

Sunday 2nd July 2017	
14:00	Registration opens - Reflections room, DoubleTree by Hilton Darwin Esplanade
18:00	WELCOME FUNCTION - Reflections room, DoubleTree by Hilton Darwin Esplanade

Monday 3rd July 2017					
7:30	Registration opens				
	Room: Playhouse theatre				
8.30-8.35	Welcome to Country				
8.35-8.45	Introduction: Edward Butler				
8.45-8.55	Official Opening: Honourable Lauren Moss MLA				
8.55-9.30	Plenary address: Professor Helene Marsh 'Ecological and cultural connections through coastal seas enabled by marine megafauna'				
9.30-9.50	Invited speaker: Mr Tim Moltmann 'Implementing the National Marine Science Plan'				
9.50 -10.30	Morning tea				
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery
	S3: Building resilient urban ports and harbours through globally integrated research and management	S5: Ecological diversity and connectivity in the tropical eastern Indian Ocean	S17: Swimming the talk: management of marine megafauna in Australian waters	S15: Great Australian Bight – seeking whole-of-system understanding	G1: Marine fundamentals
	Chair: Peter Steinberg and Beth Strain	Chair: Zoe Richards, Kathryn McMahon and Jim Underwood	Chair: Holly Raudino and Carol Palmer	Chair: Jason Tanner	Chair: Claire Streten
10:25- 10:30	Peter Steinberg: Introduction to the symposium				
10.30-10.50	Niels Munksgaard: Metal and metalloid concentrations in Darwin Harbour sediment: influence of urban development	Zoe Richards: The Kimberley - Australia's great unsung coral sanctuary	Carol Palmer: A Preliminary Study of the Movement Patterns of False Killer Whales Pseudorca crassidens in Waters of the Northern Territory, Australia.	Ben Baghurst: The Great Australian Bight Research Program - seeking whole of system understanding	Fallen Teoh: Comparative whole membrane proteomics analyses of marine cyanobacteria
10.50-11.10	Elisabeth Strain: The efficacy of eco-engineered interventions for enhancing the native biodiversity of seawalls in harbours across the globe.	Fabio Boschetti: Setting priorities for conservation initiatives at the interface between ecological connectivity, ocean circulation and ecological dynamics	Holly Raudino: Identifying critical habitat for dolphins in North Western Australia	David Griffin: Circulation of the Great Australian Bight: the influence of waves and the Leeuwin Current. Presented by <u>Peter Oke</u>	Rachel Manassa: Photosynthetic acclimation to desiccation stress in <i>Zostera muelleri</i>

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	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery	
	Symposium S3	Symposium S5	Symposium S17	Symposium S15	G1:Marine fundamentals	
	Chair: Peter Steinberg and Beth Strain	Chair: Zoe Richards, Kathryn McMahon and Jim Underwood	Chair: Holly Raudino and Carol Palmer	Chair: Jason Tanner	Chair: Claire Stretten	
11.10-11.30	Katherine Dafforn: The ecological consequences of urban seascapes at the microbial scale	Kathryn McMahon: Patterns in diversity of seagrasses in the tropical Indian Ocean	Rachel Groom: Distribution and abundance of Dugong in the Northern Territory	John Middleton: The ocean circulation and dynamics of the Great Australian Bight: model results and validation	Talia Stelling-Wood: Using functional traits to predict biodiversity in subtidal macroalgae systems.	
11.30-11.50	Sarah Kienker: Australasian differences in Stakeholder attitudes towards ecological engineering of Marine artificial structures	Jim Underwood: Expect the unexpected: remarkable genetic divergence among and within the wild coral reefs of the Kimberley	David Curmi: Monitoring and management of sea turtles and other marine megafauna in the Thamarrurr Region - where to from here?	Nicole Patten: Shifts in plankton community composition in the Great Australian Bight: New insights into food web dynamics. <u>Presented by Paul van Ruth</u>	Euan Provost: Climate-driven disparities among ecological interactions threaten kelp forest persistence	
11.50-12.10	Keliang Chen: Challenges and Experiences in Xiamen's Blue Bay Remediation Action	Made Pharmawati: Microsatellite DNA analysis of genetic diversity in <i>Enhalus acoroides</i> in Indonesia	Duane March: Assessing states of health and disease in stranded green sea turtles (<i>Chelonia mydas</i>)	Jochen Kaempf: Discovery of Widespread Autumn Phytoplankton Blooms in the Great Australian Bight	Victor Shelamoff: Patch characteristics of <i>Ecklonia radiata</i> influence associated community structure	
12.10-12.15	PEP - Jeff Tsang: Assessment of Arsenic Bioavailability in Darwin Harbour Sediment	PEP - James Gilmour: Scales of stock-recruitment and the resilience of isolated coral reefs	PEP - Ricardo Alvarez: Spatial distribution patterns in South American in-shore dolphins.	Lisa-ann Gershwin: Siphonophores: fearsome predators in oceanic food webs	PEP - Megan Carve Luzardo: Impacts to seagrass from the herbicide Fusilade Forte® in management of <i>Spartina anglica</i> infestations	
12.15-12.20	PEP - Shin Ushiana: Designing fish-friendly seawalls	PEP - Oliver Berry: Isolation of oceanic and coastal populations of the harvested mother-of-pearl shell <i>Tectus niloticus</i> in the Kimberley. <u>Presented by Mike Travers</u>			PEP - Francesca Gissi: Using the SeaSim facility for ecotoxicology -testing the effects of Ni and Cu on the adult hard coral <i>Acropora muricata</i> .	
12.20-12.25	PEP - Stuart Pearson: Jakarta Bay as an opportunity for collaborative and integrative research and the need for knowledge brokering	PEP - Catherine Kim: Biodiversity of coral reef cryptofauna in relation to coral habitat and reef fish communities in Timor-Leste				PEP - Allyson O'Brien: Going back to basics: population dynamics and ecotoxicology
12.25-12.30	PEP - Jean Chai Yee: Yard in the marinas - the initiation of WHP in Penang	PEP - Katrina West: The application of eDNA metabarcoding for marine biodiversity monitoring at the Cocos-Keeling Islands.				
12.30-13.30	Lunch					

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	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery
	Symposium S3	Symposium S5	Symposium S17	Symposium S15	G1:Marine fundamentals
	Chair: Peter Steinberg and Beth Strain	Chair: Zoe Richards, Kathryn McMahon and Jim Underwood	Chair: Holly Raudino and Carol Palmer	Chair: Jason Tanner	Chair: Claire Streten
13.30-13.50	John Lee: Assessment of human-induced change and biological risk posed by contaminants in estuarine sediments: a scheme for assessing global harbour estuaries	Thor Saunders: Optimising the management of tropical reef fish	Luciana Ferreira: The trophic role of a large marine predator, the tiger shark <i>Galeocerdo cuvier</i>	Rudy Kloser: Exploring the slope/offshore Great Australian Bight (GAB) pelagic habitat paradox	Brendan Lanham: Clams benefit mobile fauna by creating algal beds with low predation pressure
13.50-14.10	Rebecca Morris: From grey to green: efficacy of eco-engineering solutions for nature-based coastal defence	Joseph DiBattista: Evolution of Pygmy Angelfish: A Model Group to Study Species Boundaries in the Eastern Indian Ocean and Beyond	Mark Meekan: Photo-id studies using spot patterns of whale sharks - are they pointless?	Ryan Downie: Mesozooplankton abundance, biovolume and size structure within pelagic ecosystems of the Great Australian Bight. <u>Presented by Anthony Richardson</u>	Ezequiel Marzinelli: Restoration of underwater forests: "Operation Crayweed"
14.10-14.30	Stuart Pearson: World Harbour Project: Conflict and the Future in the World's Harbours	Joseph Turner: Mesophotic coral ecosystems: A global perspective and putting Ningaloo in context	Lyn Irvine: The spatial and temporal distribution of humpback whale calves in the Ningaloo Marine Park. <u>Presented by Chandar Salgado Kent</u>	Caroline Sutton: Micronekton community in the Great Australian Bight	Anna Lafratta: Importance of habitat selection to successfully develop Blue Carbon projects.
14.30-14.50	Ana Bugnot: Learning from nature: Using meta-analyses to ecologically inform foreshore infrastructure designs	Ana Hara: New knowledge on the marine Crustacea of northern Western Australia.	Fletcher Mingram: Sources of Variation in Cetacean Blubber Hormone Levels: Implications for Management of Post-mortem Sampling	Alan Williams: The deepest systematic collection of benthic fishes in Australian waters -continental slope and rise of the Great Australian Bight	Christian Salinas: Impact of eutrophication on carbon storage in seagrass meadows

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	Symposium S3	Symposium S5	Symposium S17	Symposium S15	
	Chair: Peter Steinberg and Beth Strain	Chair: Zoe Richards, Kathryn McMahon and Jim Underwood	Chair: Holly Raudino and Carol Palmer	Chair: Jason Tanner	
14.50-14.55	PEP - Mirjam Kaestli: The bacteria of Darwin Harbour: spatiotemporal patterns in a tropical macrotidal estuary subject to urbanisation	PEP - Oliver Berry: Complex ocean currents promote adaptive diversification and lower dispersal in a tropical reef fish from north-western Australia. <u>Presented by Mike Travers</u>	Gary Truong: Using environmental drivers to model blue whale acoustic detection variability	PEP - Mark Doubell: Contrasting water column structure and mixing processes across the Great Australian Bight <u>Presented by John Middleton</u>	
14.55-15.00	PEP - Ruby Garthwin: Fine-scale approach to assess the impact of recreational boat moorings on seagrass physiology in a threatened <i>Posidonia australis</i> meadow	PEP - Joseph DiBattista: Genomics reveals fine-scale Patterns of Dispersal for a Reef Fish along the ecologically significant Coast of Northwestern Australia		PEP - Paulina Cetina-Heredia: Nitrate sources, supply, and phytoplankton growth in the Great Australian Bight: and Eulerian-Lagrangian approach	
15.00-15.05	PEP - Chandar Salgado Kent: Dolphin Foraging Behaviour in the Busy Fremantle Inner Harbour, Western Australia			PEP - Kathryn Wiltshire: Assessing environmental suitability of the GAB region for key deep-sea benthic taxa using species distribution modelling. <u>Presented by Jason Tanner</u>	
15.05-15.10				PEP - Paul van Ruth: Variations in productivity in the Great Australian Bight: Uncovering hidden influences on the food web	
15.10-15.40	Afternoon tea				

Monday 3rd July 2017					
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery
	Symposium S3		Symposium S17	Symposium S15	G4:Arafura Timor Seas Ecosystem Action
	Chair: Peter Steinberg and Beth Strain		Chair: Holly Raudino and Carol Palmer	Chair: Jason Tanner	Chair: Edward Butler
15.40-16.00	Augustine Porter: 3D Mapping and Fishes at Breakwalls: An Ecoengineering Opportunity		Ricardo Tapilatu: Utilizing drone technology to assess leatherback sea turtle (<i>Dermochelys coriacea</i>) hatchling fitness in Papua Barat, Indonesia	Franzis Althaus: Benthic invertebrate megafauna of the deep Great Australian Bight	Catherine Kim: Drivers of kilometre-scale coral reef benthic composition in Timor-Leste
16.00-16.20	Nina Schaefer: Rocking urban design: how features of natural rock pools can inform ecological engineering		Sam Gaylard: Legacy pollutants in ports, PFAS and its implications for dolphins	Jodie van de Kamp: Diversity and abundance of microbial hydrocarbon degradation pathways in the offshore environments of the Great Australian Bight. <u>Presented by Lev Bodrossy</u>	Peter Mous: Assessing catch composition and fishing grounds of Indonesian dropliners and longliners targeting deepwater snappers and groupers in the Timor and Arafura Seas
16.20-16.25	Emma Jackson: Seagrass ranching: Transplant grow out to recover seagrass clonal integration			Jason Tanner: Infaunal assemblage structure in the deep Great Australian Bight	PEP - Kim Picard: Fine-scale variability of raised geomorphic features on the Sahul Shelf, North-western Australia
16.25-16.30					PEP - Jochen Kaempf: Physical Drivers of Majestic Phytoplankton Blooms in the Northwestern Arafura Sea
16.30-16.35					PEP - Harriet Davies: A participatory approach to benthic habitat mapping in a highly turbid marine environment
16.35-16.40					
16.40-17.00		Hongzhe Chen: Study of plastic marine debris around a seaside tourist city			

19:00 Public forum: Northern Development – How does marine fit? | Australia’s Shallow Tropical Seas – Resource and/or Refuge? - Playhouse Theatre of the Darwin Entertainment Centre

Tuesday 4th July					
7:30	Registration opens				
	Room: Playhouse				
8.30-8.35	Daily Introduction				
8.35-8.45	Presentation of the Allen and the Technical Awards				
8.45-9.20	Plenary address: Dr Julie Hall 'Integrating social science, economics, indigenous knowledge and marine science to underpin decision making for management of our marine environment.'				
9.20-9.40	Invited speaker: Professor Nic Bax 'Australia's 2016 State of Environment Report for the Marine Environment. Where are we and where might we be going?'				
9.40-10.00	Invited speakers: Mr Jerry Stephen, Ms Hilda Mosby and Mr Frank Loban 'Traditional management of marine resources in the Torres Strait'				
10.00 -10.30	Morning tea				
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery
	S3: Building resilient urban ports and harbours through globally integrated research and management	S10: Climate impacts on marine system structure and function: molecules to ecosystems	S6: Remote sensing techniques for marine sciences	S13: Commonwealth Marine Parks: research for management	G1: Marine fundamentals
	Chair: Peter Steinberg and Beth Strain	Chair: Alistair Hobday	Chair: Zhi Huang and Jamie Treleaven	Chair: Amanda Parr	Chair: Claire Stretten
10:25- 10:30		Karlie McDonald: Introduction to the symposium			
10.30-10.50	Mariana Pinto Mayer: Can we increase services provided by coastal infrastructure with ecoengineering?	Juan Diego Gaitan-Espitia: Climate extremes - responses of a tropical dinoflagellate to marine heat waves	Sharyn Hickey: Is climate driving temporal mangrove change? A remote sensing approach	Amanda Parr: Integrating science and management needs	David Griffin: Surface drift and the search for MH370
10.50-11.10	Rebecca Fisher: Accounting for opposing objectives and environmental uncertainty in deriving thresholds for managing dredging impacts near coral reefs.	Janine Ledet: Diet and temperature interact to affect survival and fecundity of a marine herbivore	Stephen Sagar: Extracting the intertidal extent and topography of the Australian coastline from a 28 year time series of Landsat observations	Scott Nichol: Integrated seabed mapping and geoscience in support of marine park management	Krystle Keller: Multispecies presence and connectivity around a designed artificial reef to assess local fish production-attraction.
11.10-11.30	Kay Davis: Can we engineer coastal defence structures to support more natural biota as oceans acidify?	Kristen Brown: Effects of ocean warming and acidification on the ecophysiology of a common coral-algal interaction	Janet Anstee: Preparing for satellite imaging spectrometers to improve knowledge of our reefs: COReef Airborne Laboratory 2016 overflight of the GBR and Torres Strait: CSIRO Activities	Grant Smith: Sea Surface Temperature Forecasts for evaluating Coral Bleaching Risk in the Great Barrier Reef	Cynthia Harayashiki: Effect of inorganic mercury on yellowfin bream (<i>Acanthopagrus australis</i>) behaviour

Tuesday 4th July					
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	Symposium S3	Symposium S10	Symposium S6	Symposium S13	G1: Marine fundamentals
	Chair: Peter Steinberg and Beth Strain	Chair: Alistair Hobday	Chair: Zhi Huang and Jamie Treleaven	Chair: Amanda Parr	Chair: Claire Stretten
11.30-11.50	Maria Vozzo: Wave energy alters biodiversity by shaping intraspecific variation of a habitat-forming species	Karlie McDonald: Marine climate hotspots as indicators of primary productivity in a changing global environment	David Antoine: Why would "satellite remote sensing scientists" spend time doing fieldwork?	Elizabeth Botha: A review of remote sensing-derived products and tools to support marine park management.	Rene van der Zande: Intermediate levels of environmental variability yield faster coral growth at a risk of increasing mortality
11.50-11.55	PEP - Adam Davey: World Harbours Project: Eco-engineering for biodiversity - preliminary observations and lessons learnt from Hobart Harbour. <u>Presented by Catriona Macleod</u>	Ryan D Lewis: No evidence of alternative stable states in the dynamic between the habitat-forming seaweed <i>Hormosira banksii</i> and coralline turf		Vinay Udyawer: Needles and haystacks: using spatial modelling to find rare sea snakes in the North West Marine Region	Aria Lee: Exotic polychaete species identified using integrative methods.
11.55-12.00	PEP - Beth Strain: Eco-engineering built infrastructure for marine and coastal biodiversity: which interventions have the greatest ecological benefit?				
12.00-12.10					
12.10-12.15		PEP - Ezequiel Marzinelli: Marine 'holobionts': seaweed-microbe interactions in a changing environment	PEP - Fang Yuan: Regional Copernicus Data Hub: Sentinel Data Access and Contributing to Marine Science. <u>Presented by Adam Lewis</u>	Ben Radford: Filling in the gaps in data-poor CMRs: the role of spatial predictive models	PEP - Amandine Schaeffer: Sub-surface intensification of marine heat waves: the role of stratification and local winds. <u>Presented by Moninya Roughan</u>
12.15-12.20		PEP - Karlie McDonald: Interdisciplinary knowledge exchange across scales in a globally changing environment	PEP - David Blondeau-Patissier: Satellite Detection of Oil Pollution in the Great Barrier Reef using ESA's multi-sensor Sentinel missions. <u>Presented by Janet Anstee</u>		PEP - Jason Tanner: Biogeography of southern Australian deep sea fauna
12.20-12.25		PEP - Nicole Said: Minimising the Effects of Light reducing Activities on a widely distributed Seagrass. <u>Presented by Kathryn McMahon</u>			PEP - Thais Galvao: Mapping of coral reef at Santa Cruz de Cabralia, Brazil, based on satellite image WorldView-2 by using depth invariant index method.
12.25-12.30					PEP - Oleg Makarynsky: Recent sediment investigations in an enclosed tropical harbour
12.30-13.30	Lunch				

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	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery
	S12: Migratory fishes and their fisheries	Symposium S10	Symposium S6	Symposium S13	G1: Marine fundamentals
	Chair: Lynnath Beckley	Chair: Alistair Hobday	Chair: Zhi Huang and Jamie Treleaven	Chair: Amanda Parr	Chair: Aria Lee
13.30-13.50	Toby Patterson: Cyclical migration dynamics in juvenile southern bluefin tuna	Adriana Verges: Latitudinal variation in seagrass herbivory: global patterns and explanatory mechanisms	Vincent Raoult: How reliable is structure from motion on coral reefs? Quantifying error rates compared to traditional methods	James Gilmour: Constancy of change on NW Australia's remote coral atolls: demographic, local and climatic drivers in an uncertain world	Patrick Fitzgerald: Nuanced effects of the invasive <i>Mytilus galloprovincialis</i> on mussel bed communities in Coffin Bay, South Australia.
13.50-14.10	Paige Eveson: Modelling surfacing rates of southern bluefin tuna in the Great Australian Bight	Pia Bessell-Browne: Cumulative impacts: thermally bleached corals have reduced capacity to clear deposited sediment	Pallavi Govekar: Use of ACSPO VIIRS L3U SST in the Australian Bureau of Meteorology	Marji Puotinen: In which of Australia's north and northwest region CMRs and KEFs are 13 key biotic taxa likely the most widespread?	Graeme Clark: Diffuse tolerance facilitates marine bioinvasion
14.10-14.30	Pratiwi Lestari: A multi-technique investigation of population structure of tunas in Indonesian archipelagic waters.	Nathan Janetzki: Thermal extremes: the response of three intertidal snails to boulder surface temperature	Zhi Huang: Use of MODIS data to investigate the spatial and temporal variability of the Bonney upwelling in the past 14 years	Rachel Przeslawski: Small macrofauna in marine management: Polychaetes of the Oceanic Shoals CMR region	Debra Doolan: The risk of introduction of invasive species associated with interstate vessel movements.
14.30-14.35	Anung Widodo: Characteristics of tuna fisheries associated with FADs in Indonesian waters. <u>Presented by Wudianto</u>	Paulina Cetina-Heredia: Strengthened currents override the effect of warming on lobster larval dispersal & survival	PEP - Aero Lepastrier: Dynamics and connectivity of the Bonney Coast Upwelling on a daily scale using the Himawari-8 dataset. <u>Presented by Zhi Huang</u>	Andrew Warmbrunn: Cleaning up the Coral Sea Commonwealth Marine Reserve	Sonia Sánchez: Defining Important Penguin Areas: localizing feeding hotspots and understanding the role of environmental conditions on foraging success
14.35-14.40			PEP - David Blondeau-Patissier: Phenology of <i>Trichodesmium</i> blooms in the Great Barrier Reef Lagoon, Australia. <u>Presented by Arnold Dekker</u>		
14.40-14.45			PEP - Sarah Murfitt: Applications of unmanned aerial vehicles in intertidal reef monitoring		
14.45-14.50			PEP - Denise Perez: Determining light - use efficiency of seagrass and coral reef communities for remote sensing applications.		

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	Symposium S12	Symposium S10	Symposium S6	Symposium S13	G1: Marine fundamentals
	Chair: Lynnath Beckley	Chair: Alistair Hobday	Chair: Zhi Huang and Jamie Treleaven	Chair: Amanda Parr	Chair: Aria Lee
14.50-14.55	Kylie Scales: Dynamic ocean management: near real-time spatial ecoinformatics for reducing bycatch in marine fisheries		PEP - David Antoine: The Australian Integrated Marine Observing System (IMOS) radiometry task team: a community effort towards improved field ocean colour measurements		PEP - Sara Pastorino: Shallow marine life of New Zealand's subantarctic islands.
14.55-15.00					PEP - Caitlin Rae: Dietary composition of <i>Ocyrode convexa</i> on sandy beaches in mid-west region of Western Australia.
15.00-15.05					
15.05-15.10					
15.10-15.40					Afternoon tea
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room	Session 5: Gallery
	Symposium S12	Symposium S10	Symposium S6	Symposium S13	G1: Marine fundamentals
	Chair: Lynnath Beckley	Chair: Alistair Hobday	Chair: Zhi Huang and Jamie Treleaven	Chair: Amanda Parr	Chair: Aria Lee
15.40-16.00	Russ Babcock: Environmental and individual influences on the movement and migration of <i>Lethrinus nebulosus</i> on Ningaloo reef	Tracey Rogers: Change in isotopic signatures suggest food web shift off the western Antarctic Peninsula	Tim Lynch: Metrics, parameters and results from fisheries and wildlife studies with the CSIRO Ruggedized Autonomous Gigapixel Systems (CRAGS)	Rick Stuart-Smith: Tracking biodiversity values and threats on shallow rocky and coral reefs	Christine Crawford: Overview of currents, nutrients and plankton of southeastern Tasmanian coastal waters from a five year field study
16.00-16.20	David Crook: Restoration of a traditional aquaculture system for short-finned eels (<i>Anguilla australis</i>) at Lake Condah (Tae Rak) in south-western Victoria	Paul York: Changes in fish and prawn assemblages following a climate-driven decline in tropical seagrass meadows	Arnold Dekker: Earth Observation's Role in Sustainable Development Goals: relevant Geospatial assessments of Freshwater, Estuaries, Coasts and Oceans	Terry Walshe: Should we monitor the bleeding obvious?	Lesley Clementson: The distribution of cyanobacteria in the waters of the Great Barrier Reef

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	Chair: Lynnath Beckley	Chair: Alistair Hobday		Chair: Amanda Parr	Chair: Aria Lee
16.20-16.40	Rik Buckworth: Spanish mackerel: metapopulations and management	Michelle Linklater: A hidden oasis for corals? Exploring past and present-day coral distribution in a subtropical setting		Steffan Howe: Piloting a new approach to Monitoring Victoria's Marine Protected Areas in Point Addis Marine National Park.	Joseph Crosswell: Carbon and nutrient cycling along the river-ocean continuum in Princess Charlotte Bay: observational methods to characterize the dominant biogeochemical pathways.
16.40-16.45		Will Figueira: Coral bleaching and structural complexity: refining tools and assessing impacts		PEP - Zhi Huang: A surrogacy approach to evaluate the habitat potential of Australian submarine canyons	PEP - Carlos Rocha: Towards biogeochemical modelling of the East Australian Current system. <u>Presented by Moninya Roughan</u>
16.45-16.50				PEP - Rachel Przeslawski: Development of field manuals for marine benthic monitoring in CMRs	PEP - Adriana Verges: Operation Crayweed: raising awareness about underwater forests in Sydney and beyond
16.50-16.55					PEP - Matthew Adams: Identifying robust bioindicators for seagrass light stress over several timescales. <u>Presented by Kathryn McMahon</u>
16.55-17.00					PEP - Megan Skelton: Are seahorses and pipefish losing critical habitat to a problem alga?
19:00	Student night at 'The Precinct', Darwin Waterfront. All Welcome				

Wednesday 5th July				
8:00	Registration opens			
	Room: Playhouse			
8.30-8.35	Daily Introduction			
8.35-8.45	Presentation of Jubilee award winner by Will Figueira			
8.45-9.20	Jubilee Award winner presentation: Prof Peter Steinberg ' <i>Drugs, bugs and seaweeds: multidisciplinary marine science</i> '			
9.20-9.55	Plenary address: Dr Alistair Hobday ' <i>Bluefin, connectivity, climate, and adaptation</i> '			
9.55-10.00	Ryan Baring: 2018 AMSA announcement			
10.00 -10.30	Morning tea			
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	S9: Integrating science to support management in the Kimberley	S2: Sustainable estuaries and societal benefits: linkages, challenges and future trade-offs	S7: The use of acoustics for the exploration and management of the marine environment.	S20: Small-scale commercial marine harvest: challenges and opportunities
	Chair: Stuart Field and Kelly Waples	Chair: Fiona Valesini, Kiernyn Kilminster and Chris Hallett	Chair: David Williams and Kim Picard	Chair: Karen Gibb
10.30-10.50	Stuart Field: The Kimberley Marine Research Program - Integrating Science into marine conservation management.	Peter Scanes: Threats and Risks to sustainability of NSW estuaries	Ben Scoulding: Evaluating active-acoustic methods for assessing snapper (<i>Chrysophrys auratus</i>) spawning aggregations in Western Australia	Jerry Stephen: Fishing in the Torres Strait: success through community participation.
10.50-11.10	Haliana Kobryn: Evaluating conflict potential in the marine and coastal areas of the Kimberley region through public participation GIS	Chris Hallett: Lessons for improved monitoring and reporting of estuarine condition across Australia	Miles Parsons: Marine Soundscape Ecology: Throwing a snapper in the works	Trevor Hutton: Harvest Strategy development for Torres Strait commercial fisheries
11.10-11.30	Hector Lozano: Integrated land-sea modelling of the Kimberley	Rebecca Swanson: Assessment of estuarine health in a heavily urbanised and industrialised estuary	David Williams: Use of Acoustic Techniques for the Determination of Circulation Patterns and Net Sediment Transport, Marine Supply Base, Darwin Harbour.	Ian McLeod: Seven pearls of wisdom for working in partnership with Traditional Owners towards shellfish restoration in Australia
11.30-11.50	Ming Feng: Climate drivers of marine heatwaves off the Kimberley coast	Angus Ferguson: Sustainable load assessments for Lake Macquarie using ecosystem response modelling and empirical data	Justy Siwabessy: Modelling the distribution of hard seabed in Darwin Harbour using angular backscatter response. <u>Presented by Kim Picard</u>	Samantha Nowland: The tropical rock oyster Indigenous economic development project: challenges, success and opportunities
11.50-12.10	Peter Bayliss: Integrating Indigenous knowledge and survey techniques to develop a baseline for dugong management in the Kimberley	Kerry Trayler: Flood 2017 - Impacts on environmental and social values of an urban estuary	Oleg Makarynskyy: Using acoustic current profilers and drifting buoys for current measurements in estuarine environments	Anna Padovan: Multiple approaches to assess artisanal food safety

Wednesday 5th July				
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	Symposium S9	Symposium S2	Symposium S7	Symposium 20
	Chair: Stuart Field and Kelly Waples	Chair: Fiona Valesini, Kierny Kilminster and Chris Hallett	Chair: David Williams and Kim Picard	Chair: Karen Gibb
12.10-12.15	Verena Schoepf: Will Corals from the naturally extreme Kimberley Region be able to cope with Climate Change?	PEP - David Deeley: Are Process Indicators Better Than Inventory Indicators For Determining Estuarine Ecosystem Health?	PEP - Kim Picard: Integrating marine acoustic technologies to map the seabed of macro-tidal coastal environments	PEP - Roy Deng: Development of an empirical Harvest Control Rule for supporting management of the Torres Strait Panulirus ornatus lobster fishery
12.15-12.20		PEP - Katherine Dafforn: Assessing the impacts of land-based discharges on ecosystem structure and function of urban waterways.	PEP - Miles Parsons: Shallow water shark detection with sonar	PEP - Cassandra Pert: 'Barrens of gold': sea urchin farming as a driver of ecological restoration
12.20-12.25		PEP - Simon Townsend: Towards a long-term monitoring program for Darwin Harbour.		PEP - Kimberley Hunnam: Preliminary characterisation of Timor-Leste sardine fisheries from a food security perspective
12.25-12.30				PEP - Shannon Burchert: Shellfish quality assurance in the Northern Territory
12.30-13.30	Lunch AMSA Annual General meeting (Ballroom 1)			
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	Symposium S9	Symposium S2	S8: Noise Impacts	Symposium 20
	Chair: Stuart Field and Kelly Waples	Chair: Fiona Valesini, Kierny Kilminster and Chris Hallett	Chair: Rachel Przeslawski	Chair: Karen Gibb
13.30-13.50	Christopher Cornwall: Calcification of reef-forming species in the Kimberley under variable pH regimes, today and in a future high CO2 ocean	Sabine Dittmann: Ecological responses to flow characteristics in estuaries	Rachel Przeslawski: The Gippsland marine environmental monitoring project: An integrated approach to understanding the potential impacts of marine seismic surveys on fish and invertebrates. <u>Presented by Andrew Carroll</u>	Graham Edgar: Rapid ongoing decline in populations of large-bodied Australian fishes despite world-best management practices
13.50-14.10	Michele Thums: Modelling the spatial distribution of humpback whales in the Kimberley region of Western Australia	Mathew Taylor: Direct and indirect interactions between estuarine habitats and commercially important species of penaeid shrimp. <u>Presented Troy Gaston</u>	Alec Duncan: How can impulsive marine seismic air gun signals impact marine fauna?	Matthew Taylor: Determining the contribution of estuarine habitats to the diets of commercially important fisheries species in the Hunter River. <u>Presented by Tim Smith</u>
14.10-14.30	Ruby Garthwin: Characterising fish herbivory on tropical seagrasses: relating environmental variables to feeding rates	Claudia Trave: Protect or repair: insight into shoreline habitat complexity in Australia's urbanized tropical estuaries	Cameron Sim: Applying science and collaboration to enhance environmental impact assessment for sound-generating activities	Tessa Mazor: Trawl exposure and protection of Australia's seabed fauna
14.30-14.35	David Deeley: Broadening and deepening the connections - Bi-cultural marine monitoring partnerships	Victoria Cole: Is oyster restoration of heavily urbanised estuaries possible?	PEP - Andrew Carroll: Assessing the behavioural response of sperm whales (Physeter macrocephalus) to marine seismic surveys: A case study from Lord Howe Rise in the Coral Sea	Yuanike Kaber: Performance and sustainable management of the grouper (Serranidae) in Dampier Straits marine protected area, Raja Ampat.
14.35-14.50				

Wednesday 5th July				
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	Symposium S9	Symposium S2		G2:Marine Food Security
	Chair: Stuart Field and Kelly Waples	Chair: Fiona Valesini, Kierny Kilminster and Chris Hallett		Chair: Sam Nowland
14.50-14.55	Lynnath Beckley: Is the Kimberley coast still a pristine wilderness?	PEP - Navodha Dissanayake: The contribution of macroinvertebrates to mudflat functioning: global patterns		PEP - Peter Mous: Assessing catch of juvenile tuna around Fish Aggregating Devices deployed in Indonesia's Exclusive Economic Zone
14.55-15.00		PEP - Sian Glazier: Constructing a food web for key species in a Ramsar-listed estuarine environment		PEP - Craig Proctor: fishIDER – An on-line, bilingual resource for improving fish identification capacity of field personnel in tropical fisheries.
15.00-15.05		PEP - Marta Sanchez Alarcon: Understanding seagrass resilience in a changing estuary		PEP - Edward Butler: Mercury in Barramundi of the Mary River System—Insights on the Metal's Cycling
15.05-15.10		PEP - Jessica Merrett: Marine debris: sources, distribution and management implications for an urbanised estuary		
15.10-15.40	Afternoon tea			
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	S16: Observing the north	Symposium S2	S18: Marine Spatial planning	G2:Marine Food Security
	Chair: Ana Lara Lopez	Chair: Fiona Valesini, Kierny Kilminster and Chris Hallett	Chair: Hugh Kirkman	Chair: Sam Nowland
15.40-16.00	Nicole L. Jones: Vertical mixing on the Australian Northwest Shelf	Malcolm Robb: Regional Estuaries Initiative - one year on.	Hugh Kirkman: Australia has no marine spatial planning	Sheridan Rabbitt: Women's contribution to food security and fisheries management: new data from the Solomon Islands
16.00-16.20	Hadi Bahmanpour: Annual and Inter-annual variability of Holloway Current along the shelf edge of North-Western Australia	Jocelyn Dela-Cruz: Economic implications of trade-offs to support healthy estuaries under pressure from urbanisation	Kelsey Roberts: Do Australia's marine protected areas (MPAs) operate as a network? Modelling functional connectivity within the Australian marine environment.	Karen Edyvane: Shifting the problem - trends in IUU fishing and derelict fishing nets in the shared Arafura-Timor Seas
16.20-16.40	Maxime Marin: Intra-annual Variability of the North West Shelf of Australia and its Impact on the Holloway Current. <u>Presented by Ming Feng</u>	Kierny Kilminster: Science integration to support management for the Vasse-Wonnerup Estuary during a significant cyanobacterial bloom	Margaret Andrew: Spatial tools for coastal biodiversity management: Image-based detection of sea eagle nests and identification of nest site preferences	
16.40-17.00		Fiona Valesini: Balancing estuarine and societal health in a changing environment		
17.30-20.30	Work shop: Using Novel Technologies to Answer Key Questions in Marine Science. Location Litchfield Room, DoubleTree by Hilton Hotel Esplanade Darwin			

Thursday 6th July				
8.15	Registration opens			
	Room: Playhouse			
8.30-8.35	Daily Introduction			
8.35-8.55	Invited speaker: Dr Moninya Roughan ' <i>Insight into Continental Shelf Processes Along SE Australia from 10 years of IMOS observations</i> '			
8.55-9.15	Invited speaker: Dr Richard Brinkman ' <i>Sustainable Development of the North's Blue Economy – the role of IMOS to date, and into the future</i> '			
9.15-9.35	Invited speaker: Professor Robert Harcourt ' <i>IMOS Animal Tracking, 10 years of age and going strong</i> '			
9.35-9.55	Invited speaker: Professor Anthony Richardson ' <i>A decade of IMOS Plankton Observations</i> '			
10.00 -10.30	Morning tea			
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	S16: Observing the north	S11: Crossing boundaries with marine genomics: new techniques, applications and integration	S1: How can marine science better guide environmental decision-makers?	G5: Looking to the future
	Chair: David Williams	Chair: Allyson O'Brien	Chair: Terry Walshe	Chair: Kelly Mackarous
10.30-10.50	Ana Lara-Lopez: After a decade, what is new in IMOS?	Paul Gribben: Microbial communities in marine sediments control native/invasive macrophyte interactions	Ryan Baring: Plausible ecosystem futures as guidance for decision making	Ben Rae: Research delivered by new research vessel Investigator during the first two years of operation
10.50-11.10	Ryan Lowe: Oceanic drivers of reef heat budgets in northwestern Australia: the role of tides on regional and reef-scales	Allyson O'Brien: Using metabarcoding and metabolomics to measure marine community structure and function	Alice Jones: Are you sure? Capturing expert uncertainty in marine spatial cumulative impact assessment	Tanya Whiteway: National Bathymetry Collaborations and Coordination
11.10-11.30	Craig Steinberg: The Darwin National Reference Station: a sentinel for coastal waters in Northern Australia	Kathryn Wiltshire: Refining methods for detection of marine pests using plankton tows and qPCR assays	Tony Griffiths: A coastal and marine management strategy for the Northern Territory	Brendan Kelaher: A big stick approach to improving marine reserve performance
11.30-11.50	Jessica Benthuisen: Extreme marine warming across tropical Australia during austral summer 2015-2016	Fee Moy (Lisa) Lee Nen: Early detection of MIS from biofouling assemblages in South Australia using next generation sequencing	Ian Poiner: Northern Territory Marine Science End User Needs Analysis Project	Steven Hawes: An analysis of current trends in connectivity modelling and where to next
11.50-12.10	Michelle Heupel: Exploring national-scale fish movements through the IMOS Animal Tracking Facility	Hannah Ward: Ecosystem engineers in intertidal sediments: microbial responses to macroinvertebrate exclusion along an environmental gradient	Jackie Gould: Environmental decision making in the NT: Indigenous sea country management and how science can support it	

Thursday 6th July				
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	Symposium S16	Symposium S11	Symposium S1	
	Chair: David Williams	Chair: Allyson O'Brien	Chair: Terry Walshe	
12.10-12.15	PEP - Lesley Clementson: 4 years of observational data from LJCO; an assessment of the bio-optical variability in GBR coastal waters	PEP - Oliver Berry: Going with the flow: genomic insights into ecological connectivity in the Kimberley Presented by Jim Underwood	Cass Hunter: The place of Indigenous knowledge at the marine research table. Presented by Mibu Fischer	
12.15-12.20	PEP - Erin McCosker: Influence of oceanographic conditions on coastal zooplankton assemblages at three IMOS National Reference Stations in Western Australia	PEP - Zarah Hockey: Developing new DNA Markers to more accurately test for human faecal contamination		
12.20-12.25	PEP - Jennifer Skerratt: Integrating models into water quality decisions. Presented by Mathieu Mongin	PEP - Laura Taillebois: Integration of multiple techniques to elucidate the population structure of coastal reef fish in northern Australia		
12.25-12.30	PEP - Abbi Scott: How can herbivores modify ecosystem service delivery in seagrass beds?	PEP - Georgina Wood: Using population genetics to design and assess success of marine restoration		
12.30-13.30	Lunch			
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	Symposium S16	Symposium S11	Symposium S1	G5: Looking to the future
	Chair: Craig Steinberg	Chair: Allyson O'Brien	Chair: Terry Walshe	Chair: Claire Stretten
13.30-13.50	Robert McCauley: Great whale presence in northern Australia based on passive acoustics	Simone Birrer: Molecular ecology in the tropics: Describing sediment microbes and mine-derived pollution in the Torres Strait	Patricia Miloslavich: Identifying biological and ecological Essential Ocean Variables (EOVs) for global sustained observations. Presented by Nic Bax	Colin Woodroffe: Response of mangrove ecosystems in northern Australian estuaries to environmental change
13.50-14.10	Jennifer Skerratt: Changes in water quality from 2010 to 2016 throughout the Great Barrier Reef. Presented by Mathieu Mongin	Catherine Cavallo: DNA analysis of scats reveals effect of breeding constraints and environmental variation on diet in a central place forager	Catriona Macleod: Incorporating community concerns into decision-support tools for environmental management of finfish aquaculture. How can social science better guide environmental decision makers?	Claire Spillman: Climate proofing strategies using seasonal forecasting for Australian marine industries
14.10-14.30	Paul G Thomson: Measuring the underwater light climate on the North West Shelf of Australia using IMOS Slocum gliders	Sven Uthicke: eDNA as a new tool to investigate extent and causes of Crown-of-Thorns seastar outbreaks	Warwick Noble: Nearshore marine Aquatic Ecosystem Condition Reports, AECR's or just another headache?	Paul Hedge: Engagement of Indigenous communities in marine research: A national-scale survey of marine researchers
14.30-14.50	Mark Baird: The biogeochemical state of the Great Barrier Reef (2013-2016): results from a re-analysis using the eReefs model.		Jason Hartog: Data delivery and decision-support tools underpinning sustainable fisheries	Cass Hunter: Packaging web portals for improved stakeholder usability

Thursday 6th July				
	Session 1: Playhouse theatre	Session 2: Ballroom 1	Session 3: Ballroom 2	Session 4: Litchfield room
	Symposium S16			G5: Looking to the future
	Chair: Craig Steinberg			Chair: Claire Stretten
14.50-14.55	PEP - Brendan Brooke: Coastal dynamics of Northern Australia over the last three decades - preliminary insights from the Landsat Data Cube			PEP - David Deeley: Indigenous Wisdom Can Inform Human Impact Detection and Mitigation for the Indian Ocean
14.55-15.00	PEP - Russ Babcock: Starbug-X: a Compact Autonomous Underwater Vehicle applied to surveys of deepwater reefs at Ningaloo			PEP - Lincoln Wong: Respondent driven sampling (RDS) as a cost-effective method for recreational fisheries: a trial with the Tasmania recreational rock lobster fishery
15.00-15.05	PEP - Hermerson Tonin: Application of a hydrodynamic numerical model towards implementation of desalination plant at Palm Island, Queensland.			PEP - Catriona Macleod: Broadscale Environmental Monitoring - What is it? Who does it? How does it fit in to Marine and Coastal Management? and Can we do better?
15.05-15.10	PEP - Hermerson Tonin: Mass Coral bleaching in the far northern region of the Great Barrier Reef and Torres Strait – a numerical modelling study			

18:30 - onwards	CONFERENCE GALA DINNER. Location Darwin Botanical Gardens
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Friday 7th July	
	Workshops
9:00-15:00	Furthering sea country research through advancing Indigenous collaborations with marine scientists' Location: Grand Ballroom, DoubleTree by Hilton Darwin Esplanade.
15:15 - 16:45	Getting published' Location: Charles Darwin University Waterfront, 21 Kitchener Dr, Darwin City.

Saturday 8th July	
	Workshop
11am – 7pm	Connectivity in coastal habitat utilisation workshop (includes Sea Darwin Sadgroves creek tour) ¹ . Location: Charles Darwin University Waterfront, 21 Kitchener Dr, Darwin City.