



## Experience Snapshot by Sector

### Non-Profit

Chief Executive Officer, Reef Check Australia  
Director, Conservation International

### Government & Multilateral

Great Barrier Reef Marine Park Authority  
Australian Department of Environment & Energy  
Pacific Islands Forum Fisheries Agency  
Pacific Islands Forum Secretariat  
World Bank  
Asian Development Bank  
United States National Oceanic and Atmospheric Administration  
State of Hawaii, Department of Aquatic Resources

### Private

Sole Proprietor / Consultant:  
Marine Conservation Finance Consulting  
Belt Collins & RMT (Environmental Consulting)

### Academia

Adjunct Professor, Hawaii Pacific University  
Coral Reef Ecology Instructor, Institute for Cultural Ecology, Fiji

## Awards and Distinctions

Top Featured Article in Earth Science, Nature Communications, 2021

Science for Management Award,  
Great Barrier Reef Marine Park Authority, 2014

First Place, Three Minute Thesis Competition,  
ARC Centre of Excellence for Coral Reef Studies,  
JCU, 2013

Global Leader Award, Conservation International,  
2011

Inaugural Coral Reef Management Fellow -  
Hawaii, National Oceanic and Atmospheric  
Administration, 2004-6

First Place, Graduate Student Research  
Symposium, University of Hawaii, 2003

Outstanding Achievement in Physical Chemistry,  
American Chemical Society, 2000

## Education

### PhD Marine Conservation Finance 2017

ARC Centre of Excellence for Coral Reef Studies &  
College of Business, Law, and Governance  
James Cook University, Townsville, Australia

### MS Oceanography (Coral Reef Biogeochemistry) 2003

University of Hawaii, USA. GPA 4.0/4.0

### BS Chemistry & Marine Science 2000

University of Miami, USA. GPA 3.9/4.0 Cum Laude

### Graduate (Marine Resource Management) 1999

School for Field Studies, Turks and Caicos Islands

## Appointments

Steering Committee Member, International Law  
Association, Committee on Oceans, 2021+

Co-Lead (Ocean Finance) and Member (Expert Group),  
High-Level Panel for Sustainable Ocean Economy,  
2019-2021

Lead, Global Marine and Coastal Conservation Finance  
Working Group, Conservation Finance Alliance,  
2019-2021

Member (Marine Conservation) and Alternate (Marine  
Science), Lord Howe Island Marine Park Advisory  
Committee, 2016-2020

## Professional Experience Map





## **2020+**      **Program Manager, Ocean Finance Initiative, Asian Development Bank**

Designed and managed ADB's Ocean Finance Initiative Strategy to leverage \$5 billion USD for ocean health and sustainable blue economies. Led the development and issuance of ADB's first blue bond valued at \$300 million USD, including the development of the ADB Ocean Finance Framework and the Green and Blue Bond Framework. Represented ADB at major international ocean and economy events, including providing keynote speeches and panels. Led ADB's efforts in the global Sustainable Blue Economy Finance Initiative, in partnership with United Nations Environment Programme - Finance Initiative. Managed the monitoring and evaluation (M&E) of the ADB Ocean Program, including the validation of the ocean pipeline. Worked with operations departments and the private sector department to initiate and develop new bankable projects for oceans health across a variety of sectors and geographies. Provided due diligence and screening advice for projects to assess alignment with ocean health and the blue economy. Led trainings on the blue economy and ocean finance for both internal ADB staff and representatives from developing member countries. Created knowledge products and thought leadership pieces that have been widely distributed globally. Supported the development of coral reef insurance products in four countries.

## **2017-19**      **Manager, Pacific Ocean Finance Program, Pacific Islands Forum Fisheries Agency**

Designed and directed the Pacific Ocean Finance Program, funded by the World Bank and the Global Environment Facility, and implemented in partnership with the Pacific Islands Forum Fisheries Agency and the Office of the Pacific Ocean Commissioner. Created program with the aim of improving the amount and efficacy of ocean finance for eleven Pacific Island countries. Led the innovation of novel financial instruments and global thought leadership in ocean finance. Developed multi-partner strategy and workplan with the engagement with hundreds of stakeholders. Executed research and analysis, engaged communities and businesses, and wrote reports and research papers. Created online knowledge portal: [www.pacificoceanfinance.org](http://www.pacificoceanfinance.org). Managed \$3 million USD budget, procurement processes and financial reporting, providing technical oversight and strategic leadership. Managed over 30 contracted researchers and experts. Managed complex relationships with multiple implementation partners and funders.

## **2015-16**      **Chief Executive Officer (CEO), Reef Check Australia**

Directed a prominent non-profit organisation with the mission of empowering people to save reefs and oceans. Renovated the strategic plan, business systems, and finance to support the science and outreach missions of the organisation. Managed staff and volunteers in remote locations conducting field work, community engagement, and training. Partnered with government, academics, and industry to improve utilisation of citizen science data for coral reefs. Led cross-sector collaborations for improved management of marine managed areas in Australia. Provided financial management and oversight. Directed organisational monitoring and reporting.



## 2013+ Director, Marine Conservation Finance Consulting

**2020+ Asian Development Bank** (see above)

**2020-2021: The Pew Charitable Trusts.** Lead researcher and project manager for project Funding the Big Blue: Finance for Offshore and High Seas Marine Protected Areas.

**2020-2021: Micronesia Conservation Trust.** Lead the development of a revised Sustainable Financing Plan for the Micronesia Challenge, including guiding five national consultants for stakeholder consultations.

**2018: Wildlife Conservation Society / Conservation Finance Alliance.** Co-authored paper on finance solutions for coral reefs as part of the 50 Reefs Initiative.

**2016-2017: Australian Department of the Environment and Energy.** Led a team of researchers to develop the world's first marine biodiversity offsets calculator and strategic plan for improving the effectiveness of marine offset assessment and investments. Advised the government on how to execute offset arrangements in the Great Barrier Reef to maximise benefits to habitats, ecosystem services, and communities, within the constraints of the legal system.

**2016: Australian Department of the Environment and Energy.** Developed and directed a team of 12 experts to assess and identify novel private investment opportunities for the Great Barrier Reef. Developed marine conservation finance research materials, assessed the feasibility of innovative private investment solutions, and worked directly with multinational financial institutions on the development of select private investments for Great Barrier Reef water quality and ecosystem health.

**2016: Lord Howe Island Marine Park.** Investigated Lord Howe Island resident attitudes and behaviours towards Galapagos Whaler Sharks (*Carcharhinus galapagensis*).

**2014: Great Barrier Reef Marine Park Authority.** Developed novel economic valuation of the Great Barrier Reef. Created educational materials to relay complex technical subjects to non-expert audiences.

## 2012-13 Project Manager, Great Barrier Reef Marine Park Authority

**Project Manager, Strategic Projects; Project Manager, Social & Economic Sciences; Project Manager, Sustainable Funding.**

Planned for marine biodiversity offset implementation in the Marine Park, reviewed and developed offset conditions, developed corporate policy and procedures for offset review, implementation, and monitoring. Analysed stakeholder submissions for the Strategic Assessment of the Great Barrier Reef World Heritage Area (for UNESCO). Assessed environmental and socio-cultural impacts from development proposals. Research and management of study to estimate the economic contribution of the Great Barrier Reef Marine Park. Incorporated socio-economic considerations into the organisational framework for rapid basin assessments.



## **2007-12     Director, Conservation International**

### **Director, Hawaii Fish Trust**

Designed, funded, and directed the Hawaii Fish Trust. Created novel partnerships with the government, key fishing leaders, and traditional Hawaiian communities. Facilitated stakeholder consensus between highly-opposed groups. Wrote sustainable finance strategy, raised \$10 million USD from individuals, government, and a foundation. Identified effective conservation investments to manage coastal fisheries and coastal water quality. Managed staff and consultants. Managed annual budget of \$1.6 million USD. Facilitated new community plans for marine resource co-management.

### **Director, Global Marine Partnership Fund**

Designed framework for the development of new seascapes: large cross-sector initiatives for coral reef management in the Pacific and Indian Oceans. Designed projects that connected human well-being to ocean health. Developed methods for applying business principles to marine conservation. Identified a sustainable financing mechanism for marine conservation valued at \$500 million USD.

## **2006-7     Pacific Islands Coordinator, NOAA Alliance for Coastal Technologies**

Created collaborations between marine resource managers, academic researchers, and the technology industry within the US-affiliated Pacific Islands to 1) improve marine resource management by utilising technology 2) innovate technological tools to meet the needs of marine resource managers. Translated needs across sectors and cultures.

## **2004-6     Coral Reef Management Specialist, Hawaii Division of Aquatic Resources / NOAA Coral Management Fellow**

Coordinated development of and co-authored six strategic plans for management of coral reefs in the following areas: fishing, land-based pollution, lack of public awareness, marine recreation, climate change and marine disease. Managed 14 concurrent grants totalling over 70 projects and \$1.2 million USD. Coordinated grant applications, managed fiscal paperwork, administered subcontracted projects, and prepared deliverables and reports. Participated in US Coral Reef Task Force steering committee and US All Islands committee.

## **2001-2     Associate Environmental Scientist, Belt Collins LTD, Hawaii**

Researched sustainable options for the re-use of dredged material, managed coastal restoration projects, and monitored non-point source discharge compliance. Researched and developed environmental impact statements related to United States federal defence projects.

## **2000     Environmental Scientist, RMT inc, Houston, Texas**

Conducted air pollution monitoring for various industries. Wrote components of environmental assessments and environmental impact statements under United States legislation.



## Publications

Sumaila, U.R., and 295 co-authors including **Walsh, M.** 29 October 2021. WTO must ban harmful fisheries subsidies. *Science* 374: 6567. <https://doi.org/10.1126/science.abm1680>

Sumaila, U.R., **Walsh, M.**, Hoareau, K. *et al.* 2021. Financing a sustainable ocean economy. *Nature Communications* 12: 3259. <https://doi.org/10.1038/s41467-021-23168-y>

Van Wees, I. and **M. Walsh.** 2021. Navigating the Rising Tide of Blue Business. Published by Asian Development Bank, The Business Times Singapore, The Daily Star, PACNEWS, The News International (Pakistan), and China Daily. <https://www.adb.org/news/op-ed/navigating-rising-tide-blue-ocean-business-ingrid-van-wees-and-melissa-walsh>

Sumaila, U.R., **M. Walsh**, M. Konar, and B. Hart. 2020. "7 Ways to Bridge the Blue Finance Gap." World Resources Institute, Washington DC. <https://www.wri.org/insights/7-ways-bridge-blue-finance-gap>

Sumaila, U.R., **M. Walsh**, K. Hoareau, A. Cox, et al. 2020. Ocean Finance: Financing the Transition to a Sustainable Ocean Economy. World Resources Institute, Washington DC. [www.oceanpanel.org/blue-papers/ocean-finance-financing-transition-sustainable-ocean-economy](http://www.oceanpanel.org/blue-papers/ocean-finance-financing-transition-sustainable-ocean-economy)

Walsh, M., D. Robertson, and A. Mehta. 2020. The Role of Ocean Finance in Transitioning to a Blue Economy. Published by Development Asia. <https://development.asia/explainer/role-ocean-finance-transitioning-blue-economy-asia-and-pacific>

Walsh, M. 2019. Innovative coral reef financing mechanisms. Invited panel presentation at the World Ocean Summit, Abu Dhabi.

Walsh, M. 2018. Finance for Pacific Ocean Governance. Published by the Pacific Ocean Finance Program. Pacific Islands Forum Fisheries Agency, Solomon Islands.

Walsh, M. 2018. Catalogue and Global Register of Innovative Ocean Finance Mechanisms. Pacific Ocean Finance Program, Pacific Islands Forum Fisheries Agency, Honiara, Solomon Islands. [www.pacificoceanfinance.org](http://www.pacificoceanfinance.org).

Iyer, V., K. Mathias, D. Meyers, R. Victorine, and **M. Walsh.** 2018. Finance Tools for Coral Reef Conservation: A Guide. Published by 50 Reefs, Wildlife Conservation Society, and Conservation Finance Alliance.

Walsh, M. 2018. Ocean Finance: Definition and Actions. Published by the Pacific Ocean Finance Program. Pacific Islands Forum Fisheries Agency, Solomon Islands.

Walsh, M., S. Gudge. 2017. Before it's too late? Shark-fisher interactions near the remote Lord Howe Island World Heritage Area, Au

Walsh, M. 2017. The Pacific Regional Oceanscape Program, Ocean Finance Program. Presentation to the Blue Economy Conference, Suva.

Walsh, M., N. Shumway, M. Maron. 2017. Reef Trust Marine Biodiversity Offsets Plan and Financial Calculator. Prepared for the Australian Government, Department of the Environment and Energy.

Walsh, M. 2017. Marine Conservation Finance: opportunities and mechanisms to improve the amount and efficacy of investment into marine conservation. PhD thesis, James Cook University.



Walsh, M., H. Ebeling, S. Hoobin, P. Marshall, C. Molinari, N. Pascal, A. Smith, P. Spirou, and A. Volders. 2016. Private Commercial Investment Opportunities for the Great Barrier Reef. Final report to the Australian Department of the Environment and Energy, Contract 1516-0289.

Walsh, M., J. Brodie, J. Binney, R. Pressey, N. Stoeckl, J. Vains, and A. Dale. 2016. Reef Rescue Loan Fund: can debt financing of agribusinesses contribute towards water quality targets?

Walsh, M., J. Lowe, R. Pressey, and N. Stoeckl. 2015. Impact investing for ocean health: opportunities and challenges.

### *Note Surname Change from Bos to Walsh*

Bos, M., R. Pressey, and N. Stoeckl. 2015. Marine conservation finance: the need for and scope of an emerging field. *Ocean and Coastal Management*.

Bos, M. Economic Values of the Great Barrier Reef World Heritage Area. Report to the Social and Economic Long Term Monitoring Program of the Great Barrier Reef.

Bos, M., R. Beeden, and M. Gooch. 2014. Economic Values of the Great Barrier Reef. Report to Great Barrier Reef Marine Park Authority.

Bos, M., R. Pressey, and N. Stoeckl. 2014. Effective marine offsets for the Great Barrier Reef World Heritage Area. *Environmental Science and Policy* (42): 1-15.

Bos, Melissa. May 2014. The \$40 million dollar Reef Trust is a good start, but it could be better. <https://theconversation.com>.

Bos, Melissa. Marine Conservation Finance. July 2014. Presentation to the Oceania Section, Society for Conservation Biology, Fiji.

Bos, Melissa. September 2013. Should offsets fund the Coalition Reef Plan? <https://theconversation.com>.

Grech, A., **Bos, M.**, Brodie, J., Coles, R., Dale, A., Hamman, M., Marsh, H., Neil, K., Pressey, R.L., Rasheed, M.A., and Sheeves, M. 2013. Guiding Principles for the improved governance of port and shipping impacts in the Great Barrier Reef. *Marine Pollution Bulletin*.

Bos, Melissa. 24 May 2013. Can banks make a profit by investing in the Great Barrier Reef? <https://theconversation.com>.

Bos, Melissa. 2012. Impact Investing for Ocean Health. International Coral Reef Symposium, Cairns Australia.

Bos, Melissa. 2011. Presentation: The Hawaii Fish Trust Strategy: Engaging Leaders from Government and Traditional Fishing Villages. Conservation International Seascapes Workshop, Brazil.

Bos, Melissa. 2010. Food Security and Nearshore Non-Commercial Fishing in Hawaii. Conservation International.

Bos, Melissa. 2010. Hawaii Fish Trust Strategy. Conservation International.

- Bos, Melissa. 2010. Presentation: Hawaii Marine Program, Conservation International Seascapes Workshop, Indonesia.
- Bos, Melissa. 2009. Ocean Governance: The Need for Immediate, International Cooperation to Reverse Ocean Health Decline. Invited white-paper for the World Economic Forum, Global Agenda Councils, Council on Oceans Governance.
- Bos, Melissa. 2009. Presentation on the Hawaii Marine Program, Conservation International Seascapes Workshop, Malaysia.
- Bos, Melissa. 2009. Coral Reef Compensatory Mitigation: An Opportunity for Large-Scale Marine Conservation Success. Conservation International.
- Bos, Melissa. 2008. Session Convener: "Reef Roundtable, A Leadership Summit for Main Hawaiian Islands Coral Reef Conservation. Hawaii Conservation Conference, Hawaii.
- Bos, Melissa. 2008. Presentation on the Hawaii Marine Program, Conservation International Seascapes Workshop, Ecuador.
- Bos, Melissa. 2008. Main Hawaiian Islands Seascape Strategy: Progressing nearshore resource management beyond sustainability to ecological, economic, social, and cultural prosperity. Conservation International.
- Bos, Melissa. 2008. Hawaii Marine Conservation Sustainable Finance Analysis and Business Plan. Conservation International.
- Bos, Melissa. 2008. The Business of Conservation. International Coral Reef Symposium, Florida.
- Bos, Melissa. 2007. Presentation: Main Hawaiian Islands Seascape Strategy. Hawaii Conservation Conference, Hawaii.
- Bos, Melissa and Manuel Mejia. 2007. Workbook: A Business Approach to Financing Marine Protected Area Management. Our Sea of Islands: International Forum for Marine Protected Area Managers, Hawaii.
- Bos, Melissa. 2007. Workshop Convener: "Underwater Passive Acoustic Monitoring for Remote Regions," Alliance for Coastal Technologies, Hawaii.
- Falter, James, Marlin J Atkinson, James H. Fleming, **Melissa D Bos**, Ryan J Lowe, Jeffrey R Koseff, and Stephen G Monismith. 2006. A novel flume for stimulating the effects of wave- and water-driven motion on the biogeochemistry of benthic reef communities. *Limnology and Oceanography Methods*.
- Bos, Melissa. 2006. Alliance for Coastal Technologies in the Pacific Islands. Science, Technology, and Resources Network Annual Meeting, South Pacific Applied Geoscience Commission, Solomon Islands.
- Bos, Melissa and Greta Aeby. 2005. State of Hawaii Coral Reef Local Action Strategy to Address Climate Change and Marine Disease. State of Hawaii Division of Aquatic Resources.
- Bos, Melissa. 2005. Hawaii Coral Reef Monitoring. US Environmental Protection Agency, Pacific Islands Environment Conference, Guam.
- Kerr, Wendy, **Melissa Bos** and Carlie Weiner. 2005. State of Hawaii Local Action Strategy to Address Recreational Impacts to Coral Reefs.
- Bos, Melissa. 2004. State of Hawaii Coral Reef Local Action Strategy to Address Fishing Pressure. State of Hawaii Division of Aquatic Resources.
- Bos, Melissa. 2003. Nutrient uptake by reef benthos under oscillatory versus unidirectional flow. Masters thesis, University of Hawaii at Manoa.