



TREATMENT SYSTEMS

for water quality improvement

Regional forum

AGENDA

Dates	12-13 November 2018
Time	8:30am -5:00pm 12 th November, 8:00am – 5:00pm 13 th November
Venue	Rydges Southbank, Palmer street, Townsville

Regional forum objectives	
Objective 1:	To share information and options for treatment systems for water quality improvement.
Objective 2:	To identify how various treatment systems can be used to achieve sediment, nutrient and pesticide reductions and water quality improvements.

Working together to identify, understand and manage our wetlands.

The regional forum is an initiative of the Department of Agriculture and Fisheries and the Department of Environment and Science (Queensland Wetlands Program).



Queensland Government



Queensland
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DAY 1 Workshop		Monday 12 November
8.30am	Tea/Coffee	
Session 1: Setting the scene		
8:45am	Welcome and housekeeping Introduction to the forum	Carla Wegscheidl, DAF Matthew Griffiths, DES
9:00am	The role of treatment systems in improving water quality to the Great Barrier Reef	Adam West, DAF
9:20am	Queensland Government Reef Water Quality initiatives	Ben Hammill, Office of the Great Barrier Reef
Session 2: Tools and information		
9:30am	Treatment Systems toolbox Nutrient conceptual models and community of practice	Carla Wegscheidl, DAF Matthew Griffiths, DES
Session 3: Treatment system options		
9:45am	Overview of different treatment options, case studies, pros and cons (20 mins presentation, 10 mins questions): 1. Denitrification bioreactors 2. Bioremediation of wastewater using freshwater macroalgae	Louis Schipper, Uni of Waikato Rocky de Nys, James Cook Uni, MBD Industries
10:45am	Morning tea	
Session 4: Treatment system options (continued)		
11:15am	Overview of different treatment options, case studies, pros and cons (20 mins presentation, 10 mins questions): 3. High Efficiency Sediment (HES) basins 4. Recycle pits 5. Micronutrient dosing – growing diatoms for reducing nitrogen levels	Adrian Crocetti, Water by Design Evan Shannon, FarmAcist Simon Tannock, AlgaEnviro
12.45pm	Lunch	
Session 5: Treatment system options (continued)		
1:30pm	Overview of different treatment options, case studies, pros and cons (20 mins presentation, 10 mins questions): 6. Reactive Filter Media	Eric Love, Centre for Organic Research & Education (CORE)
Session 6: Treatment systems in urban areas – lessons learned		
2:00pm	Water sensitive urban design in Townsville City	Chris Manning, Townsville City Council
2:15pm	Recent research on stormwater quality targets & practices	Alan Hoban, Bligh Tanner
2:30pm	Questions and discussion	
2.40pm	Afternoon tea	
Session 7: Treatment systems in agricultural areas – lessons learned		
3.00pm	Brief introduction and lessons learned: <ul style="list-style-type: none"> Wet Tropics treatment systems in MIPs Babinda wetland and bioreactors Burdekin bioreactors Burdekin treatment wetland 	Australian Wetlands Consulting William Darveniza – Canegrowers/Wet tropics MIP Liz Owen - Jaragun NRM Fabio Manca - QUT Arwen Rickert – BBIFMAC
4.20pm	Panel discussion and questions from the audience	
Session 8: Wrap up		
4:50pm	Wrap-up of the day and information for the field trip	Carla Wegscheidl
5.00pm	Close	

DAY 2 Site Visits		Tuesday 13 November
	Travel to Burdekin	
7:45am	Assemble outside Rydges Southbank, Palmer street, Townsville	
8:00am	Bus departs for Burdekin	
Site visit 1: Constructed treatment wetland		
9:00-9:30am	Constructed treatment wetland on a cane farm, Barratta Ck	Australian Wetlands Consulting Terri Buono, DAF
9:50-10:15am	Morning tea at Mio's college	
Site visit 2: Bioreactor		
10:45-11:15am	Bioreactor bed on a cane farm, Airville	Carla Wegscheidl, DAF Fabio Manca, QUT
11.45pm – 12:15pm Lunch at DAF Research Station, Ayr		
Site visit 3: Pacific Reef Fisheries aquaculture facility – Algae treatment		
12:45-1:45pm	Algae treatment system at Pacific Reef Fisheries, Ayr	Wayne Di Bartolo, Pacific Reef Fisheries
2:00-2:30pm	Macroalgae treatment system at Pacific Reef Fisheries, Ayr	Rocky de Nys, JCU
2:45pm	Bus departs for Townsville Afternoon tea on bus	
Site visit 4: High Efficiency Sediment basin		
4:15-4:45pm	HES basin in Townsville	Adrian Crocetti, Water by Design
4:45pm	Depart for Rydges and airport	
5:00pm	Bus arrives back at Rydges Bus arrives at airport	
Close		