

DAY ONE

THURS 10TH

Restoring and Maintaining the Mauri of Our Lakes

SESSION 1

State of our Lakes & Freshwater

Chair: John Gifford, Chair LWQS

8.30 **Mihi Whakatau/Karakia**
Dr Ken Kennedy: LWQS Committee

8.40 **Whakapapa - Rotorua Lakes**
Geoff Rolleston: Chair, Te Arawa Lakes Trust 

8.50 **State of Our Lakes and Freshwater**
Dr Scott Larned: Chief Scientist, Freshwater, and Estuaries, NIWA 

9.20 **Our Lake Health, Past, Present & Future**
Dr Marcus Vandergoes: Paleo-ecologist, GNS
Dr Susie Wood: Freshwater Scientist, Cawthron Institute 

9.40 **Lake Rotorua Status**
Chris McBride: LimnoTrack & Dr Grant Tempora: University of Waikato 

10.00 **Morning Break**

SESSION 2

Essential Water - Policies Impacting on the Management of Water Resources

Chair: Don Atkinson, Past Chair LWQS & Committee Member

10.30 **Te Mana O Te Wai and its Implementation**
Eugene Berryman-Kamp: Director Te Mana o Te Wai
Implementation Partnership, Ministry for the Environment 

10.55 **The Lens of Te Arawa (Vision and How to Get There)**
Nicki Douglas, Environmental Manager, Te Arawa Lakes Trust 

11.20 **Implications of Climate Change Policy and Reduction of
Greenhouse Gas Emissions on Dairy Farms for Nitrogen Losses to
Water**
Dr Stewart Ledgard: Principal Scientist, Ag Research 

11.40 **Managing Lakes in the Canterbury High Country**
Dr Tina Bayer: Environment Canterbury 

12.00 **Lunch Break: Blessing**

SESSION 3

Maintaining and Enhancing the Biodiversity of the Lakes

Chair: Dr Stuart Corson; LWQS Committee


1.00 **Catfish Killa Programme - Rotorua Lakes**
William Anaru, Biosecurity Manager, Te Arawa Lakes Trust 

1.20 **What Plants are in our Lakes?**
Paul Champion: Principal Scientist, Freshwater Ecology, NIWA, Hamilton 

1.30 **Aquatic Plant Control Research**
Dr Deborah Hofstra: Principal Scientist, NIWA 

1.50 **Reducing the Impacts of Aquatic Weed in South Island Lakes:
Experience from Other Lake Environments**

2.10 **Submerged Plant Indicators Reflect Lake Interventions?**
Mary de Winton; Freshwater Ecologist, Manager Aquatic Plant Group, NIWA 

2.20 **Being Prepared for Whole Lake Treatment -
What Needs to be Done to Meet Different Outcomes?**
Daniel Clements/ Deborah Hofstra/ Paul Champion/Mary de Winton NIWA 

2.40 **Novel Approaches to Control Catfish**
Dr Cindy Baker: Principal Scientist, NIWA 

2.55 **e-DNA - What Do We Want to Know?**
Dr Cindy Baker: Principal Scientist, NIWA 

3.00 **Afternoon Break**

SESSION 4

Meeting the Targets for the Rotorua Lakes

Chair: Te Taru White, Bay of Plenty Regional Council

3.30 **Lake Rotorua PC 10 Science Review and Meeting the Targets**
To be confirmed

3.55 **Te Arawa Lakes Programme Achievements and Future**
Helen Creagh, Rotorua Catchments Manager and Scott Kusabs, Land
Management Team Leader, Toi Moana, Bay of Plenty Regional Council

4.15 **Towards the Lake Tarawera NPS FW- Policy Document**
James Dare: Environmental Scientist & Gemma Moleta, Senior Planner,
Toi Moana, Bay of Plenty Regional Council (TBC)

4.35 **Lake Taupo; Water Quality Issues and Catchment Management**
Dr Paul White: Chair Taupo Lakes and Waterways Group 

5.00 **Symposium close for day: Karakia**
Dr Ken Kennedy, LWQS Committee

7.00 **Symposium Dinner**

DAY TWO

FRI 11TH

Future Challenges for Protecting Lakes and Freshwaters

SESSION 1

Climate Change and the Lakes

Chair: Kevin Winters, Bay of Plenty Regional Council

8.30 **Introduction**
John Gifford: Chair LWQS
Dr Ken Kennedy: Karakia

8.35 **Climate Crisis - How will our Lakes be Affected?**
Prof. David Hamilton: Deputy Director, Australian Rivers Institute,
Griffith University 

9.05 **Building Lake Resilience for the Future**
Assoc. Prof. Deniz Ozkundakci Assoc. Prof. Bay of Plenty Regional Council Chair
in Lake and Freshwater Science, University of Waikato 

9.25 **Climate Change: the NPS - FW and Land Use Change:
A Te Arawa Perspective**
Dr Tanira Kingi, Te Arawa Primary Sector 

9.45 **From Satellites to Communities: Effective Tools for Monitoring
Cyanobacteria in the Rotorua Lakes**
Dr Moritz Lehmann: Adjunct Senior Research Fellow, University of Waikato 

10.05 **Morning Break**

10.30 **NZ Governments Freshwater Reforms - Impacts on Lakes**
Hon David Parker: Minister for the Environment 

SESSION 2

Landuse Change to Forest - Impacts on Water

Chair: Stewart Edward, LWQS Committee

11.05 **Managing our Plantation Forests to Reduce Environmental Impacts**
Jason Wilson: Deputy Director General, Te Uru Rakau/NZ Forest Service 

11.25 **Carbon Forestry -
Can Carbon Forestry Contribute to Catchment Restoration?**
Jeff Tombleson: Jeff Tombleson & Associates 

11.45 **Modelling the impact of Forestry on Water Quality for Lake Okareka**
Gebiau Ayele, Australian Rivers Institute, Griffith University, Australia 

12.05 **Lunch Break: Blessing**

SESSION 2 CONTINUED

1.00 **Planted Forests and Water Yield in New Zealand's
Hydrological Landscape**
Dr MS Srinivasan: Principal Scientist, Catchment Hydrology, NIWA 

1.20 **Forests and Water Quality**
Dr Jen Owens, Scion 

1.40 **Right Tree Right Place -
What to Consider when Establishing New Forests**
Dr David Palmer: Senior Spatial Analyst, Scion
Dr Tim Payn: Principal Scientist, Scion 

SESSION 3

Integrating land and water management and Impact on policy

Chair Lyall Thurston: Bay of Plenty Regional Council

2.00 **Update on Biosecurity Bill**
John Walsh: Director, Readiness & Response Services, Ministry of Primary

2.20 **How Policies Have Shaped New Zealander's Relationships to Lakes**
Dr Kiely McFarlane: Social Scientist & Dr Charlotte Sunde: Social Scientist
(Cawthron Institute) 

2.40 **LandscapeDNA: Physiographic Approach to Land
and Water Management**
Dr Lisa Pearson: Lead Earth and Environmental, Land and Water Science,

3.00 **Afternoon Break**

SESSION 3 CONTINUED

3.30 **Land and Water Interactions in the Rotorua Lakes Catchments**
Dr Troy Baisden: University of Auckland & Affiliate Motu 

3.50 **Economic & Urban Growth Impacts on Lake Water Quality**
Stavros Michael: Infrastructure and Environmental Solutions, Deputy Chief
Executive, Rotorua Lakes Council 

4.10 **Concluding Overview - Key Take Home Messages & Actions**
Warren Webber 

Conference Close
John Gifford: LWQS Chair

4.30 **Closing Karakia**
Dr Ken Kennedy, LWQS Committee