



NEW ZEALAND Society on Large Dams

NZSOLD Workshop on Consequence Assessment and Potential Impact Classification

2 and 3 November 2020

Online Event

FINAL PROGRAMME

| Time | Session | Presenter | Description |
|---|--|---|---|
| Day 1: Monday 2 November, sponsored by Dam Safety Intelligence | | | |
| 08:30 | LOG-IN AND WELCOME | Matthew Shore <i>MC, Geological Consulting Ltd</i> | |
| 09:00 | Introduction | Trevor Matuschka <i>NZSOLD Chair, Engineering Geology Ltd</i> | Proposed dam safety regulations; submissions on the regulations relevant to PIC; pre-workshop survey on PIC; an announcement. |
| 09:15 | Keynote Address | Bruce Feinberg <i>Bureau of Reclamation</i> | International perspective on estimating consequences and why we do so; advantages and limitations of specific approaches; classic and recent landmark case studies. |
| 09:50 | Introduction to Consequence Assessment and PIC | Peter Lilley <i>Private consultant</i> | What is consequence assessment and PIC? How is PIC used and why is it important? Introducing the concept of a systems approach. |
| 10:20 | MORNING BREAK | | |

| | | | |
|-------|--------------------------------|---|---|
| 10:45 | PIC – the New Zealand Approach | Dewi Knappstein <i>Tonkin + Taylor</i> | What consequence assessment methodology does our NZ Dam Safety Guidelines promote? Explored via case studies. |
| 11:15 | Case Studies and Group Work | James Smith <i>Facilitator, Damwatch and NZSOLD Young Professionals</i> | PIC example to work through in breakout groups. |
| 12:15 | Dam-break Modelling | Bill Veale <i>Damwatch</i> | A deeper exploration of dam-break modelling, including planning, identifying initial conditions, estimating breach outflows, flood routing, and inundation mapping. |

13:00 – 14:00 NETWORKING

Day 2: Tuesday 3 November, sponsored by Stantec

| | | | |
|--------------|--|---|--|
| 08:30 | LOG-IN AND WELCOME | Matthew Shore <i>MC, Geological Consulting Ltd</i> | |
| 09:00 | Population at Risk and Potential Loss of Life | Paul Rivett <i>Riley Consultants Ltd</i> | A deeper exploration of PAR and Potential Loss of Life, including a few of the judgement-dependent aspects highlighted in the pre-workshop survey. |
| 09:30 | Damages to Property, Infrastructure, and the Environment | Nathan Fletcher <i>Stantec</i> | A deeper exploration of the assessment of damages via reference to a specific canal example. |
| 10:00 | MORNING BREAK | | |
| 10:30 | Case Studies and Group Work | Emma Rudge <i>Facilitator, Riley Consultants Ltd and NZSOLD Young Professionals</i> | PIC example to work through in breakout groups. |
| 11:30 | Advances in Practice | Nathan Fletcher <i>Stantec</i> Hench Wang <i>HARC</i> | A rapid-fire overview of three emerging tools relevant to consequence assessment: GIS data and analysis, HEC-LifeSim, and RiskScape. |

| | | | |
|---------------------------------|--|---|--|
| | | Ryan Paulik <i>NIWA</i> | |
| 12:15 | LUNCH | | |
| 13:15 | Social, Environmental and Cultural Impacts | Paula Chapman <i>Bay of Plenty Regional Council</i> | Learnings from a recent, real-life flood event, exacerbated by infrastructure failure. Explore the social, environmental, and cultural impacts for the Edgecumbe Community resulting from the April 2017 ex-Tropical Cyclone Debbie flood event. |
| 13:45 | Panel Debate | Dewi Knapstein <i>Facilitator,</i> <i>Tonkin + Taylor</i> Panels Dan Forster Bill Veale Jim Walker Ramon Strong Paula Chapman Bruce Feinberg Amy Moorhead | The panel comprises technical practitioners, dam owners, those familiar with broader aspects, and those considering consequence assessment in terms of the proposed dam safety regulations. |
| 14:15 | Closing | Trevor Matuschka <i>NZSOLD Chair,</i> <i>Engineering Geology Ltd</i> | |
| 14:30 – 15:30 NETWORKING | | | |