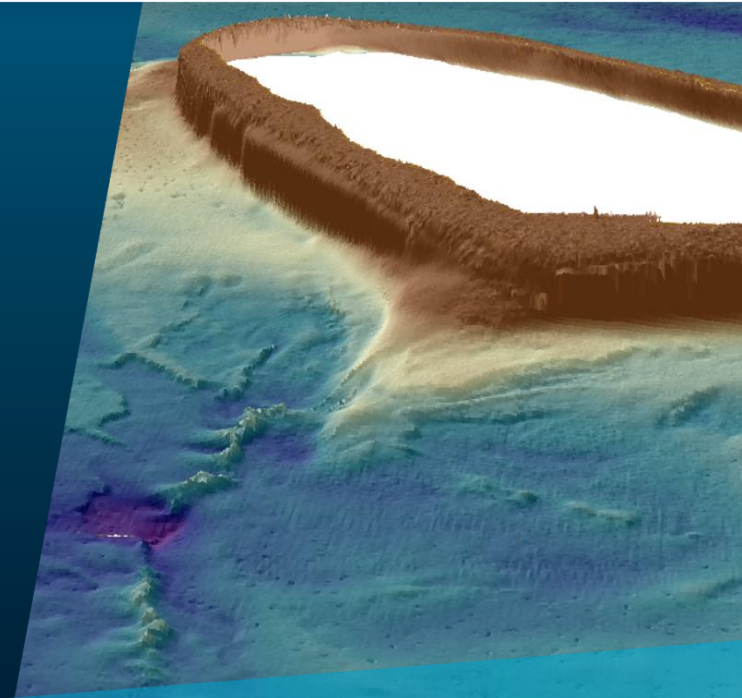


# AusSeabed Quarterly Showcase

Aug – Nov 2020

Kim and everyone

23 November 2020



# Agenda

- Welcome and Introduction
- Outreach
- Data Hub

Survey Coordination Tool

Quality Assessment Tool (QAX)

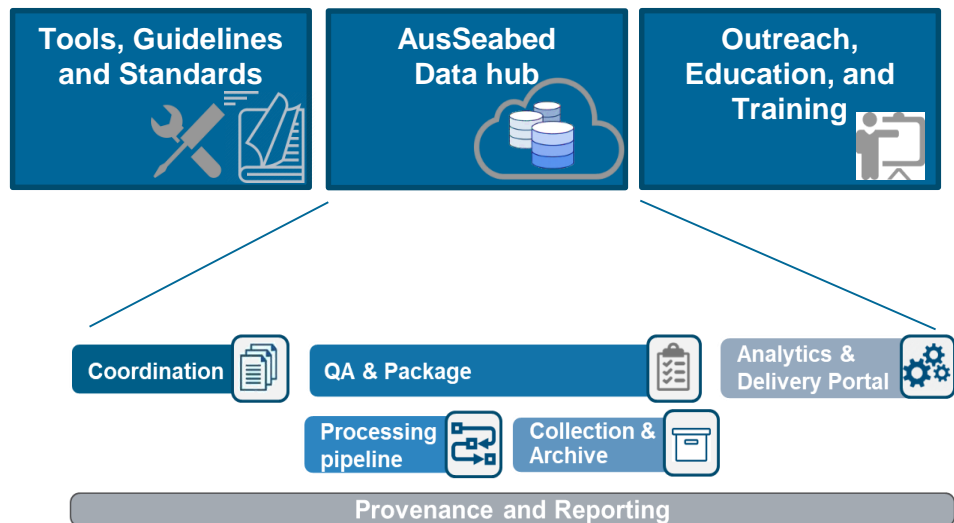
Cloud infrastructure

Data Warehouse and Data Processing

Data Publication to Portal

Data Hub Policy and Management

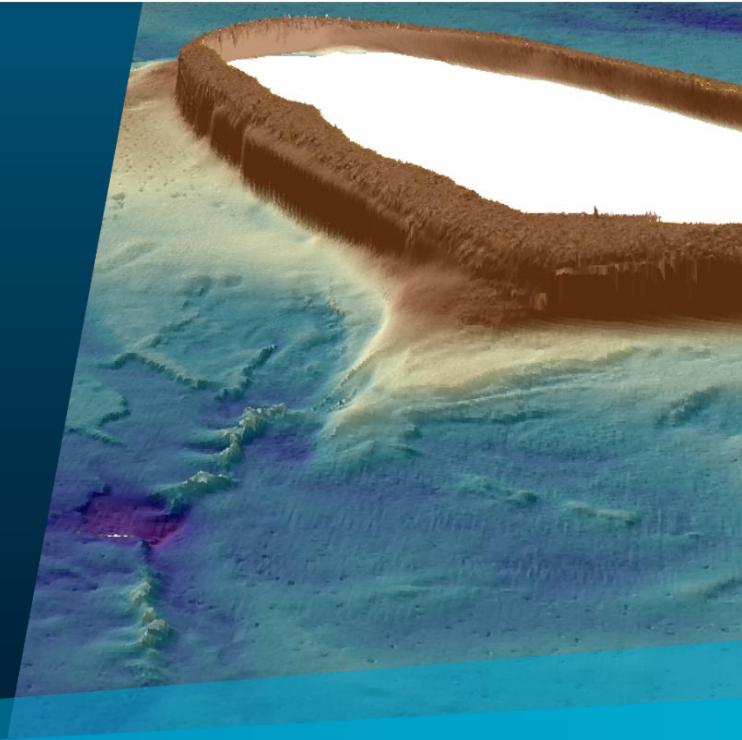
- Next PI vision
- Open Discussion



# From Ship to Shore to Portal

Infrastructure for Rapid Publication

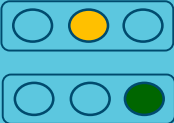
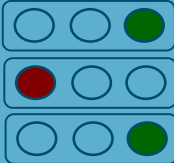
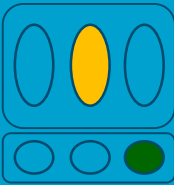
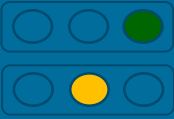
AusSeabed Quarterly Showcase - Aug to Nov 20



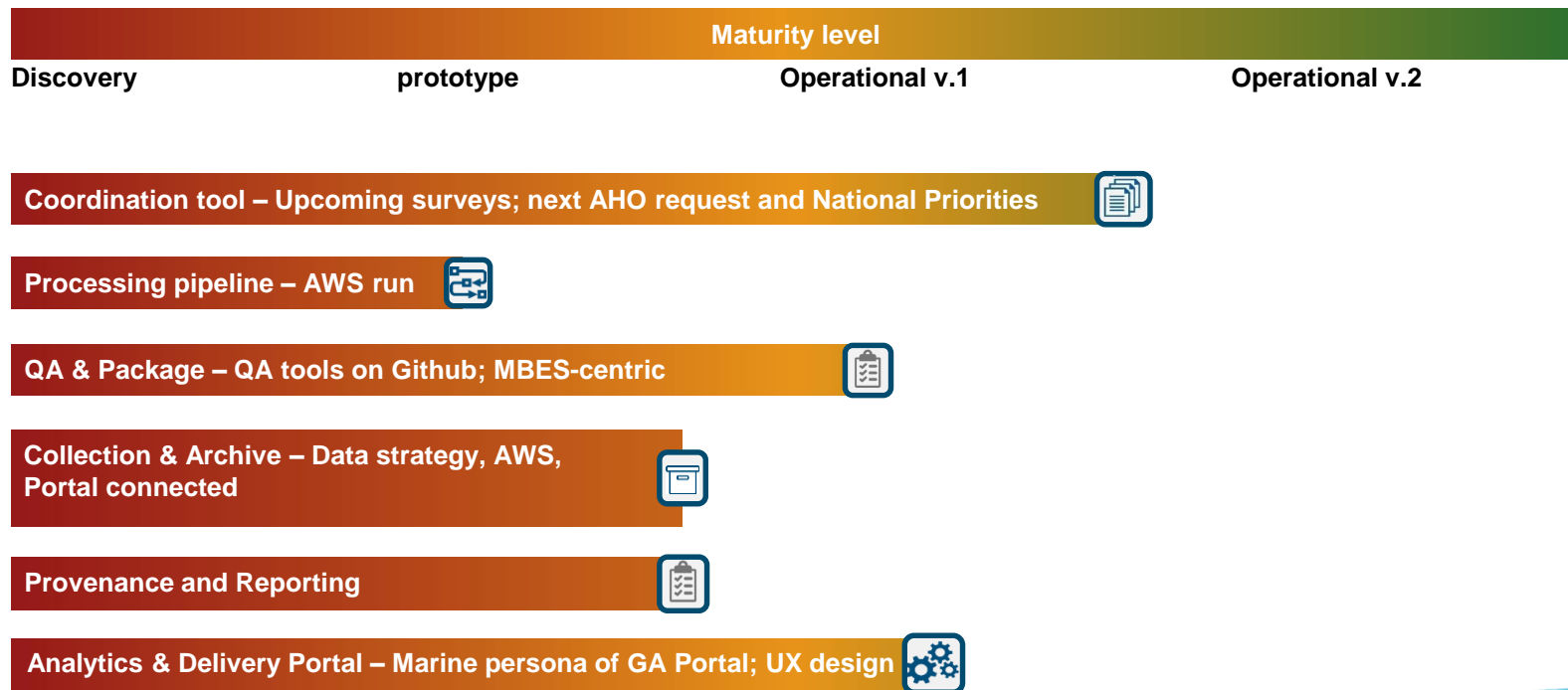
# Program objectives



# Program Increment Goals

Program Objectives	PI Goals	Status
Improve coordination of activities relating to seabed mapping.	<ol style="list-style-type: none"> <li>National Prioritisation Framework revisited</li> <li>AusSeabed welcoming new collaborators and partners</li> </ol>	
Expand the number of bathymetric products openly accessible through the AusSeabed platform.	<ol style="list-style-type: none"> <li>Increase in data published on portal</li> <li>HIPP data published in time to celebrate the 100<sup>th</sup></li> <li>Operational federated hub (CSIRO-GA)</li> </ol>	
Secure an enduring AusSeabed program to continue realising benefits to the community relying on seabed mapping.	<ol style="list-style-type: none"> <li>Collaborative agreement signed by EB members</li> <li>AusSeabed 10 year plan published</li> <li>Economic Benefit Analysis delivered</li> <li>Program Communication Strategy published</li> <li>Webinar series successfully delivered</li> </ol>	
Deliver products and services focused on the needs of key stakeholders and end-users.	<ol style="list-style-type: none"> <li>End-users analysis leading to new portal functionalities</li> <li>QA tools (QAX) delivered providing efficiency-gain and consistency</li> </ol>	

# Data Hub: Status update



# Outreach

## AusSeabed Quarterly Showcase

Aero Leplastrier | Hannah Evans | Ralph Talbot-Smith | Tim Ingleton

November 2020



# Key Outreach highlights July–October

- Delivered the AusSeabed Webinar Series
- Drafted a First Nations Collaboration Plan
- Drafted an Outreach and Communications Strategy

# AusSeabed Webinar Series: Bringing the Seabed to you

**Purpose:** to inform and engage the seabed mapping community in the absence of the AMSA conference.

**Description:** 4 sessions from June-September 2020 that included 20 talks and 5 workshop activities



**Topics:** Ntl-Intl. perspectives on seabed mapping, Mapping for Management, Data Sharing and Collaboration, Applications of Seabed Mapping

## Impact:

- Strengthened dom. and intl. networks
- Publicised tools, standards and digital infrastructure delivered through the AusSeabed program.



260 participants

117 organisations

20 countries

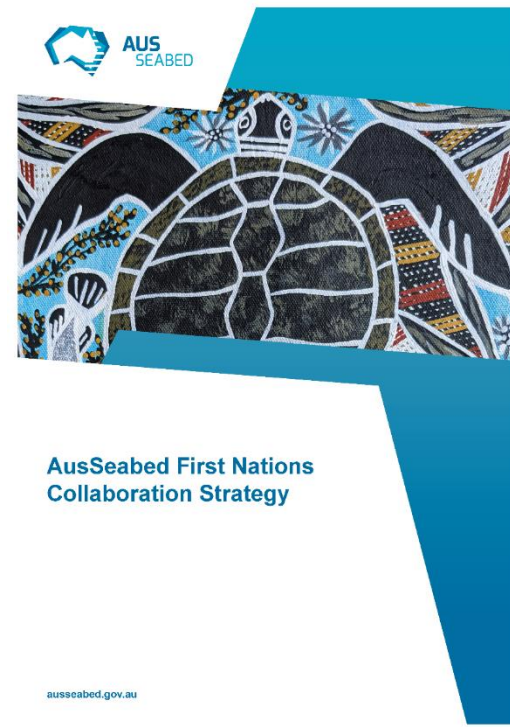
# First Nations Collaboration Strategy

**Purpose:** Develop a guiding set of principles that encourage respectful and impactful knowledge sharing and collaboration with First nations peoples across Sea Country.

**Progress & Next steps:** The first draft completed and circulated for review with the SC. Workshop draft with wider community

## Desired Outcomes:

- Improve collaboration with Sea Country Custodians
- Increase data benefit to support cultural heritage by building awareness and improving accessibility for Traditional Custodians



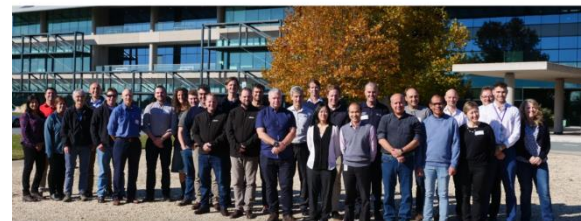
# AusSeabed Communications and Engagement Strategy

## Purpose:

- Maximise impact and boost efficiency of internal and external communications
- Continue building a community of supportive stakeholders and active collaborators
- Empower AusSeabed community to confidently champion the AusSeabed program.

**Progress & Next steps:** The first draft is almost complete and will be circulated for review with the SC in Dec. for endorsement and finalisation in February

**Desired Impacts:** Increase in number of active collaborators  
Greater awareness and familiarity of AusSeabed activities and resources



**AusSeabed Communications and Engagement Strategy**

2020-2025

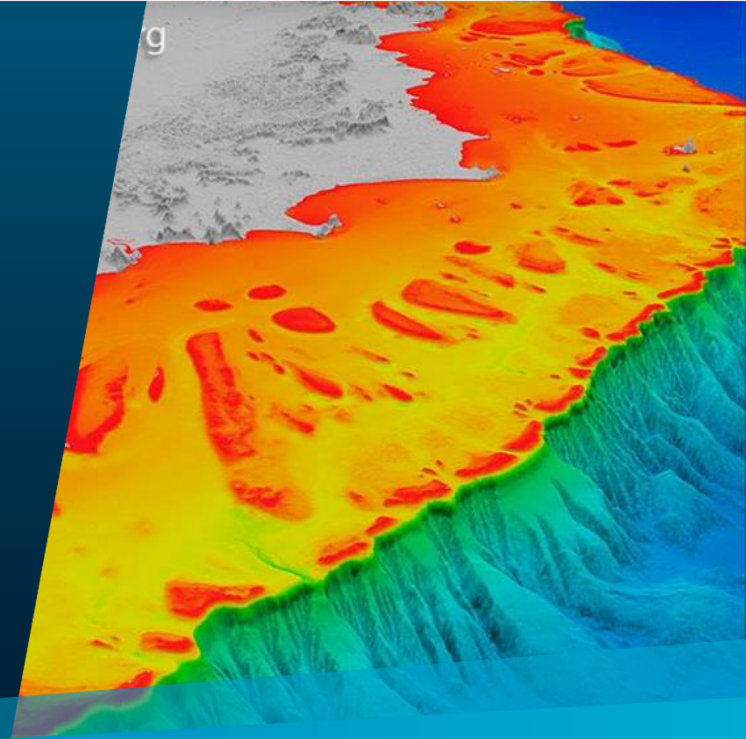
[ausseabed.com.au](https://ausseabed.com.au)

# ASB Survey Coordination Tool

AusSeabed Quarterly Showcase

Lachlan Hurst | Natalie Lennard

November 2020



## New Plan



### Basic

Survey name

Name of data collection survey

Public

☐

Make survey plan visible to all users

Survey ID

Optional

Status

☒ Planning
 ☐ Scheduled

Survey plan custodian(s)

Commissioning organisation(s)

Other organisations (if not list

Optional

Contact person

PRIORITY AREA REGISTRATION

PRIORITY AREAS

SUBMISSION CONFIRMATION

Submitting organisation

Organisation that is submitting

Contact Person

Contact person from the commissioning

Contact Email

Ideally, provide a group email

Citation

☐ Use above details

Cited Organisation

Organisation cited in the public

Cited Contact Name

Contact person from the commissioning

Cited Contact Email

email that will appear in the public

SAVE

EXIT



The HydroScheme Industry Partnership Program (HIPP) is an enduring partnership, with a request timeframe domain of 5-10 years. It aims to boost Australia's hydrographic industry capability allowing partners to acquire maritime survey data for the production of digital maps of Australia's seas and coastal areas.

REQUEST REGISTRATION	REQUEST BUSINESS CASE	AREA(S) OF INTEREST	SUB-AREA DETAILS	SUB-AREA INFORMATION	REQUEST SUMMARY	REQUEST SUBMISSION DETAILS
<p>A valid HIPP Request requires registration and the addition of at least one area of interest. Optional fields are labelled (optional). All other fields are mandatory.</p>						
<p>Request Title</p>						
<p>Requesting Organisation</p>						
<p>Primary organisation submitting the request</p>						
<p>Collaborating Organisation(s)</p>						
<p>Organisations that are submitting the request</p>						
<p>Contact Person</p>						
<p>Contact person from the requesting organisation</p>						
<p>Contact Person's Role (Title)</p>						
<p>Contact email</p>						
<p>Where possible, please provide an enduring email address such as a group email for contact</p>						

SAVE

EXIT

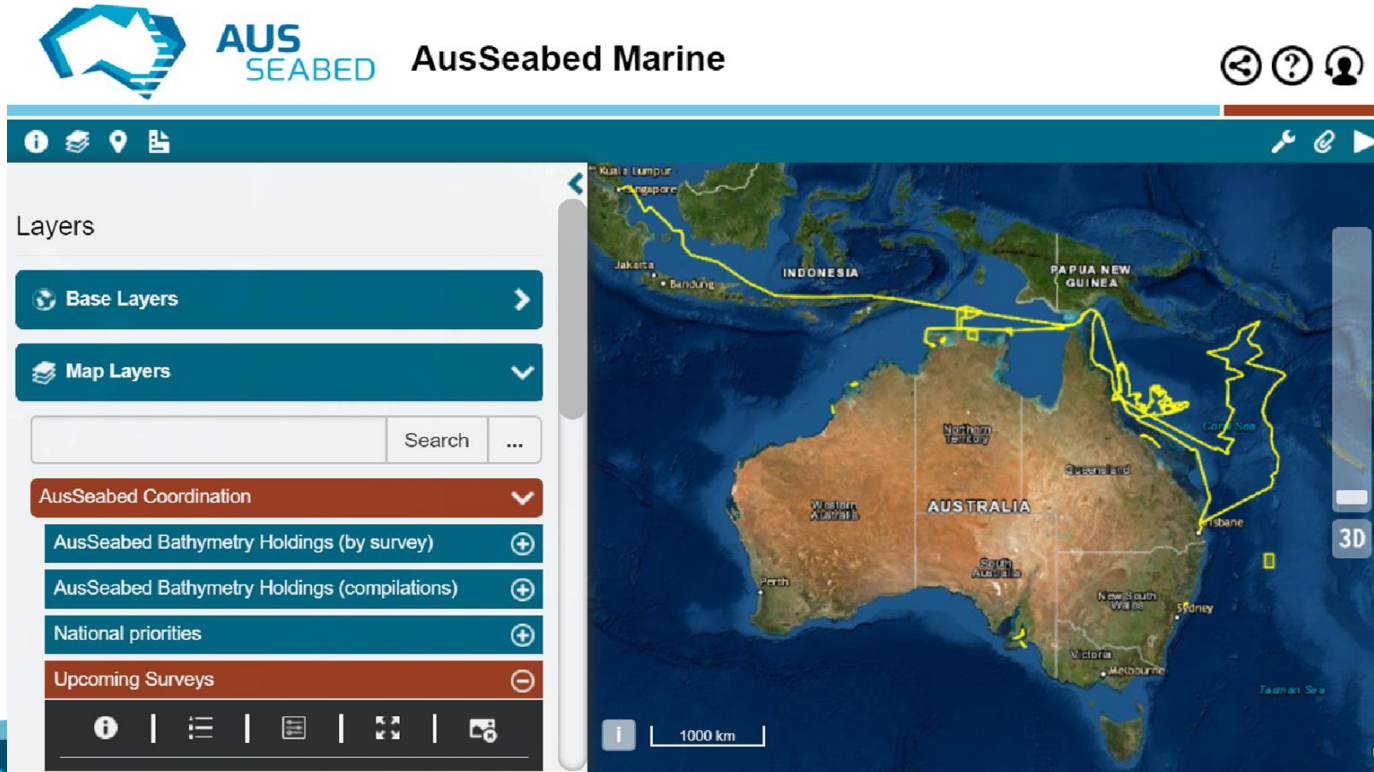
SAVE AND NEXT



2. Priority Areas
3. Request

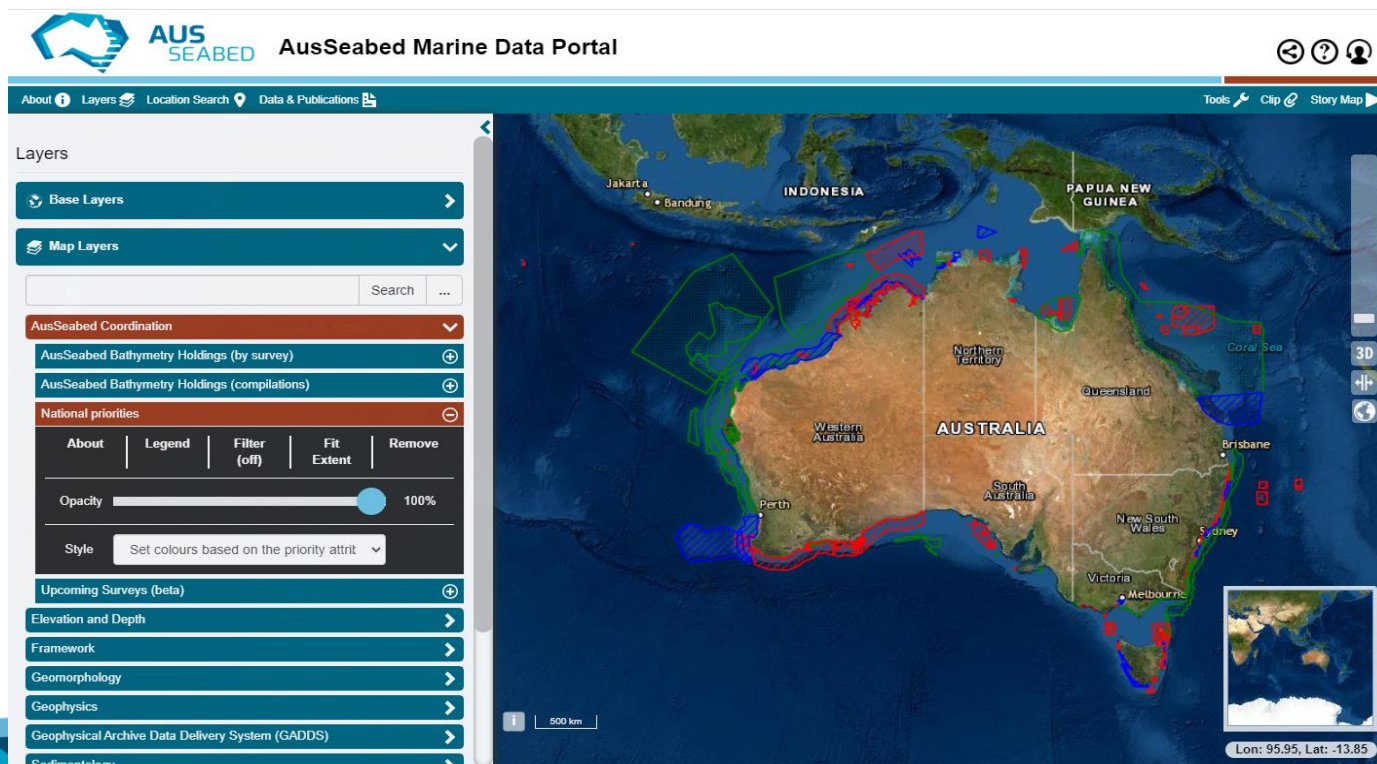
# Where does the information go?

Survey Plans = Upcoming survey layer



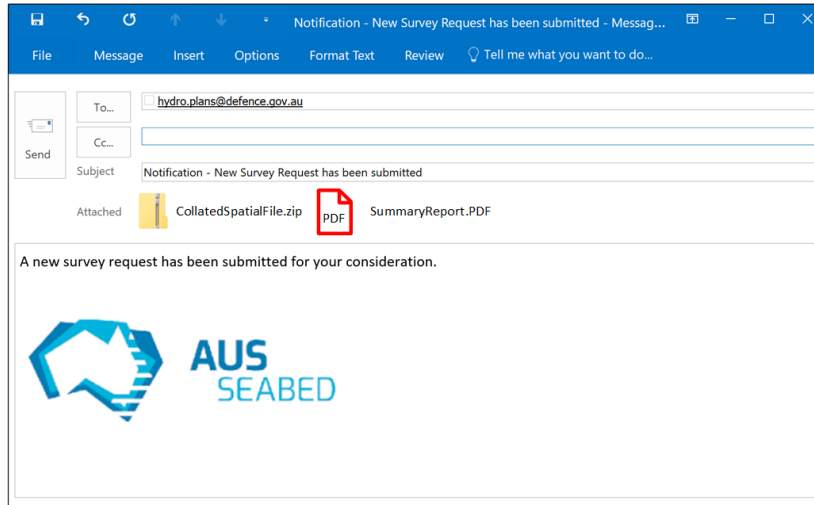
# Where does the information go?

Priorities = National Priorities Layer



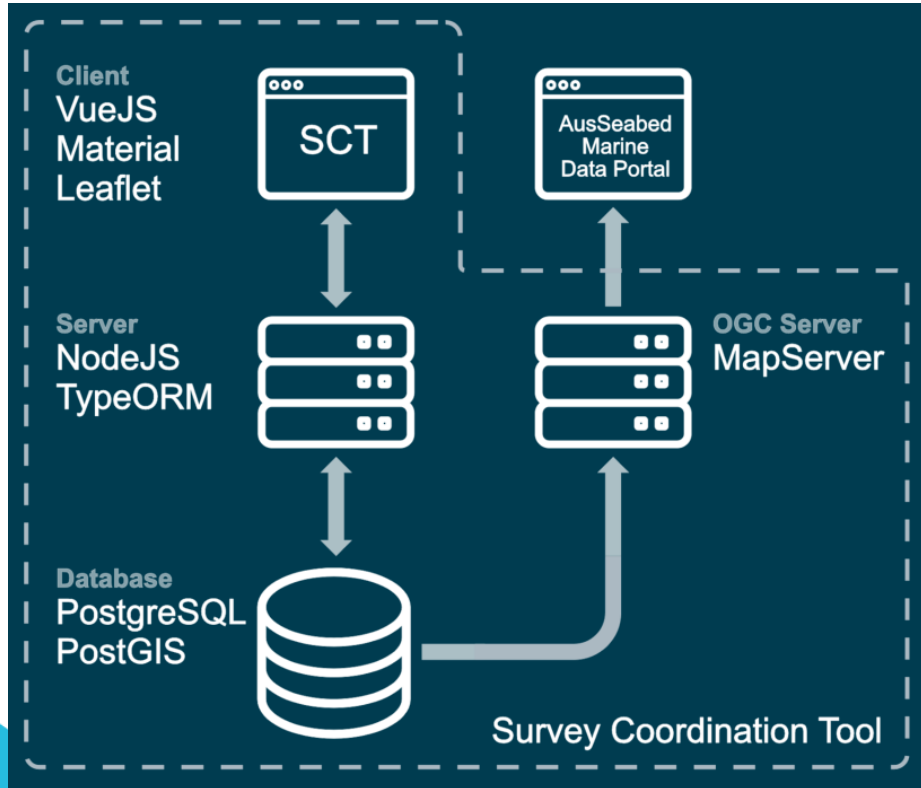
# Where does the information go?

**Requests = Formatted email to the AHO for consideration in their survey planning process**



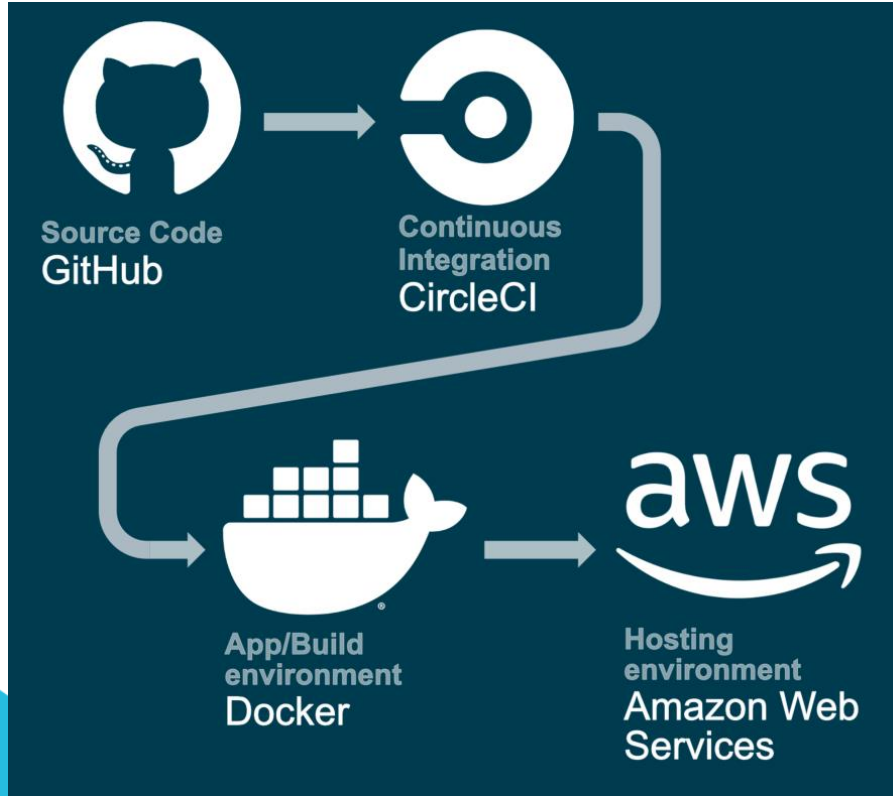
## Survey Coordination Tool

# Technology Stack




- Utilises a common web application technology stack
- Geospatial specifics handled by Leaflet and PostGIS
- SCT is open source as are all the libraries it uses
- MapServer publishes geospatial data stored in the SCT database via Open Geospatial Consortium (OGC) web services; specifically WMS and WFS

## Survey Coordination Tool Infrastructure



- GitHub used to store source code
- Continuous Integration system (CircleCI) builds development and production releases. Development deployment is automated.
- Docker used to provide automated consistent build environments.
- Production and staging (development) instances of SCT are hosted in AWS

# Survey Coordination Tool - Goals for next PI.....

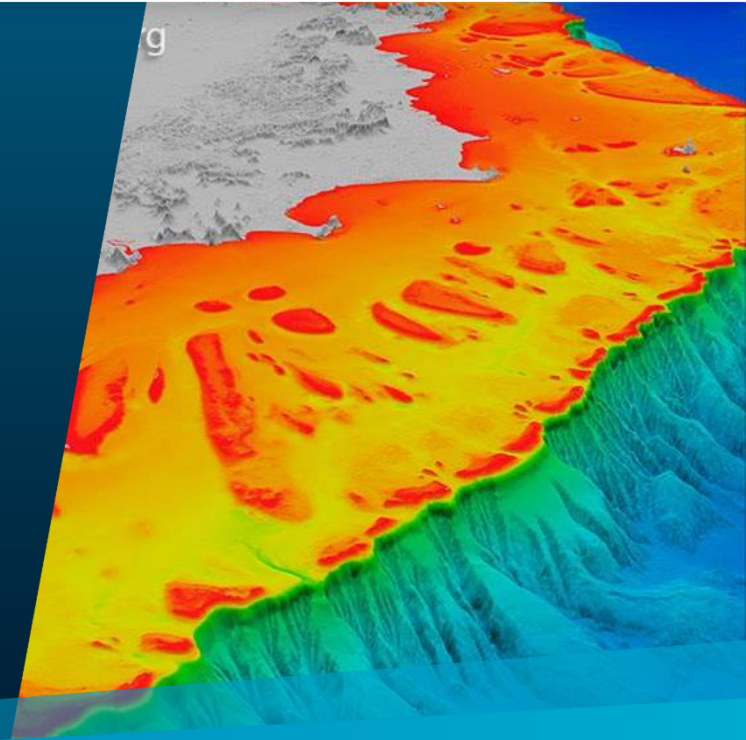
- Continue to:
    - support the user base, and increase the uptake of the tool
    - develop a backlog based on user feedback to form the foundations of future releases.
  - Scoping the system requirements for supporting the National Prioritisation Framework
- 

# ASB Quality Assurance tools

AusSeabed Quarterly Showcase

Matt Boyd | Lachlan Hurst

November 2020



# History

A screenshot of a complex spreadsheet or data table. It features numerous columns and rows of data. Some rows are highlighted in light green, and others in light blue. The text within the cells is small and difficult to read, but it appears to be a detailed data set or a list of items.

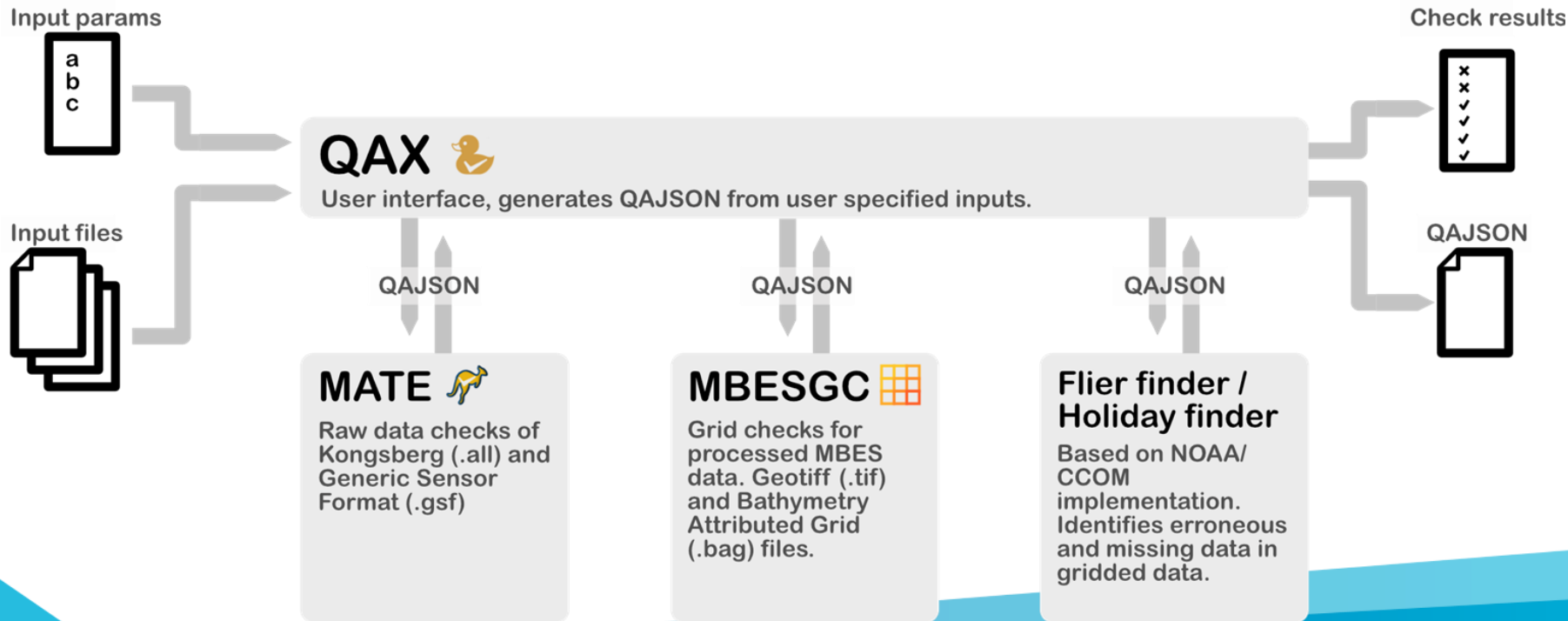
<https://www.hydrooffice.org/>  
[https://github.com/hydrooffice/hyo2\\_qax](https://github.com/hydrooffice/hyo2_qax)

## Quality Assurance tools

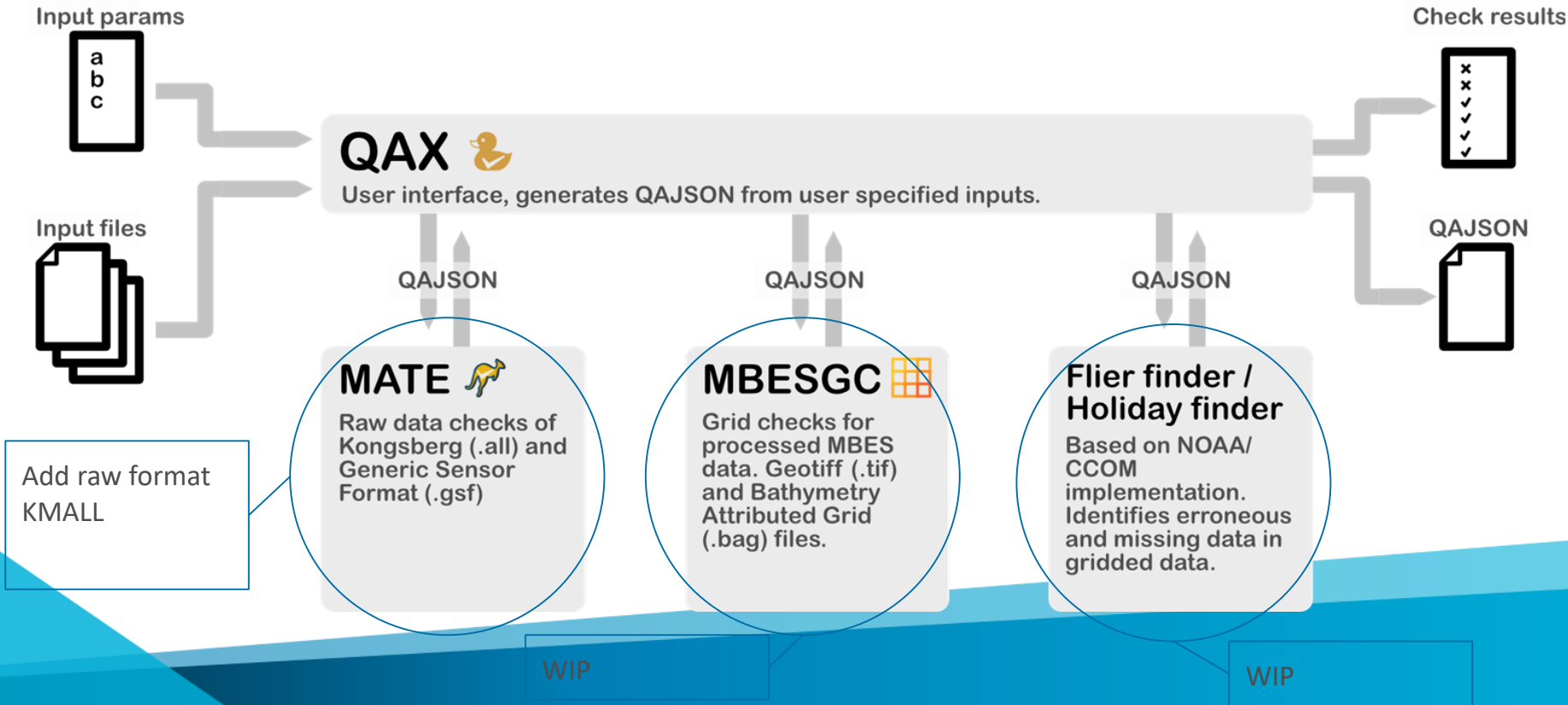
# Open Source



# Overview

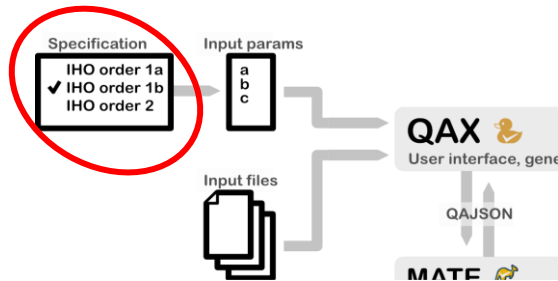


# Next Steps

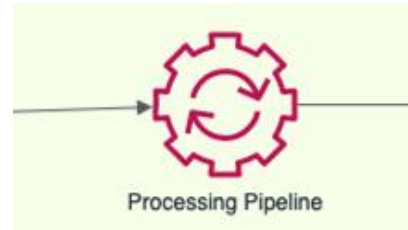


## Next Steps

- Once previous is completed will have what we believe to be a minimum viable product (MVP)
- Ambitiously wanting use of MVP in January next year
- Look to obtain feedback from users
- Following that plan is to further embed the tool within automated processes.



Support user input of specification



Integration of QA tools into processing pipeline

# Quality Assurance tools

## QAX

The screenshots show the following components of the QAX software:

- Run checks:** A window titled "Run checks" showing the execution status of a check. The status is "Complete" and the progress is "100%". A blue arrow points from the "Run" button in this window to the "Run" button in the "Run checks" window.
- Profile Settings:** A window titled "Profile Settings" showing the profile name "AppSealbed" and the check tool "Mate". A blue arrow points from the "Run" button in the "Run checks" window to the "Run" button in this window.
- Score Board:** A window titled "Score Board" showing a table of checks and their results. A blue arrow points from the "Run" button in the "Run checks" window to the "Run" button in this window.
- Score Board (Detailed):** A window titled "Score Board" showing a detailed view of the checks and their results. A blue arrow points from the "Run" button in the "Run checks" window to the "Run" button in this window.
- Score Board (Map View):** A window titled "Score Board" showing a map view of the data. A blue arrow points from the "Run" button in the "Run checks" window to the "Run" button in this window.

The Score Board table contains the following data:

ID	Check	Input	Status	QA Pass
1	830c4f10-54c9-4c50-b0d8-0174a6905091	Backscatter Available (s/t)	completed	✓
2	8c909ace-8739-4c2c-985a-0175988b0c821	Bathymetry Available (s/t)	completed	✓
3	4a303717-3a27-4402-93c4-df6d795d0002	Date checked (s/t)	completed	✓
4	9670ca01-d8a8-48f6-a77a-d8f6d8430808	Elipsoid Height Setup (s/t)	completed	✗
5	7716108b-1380-48f6-a77a-d8f6d8430808	Filename checked (s/t)	completed	✓
6	d7926797-730c-4a9f-a9d2-efc3e4744e17	Minimum Ping count (s/t)	completed	✓
7	54210302-6a37-4740-67d3-488b0e0e9994	Ray Tracing Available (s/t)	completed	✓
8	c1a857ad-4c50-418c-a086-0b0ca962768	Runtime Parameters (s/t)	completed	✓
9	9ef60b06-4761-4831-b04c-dc1ce9d80a46	Positions (s/t)	completed	✓
10	e57b7811-5963-49b3-ba06-a73a6fca0d15	SVP File Available (s/t)	completed	✓

The Score Board (Detailed) window shows the following data:

ID	Check	Input	Status	QA Pass
1	830c4f10-54c9-4c50-b0d8-0174a6905091	Backscatter Available (s/t)	completed	✓
2	8c909ace-8739-4c2c-985a-0175988b0c821	Bathymetry Available (s/t)	completed	✓
3	4a303717-3a27-4402-93c4-df6d795d0002	Date checked (s/t)	completed	✓
4	9670ca01-d8a8-48f6-a77a-d8f6d8430808	Elipsoid Height Setup (s/t)	completed	✗
5	7716108b-1380-48f6-a77a-d8f6d8430808	Filename checked (s/t)	completed	✓
6	d7926797-730c-4a9f-a9d2-efc3e4744e17	Minimum Ping count (s/t)	completed	✓
7	54210302-6a37-4740-67d3-488b0e0e9994	Ray Tracing Available (s/t)	completed	✓
8	c1a857ad-4c50-418c-a086-0b0ca962768	Runtime Parameters (s/t)	completed	✓
9	9ef60b06-4761-4831-b04c-dc1ce9d80a46	Positions (s/t)	completed	✓
10	e57b7811-5963-49b3-ba06-a73a6fca0d15	SVP File Available (s/t)	completed	✓

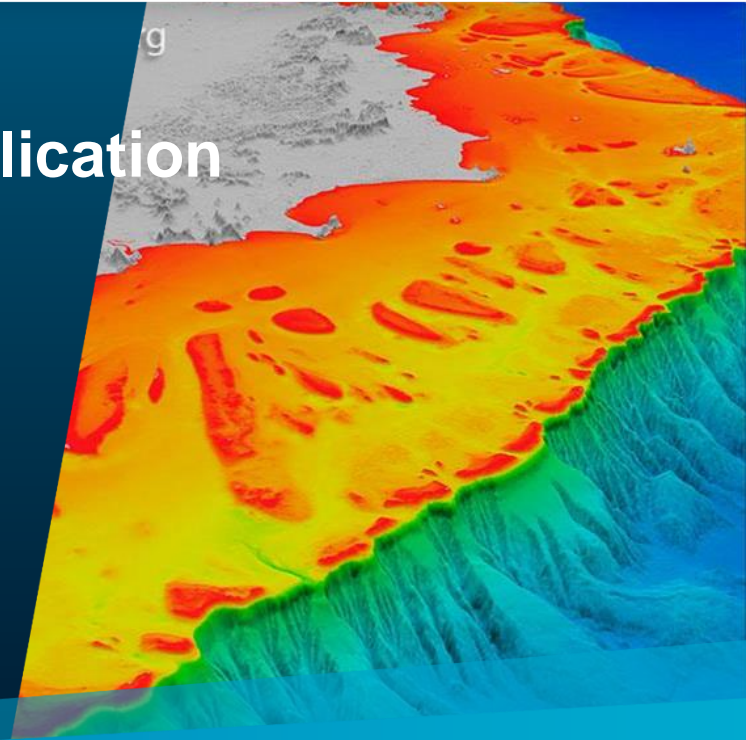
The Score Board (Map View) window shows a map of the study area with a red dot indicating the location of the data. The map is titled "QAX score: pass".

# Data Processing, Delivery and Publication

## AusSeabed Quarterly Showcase

Maggie Arnold | David Penton | Justy Siwabessy |  
Michele Spinoccia | Natalie Lennard |

November 2020



# Data Delivery Processing and Publication

- **Publication Schedule** now on the AusSeabed website

## Publication Schedule

### Bathymetry Publication Schedule

The AusSeabed Publication Schedule is a list of seabed mapping surveys that are intended for publication on the [AusSeabed Marine Data Portal](#). Currently, this process is a collaboration between Geoscience Australia and CSIRO, but is intended to expand in future with more AusSeabed data collaborators.

While AusSeabed aims to publish data to the level of adherence based on the requirements stated in the [AusSeabed multibeam guidelines](#) (version 1), we will also publish interim products (version 0) that are currently available, but have not yet been standardised (version 1). Users should be aware that V1 products will always supersede V0 products.

The status of each survey indicates the level of completeness, ranging from:

- **New:** The survey has been newly added to the schedule and has not yet progressed in the publication queue.
- **On Hold:** The survey has not yet progressed in the publication queue.
- **In Progress:** The survey is in progress of being published.
- **Published:** The survey is published on the AusSeabed Marine Data Portal and is available for viewing and downloading.
- **Not Applicable (N/A):** The survey has been published at a standardised level (version 1), and does not need to be published at a version 0 level.

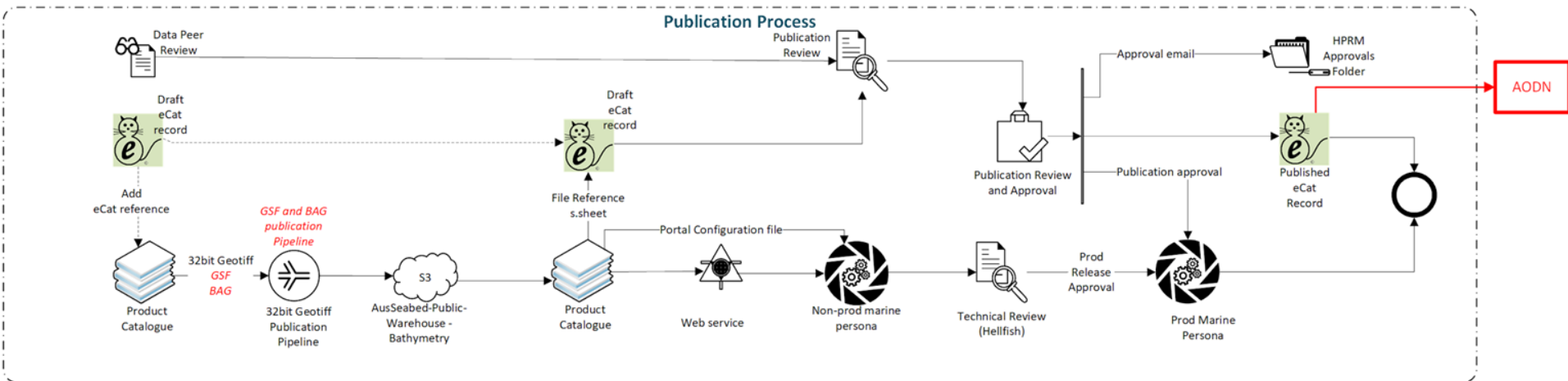
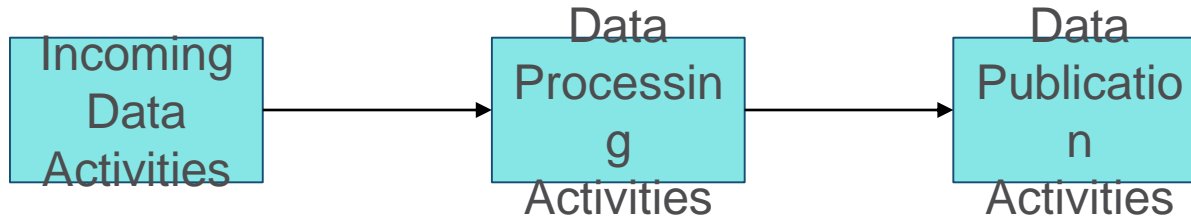
The Publication Schedule is updated weekly and once surveys are published on the AusSeabed Marine Data Portal, they will be removed from the table after a fortnight.

If you are interested in more information or would like to become an AusSeabed collaborator, please contact us at [ausseabed@ga.gov.au](mailto:ausseabed@ga.gov.au).

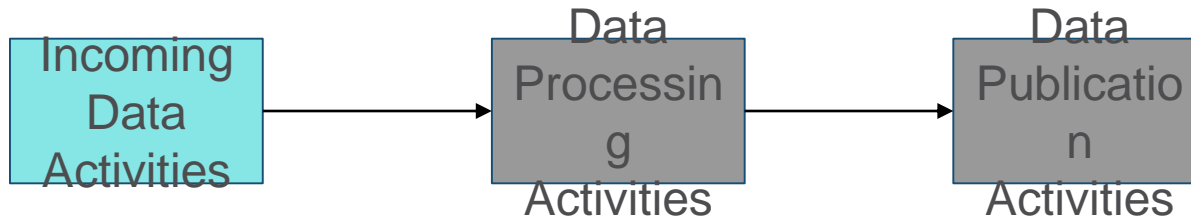
Publication Schedule for GA and CSIRO bathymetry data : AusSeabed website

Estimated date of release	Entity to release	Dataset label	Collecting Entity	Survey year	Status
24 October 2020	GA	Elizabeth Middleton reefs V1	NESP	2020	In Progress
24 October 2020	GA	Outer Darwin Harbour V1	GA/NT/AIMS	2015	In Progress
30 October 2020	GA	Bynoe Harbour V1	GA/AIMS/NT	2016	In Progress
20 November 2020	GA	Davis Coast Survey 2017 V1	GA/AAD/AHO	2017	On Hold

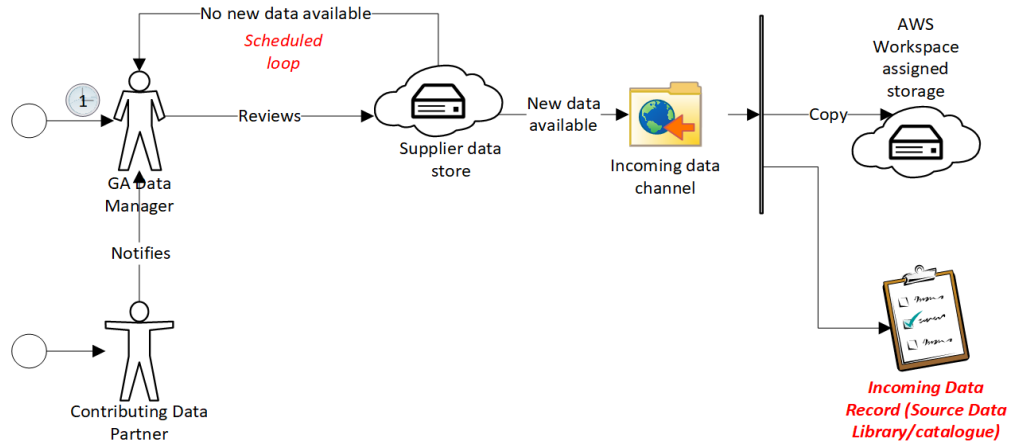
# Data Delivery Processing and Publication



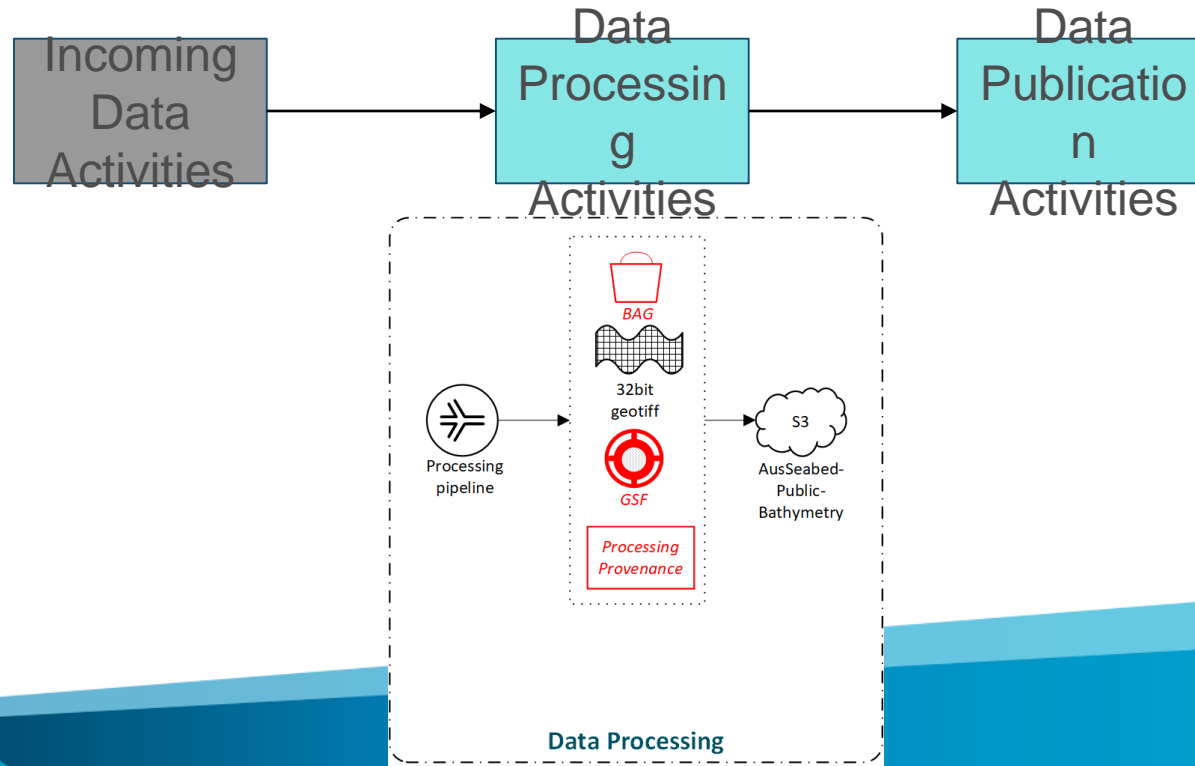
# Data Delivery Processing and Publication



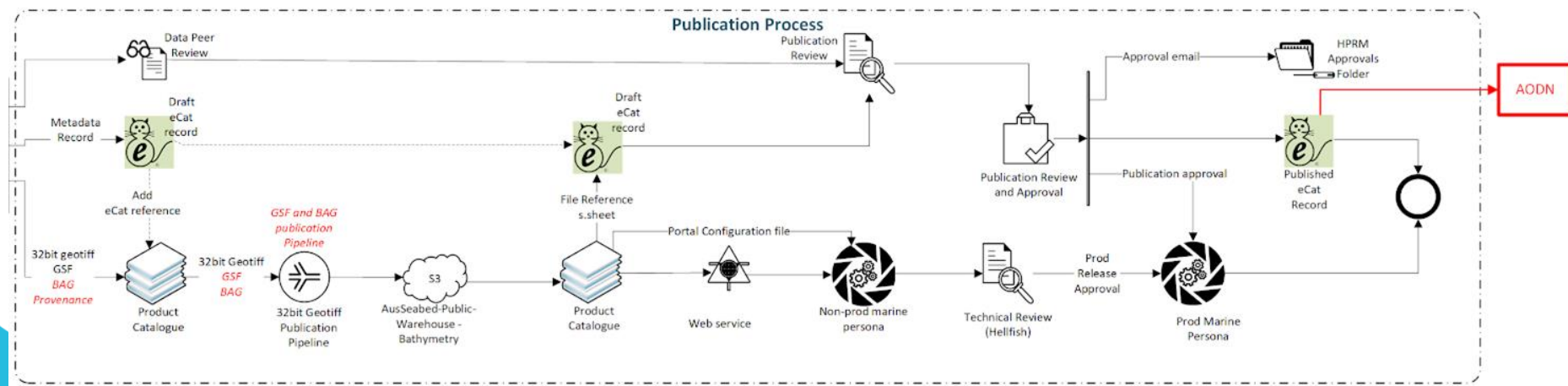
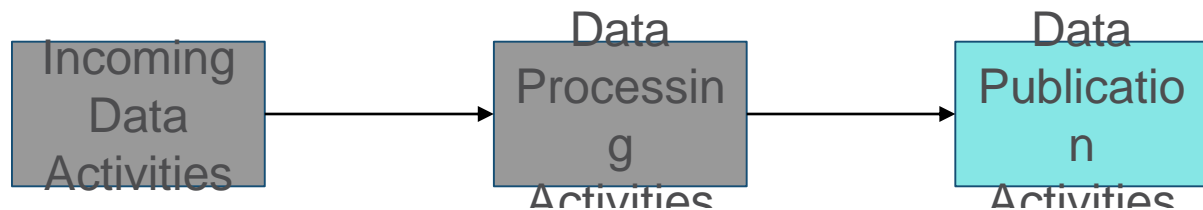
## Incoming Data Processes



# Data Delivery Processing and Publication

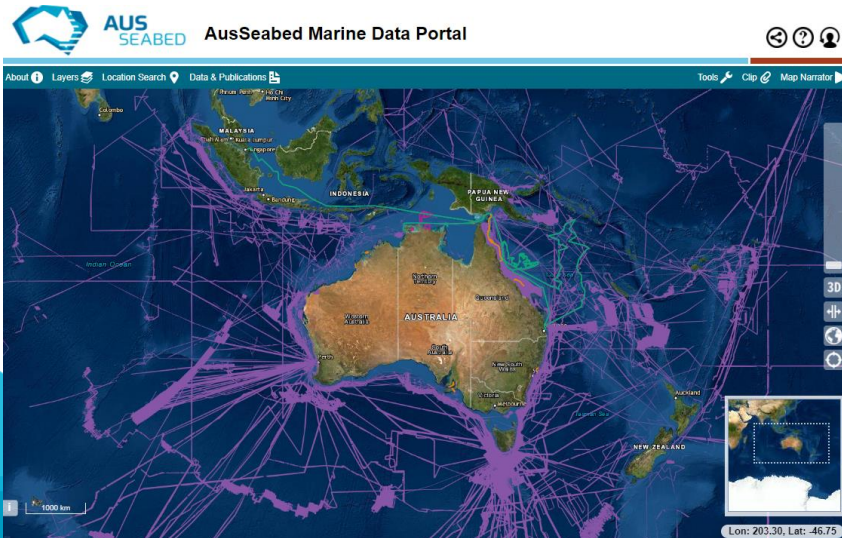


# Data Delivery Processing and Publication



# AusSeabed Marine Data Portal update

- **Portal enhancements:** Improved download functionality (WCS), 3D visualisation, Map narrator, Profile Tool to include bathymetry grids, Clip-Zip-Ship, User authentication.
- External contributor data publication pipeline



## Becoming a Contributing Data Partner Profile Form

### Contributing Data Partner Profile

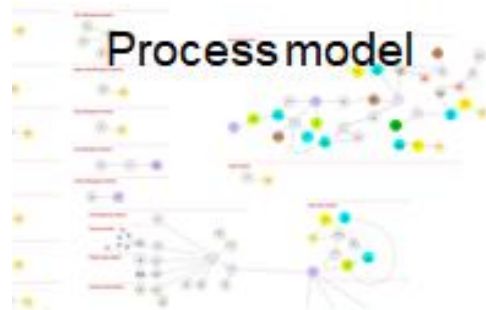
#### Data Provision

Please provide the contact details for the organisation that will be providing data to the GA Local Hub.

Organisation Name:

Organisation Representative (contact name):

# User Needs Analysis



Process model




Data model

Screen designs



## Take home points

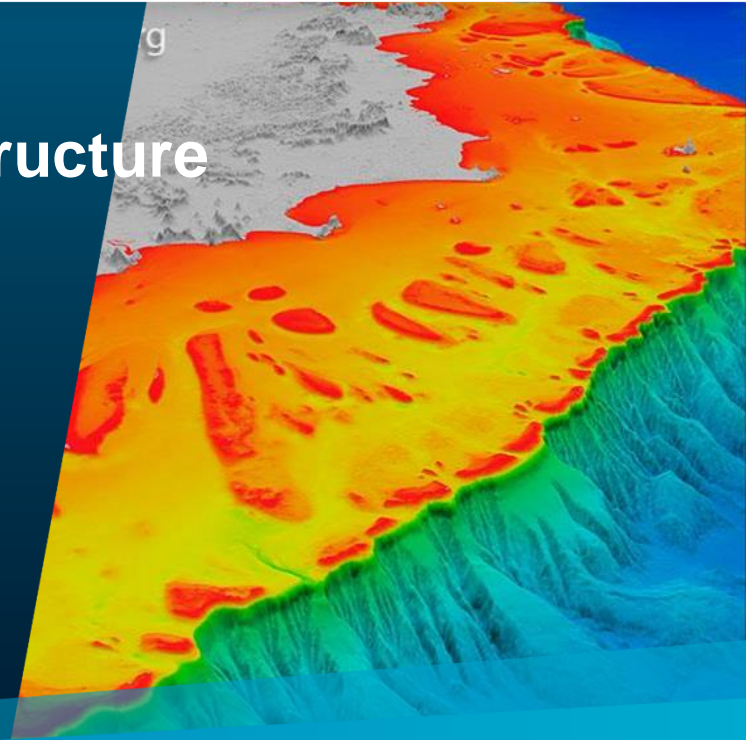
- The next PI will be focussed on **gathering user feedback** for the Portal
  - Publishing what we promised to publish on the **Publication Schedule**
    - Focus on **Publishing** our data holdings
    - Refining external contributing partners publication pipeline
  - **Usage statistics** to be gathered from Portal Clip tool
  - Portal Wireframe progression
- 

# Data Warehouse and Cloud Infrastructure

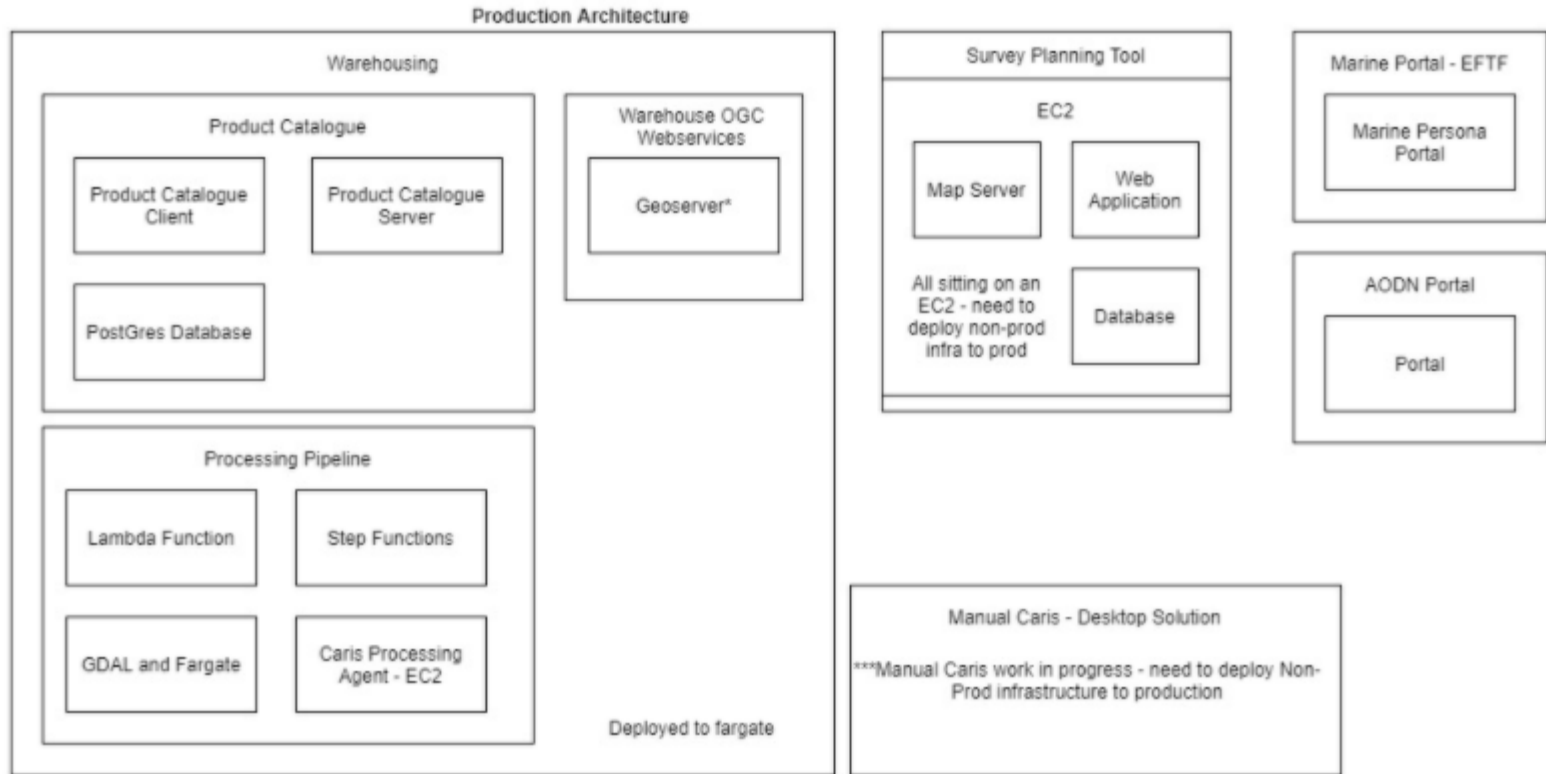
AusSeabed Quarterly Showcase

Maggie Arnold/David Penton | Ghalib Ahmad | Natalie Lennard

November 2020



# Ausseabed Data Warehouse



# Ausseabed Data Warehouse

- Product Catalogue update
  - Internal tool to support data publication
- Processing Pipeline for Level 3 data in place producing cloud-optimised geotiffs
- Processing Pipeline now implemented for Level 2 data

The screenshot displays the 'Ausseabed Product Catalogue' interface. The top navigation bar is blue with the title 'Ausseabed Product Catalogue' and version 'v1.0.10'. Below the navigation bar, the user 'Maggie.Arnold@ga.gov.au' is logged in. The left sidebar contains a menu with icons and labels: 'Home' (Welcome page), 'Survey Datasets' (Add or remove information about bathymetry products), 'Reports' (Identify files that are missing), 'Export Datasets' (Export dataset information for use in the Marine Portal), 'REST API' (Directly access the REST API to the Product Catalogue), and 'Logout' (Logout of the system). The main content area shows details for the product 'Gazetteer Beagle Commonwealth Marine Reserve Bathymetry Ellipsoid'. It includes fields for 'Resolution' (3m), 'Spatial Reference System' (EPSG:4326), 'Vertical Datum' (Ellipsoid (Best)), 'Metadata Persistent Id' (http://pid.geoscience.gov.au/dataset/ga/130301), and 'uri'. Below these fields, there are sections for 'L3 Product Tif Location' and 'L3 Product BAG Location', each with an 's3 uri'. At the bottom, there are 'SUBMIT' and 'CANCEL' buttons. A modal window at the bottom right shows 'Processed Products (Id=514):' with a list of products and their corresponding S3 URIs.

**Ausseabed Product Catalogue** v1.0.10

Maggie.Arnold@ga.gov.au ae23fcb7-

**Home**  
Welcome page

**Survey Datasets**  
Add or remove information about bathymetry products

**Reports**  
Identify files that are missing

**Export Datasets**  
Export dataset information for use in the Marine Portal

**REST API**  
Directly access the REST API to the Product Catalogue

**Logout**  
Logout of the system

Quasar v1.12.13

Gazetteer  
Beagle Commonwealth Marine Reserve Bathymetry Ellipsoid

Resolution  
3m

Spatial Reference System  
EPSG:4326

Vertical Datum  
Ellipsoid (Best)

Metadata Persistent Id  
http://pid.geoscience.gov.au/dataset/ga/130301

uri

L3 Product Tif Location  
s3://ausseabed-public-bathymetry/L3/0364\_beagle\_park/esri\_grid/ga-0364\_ausseabed\_cube\_03m\_epsg-4326\_20200824\_ellipsoid.tif

s3 uri

L3 Product BAG Location

s3 uri

**SUBMIT** **CANCEL**

**Processed Products (Id=514):**

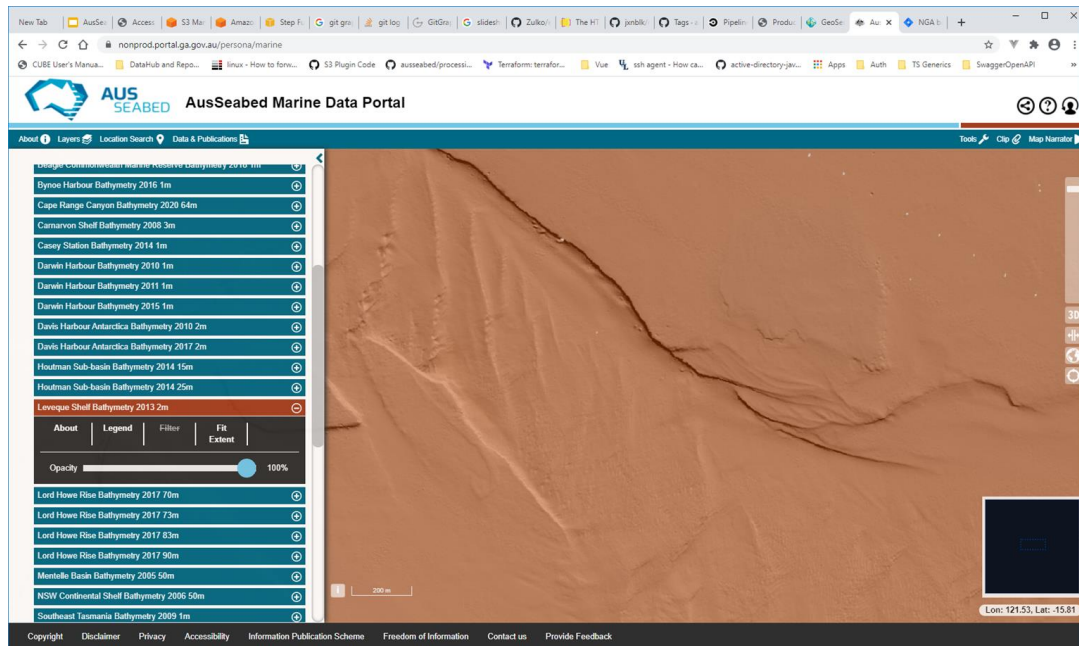
Bathymetry (tif): s3://ausseabed-public-warehouse-bathymetry/L3/a7b46b25-40af-4271-98f3-326b6c864bed/Beagle\_Commonwea

Bathymetry (bag):

Hillshade: s3://ausseabed-public-warehouse-bathymetry/L3/a7b46b25-40af-4271-98f3-326b6c864bed/Beagle\_Commonwea

# Ausseabed Data Warehouse

- Publishing bathymetry as webservice
  - Increasing access to Ausseabed survey and compilation data
- Publishing bathymetry to the Portal
  - Increasing multibeam data available to our users
  - Different download options
- AODN linkage



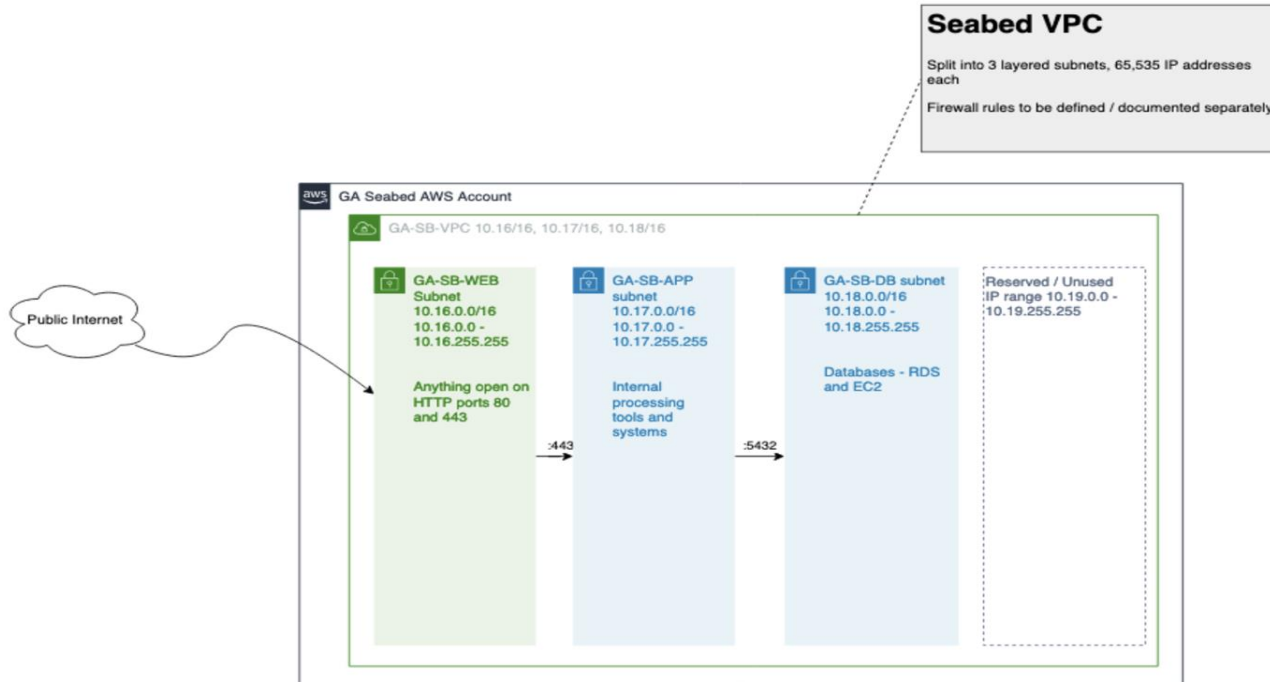
# Cloud Infrastructure

Goals for the last PI:

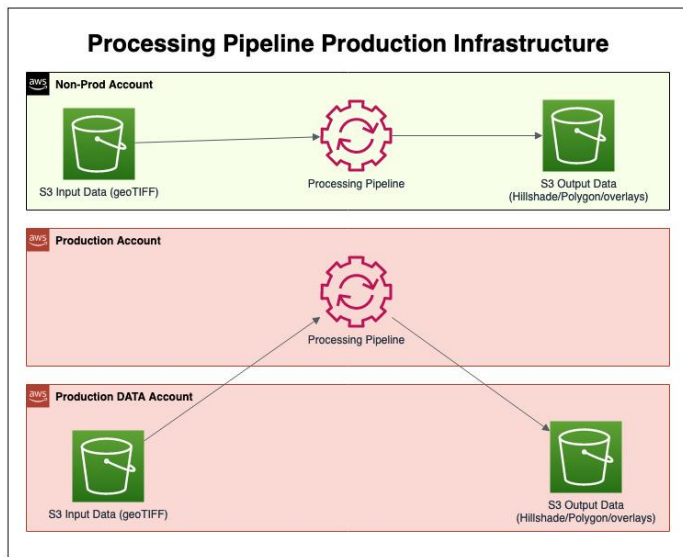
1. Data Management and processing in the cloud ✓
2. Deploying CARIS in the cloud ✓

# Cloud Network Model

## Seabed AWS Network Diagram - High Level

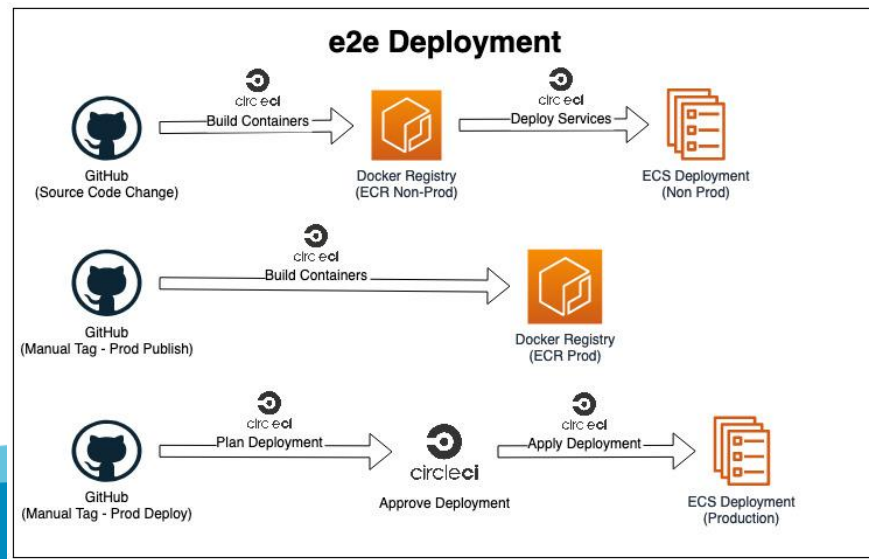


# Processing Pipeline Infrastructure



- Cloud processing and data management infrastructure established
  - Segregation of non-prod and production accounts to ensure production environments integrity
  - Segregation of production processing and data management to ensure data integrity and persistence

- Fully automated deployment pipeline established:
  - Provides for rapid deployment,
  - Consistency in deployment process (fewer errors), and
  - Rapid engagement of new resources through use of industry best practice.



# CARIS in the Cloud

The image displays a virtual desktop environment powered by Amazon WorkSpaces. The desktop background is dark blue with the Amazon WorkSpaces logo in the bottom right corner. A large white text overlay in the center reads "32GB RAM, 2TB of associated storage". The left sidebar contains several application icons: Recycle Bin, Sonar Record Viewer, Amazon WAM, WinSCP, RNX Convert To RINEX, Install Amazon..., Firefox, Google Chrome, MATLAB R2020b, and POSpac MMS 8.3. The bottom taskbar shows various system icons and the time 9:57 AM. An Amazon WorkSpaces login window is open in the foreground, featuring the Amazon WorkSpaces logo, a login prompt, input fields for username and password, a "Sign In" button, a "Forgot Password?" link, and a "Keep me logged in" checkbox. The login window also includes a "Change Registration Code" link.

Amazon WorkSpaces

Amazon WorkSpaces View Settings Support

Recycle Bin Sonar Record Viewer

Amazon WAM WinSCP

RNX Convert To RINEX Install Amazon...

Firefox

Google Chrome

MATLAB R2020b

POSPac MMS 8.3

32GB RAM,  
2TB of associated storage

amazon WorkSpaces

Amazon WorkSpaces Settings Support

amazon WorkSpaces

Please log in with your ausseabed-poc credentials

justy-powerpro

Password

Sign In

Forgot Password?

☒ Keep me logged in

[Change Registration Code](#)

Access your desktop anywhere, anytime, from any device

9:57 AM

9:57 AM

# CARIS on Workspaces in the Cloud

The image displays the CARIS HIPS and SIPS software interface, which is used for processing and visualizing hydrographic data. The interface is divided into several panes:

- Command Prompt (Left):** Shows a series of commands being executed to import and process data. The commands involve running `carisbatch.exe` with various parameters to import HIPS data from auxiliary files, process it, and generate track lines. The commands are repeated for different time periods (e.g., 2020-219, 2020-220, 2020-221, 2020-222).
- Map View (Center):** Displays a map of the study area, showing the track lines generated from the processed data. The track lines are represented by red lines on a map of the coastal region.
- Layers (Left Panel):** Lists the data layers loaded in the project, including "All Critical Soundings", "GA-0365 Critical Soundings", "All Track Lines", "GA-0365 Track Lines", and "All Contacts".
- Active Track Lines (Left Panel):** Shows the active track lines for the selected vessel, "RV\_Falkor\_EM302". It lists the track lines for different days: "Day = '2020-214'", "Day = '2020-215'", and "Day = '2020-216'".
- Properties - Track Lines (Right Panel):** Provides detailed information about the selected track line, including the HIPS file, Vessel, Day, Line Name, Line Path, Min Time, Max Time, Total Time, Resolution, Locked status, Input CRS, Modified time, and Navigation S.
- Selection (Bottom Left):** A table showing the selected track lines, including the HIPS file, Vessel, Day, Line Name, and Line Path.
- Log Viewer (Bottom Right):** Displays the log of the processing steps, including "Generic Sensor Format GSF", "Import HIPS From Applanix POS MV", and "Georeference Bathymetry".

The bottom status bar indicates the selected area (569), the coordinate system (WGS 84 / UTM zone 55S [WG84]), and the time (1:15:18 AM).

# Where to next:

## Data Warehouse:

- Technical Lead recruitment in progress = **Continued investment in innovation**
- Other data types to incorporate into the Publishing pipeline
  - Backscatter = **Expanding into other data types**
- Marine Sediments dynamic webservices = **bringing new versions of services online**
- Resolution of Technical debt = **continued investment in improvement**
- AODN linkage = **connecting with others**

## Cloud infrastructure:

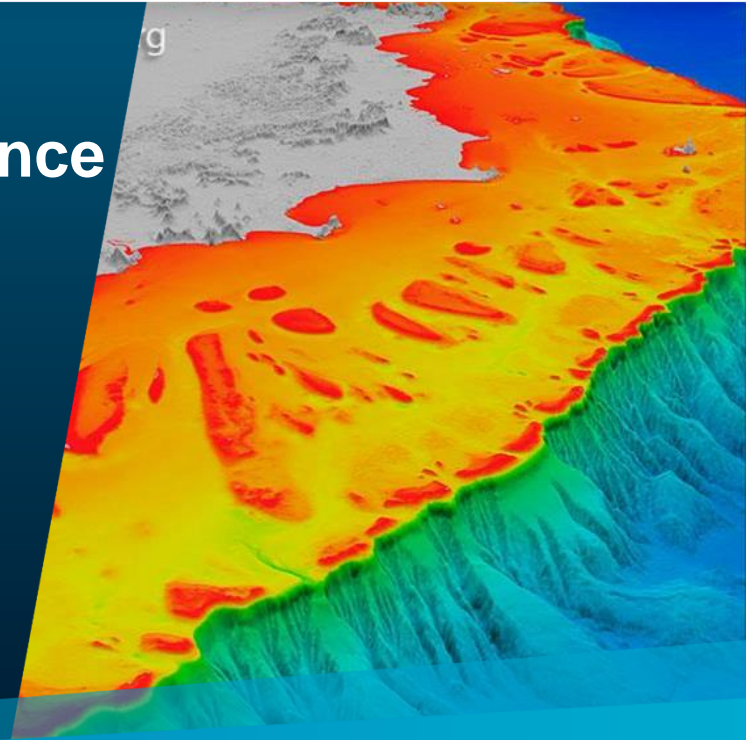
- Maturation of the processing pipeline for all levels (delivery of L2 processing in the cloud) = **new processing pathway to broaden the products available**
- Development of cloud based incoming pathway for consistent data submission = **consistent method for adding data to the GA ASB Hub**

# Data Hub Policy and Data Governance

AusSeabed Quarterly Showcase

Natalie Lennard

November 2020



# Data Hub Policy and Data Management

Goals for the last PI:

1. Establish our core data management policies: ✓
  - a. Incoming data Policies
  - b. Data storage policies
  - c. Data distribution Policies
2. Establish the supporting business processes to implement agreed policies ✓
3. Implement the policies ✓
4. Distribute the information to the team and community ✓

## AusSeabed Data Management Documentation

- GA Local Hub Metadata Requirements
- GA Contributing Hub Data Distribution Policies
  - GA Local Hub Publication Process
    - GA Local Hub Prioritisation Process
    - Updating the Publication Schedule
    - eCat and the Publication of Contributing Data ...
    - Review process of Nonproduction Ausseabed ...
- GA Contributing Hub Storage Model
- GA Contributing Hub Web Content
  - What kind of contributor are you?
  - How to register for the Survey Coordination Tool
- AusSeabed Local Hub Technical Requirements
- AusSeabed Survey Coordination Tool
- Document Checklist

## Archived pages

- GA Local Hub Metadata Requirements
- GA Contributing Hub Data Distribution Policies
  - GA Local Hub Publication Process
    - GA Local Hub Prioritisation Process
    - Updating the Publication Schedule

AusSeabed Data Management Documentation / AusSeabed Data Management Policies, Processes, Forms and Tools

...

## AusSeabed Local Hub Technical Requirements



Created by D Penton  
Last updated Oct 19, 2020 • 6 min read

The Local Hub must provide three services:

- publication of ISO19115-3 metadata through a catalogue service - nominally GeoNetwork
- publication of Web Mapping Service and Web Coverage Service according to AusSeabed protocols
- direct download of Local Hub products through HTTP protocol

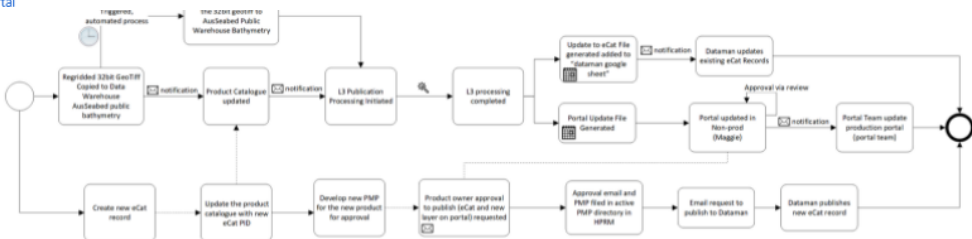
The Local Hub must also provide a description of their holdings in an Excel format that can be read by the

both new incoming data processing  
ion will be relevant until such time  
erships are put into place.

mitted funding specifically for  
ership program. Under this model,  
resources that is also provided by

To be available through the AusSeabed website in the next PI.

- Publication of ISO19115-3 metadata
  - General Background
  - Technical Details
- AusSeabed protocols for publishing Web Mapping Service and Web Coverage Services
  - Naming of layers
  - Bathymetry
  - Hillshade
  - Extent Polygon
- Direct download of Local Hub products
- Description of holdings for inclusion in EFTF Portal
  - Display names on the portal



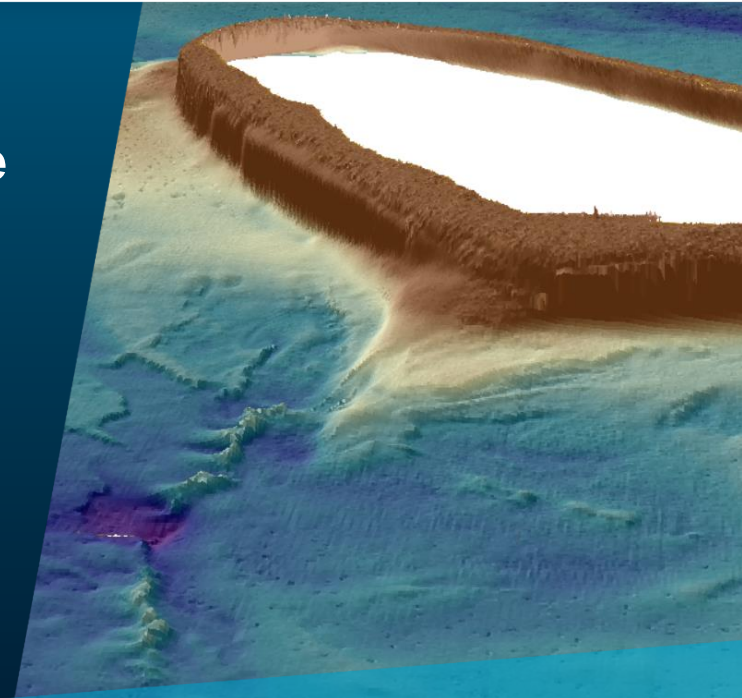
# Data Hub Policy and Data Management - Goals for next PI.....

1. Finalise the content and publish the policies to the community = **focussing on connecting other hubs/collecting other data!**
2. Transition to sections operations team:
  - a. BAU for Survey Coordination tool = **operational services**
  - b. BAU for L3 publication = **operational services**
3. Continue to develop supporting policies and procedures as required/identified = **continued investment in improvement**

# More Data from Everywhere and Everyone

Linking contributing hubs

AusSeabed Quarterly Showcase – Nov 20 to Feb 21



# Program Increment Goals

Program Objectives	PI Goals	Status
Improve coordination of activities relating to seabed mapping.	<ol style="list-style-type: none"><li>1. Engagement plan in place to progress Aus-US collaboration (GA, CSIRO, NOAA)</li><li>2. National Prioritisation Framework workshop delivered</li></ol>	
Expand the number of bathymetric products openly accessible through the AusSeabed platform.	<ol style="list-style-type: none"><li>1. Finalise CSIRO hub integration</li><li>2. Two new contributing hubs underway (1. IMSA-PAWSEY; 2. TBD)</li><li>3. Continue data publication of Falkor ongoing surveys in Aus</li><li>4. GA fully transitioned to cloud-based processing (workstation)</li><li>5. Operational Cloud Automated Processing Pipeline for key data levels</li></ol>	
Secure an enduring AusSeabed program to continue realising benefits to the community relying on seabed mapping.	<ol style="list-style-type: none"><li>1. Collaborative agreement between EB signed</li><li>2. Key agreements signed between CSIRO, AHO</li><li>3. Communication and Engagement Strategy published</li></ol>	
Deliver products and services focused on the needs of key stakeholders and end-users.	<ol style="list-style-type: none"><li>1. QA tools (QAX) in testing with volunteered HIPP contractors</li><li>2. Portal wireframe report delivered and socialised with key stakeholders</li></ol>	

# Thank you



Visit: [www.ausseabed.gov.au](http://www.ausseabed.gov.au) or  
Email: [ausseabed@ga.gov.au](mailto:ausseabed@ga.gov.au)