

## DAY 1 Schedule

08.00 Registration Opens

09.00 Conference Introduction and Opening Address

### 10.00 Session 1: Detecting change and lag times - patience and policy implementation

Chaired by Mr Andy Fanning (EPA)

10.00 Short-term (<5yr) decisions and long-term (>15 yr) responses of catchment systems. *Dr Nicholas Howden*, University of Bristol, UK.

10.15 Large-scale fluctuations of Atlantic Ocean weather patterns and water quality in agricultural river catchments. *Dr Per-Erik Mellander*, ACP, Teagasc, Ireland.

10.30 Detecting the blue shoots of recovery in agricultural catchments. *Dr Alice Melland*, University of Southern Queensland, Australia.

10.45 Time lag in effects of mitigation measures on phosphorus loss across the transfer continuum in a monitored dairy grassland catchment. *Dr Paul Murphy*, University College Dublin, Ireland.

.....Break.....

11.30 Using high-frequency water quality data to assess sampling strategies for the EU Water Framework Directive. *Prof Andrew Wade*, University of Reading, UK.

11.45 Antecedent conditions, hydrological connectivity and anthropogenic inputs: dominant factors affecting nitrate and phosphorus transfers to agricultural headwater streams. *Dr Faye Outram*, University of East Anglia, UK.

12.00 Impact of legacy soil phosphorus (P) on P loss in runoff from a grazed grassland hillslope. *Dr Rachel Cassidy*, Agri-Food and Biosciences Institute, UK.

12.15 Environmental parameters regulating groundwater nitrate attenuation & gaseous accumulation in two agricultural river catchments. *Mr Eoin McAleer*, ACP, Teagasc, Ireland.

12.30 Session Questions and Discussion

.....Lunch.....

### 14.20 Session 2: Integrated management, stakeholder engagement and catchment economics

Chaired by Dr Tom Kelly (Teagasc)

14.20 A spatial analysis of the major forces affecting ecological status of rivers across the Republic of Ireland. *Prof Cathal O'Donoghue*, Teagasc, Ireland.

14.35 FyrisSKZ: Model support for estimating the cost efficiency of riparian buffer zones to reduce phosphorus losses from agricultural land. *Dr Dennis Collentine*, University of Gävle, Sweden.

14.50 Social Learning and the farming sector, adapting to the Water Framework Directive in Scandinavia, Scotland and Ireland. *Dr Micheál Ó'Cinneide*, Director, EPA, Ireland.

15.05 Focus on Nutrients, a voluntary on-farm initiative that benefits both the environment and the economy. *Dr Stina Olofsson*, Swedish Board of Agriculture.

.....Break.....

15.50 Developing sustainability indicators to evaluate changes in farm level nutrient management efficiency through time. *Dr Cathal Buckley*, ACP, Teagasc, Ireland.

16.05 Engagement of dairy farmers in the Lake Rotorua Catchment in meeting nutrient loss targets on dairy farms in the Lake Rotorua catchment. *Mrs Sharon Morrell*, Massey University, New Zealand.

16.20 An advisory-industry perspective to nutrient management in the Agricultural Catchments Programme. *Mr Dermot Leahy*, ACP, Teagasc, Ireland and *Mr John Walsh*, Timoleague Catchment Farmer.

16.40 Session Questions and Discussion

# DAY 2 Schedule

09.00 Day 2 Welcome

## 09.10 Session 3: Soil analysis and nutrient management—achieving environmental and agronomic goals

Chaired by Dr Stan Lalor (Alltech)

09.10 Fertile soils: friend or foe for a clean catchment? *Dr Jaap Schröder*, Wageningen University, Netherlands.

09.25 Soil variability impacting nutrient source mobility. *Dr Noeleen McDonald*, ACP, Teagasc, Ireland.

09.40 Optimising soil fertility leads to efficient fertilizer use. *Dr Tim Sheil*, Alltech Bioscience Centre, Ireland.

09.55 The management of a marginal acid organic soil to decrease phosphorus losses and meet an ecological target. *Mr Bernard Simmonds*, AgResearch, New Zealand.

10.10 Variability in farm and field scale phosphorus balances within and between high status river catchments in the Republic of Ireland. *Dr Will Roberts*, Teagasc, Ireland.

10.25 Session Questions and Discussion

.....Break.....

## 11.15 Session 4: Adaptive management approaches to reducing nutrient loss risk

Chaired by Mr Bill Callanan (DAFM)

11.15 Adaptive management approaches for reducing nutrient mobilisation and transfer in surface flows. *Dr Mairead Shore*, ACP, Teagasc, Ireland.

11.30 Research for Catchment Attenuation Processes (ReCAP): Advancing knowledge and tools to account for nitrogen transport and transformation in NZ agricultural catchments. *Dr Ranvir Singh*, Massey University, New Zealand.

11.45 Targeting critical source areas benefits both farmers and water quality. *Dr Faruk Djodjic*, Swedish University of Agricultural Sciences.

12.00 Groundwater control of biogeochemical processes causing phosphorus remobilization in vegetated riparian wetlands. *Mr Remi Dupas*, INRA, France.

12.15 Development and validation of a sub-field scale phosphorus critical source area index which utilises LiDAR DEMs and GIS. *Mr Ian Thomas*, ACP, Teagasc, Ireland.

12.30 Session Questions and Discussion

.....Lunch.....

## 14.10 Session 5: Disentangling the impact of multiple stressors on aquatic ecology

Chaired by Dr Mary Kelly-Quinn (UCD)

14.10 Linking agricultural fine sediment pressure and impacts on aquatic ecology for informing catchment management across England and Wales. *Prof Adie Collins*, Rothamsted Research, UK.

14.25 Real time ecology' to understand the nutrient and community dynamics of headwater streams. Implications for biomonitoring and policy from the River Eden Demonstration Test Catchment programme. *Dr Maria Snell*, Lancaster University, UK.

14.40 Assessing the impacts of climate change on catchment sensitivity to phosphorus pollution. *Ms Kirsty Ross*, Lancaster University, UK.

.....Break.....

15.25 Is the pressure-specific invertebrate index PSI an ecologically relevant tool for determining water quality sedimentation targets? *Dr Miriam Glendell*, University of Exeter, UK.

15.40 Combining sediment flux and fingerprinting to target soil erosion and sediment management strategies in agricultural catchments. *Ms Sophie Sheriff*, Teagasc, Ireland.

15.55 Processes controlling the response of algal blooms to nutrient enrichment in estuaries and coastal waters around Ireland. *Dr Sorcha Ni Longphuirt*, EPA, Ireland.

16.10 Session Questions and Discussion

16.30 Conference Closing Session and Discussions (Lead by Prof Phil Jordan, University of Ulster and ACP)

17.30 Conference Close (Gala Dinner Follows at 19.30)