

MONDAY 19 SEPTEMBER

| From 8.00am | | | |
|------------------------|--|--|--|
| <i>Registrations</i> | | | |
| Room | Bay Trust Forum | | |
| 8.30 - 10.00am | Welcome and Opening Plenary (including Powhiri and addresses by Jan Wright, PCE) Chair: Dr Jim Cooke | | |
| 10.00 - 10.30am | | | |
| <i>Morning Tea</i> | | | |
| Room | Skellerup Room (114 theatre style) | Opus Room (114 theatre style) | Works Infrastructure Room (114 theatre style) |
| Session | Agriculture <i>Chair: Fiona Napier</i> | Urban and transport <i>Chair: Lee-Hyung Kim</i> | Lakes and nutrients <i>Chair: Clive Howard-Williams</i> |
| 10.30-10.45am | <i>Bob Wilcock</i> Ten Years of Dairy Catchment Monitoring in New Zealand: What Has it Taught Us? | <i>Jonathan Moores</i> Integrating a stormwater contaminant load model into a spatial decision support system for urban planning | <i>Max Gibbs</i> Nutrient capping: the perfect partner for enhancing the effectiveness of diffuse pollution management in lakes |
| 10.45-11.00am | <i>Francis Burdon</i> Riparian drivers and the relative effect of fine sediment and nutrients on invertebrate communities in agricultural streams | <i>Brian D'Arcy</i> Scottish SUDS retrofits to address pollution from industrial estates | <i>Jonathan Abell</i> Nutrient transport to Lake Rotorua: What happens when it rains? |
| 11.00 - 11.15am | <i>Xiaoyan Wang</i> Validation of AnnAGNPS model in a watershed of Miyun Reservoir near Beijing, China | <i>Le Song Ha</i> Sensitivity Study of Washoff Model for the Simulation of Suspended Solids Concentration in Stormwater Runoff | <i>Sarah Dörner (was Marie de Boutray)</i> One Dimensional Modeling of Cyanobacteria Dynamics in Shallow Lakes: application to Missisquoi Bay, Lake Champlain (Canada) |
| 11.15-11.30am | <i>Rebecca Eivers</i> Attenuating Sediment and Nutrient Losses from Intensive Agriculture – Restoring Eutrophic Shallow Lakes | <i>Marla C. Maniquiz</i> Performance comparison between infiltration and non-infiltration type of structural stormwater treatment systems | <i>Piet Verburg</i> Biomagnification of mercury and eutrophication: implications for wild-caught fish |
| 11.30-11.45am | <i>Sung Min Cha</i> Runoff characteristics in accordance with the strength of first-flush in agricultural area | <i>Fiona Napier</i> Managing Hydrocarbons in the Urban Environment: Implications for BMP selection | <i>Deniz Özkundakci</i> Long-term Hind- and Forecasting of Water Quality for Lake Rotorua: Coupling Catchment, Lake and Climate Models |
| 11.45-12.00 | <i>Matt Hickey</i> Water quality patterns in the Pomahaka Catchment, South-west Otago. | | <i>Eduardo von Sperling</i> Space-temporal analysis of the water quality of Funil hydroelectric reservoir - Minas Gerais State, Brazil, before and after dam construction |
| 12.00 - 1.30pm | | | |
| <i>Lunch</i> | | | |
| Session | Agriculture <i>Chair: Rich McDowell</i> | Urban and transport <i>Chair: Bruce Williamson</i> | Lakes and nutrients <i>Chair: David Hamilton</i> |
| 1.30-1.45pm | <i>Melissa Robson</i> What counts is what works: a review of how agricultural diffuse pollution is managed for water quality in New Zealand and key aspects to approaches going forward | <i>Anne-Sophie Madoux-Humery</i> Characterization of Combined Sewer Overflows (CSOs) and Evaluation of their Impacts on Urban Waters | <i>Yasunori Sawada</i> Control of Pollutant Runoff during Storm Events Using a Retention Pond - a Case Study in Lake Biwa Basin, Japan |
| 1.45-2.00pm | <i>John Paterson</i> Nitrogen leaching from gorse to Lake Rotorua and mitigation of leaching 'spike' during gorse conversion to pine forest | <i>Sheeraz Memon</i> Influence of Stormwater characteristics on first flush phenomenon at bridge and parking lot sites in Gyeongan watershed Korea | <i>Sarah Dörner (was Mouhamed Ndong)</i> Cyanobacteria modeling: A 3D hydrodynamic-cyanobacterial model based on the SIMPLE algorithm |
| 2.00-2.15pm | <i>Jon Roygard</i> Integrating science and policy to inform management approaches to manage non point source nutrient impacts on low land river systems in Manawatu-Wanganui Region of | <i>Rebecca Stott</i> Response of protozoan communities in stream biofilms to urban and agricultural land-use impacts | <i>Jae Yil Lee</i> Change Analysis of Dissolved Organic Matter on Effect of Water Release Operations in Dae-Cheong Dam Reservoir |
| 2.15-2.30pm | <i>Maree Clark</i> The Challenge of Managing Farm Dairy Effluent in the Manawatu-Wanganui Region. | <i>Karine Borne</i> Floating Vegetated Island Retrofit to Treat Stormwater Runoff | <i>David Burger</i> An integrated monitoring and modelling framework to predict and manage...drinking water reservoirs in Singapore |
| 2.30-2.45pm | <i>Neale Hudson</i> Constructed wetlands assist in lake restoration: Results from a study of the Lake Okaro constructed wetland | <i>Matthew Davies</i> An Overview of Urban Stormwater Quality in the Auckland Region | <i>Bonnie Glaister</i> Can stormwater biofilters meet receiving water phosphorus targets? A pilot study investigating metal-oxide enriched filter media |
| 2.45-3.00pm | | <i>Bum-Yeon Lee</i> Application of the High Resolution Aerial Images to Estimate Nonpoint Pollutant Loads in the Unit Load Approach for Total Water Pollution Load Management System in South Korea | <i>Jane Kitson</i> <i>Waituna Lagoon: Overview of the problem, and the response to halt the collapse of a Lagoon within a Ramsar site</i> |
| 3.00 - 3.30pm | | | |
| <i>Afternoon Tea</i> | | | |
| Session | | | |
| 3.30 - 5.00pm | POSTER SESSION - starting with a 30-45 min session of 'flash' presentations... (Themes A, B, C) Introduction: Dr Rob Davies-Colley, Chair: James Sukias | | |

| TUESDAY 20 SEPTEMBER | |
|-----------------------------|---|
| From 8.00am | Registrations |
| Room | Bay Trust Room 4 Forum |
| 8.30 - 9.45am | Joint plenary with HRWM. (Chairs: Eric van Bochove and Graham McBride) (Address Hon Dr Russel Norman, Keynote by Prof. David Kay) Chairs: Dr Eric van Bochove; Graham McBride |
| 9.45 - 10.10am | Morning Tea |
| Room | Bay Trust Forum |
| Session | Diffuse microbial pollution (Joint Session with HRWM Group) |
| 10.10 - 10.15 | Session introduction by the co-chairs |
| 10.15 - 10.30 | Nutrient Influences On Bacterial Populations <i>Xiaoyan Wang</i> Nutrients and other environmental factors affecting bacterial communities in an urban river |
| 10.30 - 10.45 | Source Tracking In Catchment Studies <i>Gertjan Medema</i> Prevalence and concentration of campylobacter, e. Coli o157 and cryptosporidium in feces of wild cattle, sheep and deer ranging in a water catchment area |
| 10.45 - 11.00 | <i>Aourell Mauffret</i> Long term monitoring of host-specific markers for microbial source tracking and catchment management |
| 11.00 - 11.15 | <i>Sinead Murphy</i> Investigation of bacterial pathogen sources and transfer hydrodynamics in rural catchments |
| 11.15 - 11.30am | Cookie Time Break |
| 11.30 - 11.45 | Campylobacter Catchment Modelling <i>Richard Muirhead</i> Quantitative analysis of Campylobacter sources in rural streams |
| 11.45 - 12.00 | <i>Sandy Elliott</i> Models for Campylobacter in Pastoral Catchments |
| 12.00 - 12.15 | Protozoa In Rivers and Reservoirs <i>Naohiro Kishida</i> Quantitative detection of Cryptosporidium oocyst in water source by alternatively binding probe competitive polymerase chain reaction (ABC-PCR) |
| 12.15- 12.30 | <i>Jean-Baptiste Burnet</i> Spatial and temporal propagation of cryptosporidium and giardia at various scales in a drinking water reservoir |
| 12.30 - 1.30pm | Lunch |

TUESDAY 20 SEPTEMBER

| 12.30 - 1.30pm | | Lunch | | |
|----------------|---|---|--|--|
| Session | Indigeneous... and small islands Chair: Garth Harmsworth | Nutrient loads Chair: Shigeo Fujii | | |
| | <i>Steven Kelly</i> Incorporating cultural perspectives in CSA management and the development GHG mitigation strategies | <i>Linda May</i> Uncertainties in estimated phosphorus loads as a function of different sampling strategies and calculation methods | | |
| 1.45-2.00pm | <i>Rebecca Stott</i> Raising community awareness to address point-diffuse water pollution problems in a coastal Fijian village - Lessons from the Wai Votua project. | <i>Markus Venohr</i> Future nutrient emissions and loads to the Oder River Basin – How to reach a Good Ecological Status? | | |
| 2.00-2.15pm | <i>Chris Tanner</i> Tackling point-diffuse pollution from on-site wastewater disposal in a Fijian village to improve health and environmental sustainability | <i>Ted McCormack</i> Quantifying the Nutrient Inputs into Karst Conduit Fed Ephemeral Lakes (Turloughs) in Ireland. | | |
| 2.15-2.30pm | <i>Kit Rutherford</i> Sediment, nutrient and geothermal input reductions to meet Maaori aspirations for the Waikato River | <i>Sean Blacklocke</i> Defining Spatial Relationships between Forestry Operations and Surface Water Quality in Ireland | | |
| 2.30-2.45pm | <i>Garth Harmsworth</i> Māori perspectives for water decision-making and the role of cultural monitoring | <i>Andy Bruere</i> Management of diffuse nutrient losses in the Lake Rotorua catchment | | |
| 2.45-3.00pm | DISCUSSION - led by Garth Harmsworth | <i>Prof. Hiroaki Furumai</i> Improved calibration of runoff load model using continuous monitoring data on turbidity and electrical conductivity | | |
| 3.00 - 3.30pm | | Afternoon Tea | | |
| Session | Wetlands and riparian Chair: Chris Tanner | | | |
| 3.30-3.45pm | Workshop - INDUSTRIAL ESTATES Chair: Brian D'Arcy | | | |
| 3.45-4.00pm | | | | <i>Keith Hamill</i> Cost-effective removal of diffuse source nitrogen: the feasibility of treatment wetlands in Lake Rotorua catchment |
| 4:00-4.15pm | | | | <i>Soyoung Lee</i> Phosphorus Mass Balance in a Surface Flow Constructed Wetland Receiving Piggery Wastewater Effluent |
| 4:15-4.30pm | | | | <i>John Paterson</i> Farming Community initiatives to modify nutrient-loss effects in the catchments of Lake Ōkaro and Lake Rerewhakaaitu in the Rotorua District of the Central North Island of New Zealand. |
| 4:30-4.45pm | | | | <i>Milos Rozkosny</i> Nutrient Treatment Efficiency of the Natural and Constructed Wetlands in the southern parts of Morava and Dyje River Basins (Danube basin) |
| 4.45-5.00pm | | | | <i>Stephanie Natho</i> Nutrient retention in riparian wetlands on landscape scale, the necessity of a monthly retention approach |

WEDNESDAY 21 SEPTEMBER

From 8.30am

Field Trips All Day

THURSDAY 22 SEPTEMBER

| From 8.00am | | | |
|---|--|---|--|
| <i>Registrations</i> | | | |
| Room Bay Trust Forum | | | |
| 8:30 - 8:55am Plenary talk - Eva Abal "Environmental report cards" Chair: Dr Bruce Williamson | | | |
| 8:55-9:00 <i>move to parallel streams...</i> | | | |
| Room | Skellerup Room (114 theatre style) | Opus Room (114 theatre style) | Works Infrastructure & Sigma Rooms (228 theatre style) |
| Session | ICM <i>Chair: Andrew Fenemor</i> | Mining... <i>Chair: Ralph Heath</i> | |
| 9:00-9:15am | <i>John Quinn</i> A Bayesian Belief Network synthesises complex interactions between irrigation-driven land development, diffuse pollution, and land and water values in a New Zealand watershed. | <i>Jenny Webster-Brown</i> Predicting the Degree of Cu, Pb and Zn Adsorption to Suspended Particulate Material in a Lowland River System | symposium - WETLANDS in AGRICULTURE |
| 9:15-9:30am | <i>Markus Venohr</i> Economy vs. Ecology? - How to reach nutrient emission reduction goals in the most international river basin: the Danube river basin | <i>Chayada Pansuk</i> Organo - fly ash granule as an adsorbent for the removal of acid brown 75, direct yellow 162, and chromium (III) in single and mixed solute system | |
| 9:30-9:45am | <i>Lucas Kornfeind</i> Assessment of river monitoring based on discrete and continuous methods | <i>Mi-Hyun Park</i> Spatial analysis for identifying EDC and PPCP sources | |
| 9:45-10:00am | <i>Jongho Ahn</i> Evaluation of Water Quality Improvement in a Large-scale Watershed, Korea | <i>Koya Komori</i> Occurrence of pharmaceuticals in channel water in an agricultural area on a fine or rainy day | |
| 10.00 - 10.30am <i>Morning Tea</i> | | | |
| Room | Skellerup Room (114 theatre style) | Opus Room (114 theatre style) | Works Infrastructure & Sigma Rooms (228 theatre style) |
| Session | ICM <i>Chair: TBC</i> | Sediment <i>Chair: Wanpen Wirojanagud</i> | <i>Convenor: Dr Chris Tanner</i> |
| 10:30-10:45am | <i>Andrew Fenemor</i> Facilitating voluntary action to reduce rural land use impacts in the Motueka River catchment, New Zealand | <i>Sandy Elliott</i> Modelling fluxes of clarity-reducing substances at regional scale | symposium - WETLANDS in AGRICULTURE |
| 10:45-11:00am | <i>Stephanie Natho</i> Analysis of flooding frequency and nutrient retention capacity of riparian wetlands along the river Elbe | <i>Noriatsu Ozaki</i> PAHs concentration and toxicity of atmospheric particulate matters and sea sediments | |
| 11:00 - 11:15am | <i>Judith Mahnkopf</i> Modelling nutrient emissions into the Baltic Sea from rivers of German catchments 1983-2005 | <i>Wanpen Wirojanagud</i> Site Characterization of Gold Mining for Arsenic Dispersion | |
| 11:15-11:30am | <i>Ray Earle</i> Dublin City Centre Catchment Analysis - Optimising a new Drainage/Sewerage Scheme for a Smarter Greener Ecocity | <i>Pat Feehan</i> Wildfires in the upper Catchment of the Goulburn River, Victoria - Monitoring and Protection of River Health and Water Quality | |
| 11:30-11:45am | <i>Jaeho Jang</i> Projected Climate Change Impact on Runoff and Water Quality from Nakdong River Watershed, Korea | <i>Milos Rozkosny</i> Long-term trends of priority and other hazardous substances content in the Morava River sediments (Danube River basin) | |
| 11:45-12:00 | <i>Xuyong Li</i> Multiple Model Comparison to Predictions of Watershed Streamflow and Nutrient Discharges | <i>Deborah Ballantine</i> New Zealand's National Rivers Water Quality Network - adding suspended sediment to add value. | |
| 12.00 - 1.00pm <i>Lunch</i> | | | |
| Session | | | |
| 1.00 - 3.00pm | Workshop - MINING | Workshop - WQ TRADING | Symposium - WETLANDS in AGRICULTURE |
| 3.00 - 3.30pm <i>Afternoon Tea</i> | | | |
| Session | | | |
| 3.30 - 5.00pm | POSTER SESSION - starting with a 30-45 min session of 'flash' presentations... (Themes D J) Chair: Dr Rob Davies-Colley | | Symposium - WETLANDS in AGRICULTURE (<i>through to 5:30</i>) |

FRIDAY 23 SEPTEMBER

| | | | |
|-----------------|---|---|---|
| From 8.00am | <i>Registrations</i> | | |
| Room | Bay Trust Forum | | |
| 8:30 - 8:55am | Plenary talk - Kevin Parris "Opportunities for lowering diffuse source water pollution from agriculture" | | Chair: Dr Jim Cooke |
| 8:55-9:00 | move to parallel streams... | | |
| Room | Skellerup Room (114 theatre style) | Opus Room (114 theatre style) | Works Infrastructure Room (114 theatre style) |
| Session | Agriculture <i>Chair: Roland Stenger</i> | Economics, policies and education <i>Chair: Xiaoyan Wang</i> | Algae and macrophytes <i>Chair: Eduardo Von Sperling</i> |
| 9:00-9:15am | <i>Uwe Morgenstern</i> Lake Taupo – Threat from Delayed Impact of Landuse via old groundwater inflow | <i>Tanira Kingi</i> Collective approaches to reducing nutrient discharge rates into Lake Rotorua | <i>Shigeo Fujii</i> Phytoplankton Species Variation Analysis in Lake Biwa by means of the Three-Ways Layout ANOVA |
| 9:15-9:30am | <i>Xin Yu Zhang</i> Assessment of shallow groundwater nitrate concentrations in typical terrestrial ecosystems of Chinese Ecosystem Research Network (CREN) During 2004-2009 | <i>Cathal Buckley</i> Farmer adoption of desirable nutrient management practices in the Republic of Ireland. | <i>Keiko Wada</i> Dynamic Analysis of Organic Carbon and Nutrients under Symbiosis Environment of Submerged Macrophytes : Experimental Study |
| 9:30-9:45am | <i>Chris Palliser</i> Modelling nitrogen loads to Lake Rotorua, New Zealand | <i>Cathal Buckley</i> An analysis of farmer attitudes to EU Nitrates Directive implementation in the Republic of Ireland | <i>Mi-Hyun Park</i> Remote Sensing Models Using Landsat Satellite Data to Monitor Algal Blooms in Lake Champlain |
| 9:45-10:00am | <i>Greg Barkle</i> Non-point source pollution - what happens between the root zone and groundwater? | <i>Justine Young</i> Protecting Lake Taupo - Nitrogen cap and trade policy | <i>Bryan Spears</i> The importance of aquatic plants in regulating stream bed sediment structure and phosphorus transport through the Loch Leven catchment |
| 10.00 - 10.30 | <i>Morning Tea</i> | | |
| Room | Skellerup Room (114 theatre style) | Opus Room (114 theatre style) | Works Infrastructure Room (114 theatre style) |
| Session | Agriculture <i>Chair: Pat Feehan</i> | Economics, policies and education <i>Chair: Prof. Xiaoyan Wang</i> | Groundwater <i>Chair: Peter Schipper</i> |
| 10:45-11:00am | <i>Chris Tanner</i> Nutrient removal from agriculturally-impacted streams using floating treatment wetlands. | <i>Mary Elizabeth Wedderburn</i> Application of a systems deliberative process to inform solutions to the cumulative effects of land uses on fresh water quality | <i>Chris Daughney</i> Groundwater Age and Transit Time in the Lake Rotorua Catchment, New Zealand |
| 11:00 - 11:15am | <i>Judith Mahnkopf</i> Measures to reduce nutrient emissions via tile drainage systems into river systems | <i>Tim Cox</i> N-Trader – a simulation model to explore possible trading schemes for diffuse sources of nitrogen | <i>Husam Baalousha</i> Understanding groundwater-surface water interaction in the Ruataniwha Basin, New Zealand using chemical signature, environmental isotopes and numerical modelling |
| 11:15-11:30am | <i>Hong Di</i> Mitigation of diffuse-source nitrate leaching from grazed pastures using a nitrification inhibitor. | <i>Ned Norton</i> Limiting diffuse pollution:an approach to science informed policy development | <i>Roland Stenger</i> Groundwater redox-stratification and water table dynamics determining nitrate discharge into a lowland stream |
| 11:30-11:45am | <i>Deborah Ballantine</i> How can we enhance phosphorus retention in constructed farm wetlands? | <i>Min Ji Kang</i> Diffuse Pollution Management in the Korean TMDL Management System | <i>Greg Barkle</i> Understanding Flow paths of Diffuse Pollution by Separating Stream Flow into Groundwater and Event Water Contributions |
| 11:45-12:00 | <i>Jianghua Yu</i> Particles and Resuspension in Constructed Stormwater Wetland during Dry Days | <i>Onur Oktem</i> Diffuse Pollution and Water Quality Challenge in New Zealand: Regulation Dilemma Argument | <i>Angela Slade</i> Boron Used to Track Water Movements along the Tarawera River, in the Bay of Plenty Region of New Zealand |
| 12.00 - 1.00pm | <i>Lunch</i> | | |
| Session | | | |
| 1.00 - 3.00pm | Workshop - AGRICULTURE | Workshop - LAKES | Workshop - REPORT CARDS |
| 3.00 - 3.30pm | <i>Afternoon Tea</i> | | |
| Session | | | |
| 3.30 - 5.00pm | Closing Plenary (Incl. address by Eric vB, awards, promotional of Beijing 2013 conf., and closure) | | |