

Submarine Cable Protection Zones off Sydney, NSW

Sharing the Seabed with Competing Activities

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Introduction

- ❑ Government Action for the Protection of Submarine Cables from competing interests sharing the Seabed
- ❑ Defining the Issue
- ❑ Legislative solutions
- ❑ Seabed Users
- ❑ Status of Global National legislation
- ❑ Case study of a practical solution

Defining the issues

- Subsea cables are Critical Infrastructure for all Nations
- Damage to cables impacts a Nations social and economic viability.
- Natural and manmade damage , typically;
 - Trawl fishing
 - Anchor damage
 - Natural geological events
eg. Earthquakes, Tsunami's,
Turbidity Flows



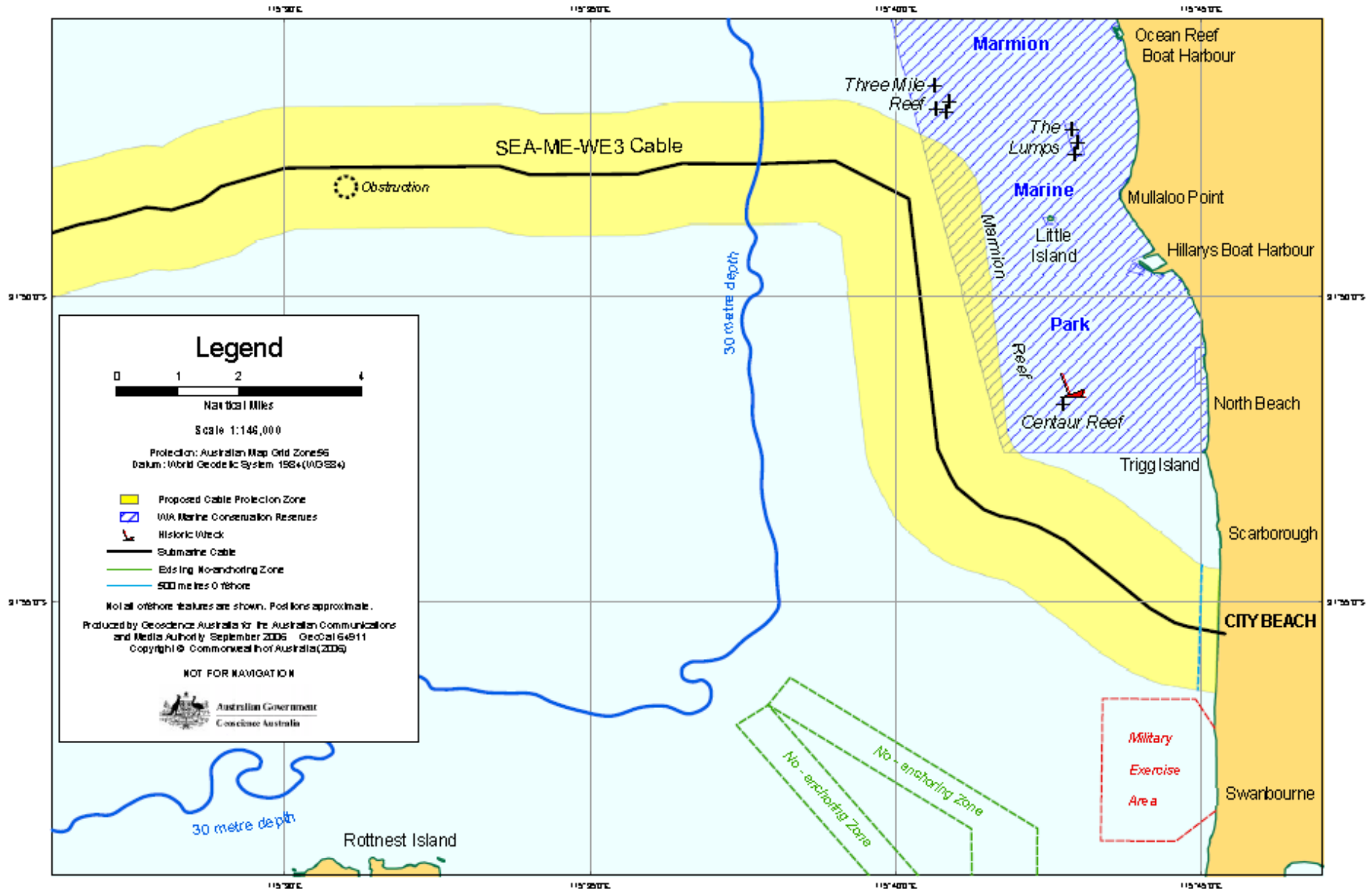
Legislative Solutions

- Implement National legislation to protect Subsea cables
- Creation of Protection zones or corridors around cables
- Restrict and Prohibit Activities in the zones
- Introduce significant criminal penalties in accordance with UNCLOS
- Educate seabed users

Working with Seabed Users

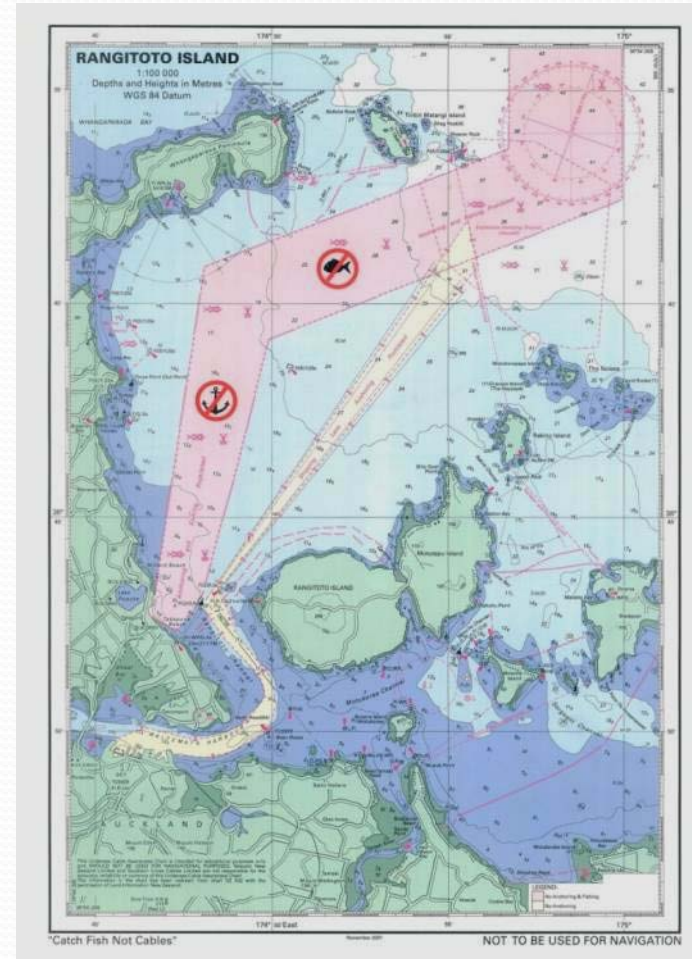
- Seabed is not owned by any one industry.
- Many Seabed users include;
 - ❖ Fishing (Commercial & Recreational)
 - ❖ Shipping (Anchors and Port Entry)
 - ❖ Mining and dredging
 - ❖ Diving (Commercial & Recreational)
 - ❖ Military and Defence
 - ❖ Power (Wind Farms)
 - ❖ Oil & Gas
 - ❖ Civil Engineering and Construction
 - ❖ Scientific

Map 2. Proposed Protection Zone - Detail



Global Status

- Countries with updated specific legislation
 - New Zealand (1996), Australia (2005), Uruguay (2011)
- Rest of the world fall into two categories
 - 19th Century Legislations
Include UK (1885), France, USA (1887)
 - No legislative protection at all



Case Study - Australia

- Submarine Cable Protection Law enacted 2005
- Advisory Committee containing representatives from all seabed user groups established 2006
- Advisory Committee agree list of Prohibited and Restricted activities within the Protection Zones
- Public awareness and multi-media campaign setup
- 1 October 2007 – Protection zones come into affect
- 2010 – Government undertakes review of legislation and recommendations for improvements

Benefits of Protection Zones

- Greater protection from man made activities
- Greater criminal penalties and imprisonment (10 years and \$330,000)
- Know and finite permit application process
- Protection Zone - \$2,000 fee and approved in 20 days
- Non Protection Zone - \$32,000 approved in 180 days

Prohibited Activities

- Use of or towing, operating or suspending from a ship;
 - ❑ trawl gear designed to work on or near the seabed, or a mid-water trawl
 - ❑ including for scallop dredging
 - ❑ a structure moored to the seabed with the primary function of attracting fish for capture (such as a fish aggregating device (FAD))
 - ❑ a demersal longline, a Scottish or Danish seine
- Establishing, maintaining or using a spoil ground or other ocean disposal point (including dumping materials at sea)
- Scuttling or attempting to scuttle a ship

Restricted activities, which vary depending on distance from shore and/or water depth

Activity	0 – 500 metres from low-water mark	500 metres from low-water mark to 100 metres water depth	Waters of greater than 100 metres depth
Anchoring in the Northern Sydney Protection zone	Permitted	Is permitted, providing <ul style="list-style-type: none"> • the anchor weighs 20 kg or less; and • the anchor is fitted with a trip release mechanism; and • the anchor line has a breaking strain of 850 kg or less; or • the anchor weighs no more than 30 kg and is anchored within 200 metres of an ACMA specified shipwreck site 	Not permitted
Anchoring in the Protection Zone	Permitted	Is permitted, providing <ul style="list-style-type: none"> • the anchor weighs 20 kg or less; and • the anchor is fitted with a trip release mechanism; and • the anchor line has a breaking strain of 850 kg or less; or • the anchor weighs no more than 30 kg and is anchored around The Peak (as specified by ACMA's coordinates) 	Not permitted
Lowering, raising or suspending from a ship a shotline	Permitted	Is permitted, providing <ul style="list-style-type: none"> • the shot weighs 20 kg or less; and • the shotline has a maximum breaking strain of 850 kg or less 	Not permitted
Demersal fishing using J-hooks	Permitted	May only occur if the fishing line has a breaking strain of 50 kg or less	

Restricted Activities

Activity	0 – 500 metres from low-water mark	500 metres from low-water mark to 100 metres water depth	Waters of greater than 100 metres depth
Use of or towing, operating or suspending from a ship a pot or trap	Permitted	Is permitted, providing <ul style="list-style-type: none"> • the base of the trap does not exceed 2 metres in length, width or diameter; and • the trap rope breaking strain is 850 kg or less 	
Harvesting the benthos	Permitted	Not permitted, unless harvesting is conducted by hand	
Use of or towing, operating or suspending from a ship a net anchored to the seabed, e.g. gillnetting	Permitted	Not permitted	
Use of an explosive or explosive device	Permitted only if used in the course of mineral or petroleum operations, civil engineering work or an exercise conducted by or with the Australian Defence Force		
Use or towing, operating or suspending from a ship a grapnel	Permitted	Permitted if used in the course of work on electricity, oil or gas pipelines and cables, installations for the use of ships, civil engineering, mining or petroleum operations or in conducting research that involves contact with the seabed	

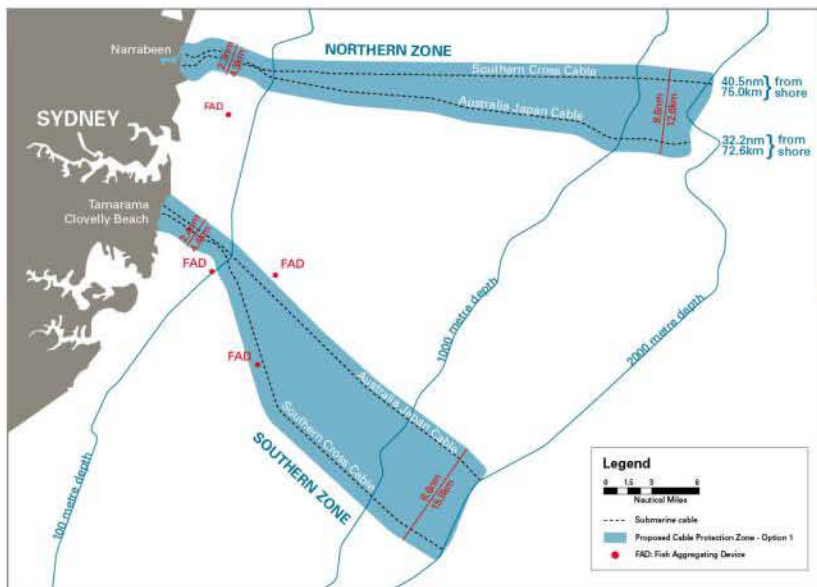
Consultative Activities

Activities that may be undertaken if cable owners are consulted prior to the commencement of the activity AND if the activity occurs in a manner that is unlikely to cause cable damage

- Installing, maintaining or removing an electricity cable, an oil or gas pipeline, any like cables or pipelines and using any associated equipment
- Constructing, maintaining or removing an installation for the use of ships
- Conducting civil engineering work, including constructing and removing navigation aids
- Exploring or exploiting resources (other than marine species)
- Conducting research that involves contact with the seabed



CLOVELLY BEACH PROTECTION ZONE



SUBMARINE COMMUNICATIONS CABLES PROVIDE ESSENTIAL INFRASTRUCTURE THAT ENABLES AUSTRALIANS TO KEEP IN TOUCH WITH THE REST OF THE WORLD.

PROTECTION ZONES EXIST IN THIS AREA TO PROTECT CABLES OF NATIONAL SIGNIFICANCE. ACTIVITIES THAT COULD DAMAGE A SUBMARINE CABLE ARE PROHIBITED OR RESTRICTED IN THE ZONE SHOWN ON MAP.

WITHIN THE PROTECTION ZONES, THE FOLLOWING MARINE ACTIVITIES ARE PROHIBITED:

- trawl fishing, demersal longlining and scallop dredging
- installing a fish aggregating device
- dumping materials at sea, and
- using underwater explosives

THE FOLLOWING RESTRICTIONS ALSO APPLY:

- gillnets cannot be set in waters beyond 500 metres from shore
- anchors above 20 kilograms cannot be set in waters beyond 500 metres from shore, except around two popular fishing and diving spots – ‘The Peak’ (off Maroubra) and several shipwrecks (off Narrabeen)
- fishers targeting bottom-dwelling fish cannot use line with a breaking strain that exceeds 50 kilograms in waters beyond 500 metres from shore
- fishers and recreational users cannot use grapnels in waters beyond 500 metres from shore.

PENALTIES APPLY FOR BREACHING THE ABOVE RESTRICTIONS.

For more detailed information about protection zone prohibitions and restrictions, call **1300 856 337** or visit www.acma.gov.au/protectionzones.

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