

## Detailed Programme DAY 1 Final Draft

Time	Programme	Who	Duration
8.30am	Registration and Coffee		
9.00am	Welcome, Introductions and Overview of Training Days	RT	10mins
9:10am	Context to Managing Water Loss – Assess current level of losses. Water Balance, concept of UARL, Performance Indicators, Uncertainties, BenchlossNZ Manual and Software	RT	60mins
10:10am	Questions and discussion	RT	10mins
10:20am	Sponsor presentation – Cla-Val		20mins
10:40am	Morning Tea		20mins
11:00am	Managing Water Loss – The 4 components of managing real water losses, component analysis of real losses, leak run times	RT	20mins
11:20am	Pressure Management - pressure/leakage relationships, options for pressure management	RT	20mins
11:40am	Pressure Management – management and case studies	ΤW	30mins
12:10pm	Sponsor presentation – Deeco Services		20mins
12:30pm	Lunch		50mins
1:20pm	Sponsor presentation – WaterOutlook		20mins
1:40pm	The Importance of Managing Water Losses	ΤW	20mins
2:00pm	Setting a Water Loss Target – Group session – What are the drivers for Water Loss Management? What are the cost benefit considerations for leakage management?	RT/all	45mins
2:45pm	New Zealand Water Loss Guidelines (available from WaterNZ) – Includes strategies to reduce real water losses.	RT	15mins
3:00pm	Sponsor presentation – Detection Services Ltd		20mins
3:20pm	Afternoon Tea		20mins
3:40pm	Monitoring - Bulk metering design, selection and installation	RT	10mins
3:50pm	SCADA (flow calculation and plotting issues) including examples of SCADA plots	RT	10mins
4:00pm	Case Study – Horowhenua DC Pressure Management	Albert H	20mins
4:20pm	<b>TBC</b> - Case Study, Demand Management Benefits of a Robust WB, and/or Water Balance Calculations Recap/Specific Issues	RT	30mins
4:50pm	Discussion, questions and summary of Day 1.	RT	10mins
5.00pm	Finish		



## Detailed Programme DAY 2 Final Draft

Time	Programme	Who	Duration
8.30am	Coffee and Registration (for new attendees)		
8.50am	Recap of Day 1 and Overview of Day 2	RT	10mins
9:00am	Design and Implementation of District Metered Areas (DMAs)/ network sectorization with examples. Questions and discussion.	ΤW	60mins
10:00am	Sponsor presentation – Arthur D Riley Ltd		20mins
10.20am	Morning Tea		20mins
10:40am	Operational Benefits of Sectorized Networks	RT/ZP	10mins
10:50am	Active Leak Detection – Equipment and Techniques. Presentation by Charles Chapman, Detection Services Ltd	CC	60mins
11:50am	Sponsor presentation – Jeff Booth Consulting Ltd		20mins
12:10am	Sponsor presentation – EMC		20mins
12.30pm	Lunch		45mins
1:15pm	How organizations manage water losses by monitoring DMAs/Minimum Night Flows and Reporting. Intervention levels, successes, issues. Case studies Wellington, Christchurch/ADR, Kapiti, Hastings/JBCL, ex Waitakere/WSL.	RT/+	75mins
2:30pm	Questions and discussion on monitoring, intervention and reporting.	RT	15mins
2:45pm	SMART Water Management - Introduction	RT	5mins
2:50pm	Big Data NRW Assessment – Eric Skowron (Jacobs)	Eric S	20mins
3:10pm	Use of latest technologies (high rate pressure monitoring) pressure transcients (TBC)		10mins
3:20pm	Afternoon Tea		20mins
3:50pm	Review of Water Balance, Performance Indicators, Four Components diagram, drivers for reducing real water losses, setting a target, monitoring and intervention – Recap and discussion.	RT/all	20 mins
4:10pm	Summary comments from Tim Waldron. International perspective.	TW	10mins
4:20pm	Final comments and feedback surveys.	RT	10mins
4.30pm	Finish 4:30pm		