:50: CNR perspective (Christophe Picault)

10:50 – 11:10: USACE perspective (Scott Shewbridge)

11:10 – 11:30: Bavarian Environment Agency perspective (Stefan Raab)

11:30 – 11:50: Flanders agency perspective (Patrik Peeters)

11:50 – 12:10: SYMADREM perspective (Thibaut Mallet)

12:10 – 12:30: Rijkswaterstaat perspective, part 1(Astrid Labrujere)

12:30 – 12:50: Rijkswaterstaat perspective, part 2 (Wim Kanning)

12:50 - 14:30: Lunch

14:30 – 15:00: UK dam owners' perspective (Alan Brown)

15:00 – 15:30: Synthesis of dam owners' perspectives. Jean-Robert Courivaud

Answering question n°1: What gaps need to be filled?

15:30: End of session 1

#### 15:30 - 18:00: Session 2: State of the Art - Part 1

Moderator: Stephane Bonelli

15:30 – 16:00: Research performed at ARS-HERU Stillwater: Past, present and future developments (Sherry Hunt)

16:00 - 16:30: Coffee Break

16:30 – 17:00: DSIG project (Tony Wahl, USBR)

17:00 – 17:30: Overtopping erosion of coarse materials embankment dams, a literature review (Mark Morris)

17:30 – 18:00: USACE-ERDC research program (Maureen Corcoran/Johannes Wibowo)

18:00: End of the session 2

#### 19:30: Dinner offered at the resort

# Tuesday 12<sup>th</sup> December

07:30 - 08:15: Breakfast offered at the resort.

08:30: - 15:00: Session 3: State of the Art - Part 2

Moderator: Mark Morris

08:30 – 09:00: Overtopping erosion of clay core zoned embankment dams: experimental and numerical modelling (Miguel Angel Toledo, University of Madrid)

09:00 – 09:30: CIMNE research (Antonia Larese)

09:30 – 10:00: Hydro Quebec research (Judith Bouchard)

10:00 - 10:30: Coffee Break

10:30 – 11:00: NTNU research (Leif Lia)

11:00 – 11:30: IRSTEA research (Stéphane Bonelli)

11:30 – 12:00: EDF/geophyConsult research (Rémi Béguin)

12:00 - 13:30: Lunch

14:00 – 15:00: Synthesis of the state of the art (Stéphane Bonelli, Mark Morris)

Answering question n°1: What gaps need to be filled?

Answering question n°2: Which are the main lines of an international research project to fill these gaps?

15:00: End of Session 3.

15:00 - 15:30: Coffee Break

15:30 - 18:00: Session 4: How Moving Forward?

Moderator: Jean-Robert Courivaud

Come back to question n°1: What gaps need to be filled?

Come back to question n°2: Which are the main lines of an international research project to fill these gaps?

Main focus on question n°3: Which dam owners would be ready to fund such a research project?

18:00 End of the embankment dams and dikes overtopping erosion workshop

19:30: Dinner offered at the resort

21:00 - 22:00 : Social event – Traditional country dance show from the Alps



# International Workshop on overflowing erosion of dams and dikes

## 11-14 December 2017 - Aussois - France - Agenda

### Part 2 - Concrete Dams

## Wednesday 13rd December

07:15 - 08:00: Breakfast offered at the resort

08:00 – 08:15: Goals of the workshop on concrete dams overtopping erosion. Frédéric Laugier

08:15 – 14:30: Session 5: The Dam Owners' Perspectives: Issues and Engineering Needs

Moderator: Frederic Laugier

08:15 – 09:00: Key note - Lessons learnt from Oroville dam 2017 flood (John France)

09:00 – 09:15: Verbund perspective (Florian Landstorfer)

09:15 – 09:30: Alpiq perspective (Raphael Leroy)

09:30 – 09:45: EDP perspective (Irene Fernandes)

09:45 - 10:00: Questions

10:00 - 10:30: Coffee Break

10:30 – 10:45 EDF perspective (Frederic Laugier)

10:45 – 11:00: Uniper and Swedish perspective perspective (Carl-Oscar Nilsson)

11:00 – 11:15: Norwegian perspective (Leif Lia)

11:15 – 11:30: British Dam Society perspective (Alan Brown)

11:30 - 11:45: Questions

11:45 – 12:00: Vietnamese perspective (Michel Ho Ta Kanh)

12:00 – 12:15: Hydro Quebec perspective (Marco Quirion)

12:15 – 12:30: USACE perspective (Maureen Corcoran)

12:30 – 12:45: USBR perspective (Tony Wahl)

12:45 - 13:00: Questions

13:00 - 14:30: Lunch

14:30 – 14:45: Synthesis of dam owner's perspectives. Frederic Laugier

14:45: End of session 5

14:45 - 17:45: Session 6: State of the Art - Part 1

Moderator: George Annandale

14:45 – 15:15: University of Pisa research (Stefano Pagliara)

15:15 – 15:45: University of Cartagena research. Paute Cardenillo and Toachi dams (Luis Castillo /

Jose Carrillo)

15:45 – 16:15: EDF research – Hydraulics of nappe flow (Yvan Bercovitz / G. Guyot)

16:15 - 16:45 : Coffee Break

16:45 – 17:15: USBR research – High velocity flows over spillway chutes (Tony Wahl)

17:15 – 17:45 : UQAC-Hydroquebec research – (Ali Saedi – Lamine Boumaiza)

17:45: End of Session 6 part 1

18:00 – 19:30 : Social event – Alpine Aperitif in a 19<sup>th</sup> century fort (warm cloths suitable!)

19:30: Dinner offered at the resort

# Thursday 14<sup>th</sup> December

07:00 - 08:00: Breakfast offered at the resort

08:00 - 09:30: Session 6: State of the Art - Part 2

Moderator: George Annandale

08:00 – 08:30: USACE research - Unlined spillway erosion risk assessment toolbox (Johannes

Wibowo)

08:30 – 09:00: EPFL research (Pedro Manso)

09:00 - 09:30: ARTELIA research (Lucie Alazard, Thierry Vincent)

09:30: End of session 6

09:30 - 10:00: Coffee Break

10:00 – 16:00: Session 7: State of the art - Key note lectures

Moderator: Anton Schleiss / George Annandale

10:00 –11:00: Key note lecture – George Annandale

11:00 - 12:00: Key note lecture - Steven Pells

12:00 - 13:30: Lunch

13:30 – 14:30: Key note lecture – Michaël George

14:30 –15:30: Key note lecture – Anton Schleiss

15:30: End of session 7

15:30 - 16:00: Coffee Break

## 16:00 - 18:00: Session 8: How Moving Forward?

Moderator: John France

16:00 – 16:30: Synthesis of the state of the art and current developments (Anton Schleiss, George

Annandale)

16:30 - 18:00: Discussion

Question n°1: What gaps need to be filled?

Question n°2: Which are the main lines of an international research project to fill these gaps?

Question n°3: Which dam owners would be ready to fund such a research project?

18:00 End of the workshop

19:30: Dinner offered at the resort

# Friday 15<sup>th</sup> December

07:30 - 08:30: Breakfast offered at the resort.

Taxi transfer from Modane railway station to Aussois resort

