



AusSeabed Newsletter No. 26 October 2021

Happy October everyone,

A lot has happened since our last newsletter and luckily most of it can be found on the AusSeabed website. In August, we hosted a very successful two-day annual webinar.

Day 1 attracted 250 participants who were interested in hearing what the AusSeabed community had achieved in 2020/21 and what it has in store for 2021/22. Day 2 attracted over 110 participants from all sectors and regions of the globe who were interested in learning more about specific AusSeabed products and projects. We have planned more upcoming events during the year, so stay tuned!

For our brightest highlights of 2020/21, we invite you to look through the page-turner that is our Annual Highlights Report and share it broadly to celebrate our achievements.

We have also seen the long awaited release of the report on the value of seabed mapping to the Australian economy. This revealed that seabed mapping data contributed directly \$9 billion to our economy and employed over 56,000 FTE in 2018–19. These figures are considerable and support the efforts that our AusSeabed community puts into improving the coordination of seabed mapping to ensure maximum impacts.

Finally, while you can find few additional links to newly released AusSeabed outputs in the section below, I would like to draw your attention to two last ones: First, a video explaining the goals and outputs sought by our collaborative GMRT-AusSeabed platform project; and second, our 2021/22 work plan highlighting activities that will contribute to meeting our program goals.

We wish you good reading and watching, and please if you have any comments or questions, don't hesitate to contact us.

Best regards,

Your Steering Committee Chair,

Kim Picard

[AusSeabed new material online](#)

Multiple outputs can now be found on our website. These are highlighted here:

- [2020/21 Highlights report](#)

- [2020/21 Annual program report](#)
- [2021/22 Work Plan](#)
- [GMRT- AusSeabed platform](#) webpage with:
 - introductory video detailing the project
 - the user-needs analysis report used to define the scope of the project
 - technical workshop reports highlighting discussions amongst experts on different technical aspects of the platform development
- [Economic benefit analysis](#) on the value of seabed mapping in Australia
- [AusSeabed webinar series 2021](#) recordings
- [QAX tool page](#), tutorials and feedback mechanism to inform next phase of development

AusSeabed Steering Committee

AusSeabed Early Career Ocean Professional representative (ECOP)

To recognise the unique perspective early career ocean professionals (ECOP) can bring to AusSeabed governance, we would like to open a new position for an ECOP to sit on the AusSeabed steering committee. The position will be trialled over 2021/22, and the applicant will be responsible for shaping the role and responsibilities for future ECOP representatives. The role offers a unique professional development opportunity to candidates, exposing ECOPs to the mechanisms for governing a large collaborative program (including the development of annual work plans), access to an expansive professional network and opportunities to participate in AusSeabed activities. Please see below for further information on how to apply.

Applications close Monday 25th October 2021 5:30pm (AEDT).

Role and responsibilities: The ECOP will attend Quarterly steering committee meetings, provide guidance to ongoing AusSeabed activities and help to develop an outline of their role to guide future ECOP representatives based on their experience. We would like the successful applicant to attend our next virtual SC meeting on November 4th 2021. The applicant's organisation will be making an in-kind contribution to AusSeabed through the ECOP's participation.

Selection Criteria: Someone currently engaged in an AusSeabed related field (at school or employed) within an Australian organisation. It must be <5 years since the applicant has graduated from a relevant degree. It is desirable that the candidate have some experience in seabed mapping.

Application: Please send applications to the AusSeabed mailbox (ausseabed@ga.gov.au) by Monday 25th October 2021 5:30pm (AEDT). A candidate's application should address:

- ✓ Name and organisation of the applicant
- ✓ Why would you like to be a part of AusSeabed? (<75 words)
- ✓ What is your previous experience with seabed mapping? (<200 words)
- ✓ Do you have the capacity to join quarterly SC meetings in person based in Canberra or Sydney (Pending COVID-restrictions eg. How many meetings? Can your organisation pay for travel?)
- ✓ Does your organisation support your application?

Appointment: If more than one application for this role is received, the Steering Committee will vote on an applicant based on 1) their ability to help guide the AusSeabed 2021/2022 work-plan and 2) The applicants previous experience with seabed mapping.

For direct queries regarding the position, please contact Kimberlee Baldry (email kimberlee.baldry@ga.gov.au or call 02 6249 9600).

Update on AusSeabed

Tools, Guidelines and Standards

- The AusSeabed multibeam **QA Tool (QAX) v1** development has now been completed. The tool can be downloaded from GitHub. The tool assesses the quality of raw and gridded multibeam bathymetry product and standardises QA reporting while in the field or back in the office.

AusSeabed Annual Report

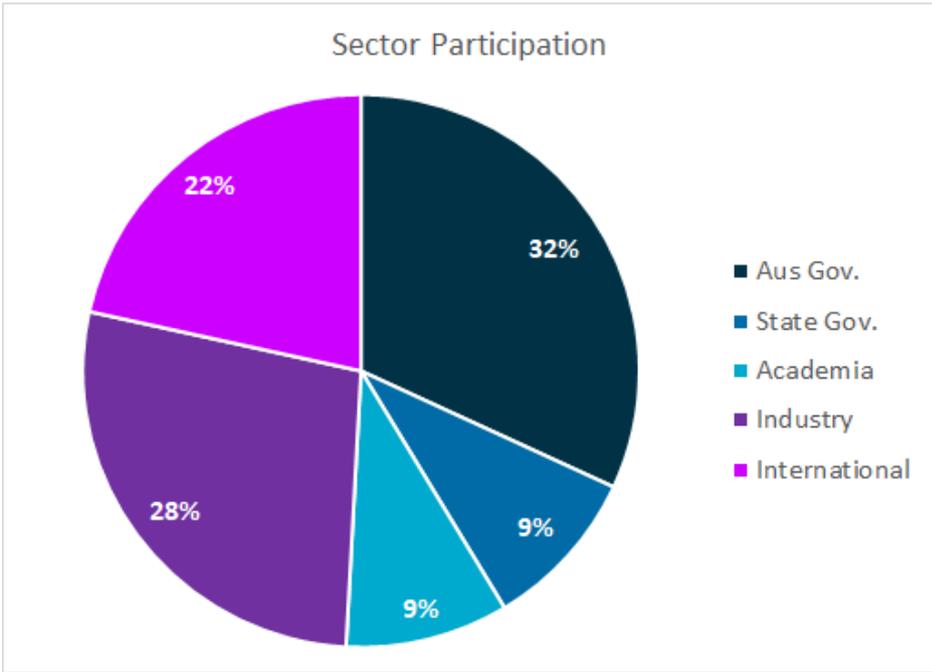
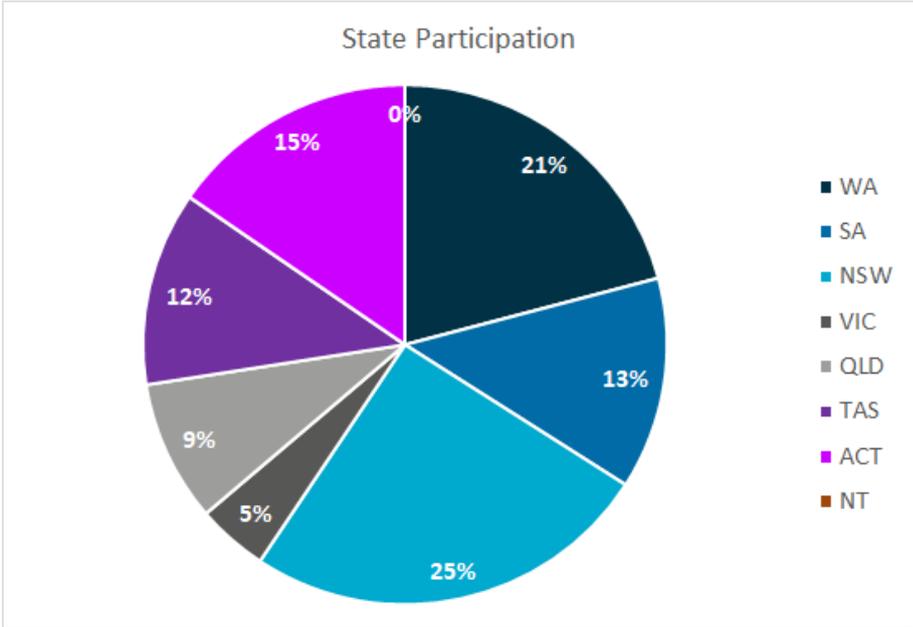
Keep an eye out for the release of the AusSeabed Annual Report on the website <http://www.ausseabed.gov.au/resources/publications>.

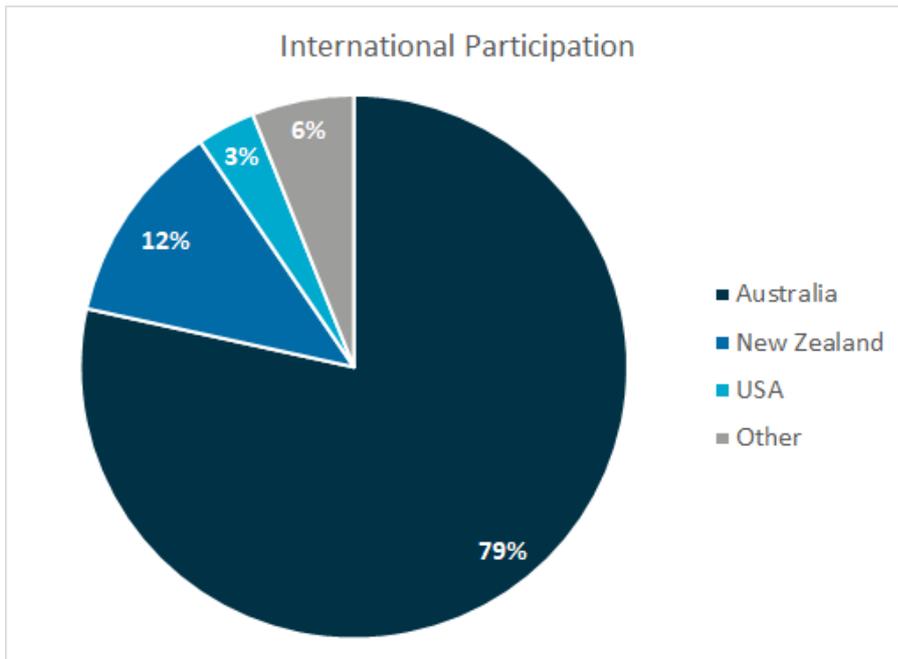
August workshop Overview

August 25th workshop: 270 Participants. 114 Geoscience Australia staff. 156 external participants. → Average time spent ~33 mins.

August 26th workshop:

116 Participants





Work plan 2021/22

The AusSeabed 2021/22 is guided by annual strategies that contribute to the four 2030 strategic program goals (Figure 1). In summary, in 2021/22 we will implement and operationalise the infrastructure built in 2020/21, and drive use and uptake by the user community (Figure 2). Figure 1 Strategies adopted in 2021/22 to contribute to achieving the fundamental strategic program goals.

http://www.ausseabed.gov.au/__data/assets/pdf_file/0003/111369/2021-22-Work-Plan-Overview.pdf

National Areas of Interest for Seabed Mapping, Characterisation and Biodiversity Assessment



Figure 4 : National Areas of Interest shown on AusSeabed Marine Data Portal

In September, AusSeabed partners were successful with a National Environmental Science Programme scoping project for co-funding to deliver a National Areas of Interest tool and prioritisation framework. This project is working to expand the existing ASB Survey Coordination Tool to capture the value behind Areas of Interest from all sectors—not just federal and state government organisations. The prioritisation framework will help organisations maximise the impact of their own survey work by suggesting a repeatable and transparent method of prioritising proposed survey areas, with the capability to include community value of data in the prioritisation process where there is overlap in the National Areas of Interest layer and an organisations own areas of interest.

The first community workshop will be held on **Wednesday the 3rd of November** from 10am – 1 pm. This workshop will refine the metadata required to capture organisational value in the areas of interest tool, develop an understanding of factors that drive organisational prioritisation and give an overview of the proposed tool and its functionality. To register your interest please email AusSeabed@ga.gov.au

A series of focus sessions will be held in late November to work with organisations to submit their areas of interest through the new tool (dates TBC).

A second workshop will be held in early December to review the National Areas of Interest Layer submitted through the November meetings and to discuss the finer points of using this data layer as input in the prioritisation framework for organisations (date TBC).

Workshop goals

The workshop seeks to determine the value of seabed data collection to different sectors and understand the factors that influence organisational decisions for site selection.

The outcomes of this workshop will guide the re-development of the AusSeabed Survey Coordination Tool so that organisations **from all sectors** (private, academia, and government) can contribute “Areas of Interest” to the national spatial layer. The workshop activities will also help guide the development of a prioritisation framework that can be used by different organisations to rank their Areas of Interest for surveys in a consistent and repeatable way that maximises impact.

Workshop context

This workshop is one of a series of activities that comprise the NESP Scoping Project 1.2 National Areas of Interest for Seabed Mapping, Characterisation and Biodiversity Assessment.

Workshop logistics

There is no cost to attend the workshop, but numbers are limited by the platform, so don't forget to [register here](#)! After registering you will receive an automated email with the meeting link details.

We Welcome RSV Nuyina!!

Australia's new Antarctic icebreaker, RSV *Nuyina*, will soon be contributing to international efforts to map the global ocean seafloor.



RSV Nuyina arriving in Hobart. (Photo: Rob Blakers) – 16th October, 2021

Data collected by *Nuyina*'s multibeam echosounder will be used to develop navigational charts and detailed maps of the Southern Ocean seafloor, off Australia's Antarctic stations and between Australia and Antarctica, as part of a newly signed agreement with the [AusSeabed initiative](#).

These charts and maps will in turn feed into the [Nippon-Foundation-GEBCO Seabed 2030 project](#), which aims to develop a definitive map of the world's ocean floor by 2030.

<https://www.antarctica.gov.au/news/2021/antarctic-icebreaker-to-contribute-to-global-ocean-map/>

Deloitte Economic Study 2021

We are incredibly proud of AusSeabed's seabed mapping community. Our organisation represents the people who are shaping the future of our industry, and thanks to a recent report prepared by Deloitte Access Economics for Geoscience

Australia, the value of Australian seabed mapping data to the blue economy informing the marine community is even more abundantly clear.

- Commercial fishing and aquaculture: seabed mapping data is required for operators to safely navigate the sea, to guide fishing and aquaculture site selection and to minimise associated environmental impacts.
- Offshore energy generation: Seabed mapping data provides useful information on seabed characteristics that can inform optimal site selection, provide evidence to support obtaining environmental and planning approvals and in establishing the required infrastructure (e.g. pipelines and wind turbines).
- Tourism: Seabed mapping is critical for tourism operators to safely navigate the sea and to reduce environmental impacts associated with anchorage and transportation.

A new report from Deloitte has found that seabed mapping data directly contributed \$9 billion to our economy and employed over 56,000 FTE in 2018–19.

[Read the report here.](#)

Accurate, consistent and widely available seabed maps are a valuable resource for Australia. There are also significant social, cultural, and environmental benefits that are attributable to the production and use of seabed mapping data. The report highlights Australia's blue economy as an area with strong potential for economic growth. However, only one quarter of the Australian seabed is mapped to an adequate resolution to assist businesses and governments in decision making.

Minderoo UWA Deep-Sea Research Centre

Research Fellow (Geoscientist)

The University of Western Australia and Minderoo Foundation joined forces in 2021 to establish a world leading deep-sea research centre. This collaboration aims to comprehensively explore the deepest areas of the Ocean – mapping the seafloor, characterising and discovering new species, assessing marine biodiversity and charting deep-sea habitats, with a focus on abyssal plains and hadal subduction trenches. The [Minderoo UWA Deep-Sea Research Centre](#), housed within the School of Biological Sciences, is supported with a major five-year grant from Minderoo Foundation's Flourishing Oceans initiative.

We are looking for someone who will implement a research program to understand the geomorphology and habitat structure of abyssal plains, hadal subduction zones and fracture zones in the Indian Ocean, and elsewhere. This post will be part of a multi-disciplinary team of ecologists, biologists and geneticists, underpinned by state-of-the-art deep-sea technology, with regular expeditions at sea. This role requires collaborative research within the Center, and other academic institutions, nationally and internationally, to improve our knowledge of deep-sea environments worldwide.

The candidate must have earned a PhD and preferably postdoctoral experience demonstrating substantive work on the mapping and interpretation of subsea features using both acoustic and visual methods. Experience in operating multibeam echo

sounders, with appropriate acquisition, processing and interpretation software is highly desirable.

<http://external.jobs.uwa.edu.au/cw/en/job/507690?|ApplicationSubSourceID=>

Upcoming Events

GEBCO SYMPOSIUM – MAP THE GAPS

NOV 30th -DEC 3rd (Online)

<https://www.mapthegaps.org/symposium-2021-redux>

Map the Gaps convenes a global event on bathymetry on behalf of GEBCO. Topics such as mapping and data processing technology, deep water exploration, mapping missions, policy, diversity, equity & inclusion, Seabed 2030 and alumni activities are shared and discussed. Participants include professionals, students, researchers, government representatives, explorers and emerging technologists.

Behaviour & Action for a Sustainable Ocean Future – Ocean Decade Australia

OCT 26th – 1pm -3pm AEDT (Online)

Since March 2021, Ocean Decade Australia have hosted [two ocean stakeholder briefs](#) to create the Australian momentum needed to embrace the [UN Decade of Ocean Science for sustainable development](#). One of the things we have heard most over that period is that Australia’s Ocean Stakeholders want action, that people are itching for change, but they don’t always know how to make a difference – individually or within their communities or organisations. This third event ([register here](#)) will focus on behaviour change and action needed to see a new blue deal.

Australia is FULL of incredible ocean leaders who have amazing stories to tell and we have asked 7 of them – Heidi Tait, Erin Coldham, Sam Elsom, Alex Ogg, Mariana Mayer Pinto, Martin Exel and Ben Milligan – to tell us theirs: pitch-style. Their stories will be but snapshots into the long roads that they have had to navigate to make the difference they seek – but their stories provide real-life, happening-now inspiration and demonstrate the complexity of behaviour change, stakeholder engagement and why ongoing dialogue is so important.

We will then be joined by experts on the science and the business of behaviour change – Kimberley Norris and Terence Jeyaretnam. In-conversation with Juliette Tobias-Webb they will join our ‘Pitchers’ to share what we know about behaviour change and what it takes to make it happen as individuals, organisations, leaders and societally.

We look forward to welcoming you to this event as we celebrate 2021 – the first year of the [United Nations Ocean Decade](#).

Please share widely to ensure that ocean stakeholders from diverse background are involved in this Decade if we want to make a change

BEHAVIOUR & ACTION FOR A SUSTAINABLE OCEAN FUTURE | 26 OCTOBER | 1PM - 3PM AEDT

oceandecadeaustralia.org



ERIN COLDHAM
Star of the South



ALEX OGG
Australian Ocean Energy
Group - AOEG



MARIANA MAYER PINTO
Living Seawalls
Sydney Institute of Marine
Science - SIMS



BEN MILLIGAN
Global Ocean Accounts
Partnership - GOAP



HEIDI TAIT
Tangaroa Blue
Foundation



TERENCE JEYARETNAM
Climate Change &
Sustainability, EY



SAM ELSOM
Sea Forest



JULIETTE TOBIAS-WEBB
Behavioural Scientist



MARTIN EXEL
Seafood Business for Ocean
Stewardship - SEABOS



KIMBERLEY NORRIS
Behavioural Psychology
University of Tasmania

'Deep Ocean Education Project'

A collaboration between NOAA Ocean Exploration, Ocean Exploration Trust and the Schmidt Ocean Institute.

Seafloor mapping is an essential step to ocean exploration and we encourage you to view video link regarding a career in Seafloor mapping.

[Seafloor Mapping video from Nautilus \(Video Link\)](#)

Share your work with the AusSeabed community

Finally, a reminder as always that anyone with an interest in AusSeabed can sign up to the newsletter mailing list on our website, where you can also check out past issues. And please send any items for the next newsletter to AusSeabedNews@ga.gov.au