

# **Emerging Issues in Waterway Health Forum**

# Thursday 7<sup>th</sup> November, CQU Cairns

Topic	Time	Speaker
Arrival	8.00am – 8.30am	Registration, tea and coffee on arrival
Introduction/Welcome	8.30am - 9.00am	The Hon. Warren Enstch MP, Federal Member for Leichhardt, Special Envoy for the Great Barrier Reef Welcome and forum opening Acknowledgement of Country
Microplastics	9.00am – 9.30am	Keynote Speaker – Dr Michelle Blewitt, Ausmap (Australian Microplastic Assessment Project at Total Environment Centre)
Microplastics	9.30am – 10.00am	Speaker – Dr Lynne Powell, Cairns Regional Council
Microplastics	10.00am – 10.30am	Q&A/Panel discussion
Morning Tea		
Aquatic biosecurity	11.00pm – 11.30pm	Keynote Speaker - <b>Dr Brendan Ebner, TropWater</b>
Aquatic biosecurity	11.30pm – 12.00pm	Speaker – Travis Sydes, FNQROC (Far North Queensland Regional Organisation of Councils)
Aquatic biosecurity	12.00pm – 12.30pm	Q&A/Panel discussion
Lunch		
PFAS	1.30pm – 2.00pm	Keynote Speaker – <b>Dr Karl Bowles, RPS</b>
PFAS	2.00pm – 2.30pm	Speaker – Dr Christoph Braun, DES (Department of Environment and Science – Qld Govt)
PFAS	2.30pm – 3.00pm	Q&A/Panel discussion
Afternoon Tea		
Climate Change	3.30pm – 4.00pm	Keynote Speaker – Professor Steve Turton, Adjunct (honorary) Professor in Environmental Geography, CQU & Wet Tropics Waterways, Independent Chair
Climate Change	4.00pm – 4.30pm	Speaker – Professor Jonathan Nott, Centre for Tropical Environmental and Sustainability Science, JCU
Climate Change	4.30pm – 5.00pm	Q&A/Panel discussion
Close	5.00pm – 5.15pm	Forum close





### **Session 1: Microplastics And Contaminants**

#### Dr Michelle Blewitt, AUSMAP

(Australian Microplastic Assessment Project, Total Environment Centre)



Dr Lynne Powell, Cairns Regional Council



Microplastics have been described as one of the biggest threats to ocean wildlife and to the human food chain in our lifetime. Despite this, the scale of contamination has gone largely unrecognised, in part due to the invisibility of microplastics to the naked eye. Dr Michelle Blewitt (AUSMAP) will explain the magnitude and significance of microplastic contamination, why we should be concerned - and the project underway to make the invisible visible.

Dr Lynne Powell (Cairns Regional Council) is an environmental specialist working within the largest local Government organisation within the Wet Tropics region. Lynne will explain the role of councils in leading the push for better containment of microplastics and other contaminants emanating from urbanised catchments, along with the particular challenges faced by Wet Tropics councils and strategies for stemming the threats.

#### **Session 2: PFAS**

Dr Karl Bowles, RPS



**Dr Christoph Braun, DES** (Queensland Department of Environment and Science)



Historically, PFAS and PFOS have been widely used chemicals in both industrial and domestic situations. In recent years these chemicals have been recognised as potential threats due to their persistence in the environment, their ability to bioaccumulate (biomagnify) and the fact that little is known about their toxicity or the implications of chronic exposure. Dr Karl Bowles (RPS Consultants) will discuss what PFAS chemicals are and the ecological/biological implications of their migration into aquatic ecosystems.

Queensland's Department of Environment and Science runs multiple programs for monitoring water quality in catchments across the state, including contaminants such as pesticides, hydrocarbons and other contaminants. Dr Christoph Braun (DES) will explain the current baseline monitoring program for PFAS across Queensland's basins and will present some preliminary data coming from the program to date.



### **Session 3: Aquatic Biosecurity**

Dr Brendan Ebner – TropWATER



**Travis Sydes, FNQROC** (Far North Qld Regional Organisation of Councils)



Recent recordings of noxious fish in Wet Tropics River basins where they were previously not to be present have highlighted the significance of this threat. Dr Brendan Ebner (TropWater) is a Wet Tropics-based fish specialist assessing the threat of imported fish to our ecosystems. In his presentation he'll explain why we should be concerned about pest fish, the potential impacts on native fish communities and emerging species we need to be vigilant about keeping out of our waterways.

Invasive aquatic plants have caused, and continue to cause, damage to aquatic ecosystems across Australia, and the Wet tropics is far from immune to the threat. In his role as Regional Natural Asset Management and Sustainability Coordinator for the Far North Queensland Regional Organisation of Councils, Travis Sydes is a regional expert on the spread, and management of invasive aquatic plants and will provide us with details of the status of wet tropics waterways and emerging species of concern.

#### **Session 4: Climate Change Impacts**

Professor Steve Turton
PhD DFIAG, CQU and Wet
Tropics Waterways
(Independent Chair)



Professor Jonathan Nott, JCU



The recently released 2019 GBRMPA Outlook Report highlighted the implications of long-term climate change on the health of the Great Barrier Reef as a whole. In his presentation, Professor Steve Turton (Wet Tropics Waterways) will explain the implications of projected temperature rises not only for the reef, but for the other marine and freshwater ecosystems in the Wet Tropics region.

Professor Jonathan Nott (JCU) is an expert on extreme weather events such as tropical cyclones, river floods and tsunamis. A wet tropics resident, he'll share with us how patterns in these events are predicted to alter with climate change in the coming decades and the implications for ecological and geophysical processes in our region.