

National Environmental Science Program

Improving knowledge transfer to support Australian Marine Park decision making and management effectiveness evaluation

Project 2.3

Contacts: Keith Hayes, Peter Walsh CSIRO, IMAS



Project Objectives

- Identify the data products needed to assess the condition of Australian Marine Park (AMP) values.
- Assess the availability of, and access to, these data products and whether they are currently fit for purpose.

Key Questions and the Data Product Hierarchy

- Key Questions
 - 1. What natural values are in the area of interest?
 - 2. What state or condition are the natural values in?
 - 3. How special are the natural values?
 - 4. How might the natural values respond to a pressure, activity, or management action?
 - 5. Where is the activity, incident, or pressure occurring in relation to where the values are?
 - 6. What management actions can be taken to contribute to zone objectives and conservation goals for the natural values?



Publication Repository

Science Reports and Publication

CRM Database

Researcher profiles

Level -1

Level -2

Research capability

and contacts data

Reports and publications (unstructured data)

Conversations with Traditional Owners

and Researchers

ROVs

Management Publications

National Areas of Interest

Vessel and equipment inventories

Key Questions and the Data Product Hierarchy

- Data Product Hierarchy
 - Deployments and monitoring sites
 - Primary data, samples, imagery
 - Observations
 - Component distributions, imagery
 - Distributions, monitoring summaries, status assessments
 - Visualisation, analytics and reporting



Conceptual data and information supply chain



Parks Australia Quality Assurance Framework

- Identifies 6 data quality assurance aspects.
- 41 questions to assess each of the quality criteria
 - Requirements (4)
 - Science (7)
 - Production (10)
 - Stewardship (9)
 - Service (7)
 - Use (4)



Shared Analytics Framework for the Environment (SAFE 2.0)

Identifies key capabilities at six stages of a data product lifecycle and quality culture to achieve a national supply chain of environmental information.



Mapping the quality assurance framework to SAFE 2.0



Quality assessment outcomes



Quality assessment outcomes

- Recommendations
 - 20 priority data products
 - 10 data providers
 - 111 recommendations
- Paths to adoption
 - Related projects



Quality assessment outcomes

- General Recommendations
 - National standards and service principles for marine science data
 - Access to sensitive and embargoed data
 - Infrastructure sustainability





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FINAL REPORT Project 2.3 December 2024

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