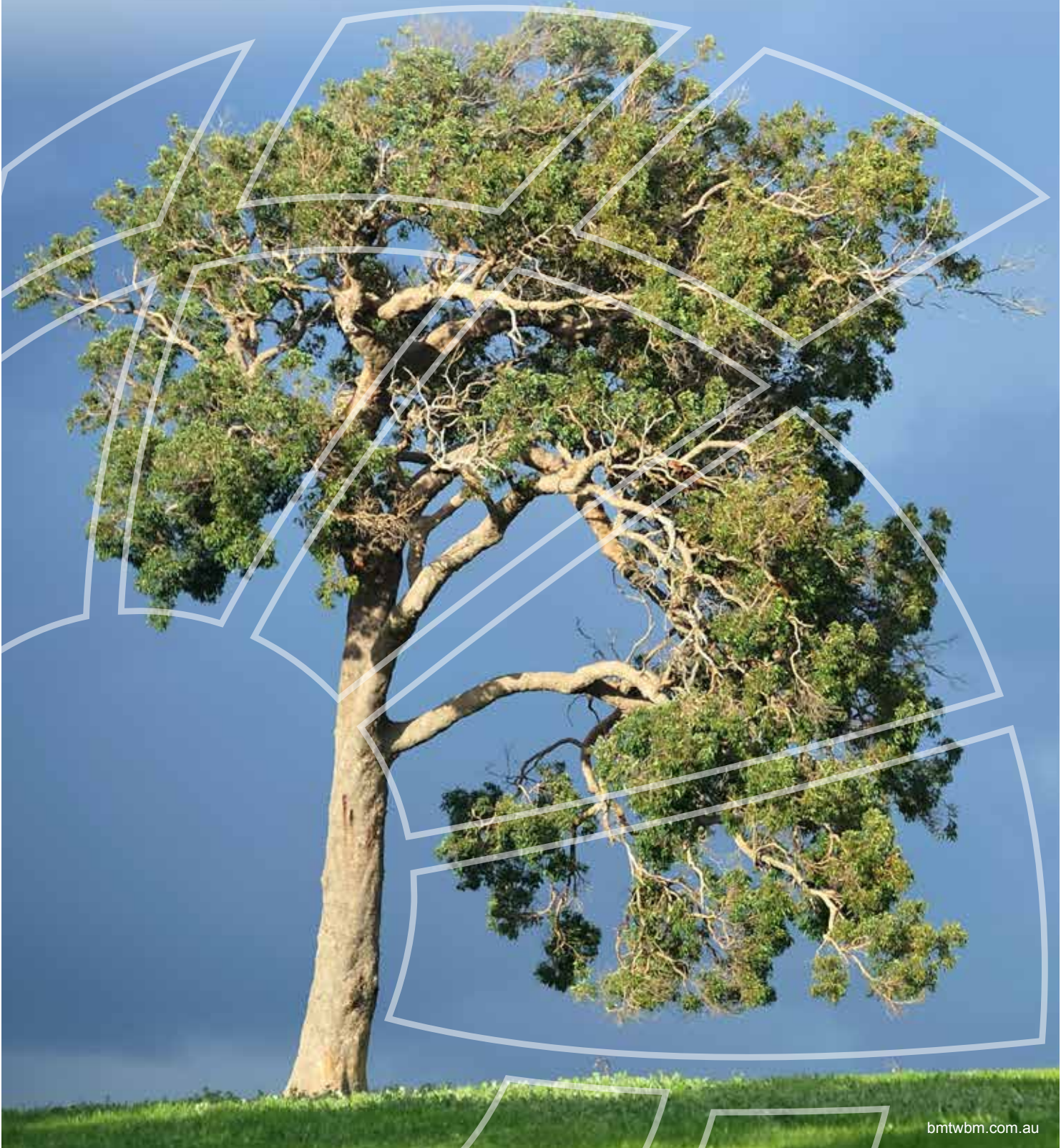




"Where will our knowledge take you?"

Expert Legal Consulting

Water and Environment



The Company

BMT WBM Pty Ltd is a leading edge consultancy with more than 40 years national and international experience in the fields of water and environmental engineering, maritime structures and environmental science. We employ approximately 185 staff, consisting of highly qualified engineers, ecologists, scientists, field technicians and office personnel. Founded in Brisbane, Australia, BMT WBM has expanded to include offices across Australia, North America and the United Kingdom.

BMT WBM is part of the BMT Group of Companies. BMT was formed in 1985 and is the largest, independent maritime research and technology organisation in the world. BMT has over 30 offices in five continents and employs over 1200 staff. BMT provides services to industry, commerce, policy-makers, regulators and public sector operators in the fields of energy and environment, transport and defence on a global basis.

Expert Services

BMT WBM offers a range of Expert Services to assist land and environment courts with assessments of development proposals for environmental impact. We also assist the courts in determining appropriate highest and best use of land in resumption compensation cases. In addition, we provide expert peer review and due diligence assessments for major projects on behalf of government and private sector clients.

Our current experts and their general capabilities are outlined on the opposite page. Profiles of our experts are presented on the following pages.



Expert Capabilities	Lead Experts	Other Experts
Flooding	Neil Collins (Principal Expert Witness)	Dr Philip Haines, Anthony Charlesworth
Development impacts		
Emergency response planning		
Hydrology		
Stormwater	Tony Weber	Neil Collins
Water re-use		
Water sensitive urban design (WSUD)		
Urban runoff and detention		
Coastal	Dr Philip Haines	Malcolm Andrews
Storm erosion		
Storm-tide inundation		
Climate change, sea level rise impacts		
Water Quality and Contamination	Tony Weber	Neil Collins
Pollution events		
Water supply		
Dams and reservoirs		
Aquatic and Marine Ecology	Dr Darren Richardson	
Flora and fauna threatened species		
Habitats		
Dredging and sea dumping		
Environmental Policy & Planning	Greg Fisk	
EPBC, incl. Ramsar wetlands		
Fisheries and marine parks		
Coastal protection		

Neil Collins

BE Eng, MEngSc, PIANC,
NPER-3, RPEQ



Neil has over 33 years experience in engineering and is an acknowledged expert in flooding, stormwater and coastal processes. He has worked with the Planning and Environment Court Qld, Land Court Qld, Supreme Court Qld (damages actions), Land & Environment Court NSW, Commissions of Inquiry (various States) and has provided many expert peer reviews. Neil was heavily involved with the Queensland Floods Commission of Inquiry with reports for six local authorities for LGAQ and also provided expert advice for Ipswich City Council. Neil was also the independent hydraulic expert to the Queensland Government for the North Bank Project.

He has worked on major infrastructure projects as a Hydraulic Specialist including Sydney Third Runway, Sydney Harbour Tunnel, Gateway Bridge and Arterial and several coal ports in Queensland and in Indonesia, Power Stations in Queensland and Thailand, hydro-electric schemes in PNG and port dredging management at Cairns, Townsville, Weipa and Mackay.

Expert Areas

- Flooding and floodplain management
- Emergency response planning stormwater management
- Hydrology

Neil.Collins@bmtwbm.com.au

Dr Philip Haines

BE (Hons), MEngSc, PhD, MIEAust,
MEIANZ, CPEng RPEQ



Philip Haines is a director of BMT WBM and the General Manager of the Water and Environment Group. Philip has over 23 years experience in environmental engineering and is a recognised industry expert in coastal, estuarine, and floodplain management. This includes

all aspects of storm erosion, coastal recession and stormtide inundation, as well as climate change effects on coastal and floodplain processes.

Philip has experience in local government environmental planning and law, especially associated with the coastal zone. Philip has been involved in several Land and Environment court appeals in NSW regarding flooding, wetland inundation and coastal engineering.

Expert Areas

- Coastal erosion and storm tide inundation
- Flooding and floodplain management
- Climate change impacts and adaptation planning

Philip.Haines@bmtwbm.com.au

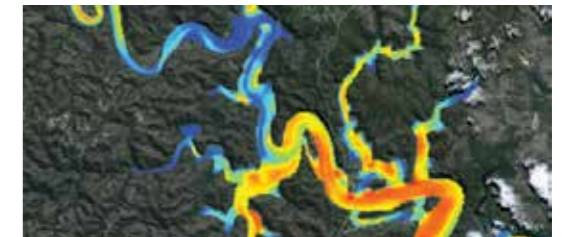
Tony Weber

BAppSc/Chem,
Visiting Fellow ANU, MSIA, MAWA



Tony is an Associate with over 24 years experience in the water industry. As the National Practice Leader for Water Quality, Tony manages the stormwater and water quality discipline across BMT WBM's Australian operations. Tony was also an Auditor for the National

Association of Testing Authorities for over 10 years, and provides expert advice, beta testing and peer review of catchment modelling activities across Australia, and overseas.



Expert Areas

- Stormwater management and re-use
- Water sensitive urban design (WSUD) and integrated water management
- Catchment hydrology and pollutant export

Tony.Weber@bmtwbm.com.au



Dr Darren Richardson

B.App.Sc. (Hons),
PhD, MEIANZ



Darren is a qualified aquatic ecologist with over 20 years' experience in research and environmental consulting. He attained a B.App.Sc (Hons) at the University of New England, and a PhD at Southern Cross University, both in the aquatic ecology field. Darren is a

recognised expert in the ecology of fish and invertebrates in freshwater, estuarine and marine environments, particularly in sub-tropical environments. He has considerable experience in aquatic environmental impact assessment and has a detailed understanding of all related environmental issues.

Darren has been retained as an expert witness for several appeals acting for both development proponents and defending Councils, primarily in South East Queensland.

Expert Areas

- Aquatic and marine flora and fauna
- Aquatic habitats, wetlands and threatened species
- Dredging impacts and sea dumping

Darren.Richardson@bmtwbm.com.au

Greg Fisk

BA M.Sci Affairs, M.S.Marine Policy, MEIANZ,
Member Australian Coastal Society



Greg is an Associate at BMT WBM, Business Unit Manager of the Brisbane Office and National Practice Leader for Environment. He has over 17 years experience in preparing, assessing and managing multi-disciplinary environmental plans and impact assessment studies.

Greg has a thorough knowledge of environmental law, policy, planning and management throughout Australia. In particular, Greg has specialised expertise in wetland, coastal and marine legislation and planning, climate change, environmental impact assessment and environmental management related to transport and energy infrastructure.



Expert Areas

- Coastal management, fisheries, wetlands, marine parks and related environmental legislation and policy instruments
- Coastal and marine development projects and assessment
- EPBC requirements and Ramsar Wetlands

Greg.Fisk@bmtwbm.com.au

Anthony Charlesworth

BEng (Civil), M. Eng. Sc. (Env),
MIEAust, RPEQ



Anthony is a Registered Professional Engineer of Queensland (RPEQ) and a Senior Engineer at BMT WBM with over 19 years of experience as a water engineer. Expertise includes flooding, stormwater management (quantity & quality), and receiving water quality. He

has particular expertise in hydrology and hydraulic studies for a range of development assessments that have included flood impacts, mitigation, risk assessments and emergency flood management planning for large and small scale developments. Anthony has provided expert services to the Planning and Environment Court Qld, assisted in numerous court appeals and has provided expert peer reviews for Councils and the development industry.



Expert Areas

- Flooding and floodplain management
- Emergency flood management planning
- Stormwater management
- Water quality and pollution modelling

Anthony.Charlesworth@bmtwbm.com.au

Malcolm Andrews

BE, Grad. Dip. Mun. & Env. Eng.,
Grad. Dip. Hydroinformatics (Delft), FIEAust, RPEQ



Malcolm is an Associate and Manager of the Coastal Discipline within BMT WBM' Brisbane office. He has a degree in Civil Engineering and a Post Graduate Diploma in Hydraulic Engineering from the International Institute for Hydraulic and Environmental Engineering

in Delft, the Netherlands. Malcolm provides expertise in oceanographic data collection, coastal modelling, physical coastal process modelling, coastal engineering structures and coastline management. Malcolm is also a Registered Professional Engineer of Queensland. Malcolm's 30 years experience in coastal engineering includes holding similar positions within the Queensland Government's leading coastal agency, the former Beach Protection Authority.



Malcolm has provided expert evidence to court cases involving coastal issues such as sea conditions for a boat charter and inter-tidal coastal sand movement relating to physical injury claims.

Expert Areas

- Coastal erosion and stormwater inundation
- Numerical and physical modelling
- Oceanographic (metocean) data collection
- Coastal engineering and structures

Malcolm.Andrews@bmtwbm.com.au

BMT WBM has a proven record in addressing today's engineering and environmental issues.

We aim to continue to enhance our services, capabilities and areas of application to meet the community's future development and environmental protection needs.



1 Number of BMT WBM offices in region

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