| | |
|---|---|
| Title | Nearshore subtidal marine reef systems and soft sediment mapping, New South Wales |
| Alternative title(s) | NearshoreSubtidalMarineReffMapping2002.shp |
| Abstract | Near-shore reef boundaries mapped from available aerial photography over a range of years and scales. The mapped reef boundaries represent the greatest extent of reef observed over multiple years ie. mapped reef area includes reefs prone to intermittent sand inundation. Unrectified photos were used. Mapping has been conducted in several stages with the current version 5 being extended to include the coast between Port Jackson and Newcastle. Clarence River and Tweed Heads. Mapping is effectively complete with about 0.2% of the NSW coast remaining unmapped due to a number of reasons - unavailability of suitable aerial photos; poor visibility through the water column in deep nearshore zones (eg Sydney Heads south). This mapping was conducted by NSW National Parks and Wildlife Service, and is owed jointly by NPWS, NSW Fisheries, NSW Marine Parks Authority, NSW Department of Land and Water Conservation and Environment Australia. Aerial photos used in this process were provided by NSW Dept of Land and Water Conservation's Specialist Coastal and Floods Unit. |

## Resource locator

| | |
|---|---|
| Data Quality Statement | Name: Data Quality Statement<br>Protocol: WWW:DOWNLOAD-1.0-http--download<br>Description:<br>DQS for Nearshore subtidal marine reef mapping<br>Function: download |
| Nearshore Subtidal Marine Reef data package | Name: Nearshore Subtidal Marine Reef data package<br>Protocol: WWW:DOWNLOAD-1.0-http--download<br>Description:<br>Data package including data, reports, and associated documentation...<br>Function: download |

## Unique resource identifier

| | |
|---|---|
| Code | f357f40e-0d9a-4d29-b4fd-4e61729a1752 |

| | |
|---|---|
| Presentation form | Document digital |
| Edition | 1 |
| Dataset language | English |

## Metadata standard

| | |
|---|---|
| Name | ISO 19115 |
| Edition | 2016 |

| | |
|---|---|
| Dataset URI | https://datasets.seed.nsw.gov.au/dataset/f357f40e-0d9a-4d29-b4fd-4e61729a1752 |
| Purpose | This coverage is intended for used in regional level marine conservation assessment. It was prepared using very low cost techniques (ie. unrectified API) and should not be relied upon for navigation purposes. THIS DATA IS NOT SUITABLE FOR NAVIGATION PURPOSES. |
| Status | Completed |

## Spatial representation

| | |
|---|---|
| Type | vector |

## Spatial reference system

| | |
|---|---|
| Code identifying the spatial reference system | 4283 |

## Spatial resolution

50 m

## Additional information source

ATTRIBUTES:;SUBSTRATE Categories: "Reef": includes bedrock, bolder/cobble fields, barrens below the approximate astronomical low water mark; "Sand": includes sand and soft sediments;"Emergent": includes emergent and intertidal components of islands and rocks derived directly from the AMBIS low water coverage (Marine). Emergent areas should be treated as outside in any analysis of subtidal (ie. below astronomical low water) habitats. For delineation of intertidal and supratidal components of these 'emergent' units use the complementary intertidal coverage;"Outside": includes areas not covered by available aerial photography, or bottom was not clearly visible through the water column.;HABITAT Categories (on selected reef only):"Barrens" : Large areas of unvegetated reef, grazed and maintained by urchins;"Fringe" : Includes vegetated reef;"Sand": includes areas of sand and soft sediments;"Emergent": includes emergent and intertidal components of islands and rocks derived directly from the AMBIS low water coverage (Marine). Emergent areas should be treated as outside in any analysis of subtidal (ie. below astronomical low water) habitats. For delineation of intertidal and supratidal components of these 'emergent' units use the complementary intertidal coverage; "Outside": includes areas not classified to habitat level, along with areas not covered by available aerial photography, or where bottom type was not clearly visible through the water column.;METHOD:;Aerial photos of varying scales (generally 1:10,000, but ranging from 1:8,000 to 1:40,000) and dates (1970's to 2000) were traced onto 1:25,000 scale topographic maps using a 'Zeiss - Aero Sketchmaster'. Only photos with sharp visibility through the water column were utilised. Multiple photos where viewed and traced for any one location with the final linework representing the greatest extent of reef visible over the period examined. Obvious algal drifts were excluded. Photos and digitised composite remain un-rectified. No ground truthing conducted, but reliance on experience of interpreter and capacity to check reef boundary positions at a site across a time series of photo images. The AMBIS 1995 low water coast ('marine') was editied into the coverage. Where, the AMBIS coast was not available (eg behind bay closures), the coastline from LIC 1:25,000 topos was applied.Where clear images allowed, additional attributes, habitats (ie barrens, fringe) where mapped on a selection of reefs. The attribute accuracy of these habitat features remains unvalidated and should be consided to be of poor quality at this point in time.

## Topic category

## Keyword set

| | |
|---|---|
| keyword value | ECOLOGY-Habitat |
| | FISHERIES |
| | FISHERIES-Marine |
| | MARINE |
| | MARINE-Biology |
| | MARINE-Coasts |
| | MARINE-Reefs |
| | OCEANOGRAPHY |

Originating controlled vocabulary

| | |
|---|---|
| Title | ANZLIC Search Words |
| Reference date | 2008-05-16 |

## Geographic location

| | |
|---|---|
| West bounding longitude | 149.7 |
| East bounding longitude | 153.6 |
| North bounding latitude | -37.6 |
| South bounding latitude | -28.1 |
| NSW Place Name | NSW Coast |

## Vertical extent information

| | |
|---|---|
| Minimum value | -100 |
| Maximum value | 2228 |
| Coordinate reference system | |
| Authority code | urn:ogc:def:cs:EPSG:: |
| Code identifying the coordinate reference system | 5711 |

## Temporal extent

| | |
|---|---|
| Begin position | 1940-10-18 |
| End position | N/A |

## Dataset reference date

## Resource maintenance

| | |
|---|---|
| Maintenance and update frequency | Unknown |
| Contact info | |
| Contact position | Data Broker |
| Organisation name | NSW Department of Climate Change, Energy, the Environment and Water |
| Telephone number | 131555 |
| Email address | data.broker@environment.nsw.gov.au |
| Web address | https://www.nsw.gov.au/departments-and-agencies/dcceew |
| Responsible party role | pointOfContact |

Lineage

Lineage:; Mapping has been conducted in five stages.; Version 1: The first stage of the 'Nearreef' coverage mapped the area from Woody Head (29 22'S) to Sawtell (30 22' 30'' S). This work was initiated in 1996 by the NPWS and completed with funding from the recently established NSW Marine Parks Authority in preparation for the development of zonation plans for the Solitary Island Marine Park. The coverage was prepared in ERMS and converted to ArcView. Reef boundaries from unrectified aerial photos were transferred onto 1:25,000 topographic sheets using a Zeizz Aero Sketchmaster before being digitised. The coastline was digitised directly from the 1:25,000 topo sheets.; Version 2: Second stage extended mapping from Sawtell to Newcastle. Data capture was conducted at NPWS with funding from the NSW Marine Parks Authority and Environment Australia as part of the Manning Shelf Bioregional Assessment. Methodology remained essentially the same as stage 1, however data capture in stage 2 was achieved using ArcInfo GIS software and the 1:25,000 Topographic map coastline was replaced with the AUSLIG/AMBIS 1995 low water coastline ('marine').; Version 3: Third stage extended mapping from Port Jackson (ie.Sydney) south to Cape Howe (ie. NSW-Victorian Border). Mapping was undertaken by NPWS in mid 2001 with funding from NSW Fisheries. Methods used were identical to those in Stage 2 except that additional reef habitats (ie barrens, fringe) were mapped for selected areas south of Sydney.; Version 4: Fourth stage extended mapping north from Woody Head (29 22'S) to Tweed Heads (ie.NSW - Queensland border). Mapping was undertaken by NPWS in mid 2001 with funding from the NSW Marine Parks Authority as part of the investigations into the Byron Bay Marine Park proposal.; Version 5: Fifth stage essentially complete the last major stage in the mapping of the NSW coast, between Sydney and Newcastle. Mapping was conducted by NPWS with funding from NSWF.; Positional accuracy:; Fair. Upto +/- 50m. Error due to tracing of unrectified aeral photos; Attribute accuracy:; Fair for substrate (sand, reef) categories.; Poor for reef habitat categories (barrens, fringe).; No ground truthing conducted. Possible confunding effect of algae drifts generally eliminated by viewing multiple images of any one site.; SUBSTRATE Categories; 'Reef': includes bedrock, bolder/cobble fields, barrens below the approximate astronomical low water mark.; 'Sand': includes sand and soft sediments; 'Emergent': includes emergent and intertidal components of islands and rocks derived directly from the AMBIS low water coverage (Marine). Emergent areas should be treated as outside in any analysis of subtidal (ie. below astronomical low water) habitats. For delineation of intertidal and supratidal components of these 'emergent' units use the complementary intertidal coverage.; 'Outside': includes areas not covered by available aerial photography, or bottom was not clearly visible through the water column; HABITAT Categories (on selected reef only); 'Barrens' : Large areas of unvegetated reef, grazed and maintained by urchins.; 'Fringe' : Includes vegetated reef; 'Sand': includes areas of sand and soft sediments; 'Emergent': includes emergent and intertidal components of islands and rocks derived directly from the AMBIS low water coverage (Marine). Emergent areas should be treated as outside in any analysis of subtidal (ie. below astronomical low water) habitats. For delineation of intertidal and supratidal components of these 'emergent' units use the complementary intertidal coverage.; 'Outside': includes areas not classified to habitat level, along with areas not covered by available aerial photography, or where bottom type was not clearly visible through the water column; Logical consistency:; Good. Good reef boundary consistency between years, although sand drift (constriction of some reefs) was observed.; Completeness:; Version 5 maps reefs along the whole NSW coast (ie Tweed Heads to Cape Howe); reefs are mapped in waters upto 1km offshore and in depths upto 20m. A number of small gaps exist in the cover where suitable images were not availble, or where wave exposure and excessive depth obscured reef visibility. Version 5 essentially completes the mapping of the NSW nearshore zone. Only,0.2% remains unmapped.

Limitations on public access

| | |
|---|---|
| Scope | dataset |

DQ Completeness Commission

| | |
|---|---|
| Effective date | 2001-01-01 |

DQ Completeness Omission

| | |
|---|---|
| Effective date | 2001-01-01 |

DQ Conceptual Consistency

| | |
|---|---|
| Effective date | 1900-01-01 |

DQ Topological Consistency

| | |
|---|---|
| Effective date | 1900-01-01 |
| Explanation | Fair for substrate (sand, reef) categories.Poor for reef habitat categories (barrens,fringe). No ground truthing conducted. Possible confunding effect of algae drifts generally eliminated by viewing multiple images of any one site. |

DQ Absolute External Positional Accuracy

| | |
|---|---|
| Effective date | 1900-01-01 |
| Explanation | Fair. Upto +/- 50m. Error due to tracing of unrectified aeral photos |

DQ Non Quantitative Attribute Correctness

| | |
|---|---|
| Effective date | 1900-01-01 |
| Explanation | Fair for substrate (sand, reef) categories. Poor for reef habitat categories (barrens, fringe). No ground truthing conducted. Possible confunding effect of algae drifts generally eliminated by viewing multiple images of any one site. |

## Responsible party

| | |
|---|---|
| Contact position | Data Broker |
| Organisation name | NSW Department of Climate Change, Energy, the Environment and Water |
| Telephone number | 131555 |
| Email address | data.broker@environment.nsw.gov.au |
| Web address | https://www.nsw.gov.au/departments-and-agencies/dcceew |
| Responsible party role | pointOfContact |

## Metadata point of contact

| | |
|---|---|
| Contact position | Data Broker |
| Organisation name | NSW Department of Climate Change, Energy, the Environment and Water |
| Telephone number | 131555 |
| Email address | data.broker@environment.nsw.gov.au |
| Web address | https://www.nsw.gov.au/departments-and-agencies/dcceew |
| Responsible party role | pointOfContact |

## Metadata date

2024-02-26T15:33:18.739866

## Metadata language