



CQ 2022 Big Data Forum

GUEST SPEAKERS AND AGENDA

11-12 May, 2022



ABOUT THE BIG DATA FORUM AND SPEAKER PRESENTATIONS

Building on two successful events in 2021 the CQ 2022 Big Data Forum aims to bring together industry, investors, researchers, First Nations and natural resource management practitioners to discuss regional monitoring and reporting, and how this can be leveraged and combined to report on the state and trend of the region's natural assets.

This forum marks the launch of fourth revision of the CQSS2030 (Central Queensland's Natural Resource Management Plan) and includes regional targets and strategies to safeguard our region's six natural assets and ensure a sustainable future. For the first time the strategy also includes targets for our regional communities.

To promote key monitoring and reporting initiatives (and set the tone for collaborative discussions on Session 2) guest presenters will showcase the work they do, sharing key challenges, lessons, outcomes and opportunities they see in relation to informing progress against CQSS2030 asset targets.

Each Natural Assets presentation has been allocated 20 minutes (10-15 minute presentation and 5-10 minutes of Q&A).

GUEST PRESENTERS



DRIVERS

Josh Weazel

Josh is a Woorabinda lad who grew up in community, married and is now raising a family of five children. Josh identifies as a Wakka Wakka, Pitta Pitta man, who respectively understands and values his position and lineage with historical connections to Woorabinda.

Josh's working career has involved working as a paramedic, local government executive roles and is the current elected Mayor of Woorabinda Shire. He has also worked in education, a number of government departments, and non-government arenas both within and outside Woorabinda.

With a keenness to foster opportunities and lead community with purpose, vision, and actions that improve prospects and standards of community life, Josh will be sharing his unique perspective on central Queensland's history and future. Through Josh's presentation, participants are provided the opportunity to reflect on and learn more about the critical interconnections between past, present and future. Importantly, Josh seeks to inspire and tap into our collective conscience and the possibilities available to us through genuine collaboration.



DRIVERS

Joe Craggs

*Business Development Manager
Surflakes*

Joe has lived and worked in central Queensland for 20 years.

With a background in sales and marketing, Joe worked in the energy, banking and retail sectors in the UK before joining (and then running) Mediator; a sales promotion agency in London.

Having immigrated to central Queensland in 2002, Joe has built a strong reputation across the region in tourism and events, construction, and agriculture industries and working with multiple stakeholders both locally and nationally. Joe is a passionate supporter of central Queensland and a real advocate for the region, embracing all it has to offer as an incredible place to live, work and play.

Joe touches on some of the key global and regional drivers for sustainability, and the balance we all play in a world that is spinning towards an increasingly uncertain future.



CQSS OVERVIEW

Jo Kurpershoek
Regional Engagement Coordinator
Fitzroy Basin Association

With over 15 year's experience working with public, private and not-for-profit organisations in community engagement and capacity building, Jo Kurperhoek is Fitzroy Basin Association's Regional Engagement Coordinator. In her role, she initiates and facilitates collective action across the Fitzroy region - enabling more to be achieved with limited resources.

After exploring the arts and most of Australia's east coast, Jo elected to turn her childhood passion for 'doing better by our planet and people' into a career path. She holds a Bachelor of Applied Science in Parks, Recreation and Heritage and a Graduate Certificate in Brain-based Education which gives her unique insights into how best to facilitate change to overcome wicked problems. With her team, Jo has coordinated and delivered the fourth revision of central Queensland's Natural Resource Management Plan – the CQSS2030. The result has involved an in-depth analysis of global, national, state and local perspectives and priorities, and significant community consultation despite a global pandemic.

In her presentation, Jo shares key insights into the process and outcomes of the newly updated CQSS2030, including how the regional targets were developed.



AIR

Don Neale
Science Leader, Air Quality Monitoring
Department of Environment and Science

Don Neale is Science Leader of the Air Quality Monitoring team in the Queensland Department of Environment and Science (DES). His position includes managing the Department's ambient air quality monitoring program throughout Queensland. With a Doctorate in chemistry from the University of Queensland Don has worked in the air quality field since 1990. Don brings considerable experience in air quality management and a strong background in air quality measurement and interpretation.

In Don's presentation, you'll hear about DES's ambient air quality monitoring network, and planned expansion program. Don will also explain what air quality data is collected by DES, where this data can be found, how it relates to National Pollutant Inventory industry air emissions data and how these data sources relate to the targets set for Air under the Central Queensland Sustainability Strategy.



SOIL

Craig Thornton
Senior Scientist, Brigalow Catchment Study
Department of Environment and Science

Craig Thornton is a Senior Scientist with the Department of Environment and Science (DES), and the project leader for the long-term Brigalow Catchment Study. Passionate about understanding the effects of land clearing and landuse change on the natural resources of the Brigalow Belt bioregion, his 20+ years of knowledge and experience guides agricultural best management practice towards long-term sustainability (including 25 publications he has authored, found at www.brigalowcatchment-study.com).

Craig will be presenting a snapshot of what his work and research has revealed about soil fertility in the Fitzroy region, how it relates to larger scale monitoring and reporting programs (including the paddock to Reef Integrated Monitoring, Modelling and Reporting Program), and what this means for the future of our soils and other assets.



LAND-BASED

Tim Ryan

*Science Leader, Ecosystem Survey and Mapping
Department of Environment and Science*

Tim Ryan leads the Queensland State Government's Ecosystem Survey and Mapping Unit based at the Queensland Herbarium in Brisbane and the Australian Tropical Herbarium in Cairns. With over 26 years of ecosystem survey and mapping experience gained in public and private sectors, Tim brings extensive knowledge of Queensland's land-based ecosystems. Tim's team is responsible for producing Queensland's foundational ecosystem related datasets that are used by a wide range of planning and regulatory frameworks at all levels of government. Datasets include state-wide remnant and pre-clearing regional ecosystems (RE) mapping, Queensland Wetlands Mapping, Groundwater Dependent Ecosystems (GDE) mapping and High Value Regrowth (HVR) mapping.

Tim will briefly present these foundational ecosystem map products and explain their supporting information sources, including how they relate to the Paddock to Reef Monitoring and Reporting Program. Tim also touches on other land-based ecosystem products such as Biodiversity Planning Assessments, Spatial BioCondition Mapping and the recently released SLATS woody vegetation data.



FRESHWATER

Leigh Stitz

*Executive Officer
Fitzroy Partnership for River Health*

Dr Leigh Stitz has been in the role of Executive Officer for Fitzroy Partnership for River Health (FPRH) since 2019. Leigh loves the opportunity her role provides to engage with a range of different stakeholders. Building relationships with the community, industry, research, and all levels of government allows her to see the 'big picture' and to facilitate conversations between people with similar interests, resulting in better outcomes for water management.

Leigh has published eight scientific journal publications, written many industry reports, and presented at national and international conferences.

Having called the CQ region home since 2007, Leigh has specialised in understanding the aquatic ecology of the Fitzroy Basin, with a focus on using biological indicators to measure stream health. Leigh will provide a rapid and fun overview of how the Fitzroy Partnership for River Health collects, collates and reports on the state of freshwater ecosystems in the Fitzroy Basin, including insights into some of the key lessons they have learned along the way.



GROUNDWATER

Sanjeev Pandey

*Executive Director, Office of Groundwater Impact Assessment
Department of Regional Development, Manufacturing and Water*

Sanjeev Pandey is a hydrogeologist with nearly 17 years of public and private sectors experience in groundwater resource management in Australia and southern Africa. Sanjeev is the Executive Manager at the Office of Groundwater Impact Assessment, Queensland Government (OGIA).

Sanjeev was previously the Director of Projects at the Queensland Water Commission's Coal Seam Gas Water Unit and led the development of first cumulative groundwater impact assessment and reporting for the Surat and Southern Bowen Basins. In his previous role at Qld DERM, Sanjeev was intimately involved in the development of strategic policy, legislation and implementation framework for the management of groundwater impacts from proposed extraction of Coal Seam Gas water in Queensland. Sanjeev also lead development of a number of groundwater management related policy initiatives to support the water resource planning framework in Queensland.

Sanjeev will present and discuss the latest findings and implications of the 2021 Surat Catchment Management Area Underground Water Impact Report, and share insights from his extensive experience working with our least understood natural asset.



COASTAL AND MARINE

David Orr

Senior Scientist (Water Quality)
Department of Environment and Science

David Orr is a water quality scientist with the Water Quality and Investigations team in the Department of Environment and Science (DES). He leads the operational implementation of one of the longest running and largest (spatially) water quality monitoring programs in the world. His team monitor water quality as part of the Paddock to Reef Program, which evaluates progress towards Reef 2050 Water Quality Improvement Plan (WQIP) targets.

David's presentation covers the Paddock to Reef Program framework, how monitoring and modelling helps evaluate progress towards WQIP targets, and what data has been collected across the Fitzroy basin. Focusing on locally relevant sediment, nutrient and pesticide monitoring and modelling results, David will explain how those results relate to the goals, targets and strategies outlined in the Central Queensland Sustainability Strategy 2030 (CQSS2030).

David will also outline where to find publicly available reporting products and where to source Queensland water quality monitoring and modelling data.

ECOCOMMONS FACILITATORS



Rob Clemens

Change & Communications Manager
EcoCommons

Dr Rob Clemens is an ecologist with a background in ornithology. Initially he spent his time studying birds of prey in North America before shifting to Australia where he studied migratory shorebirds at BirdLife Australia. While earning a PhD at the University of Queensland Rob discovered ecological modelling and has been increasingly interested in time-series analysis, species distribution modelling and population models. Rob is currently working as the Change and Communications Manager at EcoCommons where he gets to highlight all the great work that EcoCommons is doing and where he can share his passion for ecological modelling with a growing audience.



Elisa Bayraktarov

Program Manager
EcoCommons

Elisa is a conservation scientist and data diplomat. She did her PhD in Ecology in 2013, and led the development of Australia's Threatened Species Index from 2016 – 2020. As a Program Manager, Elisa oversees the work of a team of agile software engineers (DevOps), scientists, science communicators, trainers and analysts to make EcoCommons the platform of choice for environmental and ecological modelling.

The EcoCommons program is building a platform which aims to empower Australian practitioners and researchers to use trusted datasets, modelling tools, and training resources to produce high-quality research that informs and accelerates evidence-based policy and decision-making for the environment. Elisa and Rob will present on the program, what makes it possible, and will provide a brief demonstration of some of the modelling tools already available in the beta-version of the platform.

AGENDA

Session 1 – 11 May 2022	11.30am-5.30pm
LUNCH	11.30am
Welcome to Country – Darumbal	12.30pm
A First Nation's Perspective – Mayor Joshua Weazel	12.40pm
Regional perspective – Joe Craggs	1.00pm
CQSS2030 today – Jo Kurpershoek	1.30pm
QUICK BREAK (20mins)	1.55pm
Air – Don Neale	2.15pm
Soil – Craig Thornton	2.40pm
Landbased - Tim Ryan	3.05pm
AFTERNOON TEA AND MINGLE (30mins)	3.30pm
Freshwater – Leigh Stitz	4.00pm
Groundwater – Sanjeev Pandey	4.25pm
Coastal & Marine – David Orr	4.50pm
What next and your feedback	5.15pm
CLOSE AND CANAPES NETWORKING	5.30pm
Session 2 – 12 May 2022	8.30am-12.30pm
Recap of previous day / Purpose of today	8.30am
Ecocommons – Introduction	8.35am
Working group session	9.05am
MORNING TEA (25mins)	10.15am
Working group session	10.40am
What next and your feedback	12.15pm
CLOSE AND LUNCH (Grab and go, or stay, eat and reflect)	12.30pm