



# **Coastal Waters Marine Pollution Plan**

**A Sub Plan of the  
State Emergency Management Plan  
and the  
National Plan for Maritime  
Environmental Emergencies**

**Endorsed by the  
State Emergency Management Committee**

**September 2022**

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# 1 Introduction

NSW has well established emergency management arrangements that follow the ‘all-agencies all-hazards approach’ to emergency management. An effective response to a shipping emergency, marine oil or chemical spill (maritime incident) requires a coordinated response from State and Commonwealth agencies. The [National Plan for Maritime Environmental Emergencies](#) (National Plan) represents the combined efforts of the Commonwealth, State and Northern Territory Governments, with the assistance of the oil industry, to respond to the threat of oil and chemical spills from ships. The National Plan meets Australia’s international treaty obligations for maritime incidents and this state plan is consistent with its arrangements.

## 1.1 Purpose

This NSW Coastal Waters Marine Pollution Plan describes the strategic emergency management arrangements for marine oil or chemical spills in Coastal Waters (defined in 1.4.1) and maritime incidents (such as groundings, collisions, disabled vessel, or vessel on fire) with potential to create an oil or chemical spill into Coastal Waters.

## 1.2 Authority

Managing marine pollution is a multi-jurisdictional responsibility based on international agreements and treaties; national agreements, arrangements and plans; and state arrangements. This plan complies with Commonwealth and state legislation, which, in turn, gives effect to international treaties and agreements.

In this Plan, for the purposes of the roles and functions of the Statutory Agencies, the National Plan and associated Inter-governmental Agreements including overall state arrangements within the scope of this Plan, the term “NSW Maritime” is used for ease of reference and is a reference to Transport for NSW constituted under section 3C of the *Transport Administration Act 1988*. NSW Maritime is the operational area of Transport for NSW responsible for administration of the marine legislation, including responsibility for responding to marine oil and chemical spills pursuant to the *Marine Pollution Act 2012*. Any reference to NSW Maritime is to be read as a reference to Transport for NSW.

### 1.2.1 Commonwealth legislation

Australia has been a member of the International Maritime Organization (IMO) since its inception and is a party to the IMO Conventions that specifically address pollution from ships (collectively known as the MARPOL conventions). These conventions are implemented in Australia by the following Commonwealth Acts:

*Protection of the Sea (Civil Liability) Act, 1981 (Cth)*

*Protection of the Sea (Powers of Intervention) Act 1981 (Cth)*

*Protection of the Sea (Prevention of Pollution from Ships) Act 1983 (Cth)*

*Protection of the Sea (Shipping Levy) Act 1981 (Cth)*

*Protection of the Sea (Shipping Levy Collection) Act 1981 (Cth)*

*Protection of the Sea (Oil Pollution Compensation Fund) Act 1993 (Cth)*

*Protection of the Sea (Oil Pollution Compensation Fund - Customs) Act 1993 (Cth)*

*Protection of the Sea (Oil Pollution Compensation Fund - Excise) Act 1993 (Cth)*

*Protection of the Sea (Oil Pollution Compensation Fund - General) Act 1993 (Cth)*

### *Protection of the Sea (Civil Liability for Bunker Oil Pollution Damage) Act 2008 (Cth)*

The *Protection of the Sea (Powers of Intervention) Act 1981 (Cth)* provides powers to support the National Maritime Emergency Response Arrangement ([NEMERA](#)) including the appointment of a national Maritime Emergency Response Commander (MERCOCOM).

The Australian Maritime Safety Authority (AMSA) is established under the *Australian Maritime Safety Authority Act 1990* to (in part) combat pollution in the marine environment. The AMSA Act also directs the authority to perform its functions “in a manner consistent with the obligations of Australia, under any agreement between Australia and another country”.

The National Plan is maintained by AMSA to meet Australia’s international obligations and to guide the states’ and Northern Territory planning arrangements.

Under the National Plan arrangements, NSW Maritime is the Statutory Agency for NSW and is responsible for:

- ensuring that NSW is prepared for, and can respond appropriately to a maritime incident in Coastal Waters
- representing the maritime combat agencies at the State Emergency Management Committee (SEMC)
- liaising with the State Emergency Operations Controller (SEOCOC) as required during a significant incident/emergency

### **1.2.2 State legislation**

This Plan is written and issued under the authority of the following state legislation:

*State Emergency and Rescue Management Act 1989 (NSW)* (‘SERM Act’)

*Marine Pollution Act 2012 (NSW)*

This Act provides (in Parts 14-16) the portfolio minister with powers of intervention to detain or direct vessels and for preventing, combating and cleaning up oil and chemical spills in NSW State Waters. The Minister has delegated functions under the *Marine Pollution Act* to NSW Maritime and Port Authority of New South Wales (Port Authority).

This act also provides for appointment of inspectors to obtain evidence relating to an illegal discharge or a suspected illegal discharge of oil or chemicals. An inspector has the power to board a vessel, inspect records, take samples of any substances on board the vessel and investigate the suspected discharge. Inspectors are appointed by NSW Maritime and Port Authority. AMSA inspectors may also be available to assist with sample collection and investigations.

*Ports and Maritime Administration Act 1995 (NSW)*

Section 10 of the Act describes the functions of Port Authority as being, in part:

2(b) to exercise the port safety functions for which it is licensed in accordance with its operating licence (Port Safety Operating Licence [PSOL]).

The PSOL sets out the emergency response requirements required by Port Authority:

- must respond to incidents as required by the NSW Coastal Waters Marine Pollution Contingency Plan or the relevant NSW emergency management plans
- must respond to Port-related emergencies, in accordance with the Licensee’s role in the relevant NSW emergency management plans, within the area of operations

The Act further describes the port safety functions in section 11: Meaning of “Port Safety Functions” as including:

11(b) the function of providing or arranging for the provision of emergency environment protection services for dealing with pollution incidents in relevant waters; and

11(c) the function of carrying out investigations into marine accidents or incidents.

*Protection of the Environment Operations Act 1997 (NSW)* (POEO Act) and Protection of the Environment Operations (General) Regulation 2021.

NSW Maritime is the designated Appropriate Regulatory Authority (ARA) for activities involving a non-pilotage vessel in navigable waters covered by the POEO Act and Regulation.

The POEO Act also allows a public authority to take voluntary clean-up action if it reasonably suspect that a pollution incident has occurred or is occurring.

*Fire and Rescue NSW Act 1989 (NSW)*

This Act allows the Commissioner of Fire and Rescue NSW (FRNSW) to permit its members to attend the site of an oil or chemical spill in Prescribed Waters in relation to which the Port Authority exercises functions (section 20A).

### 1.2.3 Revision history

This plan is a Sub-plan to the NSW State Emergency Management Plan (EMPLAN). It was endorsed by the NSW State Emergency Management Committee (SEMC) on 2 June 2022.

Version	Date endorsed	Amendment notes
V1	December 2021	Endorsed as interim plan following title change and revision of definitions for State Waters, AIIMS and Agency changes
V2	June 2022	Revised to new template Incorporated Coastal Risk Assessment content Incorporated TfNSW comments on the interim plan

Suggested amendments or additions to the contents of this plan should be forwarded in writing to:

Manager, Marine Pollution & Emergency Response  
NSW Maritime, Transport for NSW  
Locked Bag 5100  
CAMPERDOWN NSW 1450

### 1.3 Activation

The arrangements in this plan and the National Plan are always active. A formal declaration or activation is not required. Notification arrangements are summarised in section 5.3.1.

### 1.4 Scope

This Plan covers the Coastal Waters of the NSW and adjacent foreshores, major and regional ports excluding rivers, estuaries and local harbours.

This Plan applies to:

- pollution of oil and chemicals from all vessels as defined in the *Marine Pollution Act 2012 (NSW)* and Marine Pollution Regulation 2014.

- pollution of oil and chemicals for other sources that may enter Coastal Waters (as defined by the *Marine Pollution Act 2012 (NSW)*).

This plan describes the state-level emergency management arrangements for oil and chemical spills affecting NSW Coastal Waters and adjacent shorelines. It includes:

- the potential risks and consequences of the emergency to the social, built, economic, and natural environments
- the policy and programs in place to mitigate these risks before, during and after an emergency
- the control and coordination arrangements for managing an oil and chemical spill impact
- an outline of the approach to managing an oil and chemical spill and the agencies responsible for managing specific strategies
- the multi-agency management arrangements at the national, state, regional and local levels
- links to sources of information where the reader can obtain further detail

This plan includes responding to debris from shipping containers and their contents but not debris whose origin is land-based, such as from flooding.

This plan does not address oil and chemical spills affecting inland waterways or areas outside NSW Coastal Waters, which are covered by the NSW Hazardous Materials, Chemical, Biological, Radiological, Nuclear Emergency Plan ([HAZMATPLAN](#)), nor does it address oil and chemical spills outside State Waters, which are managed by the AMSA under the [National Plan](#) arrangements.

This plan does not include detail about the operational activities of individual agencies.

#### 1.4.1 Coastal Waters

NSW State Waters are defined in Section 3 of the *Marine Pollution Act 2012 (NSW)*. “State waters” means:

- coastal waters of the State (within the meaning of Part 10 of the *Interpretation Act 1987 [NSW]*), and
- waters within the limits of the State.

**For this Plan**, Coastal Waters are those waters seaward for three nautical miles including:

- Port of Clarence River (Yamba) (part of the Clarence River)
- Coffs Harbour
- Port Macquarie (part of the Hastings River)
- Port Stephens (eastern section of Port Stephens)
- Port of Newcastle (part of the Hunter River)
- Sydney Harbour (all of Sydney Harbour and Middle Harbour, Parramatta River and Lane Cove River up to the tidal limits.)
- Port Botany (all of Botany Bay)
- Port Kembla
- Jervis Bay (except Commonwealth waters)
- Port of Eden (Twofold Bay)

See Map 1 for locations of the ports along the NSW coast and areas of responsibility for leading response operations.



### **1.4.2 Assumptions**

This plan is based on the following assumptions:

1. all the agencies and organisations with a role or responsibility included in this plan
  - a maintain their own capability; including operational plans or guidelines, adequately trained personnel, and sufficient resources to fulfil their role
  - b maintain up-to-date contact lists to enable notification, activation and escalation
2. NSW Maritime will receive timely notification of an actual or potential marine pollution incident

### **1.5 Goals**

The goals for coastal waters oil and chemical spill emergency management are to:

1. preserve life
2. prevent oil and chemical spills
3. protect critical habitat, animal and plant life, and cultural assets
4. protect critical infrastructure
5. protect property
6. minimise impact on assets and activities that support the local economy
7. clean affected environments as far as reasonably practicable
8. promote community recovery

This plan includes arrangements to:

- provide an effective system for reporting, assessing and responding to an actual or potential maritime incident
- ensure that the NSW Government's resources are integrated with the National Plan and effectively mobilised in the event of a maritime incident in or adjacent to NSW Coastal Waters
- define the division of responsibilities for responding to maritime incident
- institute procedures to minimise the impact on the natural and socio-economic environment of the area impacted by a maritime incident
- establish a response structure using the Australasian Inter-service Incident Management System (AIIMS) to manage the maritime incident response
- obtain assistance from other Functional Areas and agencies under the NSW EMPLAN arrangements.

### **1.6 Audience**

The audience for this plan is the NSW and Australian Government and agencies within the emergency management sector, including non-government organisations (NGOs) industry and community groups with a significant role in managing a marine oil or chemical spill.

Although the wider community is not the primary audience, community members may find the contents of this plan informative.

### **1.7 Linkages**

This plan reflects current legislation, the arrangements in the EMPLAN, the strategic direction for emergency management in NSW and the accepted State practice for emergency management. The EMPLAN arrangements have not been repeated unless necessary to ensure context and readability. Any variations from these arrangements have been included.

The [NSW Hazardous Materials/Chemical, Biological, Radiological, Nuclear Emergency Plan](#) (HAZMATPLAN) establishes FRNSW as the Combat Agency for hazardous materials incidents or emergencies occurring on land and for oil and chemical spills in rivers, estuaries and inland waterways. NSW Maritime and Port Authority will assist in these waters on request as described in the MOU between FRNSW and the maritime combat agencies.

This plan is supported by the following Commonwealth documents:

- [National Plan for Maritime Environmental Emergencies](#)
- [National Maritime Place of Refuge Risk Assessment Guidelines](#)
- [Inter-governmental agreements](#) relating to the National Maritime Emergency Response Arrangements and Combating Pollution of the Sea by Oil and Other Noxious and Hazardous Substance

## 1.8 Maintaining the plan

NSW Maritime will keep this plan current by:

1. ensuring that all emergency service organisations, functional areas and officers included in this plan are made aware of their roles and responsibilities
2. conducting exercises to test arrangements
3. reviewing the contents of the plan
  - a. after significant marine pollution response operations
  - b. when there are changes to the machinery of government
  - c. when there are changes that alter agreed plan arrangements
  - d. as determined by the NSW SEMC

This plan will be reviewed no less frequently than every five years.

## 2 The emergency risk context

NSW Maritime completed a comprehensive coastal risk assessment in 2021. The assessment drew on regional data for maritime activity and international data for the likelihood of marine oil spills. Consequences of oil spills were considered and combined with the likelihoods to generate the risk assessment.

The Oil Spill Response Atlas (OSRA) is maintained by NSW Maritime as a resource that lists coastal environmental values and infrastructure at risk from marine pollution.

### 2.1 The hazard

The NSW mainland and island coastline borders stretch more than 2100km, from Tweed Heads in the north to Cape Howe in the south.

Several areas contain RAMSAR wetlands (including the Myall Lakes National Park and Port Stephens Great Lakes Marine Park), or significant wetlands such as the Hunter Estuary Wetlands. Lord Howe Island is a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage area. When added to other risk factors this result in these areas having a “High” consequence rating.

Oil spills can have devastating impacts across a wide range of domains, from the immediate and visible oiling of pristine beaches or coral reefs to unseen effects on endangered species. Damage it is wide reaching and has the potential to affect many aspects of the lives and livelihoods of millions of people.

The impacts are broadly grouped into the following categories (and mapped to the recovery environments):

- critical habitats (natural environment)
- plants and animals (natural environment)
- culture and heritage (social environment)
- social amenity and recreation (social environment, built environment)
- economic; including tourism, fisheries, aquaculture, desalination and port delays (economic environment)

Pollution from oil and chemical spills into Coastal Waters can come from three sources:

- NSW sources and shipping – all shipping plus fixed petroleum installations and oil transfer operations at facilities within NSW waters
- External sources – fixed petroleum installations and oil transfer operations at facilities outside of NSW waters (extending 200km north and south of the border; primarily including Brisbane terminal facilities)
- offshore exploration and drilling

There are sensitive shorelines scattered along the whole NSW coastline, consequently the distribution of overall oil spill risk is largely driven by exposure to spilled oil. This in turn is driven by state and external factors:

- marine traffic associated with larger NSW ports influences oil spill risks in the central part of the NSW coast
- external factors such as the Port of Brisbane near the northern state boundary, and the Gippsland Basin offshore petroleum offshore from Victoria have a significant influence on risk for adjoining areas of the NSW coast

### **2.1.1 Shipping**

Vessels operating in NSW waters can be classified as domestic or foreign-going operations. The domestic fleet tends to be comprised of relatively small coastal vessels such as fishing vessels, harbour ferries and tugs, tourist boats and pleasure craft. Most of the domestic fleet is fuelled by marine distillates such as marine diesel and represent a lower pollution risk.

Foreign-going operations include container ships, bulk carriers, petroleum oil product tankers and cruise ships. These ships tend to be larger and almost all are currently fuelled by bunker oils such as IFO380, which creates a higher pollution risk from the nature of the oil and amount onboard.

Unless entering or departing harbours, vessels navigating along the NSW coast will normally remain within the general North-South traffic flow that largely parallels the coastline. Vessels typically passage between NSW ports and Melbourne, Devonport, and Tasmanian ports to the south, and either northwest around Queensland or north towards Asia. Additionally, there are several distinct tracks across the Tasman to Cape Reinga and Cook Strait in New Zealand, and north towards other Pacific nations.

The four largest commercial ports (by proportion of trade value) along the NSW coastline are the ports of Botany Bay, Sydney, Newcastle and Kembla<sup>1</sup>. Of these ports, Botany Bay has the most cargo traffic, Sydney the most cruise ship traffic, Newcastle mainly exports coal, while Kembla operates the largest car importation terminal in Australia.

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<sup>1</sup> Port Authority of New South Wales (2020), *Annual Report 2019-20*, Walsh Bay, NSW

### 2.1.2 Terminals

There are no oil refineries operating in NSW, however Port Botany and Gore Cove are major import terminals for a range of refined products (diesel, petrol, aviation fuels, etc. Additionally, Newcastle and Port Kembla also receive refined products on a smaller scale

### 2.1.3 Offshore installations

There are currently no offshore petroleum installations in the waters off the NSW coast. To the south, offshore petroleum infrastructure has been operating in the Gippsland Basin and Bass Strait for many years. The developed oil and gas fields in the Gippsland Basin are nearing depletion and many of the wells in the area are scheduled to be plugged and decommissioned in coming years<sup>2</sup>.

Oil spill likelihoods for offshore petroleum infrastructure were adopted from the AMSA national oil spill risk assessment<sup>3</sup> and updated where appropriate using the latest data from the International Association of Oil & Gas Producers (IOGP) release frequency reports<sup>4</sup>.

## 2.2 Consequences

The Coastal Waters Risk Assessment maps consequence and likelihood in 52 cells along the coast.

Consequence includes ecological effects and impacts on human activities. Sensitivity to oil spills can be higher in some areas due to features such as:

- ecological features such as coral reefs and wilderness areas
- tourism
- fisheries
- desalination plants

Consequence mapping is enhanced by assigning higher rating to areas of increased natural and social values as identified by authoritative public sources, including:

- The [New South Wales Marine Estate Threat and Risk Assessment Report](#)
- GIS data downloaded from the Australian Government Data Portal
- The [Collaborative Australian Protected Areas Database](#) (CAPAD) 2020 provides both spatial and textual information about government, Indigenous and privately protected areas for Australia, in both the marine and terrestrial environments
- Threatened species lists from the NSW Government Department of Primary industries (DPI) threatened species lists

Economic consequences include temporary closure of a nearby port, oiling of shoreside structures, increased spreading of oil due to ship movements and impacts to response activities. Other economic consequences include closures of commercial fisheries for a period and effects on tourism revenues.

The coastal waters risk assessment identifies consequence ratings as shown in Map 2.

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<sup>2</sup> Evans, Damon (2021), *Multi-Billion Dollar Plug and Abandonment Market Emerges in Australia*. <https://www.energyvoice.com/oilandgas/asia/334567/multi-billion-dollar-plug-and-abandonment-market-emerges-in-australia/>

<sup>3</sup> Det Norske Veritas (2011), *Final Report Assessment of the Risk of Pollution from Marine Oil Spills in Australian Ports and Waters: Appendix V Offshore Oil Spill Risk Models.* DNV, Høvik, Norway.

<sup>4</sup> IOGP (2019), *Risk assessment data directory – Blowout frequencies*, International Association of Oil and Gas Producers, London

Table 1 - risk determinants shows that habitats tended to be rated more highly for consequence than other factors, accounting for the most sole determinations and the most equal joint determinations<sup>5</sup>. Social factors are a significant joint determinant. Economic factors are the least influential, with no sole determinations and the fewest joint determinations.

*Table 1 - risk determinants*

<i>Consequence</i>	<i>Sole determinant</i>	<i>Joint determinant</i>	<i>Total influence</i>	<i>Influence as proportion of shoreline cells</i>
Habitats	7	28	35	59%
Plants and Animals	3	28	31	53%
Culture and Heritage	5	17	22	37%
Social	0	25	25	42%
Economic	0	12	12	20%

### **2.3 Risk analysis**

The proportion of the total risk for each bioregion is presented in Figure 1 - proportion of total risk in each NSW Marine Estate TARA region. The bioregion with the highest overall risk is the Hawkesbury Shelf, which contains 48% of the total risk across NSW. This is primarily due to the relatively high density of vessel traffic visiting Newcastle, Sydney and Botany Bay in combination with the consequences that may occur if a spill were to occur in this bioregion.

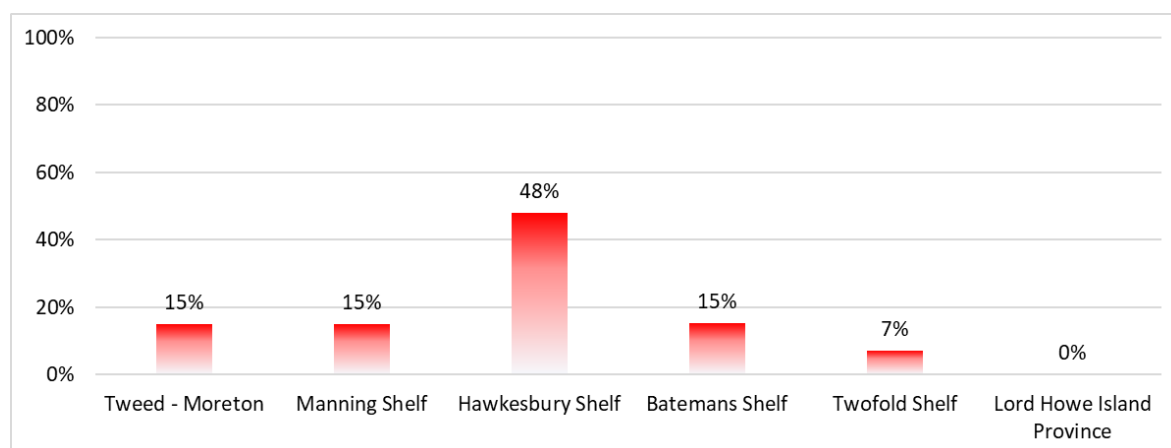
Outside of the Hawkesbury Shelf bioregion, Tweed-Moreton, Manning Shelf and Batemans Shelf each contain 15% of the total risk. At 7% of the total risk, Twofold Shelf contains approximately half of the total risk of these three bioregions<sup>6</sup>.

Relative to the rest of NSW, Lord Howe Island has a resulting risk of approximately 0%. Despite its very high consequence ratings, the waters around Lord Howe Island and Ball's Pyramid have too little nearby vessel activity relative to the NSW Marine Estate TARA bioregions for modelling to assign an overall risk rating higher than "very low".

<sup>5</sup> Joint determinant means that multiple consequences were assigned the highest rating for the cell.

<sup>6</sup> Twofold Shelf is approximately half the size of the other four bioregions and its total risk is half of the total risk of each of Tweed–Moreton, Manning Shelf, and Batemans Shelf. This means that it has a similar risk per shoreline cell as these bioregions.

Figure 1 - proportion of total risk in each NSW Marine Estate TARA region



### 3 Prevention

The International Convention for the Prevention of Pollution from Ships (MARPOL) includes regulations that aim to prevent all forms of marine pollution, including oil and chemical spills from ships. MARPOL regulations are overseen by AMSA. The *Marine Pollution Act 2012* reflects MARPOL at the state level.

Prevention within the scope of this Plan comprises those actions taken to prevent or minimise the release of marine pollution from vessel operations or from a maritime casualty. This includes:

- defined responsibilities to the shipowner and governments
- an incident management system
- national emergency towage arrangements, and
- national guidance for the assessment of requests for a place of refuge

Additionally, Port Authority controls and those stipulated in the Port Safety Operating Licence, apply a level of cover to prevent accidents from occurring.

AMSA and NSW (through the Port Authority) has an active strategy of vessel monitoring (vessel traffic services or VTS) to encourage and enforce compliance with MARPOL regulations.

### 4 Preparedness

Preparedness includes arrangements or plans to deal with an emergency or the effects of an emergency. Preparedness activities are undertaken by:

- agencies and organisations that have responsibilities before, during and after an emergency
- industry, communities, businesses and households that are likely to be affected by marine pollution

#### 4.1 Emergency planning

NSW Maritime maintains the NSW state plan for marine pollution emergencies and contributes to the National Plan.

<i>Strategy</i>	<i>Actions</i>
Maintain risk awareness	<ol style="list-style-type: none"> <li>1. stakeholder engagement program with industry through the NSW Technical Working Group</li> <li>2. programmed review of the Coastal Risk Assessment</li> <li>3. programmed review of the Oil Spill Response Atlas</li> </ol>
Maintain plans consistent with national arrangements	<ol style="list-style-type: none"> <li>1. develop and review the NSW Coastal Waters Marine Pollution Plan</li> <li>2. support development of local port pollution control plans by Port Authority and NSW Maritime level 1 plans</li> <li>3. contribute to maintaining the National Plan for Maritime Environmental Emergencies</li> </ol>

## 4.2 Operational readiness

NSW Maritime has a robust regime to develop and maintain response capability.

<i>Strategy</i>	<i>Actions</i>
Maintain a state response capability	<ol style="list-style-type: none"> <li>1. implement a training program for identified staff with potential roles in a marine pollution response</li> <li>2. implement a multi-agency exercise program to validate plans and practise response</li> <li>3. acquire and maintain equipment stockpiles for pollution response</li> <li>4. establish access to vessels and aircraft that may be used in a pollution response</li> </ol>
Contribute to a national response capability	<ol style="list-style-type: none"> <li>1. participate in the National Plan Strategic Coordination Committee</li> <li>2. participate in national training and exercise activities</li> <li>3. provide warehousing and maintenance services for national stockpile equipment</li> </ol>

### 4.2.1 Training

Regular training programs are provided by NSW Maritime at a state level with Port Authority. AMSA also provides training. NSW Maritime monitors staff training to ensure there are sufficient staff trained in the various aspects of spill response and shoreline clean up as part of a State Response Team.

NSW Maritime and Port Authority each provide training to deal with oil spills for their own personnel and staff of other agencies. This training covers implementing AIIMS, managing an incident control centre, deployment and operation of oil spill response equipment and oiled shoreline assessment and clean up.

NSW Maritime will develop and provide training where specific needs are identified by the NSW Technical Working Group (TWG).

#### **4.2.2 Exercises and plan review**

This plan will be reviewed in accordance with SEMC policy and after any Level 2-3 response

The plan will be exercised annually unless there is a Level 2-3 response, in which case the actual response will replace the need to exercise this plan.

Port Authority exercises each port's emergency response plans, including an equipment deployment exercise, annually.

#### **4.2.3 Equipment stockpiles**

Oil spill response equipment is broadly categorised according to the level of response that it is designed for. While interchangeable, the smaller equipment is designed for Level 1 spills in enclosed waters and the larger Level 2-3 equipment is designed to respond to large or offshore spills.

##### *4.2.3.1 Level 1 response equipment*

NSW Maritime and Port Authority maintain Level One stockpiles of equipment at the major ports of Newcastle, Sydney Harbour, Port Botany and Port Kembla, the regional ports of Eden and Yamba, and at Lord Howe Island, Port Macquarie and Nowra.

##### *4.2.3.2 Level 2-3 response equipment*

In addition to the Level One stockpiles; Port Authority maintains its own stockpile of Level 2-3 equipment which is stored at its Level One equipment locations in Sydney and Newcastle as a state resource. The petroleum industry also own oil spill response equipment that is stored on their individual premises.

NSW Maritime owns and maintains a purpose-built Wildlife Wash Facility that is available for deployment to anywhere in the state. Incorporated into a 20' shipping container the facility can be easily moved to rapidly setup wildlife treatment and washing pending deployment of a larger capability maintained by Port Authority in Sydney.

The Australian Institute of Petroleum, on behalf of the petroleum industry, owns and maintains an equipment stockpile at the Australian Marine Oil Spill Centre (AMOSC) in Geelong (Victoria), and Fremantle and Northwest Shelf (Western Australia).

##### *4.2.3.3 National Plan stockpile*

AMSA provides National Plan stockpiles of oil pollution response equipment at nine locations around Australia. These stockpiles are available to all states and the NT on request. The National Plan Level 2-3 stockpile for NSW is kept at Ingleburn and maintained under a contract arrangement.

##### *4.2.3.4 National equipment database*

Details about the equipment available in the National Stockpile and stockpiles owned by other jurisdictions are contained in a national database maintained by AMSA. The MPC can request equipment from these stockpiles from AMSA. Once approved, AMSA can arrange for interstate equipment to be delivered to the response location. In the event of a Level 2-3 spill, a National Response Team member may be available to work within the AIIMS structure, to assist in coordinating equipment transfers.



## 5 Response

Timely initiation of a response is critical to achieving an effective outcome from an operation. A response should be initiated where there is a need to:

- monitor the incident, potential or actual
- implement measures to mitigate the impacts of the incident

### 5.1 Work health and safety

The health and safety of emergency responders and the public is of paramount importance in any response operation. The *Work Health and Safety Act 2011 (NSW)* places a duty on all persons conducting a business or undertaking (PCBU), for example a Combat Agency or a Functional Area, to ensure the health and safety, so far as is reasonably practicable, of all workers. Workers include persons who carry out work in any capacity for a PCBU, including work as an employee, a contractor and its employees, a subcontractor and its employees, labour hire workers, and volunteers.

Oil or chemical spills are hazardous by nature and an Incident Safety Officer should be appointed as soon as reasonably practicable. This person reports directly to the Incident Controller and is responsible for developing and maintaining an incident work health and safety plan.

NSW Maritime maintains materials which may assist a Combat Agency or Functional Area Agency to manage WHS issues in response to an incident including:

- a generic WHS Plan that can be used as the basis for the preparation of a detailed site specific WHS plan
- Volunteer Management Policy for Marine Incident Response in NSW
- Fatigue Management Guidelines for Marine Incident Response in NSW

### 5.2 Concept of operations

The aim of responding to maritime incidents is to minimise damage to the environmental and socio-economic resources and reduce the time required for the recovery. Every maritime incident or emergency is different, and this plan must be flexible in its implementation to respond in the most effective and timely manner.

To the maximum extent possible, consistent with the public interest in protection of the marine environment, resolution of maritime incidents will be left to the ship owner and salvors or towage providers to address on a commercial basis, with advice or assistance from emergency response agencies as appropriate.

#### 5.2.1 Management system

As part of the National Plan arrangements, all combat agencies for maritime incidents have agreed to use AIIMS adapted for marine incidents, to control and manage maritime incident or emergency response. AIIMS can be scaled up or down depending on the size and complexity of the response required to effectively control the incident or emergency.

NSW marine incident Combat Agencies have developed procedures to implement AIIMS in response to an incident or emergency. The structure of a fully evolved Incident Management Team (IMT) is in Appendix C—AIIMS structure.

#### 5.2.2 Protection priorities

Protection priorities for responding to a maritime incident are, in order of descending priority:

- human safety and health
- habitat and cultural resources
- rare and/or endangered flora and fauna
- commercial resources, such as oyster farms; then
- amenities, such as beaches.

A balanced view needs to be maintained on the likely success of protection strategies. This is particularly important when it is unlikely that such strategies will be successful in protecting a higher sensitive resource but could be successful in the protection of other less sensitive resources.

## **5.3 Notification**

### **5.3.1 Notification of the Combat Agency and Statutory Agency**

NSW Maritime, as the Statutory Agency, must be notified of all shipping and commercial vessel incidents, emergencies and maritime oil and chemical spills in Coastal Waters and in adjacent Commonwealth Waters.

The Port Authority maintains 24/7 communication centres and NSW Maritime maintains a 24/7 Duty Officer telephone number.

All maritime incidents, including actual or potential oil and chemical spills, must be reported to the nearest Port Authority communications centre or the NSW Maritime Marine Pollution and Emergency Response Duty Officer as soon as possible.

NSW Maritime and Port Authority are to pass on any reports to the relevant Combat Agency when the maritime incident is not in the agency's allocated area of responsibility. This includes any incidents in inland waters which must be passed to FRNSW.

AMSA will notify NSW Maritime of any incidents in Commonwealth Waters that may affect NSW Coastal Waters.

### **5.3.2 Notification of supporting agencies**

The Combat Agency will determine what level of notification and callout is initially required for a maritime incident/emergency using the following guidelines:

*Small incidents (Level 1) within port areas without significant environmental impact.*

- Small incidents can usually be dealt with by the Combat Agency using their internal resources.
- The Combat Agency should notify local representatives from key supporting agencies if the response is expected to last longer than one day and there may be media interest in the incident. The contact points are usually the agency representatives on the Local Emergency Management Committee.

*Small incidents (Level 1) where there could be significant environmental impact.*

These incidents usually require the assistance from supporting agencies.

- The Combat Agency should notify local representatives from key supporting agencies.
- The Environment and Scientific Coordinator (ESC) should be notified via the EPA Duty Incident Advice Coordinator.
- The NSW Maritime Marine Pollution and Emergency Response Duty Officer must be notified and requested to notify supporting agencies via SMS notification arrangements.

*Significant incidents/emergencies (Level 2 and 3)*

- The NSW Maritime Marine Pollution and Emergency Response Duty Officer must be notified of the incident.
- The Combat Agency should notify local representatives from key supporting agencies.
- NSW Maritime will notify combat and supporting agencies via the SMS notification arrangements.
- The ESC must be notified via the EPA Duty Incident Advice Coordinator.
- Agencies will be called out to respond.

*Shipping incidents offshore*

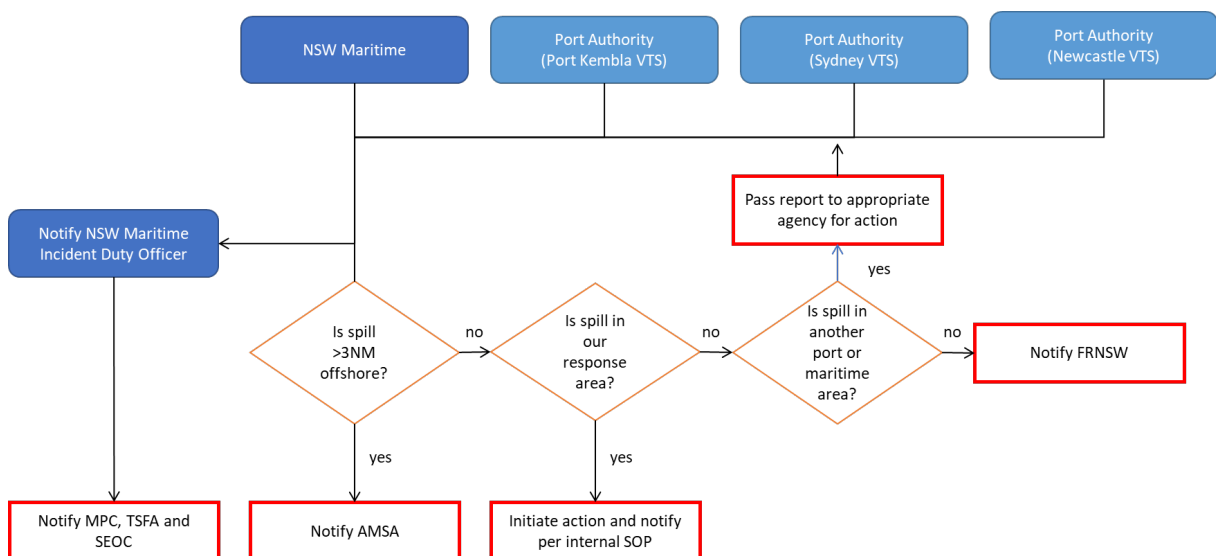
Shipping incidents less than 20 nautical miles offshore should be treated as a potentially significant incident.

- The NSW Maritime Marine Pollution and Emergency Response Duty Officer must be notified of the incident.
- NSW Maritime will notify combat and supporting agencies via the SMS notification arrangements.
- The Environment and Science Coordinator (ESC) must be notified via the EPA Duty Incident Advice Coordinator.
- Agencies will be either put on standby or called out to respond.

The following agencies must be included in notifications:

- The NSW Maritime Marine Pollution and Emergency Response Duty Officer (who will notify the MPC if required)
- Portfolio minister (via MPC)
- Port Authority
- EPA (via the Duty Incident Advice Coordinator)
- FRNSW
- AASFA
- TSFA (via TSFA Duty Officer)
- AMSA (via the RCC)
- State Emergency Operations Centre (SEOC), who will notify the relevant Regional Emergency Management Officer (REMO) and other functional areas as required

*Figure 2 - notification sequence*



### **5.3.3 Notification report types**

#### *5.3.3.1 Pollution report (POLREP)*

After initial notification and assessment of the incident/emergency has been made, the Combat Agency should issue a [POLREP](#) to relevant agencies.

#### *5.3.3.2 Situation report (SITREP)*

The Incident Controller is responsible for ensuring that periodic SITREPS are issued and distributed.

### **5.4 Initial reconnaissance and assessment**

Information concerning the movement of spilt oil and floating chemicals is of vital importance when choosing response options. Visual observations from aircraft or remotely piloted aircraft systems (RPAS) should be used to confirm the location, extent and if possible, to estimate the volume of pollutant. Aircraft or drones can be sourced as outlined in Aviation Support or by using AMSA operated SAR aircraft.

Aerial reconnaissance will allow rapid assessment of the extent to which the oil has spread, prevailing local conditions, resources that may be threatened by the approaching oil, where vessels and aircraft should begin recovery or dispersant spraying operations, and in which direction they should proceed.

Obtain expert advice from FRNSW before any reconnaissance near a chemical spill. AMSA has chemical spill decision support computer models and risk analysis tools that can be accessed by contacting AMSA's Duty Officer.

An Oil Spill Trajectory Model (see Appendix E—Support resources: Oil Spill Trajectory Model) can also be used to provide predictions of the pollutant movement but should always be verified by visual observations where possible. Trajectory Modelling identifies speed of movement, weathering and spreading characteristics of the pollutant under the influence of prevailing currents and weather conditions. The modelling capability is activated by AMSA.

The Oil Spill Response Atlas (OSRA) will provide information about sensitive areas potentially in the path of a spill. (See Appendix F—Support resources: Oil Spill Response Atlas).

Monitoring the spill plume will help establish the shoreline impact zone so that equipment and personnel can be deployed to protect sensitive ecological areas.

#### **5.4.1 Intervention powers**

AMSA has appointed a Marine Emergency Response Commander (MERCOT) to act on behalf of AMSA to control a maritime casualty in Commonwealth waters. The MERCOT has statutory powers under the *Protection of the Sea (Powers of Intervention) Act 1981 (Cth)* to make decisions consistent with the aim of the National Maritime Emergency Response Arrangements.

The MERCOT's powers include intervention to take any measures necessary to prevent, mitigate or eliminate a risk of significant pollution. The MERCOT may give instructions directing a port to release a tug to provide emergency assistance to a vessel at risk or designate a place of refuge for a ship in emergency situations and direct the ship to that place of refuge. The MERCOT's powers override that of State authorities during a response to a maritime casualty and will prevail over the directions of any other person when a conflict exists

between directions, although every effort will be made to reach a consensus on the appropriate directions.

Incidents requiring the MERCOM to intervene will occur randomly and infrequently and will be in response to actual or potentially serious emergencies. The MERCOM's intervention will only be for incidents where there is a threat of significant pollution posed by a ship, but do not extend to any actual pollution response. The MERCOM will endeavour to consider all relevant legal, practical, environmental, socioeconomic and operational issues in deciding whether and how to respond to a maritime causality.

NSW has intervention powers under the *Marine Pollution Act 2012 (NSW)* to deal with threats of pollution or other environmental damage within Coastal Waters. These powers are applied by the Marine Pollution Controller (MPC). The MERCOM will not normally become involved in these incidents but is available to assist and provide advice to the Combat Agency if requested. The MERCOM's powers include intervention powers and to direct resources if, in the MERCOM's opinion, such action is needed to fully address the threat.

The MERCOM will consult with the affected jurisdiction where they consider it necessary to direct a ship to a place of refuge that is within that jurisdiction. The point of contact for liaison and coordination is the Marine Pollution Controller or their delegate. The MPC will be responsible for communications and coordination with other state agencies and the NSW Government. Depending on the type of maritime incident and the risk of pollution the MPC, in consultation with NSW Maritime and/or Port Authority, may establish an Incident Control Centre (ICC) to coordinate support for AMSA or prepare to respond to a possible oil or chemical spill. The ICC should be established at an appropriate location, which may be an existing NSW Maritime or Port Authority facility, or other suitable location based on the incident.

#### **5.4.2 Place of Refuge request**

Vessels at sea might be involved in emergencies such as an explosion, fire, flooding, collision, structural failure, grounding, or power failure. In such a situation, the Master of a vessel may seek permission to enter a port or sheltered waters to protect lives and property on board or carry out repairs. Such a request could also come from the vessel's agent, operator, or owner. A request of this nature is a request for a place of refuge.

NSW has endorsed the [National Maritime Place of Refuge Risk Assessment Guidelines](#) for use in NSW. NSW Maritime will take the Combat Agency role, no matter where the vessel is in Coastal Waters, until such time as a place of refuge is determined. At that time control of the incident may be handed to Port Authority or retained by NSW Maritime, based on the location of the place of refuge.

#### **5.4.3 Levels of response – classifying the response**

Oil and chemical spills and the responses they require are categorised into three levels in the National Plan. The levels link credible spill scenarios to attainable scales of response and enable escalation from one level response to another. It is a practical method of planning a spill response based on impacts and required resources.

The quantity of oil or chemical discharged does not automatically determine the response but is used as a guide. The scale of response depends upon the type of oil or chemical, magnitude of the spill, its potential and immediate threat to human health and the environment as well as available resources.

The three levels of response are described in Table 2 - National Plan response levels:

Table 2 - National Plan response levels

Level	Levels of Response
1	<p><b>Potential Emergency Condition – small spill or incident</b></p> <p>An incident that only requires response within the boundaries of the berth, vessel or small geographical area.</p> <p>No public health and/or environmental impact or problems are anticipated outside the operations area.</p> <p>The Combat Agency will generally be able to respond to and clean up the spill using local resources. In cases where additional resources are required, these will generally be available from the local port authority, HAZMAT, or industry resources under mutual aid arrangements.</p>
2	<p><b>Limited Emergency Condition – a medium or significant spill/incident</b></p> <p>A significant incident or emergency that can be responded to within the boundaries of the berth, vessel, or geographical area, and which may have a serious impact on public health and/or the environment.</p> <p>The Combat Agency will initiate a response with support from other agencies, including the MPC where necessary.</p> <p>Local and regional resources may need to be supplemented by other intra-state or interstate resources.</p> <p>AMSA will facilitate provision of interstate resources upon request from the MPC.</p>
3	<p><b>Full Emergency Condition- a major spill/incident</b></p> <p>An incident/emergency that will pose a very serious impact on human life and/or affect the environment significantly.</p> <p>It requires the activation of support resources up to national or international level.</p> <p>The Combat Agency with the assistance of the MPC would require local, region and national assistance. For catastrophic spills, resources from overseas may also be required. These can be sought by the MPC through AMSA, and, in the case of incidents involving chemical tankers, in consultation with industry.</p> <p>A spill of this magnitude may require additional coordination via the SEOCON.</p>

## 5.5 Initial response

### 5.5.1 Response sequence

Once a maritime incident occurs the typical sequence of responding is as follows:

- notification of the maritime incident (section 5.3)
- initial assessment and distribution of the information (section 5.4)
- establishment of an incident control centre (ICC) and incident management team (IMT) (section 5.6.3)

Some or all the following actions may be required, depending on the incident:

- ensure the safety of ship's crew and responders
- stabilise the ship to prevent an oil spill and protect cargo (usually the responsibility of a salvage company engaged by the ship owner)
- stop or minimise the amount of pollutant being spilt and/or cargo being lost (usually the responsibility of a salvage company)
- monitor the movement of the pollutant and let it disperse naturally
- contain and recover the pollutant as close to the source as reasonably practicable
- disperse the pollutant using approved dispersants
- protect sensitive resources
- clean-up shorelines
- respond to affected wildlife
- manage waste
- terminate the response

In addition, all marine pollution responses need to:

- maintain safety of responders and the public
- provide public information, stakeholder engagement and community liaison

Initial response will depend on the size and location of the incident.

For all incidents, the relevant Combat Agency is to:

- determine the closest available trained personnel and request an initial assessment
- obtain expert advice from FRNSW if a chemical spill is involved
- advise the NSW Maritime of the incident via the NSW Maritime Marine Pollution and Emergency Response telephone number
- assign an Incident Controller to coordinate spill clean-up, if necessary, using local resources
- advise AMSA through the Rescue Coordination Centre (RCC) if the incident involves a trading ship or commercial vessel
- advise the Local Emergency Operations Controller (LEOCON) of the incident and request local support if required
- mobilise local resources to respond

In addition, for Level 2-3 spills the relevant Combat Agency will:

- assign an initial Incident Controller for first strike response and mobilise local resources
- advise the Region Emergency Management Officer (REMO) of the incident and request local support
- notify other NSW supporting agencies through the SEOC and place them on standby or mobilise
- place the State Response Team on standby or deploy selected members
- liaise with the MPC regarding possible mobilisation of the National Response Team and equipment

Oil and chemical spill response equipment will be initially mobilised from the stockpiles held by NSW Maritime and Port Authority. If additional equipment is required AMSA will be requested to arrange for the release and transport of equipment from its stockpiles and if necessary, the petroleum industry's stockpile at Geelong. If necessary, international stockpiles can also be mobilised to assist with the response.

### 5.5.2 Response options for oil spills

The advantages and disadvantages of different response options are compared with each other and with natural recovery in a **Net Environmental Benefit Analysis**. This process considers the circumstances of the spill, practicalities of response, relative impacts of the response methods, a judgement on the relative importance of social, economic and environmental factors and overall likely environmental impact.

The Environment and Scientific Coordinator must be activated for significant maritime incidents to provide advice to the Incident Controller or MPC and to ensure that the appropriate Net Environmental Benefit Analysis is conducted for the various response options.

The following options will be considered based on the analysis:

- **control or stop** the discharge at the source if possible
- **contain** and capture discharged material at the source if possible
- if coastal or sensitive marine environments are not threatened or likely to be threatened, **monitor** the movement and behaviour of the discharge
- if coastal and sensitive marine environments are threatened **take active response measures** where practicable to protect sensitive environments, including:
  - applying **dispersant**
  - **containment** and recovery of the oil
  - **physical protection** of sensitive resources
- if response at sea is not feasible or protection of sensitive environments is not feasible due to weather and sea conditions, or these have already been affected, determine appropriate clean-up priorities and **initiate a shoreline clean-up and wildlife response**.

### 5.5.3 Response options for chemical spills

A response method can only be considered once a chemical has been identified and grouped according to its physical and chemical behaviour and hazard classification.

Specialist advice must first be sought from FRNSW, EPA and the chemical industry.

The appropriate method of response to a chemical spill may depend on the quantities spilled or released, chemical reactivity, concentrations in air and water and the environmental conditions at the location of the spill. The magnitude of the release is also important in determining the feasibility of response, particularly with gases and vapours.

- response options will be based on:
- controlling or stopping the discharge
- collecting the spilled material at the source
- diluting or neutralising the chemical
- managing any impact on the shoreline and/or plants and animals

### 5.5.4 Shoreline clean-up

A shoreline clean-up may be required if the spill cannot be contained or dispersed at sea. Shoreline clean-up operations are planned to minimise further environmental damage. Sometimes, oil or chemicals on shorelines may best be left to weather and degrade naturally. This option must be considered where oil or chemical impacts a sensitive area such as mangroves, salt marshes, mud flats or remote areas.

Shoreline clean-up is labour and equipment intensive and will be included as a part of the IAP.



### 5.5.5 Animal and wildlife response

Affected wildlife will be managed in accordance with the Environmental Services Functional Area (EnvSFA) supporting Plan and associated policies and procedures.

Impacts on fisheries, aquaculture and animals (livestock and companion) at risk and coordinating appropriate response and recovery measures will be managed in accordance with the Agriculture and Animal Services Functional Area (AASFA) supporting Plan.

The EnvSFA and AASFA must be engaged as soon as possible to assist with risk identification and response planning relevant to the resources at risk.

Animal and wildlife response is labour and equipment intensive and will be included as part of the IAP.

### 5.5.6 Waste management

Oil and chemical clean-up operations can generate large amounts of different waste types and contaminated materials. It is crucial that management strategies and disposal methods are addressed as early as possible by the Incident Controller with support from the EnvSFA and other relevant authorities. Different type of waste should be kept separated and a management strategy developed for each of the different waste streams.

Oil and chemicals may be contaminated with a variety of solids such as seaweed, wood, plastic materials of various types, dead birds and animals which complicate handling and disposal. Appropriate collection and disposal techniques must be selected for the circumstances.

Disposable safety equipment and other products such as sorbent materials etc. can also generate large amounts of waste that need a collection, management and disposal strategy.

For an oil spill at sea, the volume of waste requiring disposal will be the collected oil multiplied by a factor of **five** to include the entrained water content. For shore-based clean-up, the volume of collected oil should be multiplied by a factor of **ten**.

The collected mass of oil and chemical spill debris must be properly stored, transported and disposed of to minimise the potential for further adverse environmental impacts. Permitting for the establishment of Temporary Emergency Waste Storage Sites (TEWSS) will be reviewed and assessed by the EnvSFA and the EPA.

Waste management is a significant challenge and will be included as part of the IAP.

## 5.6 Control and coordination

Control and coordination responsibilities are in Table 3 - control and coordination responsibilities:

*Table 3 - control and coordination responsibilities*

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Combat Agency</b>	NSW Maritime or Port Authority	NSW Maritime or Port Authority	NSW Maritime or Port Authority
<b>Incident controller</b>	NSW Maritime or Port Authority	NSW Maritime or Port Authority	NSW Maritime or Port Authority

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Support coordination</b>	Not normally required however, functional areas should be notified of the incident so they can undertake risk-based assessment based on type, volume and location of the spill	As described in: <ul style="list-style-type: none"> <li>• NSW Coastal Waters Marine Pollution Contingency Plan (if required)</li> <li>• Regional Emergency Management Plan</li> <li>• Functional Area Plans</li> </ul>	As described in: <ul style="list-style-type: none"> <li>• NSW Coastal Waters Marine Pollution Contingency Plan</li> <li>• Regional Emergency Management Plan</li> <li>• Functional Area Plans</li> <li>• NMRA</li> <li>• National Plan</li> </ul>
<b>High level coordination</b>	Not required	MPC/REOCON	MPC/SEOCON
<b>Response resources</b>	Local (NSW Maritime, Port Authority or oil or chemical company)	Local Region State National	Local Region State National International

### 5.6.1 Control responsibilities

A maritime incident can occur anywhere in NSW ports or the seas around Australia, so response may be multi-jurisdictional. The National Plan Inter-Government Agreement (IGA) sets out the divisions of responsibility between the Commonwealth, states, and NT. At the state level, this Plan, the PSOL issued by the portfolio minister to Port Authority, and ministerial delegations set out the requirements for responding to maritime incidents. The divisions of responsibility are summarised in Table 4 - Combat Agency areas of responsibility and Figure 3 - Combat Agency areas of responsibility.

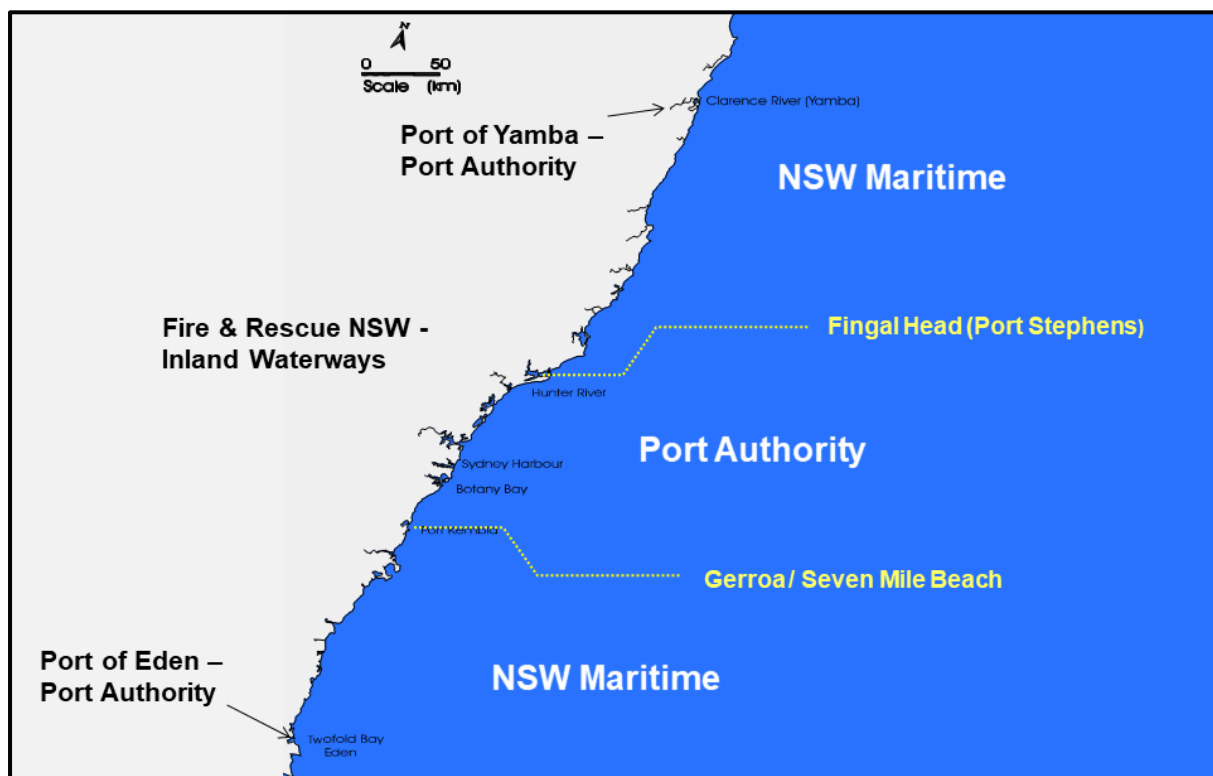
Where oil or chemical pollutants also affect an adjoining area of Coastal Waters or the shoreline, the agency which took on the initial Combat Agency role will remain the Combat Agency for the entire incident or emergency unless there is a mutual agreement to hand over the role.

In the case of a place of refuge request, NSW Maritime will assume the Combat Agency role until a place of refuge is granted. At that time, control of the incident may be handed to Port Authority as the designated maritime incident Combat Agency.

Table 4 - Combat Agency areas of responsibility

Location	Combat Agency
Qld border to Fingal Head (Port Stephens) <u>excluding</u> the Port of Clarence River;	NSW Maritime
Port of Clarence River (Yamba) (Port Waters)	Port Authority
Fingal Head to Gerroa including: <ul style="list-style-type: none"> <li>• Port of Newcastle</li> <li>• Sydney Harbour</li> <li>• Botany Bay</li> <li>• Port Kembla</li> </ul>	Port Authority
Gerroa to the Victorian border <u>excluding</u> the Port of Eden	NSW Maritime
Port of Eden	Port Authority
Inland waterways, rivers and estuaries	Fire & Rescue NSW
Australian Territorial Sea and High Sea (outside 3 nautical mile State limit)	Australian Maritime Safety Authority
Declared Naval Waters	Royal Australian Navy

Figure 3 - Combat Agency areas of responsibility



### **5.6.2 Marine Pollution Controller**

The portfolio minister has appointed the Executive Director NSW Maritime as the Marine Pollution Controller (MPC). The MPC is responsible for coordinating the overall State response to an actual or potential oil or chemical spill into Coastal Waters. The Minister has also appointed alternate MPCs from within NSW Maritime.

The MPC supports the Combat Agency response to a maritime incident and is responsible for liaison with the relevant ministers, industry representatives, vessel owner(s), salvor(s) and media as required.

The MPC will usually work from an Emergency Operations Centre (established at the NSW Maritime office, James Craig Road, Rozelle). MPC support personnel work to an AIIMS structure.

### **5.6.3 Incident Controller and support staff**

Response to an oil or chemical spill in Coastal Waters is controlled by a suitably trained Incident Controller (IC) appointed by NSW Maritime or Port Authority in consultation with the MPC (or Delegate). The IC works from an Incident Control Centre (ICC) established for the purpose. A Forward Command Point (FCP) may be established where required.

The Incident Controller controls the response and overall operational decision making. NSW Maritime and Port Authority have pre-designated Incident Controllers and support staff for spills within their assigned areas. The Incident Controller will use the AIIMS structure to manage the response. They may call on other agencies to assist with filling key positions, including members of the NSW Maritime State Response Team, which is a group of trained and experienced staff capable of responding to a maritime pollution incident (see Appendix C—AIIMS structure).

Functional areas may be requested to provide support. This may be via their liaison officer or within the AIIMS structure. For example, the Environmental Services Functional Area may be asked to provide an Environment Coordinator and Waste Management Coordinator.

#### **5.6.3.1 Multi Agency Incident Control Team**

For maritime incidents where FRNSW has a large commitment of personnel and or equipment (usually fire on a vessel or significant chemical spill) the maritime combat agencies have agreed to use a Multi-Agency Incident Control Team (MAICT) approach to managing a maritime incident. These arrangements are described in more detail in the *Fire on a Vessel Guidelines* maintained by NSW Maritime.

#### **5.6.3.2 Environment and Scientific Coordinator**

The Environment and Scientific Coordinator (ESC) is a specialist advisor position that reports to the MPC and/or the Incident Controller depending on the type and complexity of a response. The role of the position is to provide timely, accurate and effective high-level scientific and environmental advice to the MPC and/or Incident controller. The ESC should be activated in conjunction with the EPA Duty Incident Advice Coordinator.

The ESC works with and calls upon the expertise and resources available through the EnvSFA.

### **5.6.4 Coordination with salvage**

The salvage industry should be involved early in the response to a maritime incident involving a damaged or disabled vessel (maritime casualty). Salvage may need to be arranged to take the vessel in tow, re-float a grounded vessel, reduce or stop a discharge of pollutant to

minimise environmental damage. A salvage contractor will normally be appointed by the vessel's owner or insurer.

Where a salvor is not appointed, the MPC may use the powers of intervention under section 183 of the *Marine Pollution Act 2012 (NSW)* to issue a direction or take control of the vessel and take appropriate action. Alternatively, the MERCOM may intervene to take control of the casualty in Commonwealth waters.

The MERCOM may also activate towage vessels using the national arrangements.

The Incident Controller may appoint a person with appropriate marine qualifications as the Maritime Casualty Officer. The role of this person is to provide the Incident Controller and/or MPC with the best available information regarding the salvage operation and the salvor's actions.

During incidents involving a complex casualty situation, it may be necessary for the Incident Controller, MPC or MERCOM to have access to independent advice on the salvage operation, including whether the proposed salvage operations are appropriate or feasible. Assistance in identifying suitable companies to provide independent advice can be provided by AMSA.

### **5.6.5 Aviation Support**

AMSA maintains an aerial reconnaissance capability and Fixed Wing Aerial Dispersant Capability. These specialist resources are available on request.

NSW Maritime may request the assistance of the State Air Desk (SAD) to use NSW RFS owned or contracted aircraft, National Aerial Firefighting Centre contracted or Call When Needed contracted aircraft for incidents managed under this Plan.

Combat agencies may request assistance from FRNSW for remotely piloted aircraft systems (RPAS).

Aviation operations will be managed in accordance with the NSW & ACT Aviation Standard Operating Procedures.

### **5.6.6 Incidents originating in Commonwealth Waters**

Where an incident or emergency occurs outside of the three nautical mile limit and is likely to enter Coastal Waters (and affect the shoreline), AMSA will request that NSW assume responsibility for responding to the maritime incident. The MPC (or Delegate) will consult with NSW Maritime and Port Authority to determine which agency takes on the Combat Agency role.

NSW will assume responsibility for an oil spill originating from offshore petroleum exploration or production operations that enters NSW Coastal waters. The operator (Title Holder) and relevant Commonwealth Agency will be consulted and advised of the Combat Agency arrangements.

Regardless of where the maritime incident occurs, other agencies will assist in accordance with this plan, the NSW EMPLAN and National Plan arrangements.

## **5.7 Emergency information and warnings**

The Combat Agency appoints a Public Information Officer (PIO) to work with the Incident Controller. The PIO is responsible for managing media requests and providing the media with regular accurate updates on the incident response.

For significant incidents where the MPC is activated a Media Officer will be appointed by the MPC. The role of this person is to provide overall coordination of the media requests and information distribution and to assist the Ministerial Media Officer with media requests.

### **5.8 Inter-jurisdictional support**

NSW Maritime may call on the National Plan arrangements to activate the National Response Team (NRT) and/or get access to equipment stockpiles. Requests for members of the NRT or national stockpile equipment are made through AMSA.

### **5.9 Impact assessment**

A comprehensive impact assessment and net environmental benefit assessment are the basis of responding to marine pollution. Combat Agencies use the PESTLEO impact assessment model, which assesses impact across political, economic, social, technological, legal, environmental and operational dimensions. This information is made available to the recovery structures as they are established and can be mapped against the four recovery environments.

### **5.10 Terminating the response**

The Incident Controller, in consultation with the Environment and Scientific Coordinator, will determine when further effort and expenditure in clean-up becomes unreasonable and will advise the MPC accordingly.

The Incident Controller should stand down individual participating and supporting agencies when satisfied that the incident or emergency has been satisfactorily controlled and the pollutant cleaned up, or when their input is no longer required. Guidelines have been developed for determining how clean shorelines should be based on their environmental and human usage. A summary of the guidelines is in Appendix D—Criteria for terminating a spill response.

Each agency when stood down should conduct an internal debrief to analyse its involvement in the response. Once the major operational phase of the response is completed the MPC (or Delegate) should organise an after-action review of the response and follow it up with a formal report.

## **6 Recovery**

The arrangements for recovery operations in New South Wales are outlined in the NSW State EMPLAN and further described in the State Recovery Plan.

The Combat Agency will conduct impact analyses as part of its response planning and community outreach throughout the response. These products and processes are directly relevant to community recovery and will be made available to Resilience NSW staff.

Recovery planning should be embedded into the Incident Management Team.

Recovery operations aim, as far as possible, to return the environment to its pre-incident condition or to a state considered to be an acceptable environmental outcome but may not include direct long term environmental impacts.

## 6.1 Recovery function activities

<i>Environmental</i>	<i>Economic</i>	<i>Social</i>	<i>Built</i>
Assessing and documenting impact on natural resources	Assessing and documenting impact on the local, regional, and national economy	Assessing and documenting impact to cultural, heritage and other community resources	Assessing and documenting impact to infrastructure and services
Rehabilitating affected areas where possible and measuring recovery over time	Support agencies to recover response costs	Rehabilitating and conserving impacted cultural and heritage resources where possible	Rehabilitating or returning affected infrastructure to service, e.g., damaged navigation aids and restoring production
Communicating incident impacts to the public	Facilitating recovery of incident losses incurred by business	Restoring community services as soon as possible, e.g., re-opening beaches and boat ramps	Prioritising repairs or reconstruction of affected infrastructure
Engaging with the community to assist with the assessment and rehabilitation processes	Assisting business to recover from the intangible impacts of the incident, e.g., loss of confidence in the fishery or tourism sectors	Engaging with the community on the recovery process	Engaging with affected stakeholders on recovery priorities

## 7 Logistics and finance

### 7.1 Financial policy

Commercial ships generally have insurance to cover the costs of oil and chemical spill clean-up and pollution damage. This insurance is usually from ship owners Protection and Indemnity Clubs (P&I Club). Claims may be made for reimbursement of costs incurred in pollution response, and for pollution damage. There may be liability limits on any claims, including claims made on a strict liability ('no fault') basis.

Where a polluter cannot be identified or the costs recovered, there are provisions under the National Plan IGA to recover costs from the National Plan up to certain limits.

Clean-up measures must be reasonable in the circumstances and supported by accurate documentation, evidence of expenditure and cost of any pollution damage. All agencies involved in a maritime incident response should keep detailed records of all requests made, decisions taken, financial expenditure incurred and the reasons for the expenditure. P&I Clubs

assess all claims very methodically to ensure they are reasonable and are supported by satisfactory documentation.

Agencies should familiarise themselves with the *NSW Cost Recovery Guidelines for Maritime Incident Response* available from NSW Maritime.

## **7.2 Resource availability**

### **7.2.1 Equipment returns and restoration**

Following a response operation, the Incident Controller should arrange to recover, clean and return all equipment and unused materials to the appropriate resource centre by the quickest means available, at reasonable cost.

Once returned, all equipment shall be thoroughly serviced in accordance with equipment maintenance schedules prior to being stored. The Combat Agency shall ensure that all costs incurred in returning equipment to the resource centre, including cleaning and servicing are included in the overall schedule list of costs submitted for reimbursement by the polluter.

### **7.2.2 Specialist hazmat equipment**

All FRNSW units carry limited resources for oil and chemical incident or emergency response. Specialised appliances and specialist-trained personnel are in Newcastle, Sydney and Wollongong. FRNSW will coordinate the supply of their internal resources and, when requested by the Combat Agency, will coordinate the supply of external specialist resources.

### **7.2.3 Overseas assistance**

Overseas assistance would not normally be necessary, however, if needed assistance may be sought from overseas in accordance with the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC 1990). Existing Commonwealth arrangements can expedite the temporary import of equipment and experienced personnel should the need arise on a request from AMSA.



## Appendix A—Roles and responsibilities

The following roles and responsibilities are in addition to the roles and responsibilities described in the EMPLAN and contextualised to marine pollution.

Agency or Functional Area	Roles and responsibilities
<p><b>Agriculture and Animal Services Functional Area (AASFA)</b></p> <p>Through Department of Primary Industries (DPI)</p>	<p><i>Role: to support combat agencies manage the impact of emergencies on agriculture, fisheries, companion and commercial animals.</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• build awareness for emergency prevention and preparedness by primary producers (particularly fisheries and aquaculture), animal holding establishments and the community</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of fisheries and aquaculture operations that may be affected by marine pollution</li> <li>• train staff to work in an IMT and as liaison officers</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• identify at-risk animals and agricultural assets and provide impact advice to the Combat Agency</li> <li>• coordinate impact assessment on fisheries and aquaculture</li> <li>• coordinate support to primary producers, animal holding establishments and the community</li> <li>• coordinate rescue, evacuation, emergency care of animals and the assessment, humane destruction and disposal of affected animals</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• conduct agricultural damage impact assessments.</li> <li>• assist with transition from response planning</li> <li>• provide recovery information and workshops</li> <li>• attend recovery centres and recovery committees when activated</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Australian Maritime Safety Authority (AMSA)</b></p>	<p><i>Role: National marine pollution response authority outside State Waters.</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• ensure compliance with IMO requirements to prevent marine pollution</li> <li>• exercise MERCOM powers</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain the <i>National Plan for Maritime Environmental Emergencies</i></li> <li>• maintain a National Response Team to supplement incident management teams</li> <li>• maintain equipment stockpiles for responding to a marine pollution emergency</li> <li>• maintain an aerial reconnaissance and response capability for marine pollution emergencies</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• appoint a Marine Emergency Response Commander (MERCOM) to act on behalf of AMSA to control a maritime casualty in Commonwealth waters.</li> <li>• provide advice on combat and clean-up options to the Incident Controller and the MPC</li> <li>• provide expert advice on the management of a marine casualty</li> <li>• coordinate the supply of additional National Plan equipment from other jurisdictions</li> <li>• mobilise the National Response Team</li> <li>• liaise with industry and international stockpile holders for the supply of oil and chemical spill response equipment and personnel</li> <li>• activate the Fixed Wing Aerial Dispersant Capability</li> <li>• provide oil and chemical spill trajectory modelling</li> <li>• provide suitably qualified personnel to fill specialist AIIMS positions</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with transition from response planning</li> <li>• assist with insurance claims and legal proceedings</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Emergency Operations Controller (EOCON)</b></p>	<p><i>Role: coordinate support to Combat Agency on request</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of marine pollution response strategies and implications</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• monitor the response</li> <li>• coordinate support resources at the appropriate level on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• support transition from response planning</li> </ul>
<p><b>Engineering Services Functional Area (ESFA)</b> Through NSW Public Works Advisory</p>	<p><i>Role: to provide engineering support to the Combat Agency:</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of potential marine pollution impacts</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• provide specialist advice, particularly for construction of temporary structures, other infrastructure, and waste management</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with transition from response planning</li> <li>• provide specialist engineering advice on dismantling infrastructure, remediation and rehabilitation</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Environmental Services Functional Area (EnvSFA)</b></p> <p>Through the Environment Protection Agency (EPA)</p>	<p><i>Role: to give expert scientific advice and support regarding environment protection and waste management to the MPC and Incident Controller:</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of potential marine pollution impacts</li> <li>• develop contingencies for emergency wildlife response and waste disposal</li> <li>• identify and prepare staff to act as Environment and Science Coordinator and Waste Coordinator in a marine pollution emergency</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• provide appropriately trained IMT personnel on request</li> <li>• assist in determining environmental impacts, including to cultural or heritage assets</li> <li>• assist with identification and assessment of hazardous materials</li> <li>• identification and provision of appropriate environmental monitoring equipment</li> <li>• support the coordination of the wildlife response</li> <li>• provide technical and regulatory advice regarding options for clean-up, waste transport, temporary storage, treatment and disposal of recovered oil, chemicals and contaminated debris</li> <li>• advise other Functional Areas or agencies involved in the emergency on environmental issues</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with planning transition from response to recovery</li> <li>• provide technical advice on long-term impacts from marine pollution and environmental remediation or rehabilitation</li> </ul>

Agency or Functional Area	Roles and responsibilities
<b>Fire and Rescue NSW (FRNSW)</b>	<p><i><b>Role:</b> Combat Agency for hazardous materials incidents and emergencies, including inland waters, rivers, estuaries, local harbours. Supporting agency for marine pollution.</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• Providing regulatory, advisory and compliance inspection services for the built environment</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• train and maintain response staff to respond to hazardous materials incidents</li> <li>• participating in multi-agency exercises designed to prepare emergency services to respond effectively to local hazards, as well as broad threats to the community</li> <li>• develop and maintain technical guides and procedures for hazardous materials response</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• take all practicable measures to protect life, property and the environment from incidents</li> <li>• provide and coordinate specialist FRNSW resources for oil and chemical spills</li> <li>• rendering the site of an incident or emergency safe</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with planning transition from response to recovery</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Health Services Functional Area (HSFA) and NSW Ambulance</b></p> <p>Through NSW Health</p>	<p><i>Role: to provide health advice and support to the Combat Agency:</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of health risks associated with marine pollution</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• appoint a Health Commander, Ambulance, and a Medical Commander if necessary</li> <li>• coordinate and manage the mobilisation of health resources, including medical, mental health and environmental health in accordance with the arrangements detailed in NSW State Health Plan</li> <li>• NSW Ambulance will provide pre-hospital care and transport of injured casualties</li> <li>• undertake environmental health protection including: <ul style="list-style-type: none"> <li>○ assess long term health risks to any persons or populations that may be exposed</li> <li>○ make recommendations to Incident Controller regarding appropriate actions to prevent significant long term health risks</li> <li>○ advise on the risks of exposure to people/populations and recommend appropriate actions</li> </ul> </li> <li>• in the event of evacuations monitor temporary accommodations and recommend measures to maintain satisfactory public health standards including food, water and waste disposal</li> <li>• provide appropriate personnel as requested</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with transition from response planning</li> <li>• provide specialist health advice on long-term impacts of marine pollution, including community mental health</li> </ul>

Agency or Functional Area	Roles and responsibilities
Local Government	<p><i>Role: to provide specialist local knowledge to the Combat Agency and facilitate transition from response and community recovery</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of marine pollution risks and impact</li> <li>• develop contingencies for waste management</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• support the response by providing local knowledge and linkages into the community</li> <li>• support planning for temporary response infrastructure</li> <li>• assist with community liaison and engagement activities</li> <li>• provide links to local emergency management committee(s)</li> <li>• provide specialist equipment (e.g., earthmoving) on request</li> <li>• coordinate or facilitate waste disposal</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with transition from response planning</li> <li>• coordinate community renewal</li> </ul>

Agency or Functional Area	Roles and responsibilities
<b>NSW Food Authority (NSWFA)</b>	<p><b>Role:</b> <i>Combat Agency for food safety emergencies under the NSW Food Safety Sub Plan. Supporting agency during a marine pollution emergency.</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of potential marine pollution impacts on food supply, particularly seafood</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• assess health risks posed by the contamination of water supplies or foodstuffs including seafood</li> <li>• assess food safety risks and determine appropriate response action</li> <li>• issue prohibition orders on implicated businesses to stop manufacturing or supplying food</li> <li>• seize unsafe food and supervise disposal in a manner that is safe and environmentally acceptable</li> <li>• initiate a recall of contaminated food</li> <li>• if required provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• support transition from response planning</li> </ul>



Agency or Functional Area	Roles and responsibilities
NSW Maritime	<p><b>Role:</b> <i>Combat Agency for marine pollution response in defined NSW Coastal Waters.</i></p> <p><b>Prevention:</b></p> <ul style="list-style-type: none"> <li>• apply provisions of the <i>Marine Pollution Act</i> relating to preventing spills and other noxious discharge from vessels</li> <li>• exercise intervention powers</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain the Coastal Waters Marine Pollution Sub-plan</li> <li>• represent NSW for maintaining the National Plan for Maritime Environmental Emergencies</li> <li>• train and maintain response staff to respond to marine pollution</li> <li>• prepare and maintain procedural and technical documents that support a marine pollution response</li> <li>• establish a reserve of equipment for responding to a marine pollution emergency</li> </ul> <p><b>Response</b></p> <p>as Statutory Agency under National Plan arrangements:</p> <ul style="list-style-type: none"> <li>• assist the incident controller to coordinate resources from NSW Maritime, Port Authority and AMSA if requested to do so</li> <li>• provide and support the MPC when monitoring or supporting the response to a maritime incident /emergency</li> </ul> <p>as Combat Agency in defined areas:</p> <ul style="list-style-type: none"> <li>• establish an incident control centre</li> <li>• provide an Incident Controller</li> <li>• provide trained emergency response staff</li> <li>• make available emergency response equipment under its control</li> </ul> <p>when supporting a Combat Agency (Port Authority or FRNSW)</p> <ul style="list-style-type: none"> <li>• provide trained emergency response staff</li> <li>• make available emergency response equipment under its control</li> <li>• if required provide a liaison officer</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• coordinate community liaison</li> <li>• develop a plan to transition from response to recovery</li> <li>• keep the SERCON briefed</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>NSW Police Force</b></p>	<p><b>Role:</b> Law enforcement, combat agency for search and rescue, counter terrorism activities, and coordination in circumstances where no other agency has legislated responsibility during emergencies. Control and coordination of evacuation from an area affected by an incident or emergency.</p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• provide training for Marine Area Command staff likely to assist in marine pollution response</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• assist with traffic and crowd control</li> <li>• maintain access and egress route security and control</li> <li>• on advice from the FRNSW, evacuate an area at risk of being severely affected by a maritime incident</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul>
<p><b>Petroleum Industry</b></p>	<p><b>Role:</b> to control incidents within their terminal area (or Commonwealth Waters) and provide operational assistance to the Combat Agency for spillage that escapes the terminal area.</p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• comply with the <i>Marine Pollution Act (2012) NSW</i> and <i>Protection of the Environment Operations Act (1999) NSW</i></li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain a spill response capability for their terminal operations</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• control marine pollution within the extent of their terminal</li> <li>• advise the relevant Combat Agency if the spill extends, or is likely to extend, outside the terminal area</li> <li>• provide industry advice and assistance, as requested, to the Incident Controller and/or the MPC</li> <li>• provide industry owned response equipment</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with planning transition from response to recovery</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Port Authority of NSW</b></p>	<p><i><b>Role:</b> Combat Agency for marine pollution response in defined NSW Coastal Waters.</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• comply with the conditions of the Port Safety Operating Licence</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• train and maintain response staff to respond to marine pollution incidents</li> <li>• establish a reserve of equipment for responding to a marine pollution emergency</li> </ul> <p><b>Response</b></p> <p>as Combat Agency in defined areas:</p> <ul style="list-style-type: none"> <li>• notify appropriate agencies</li> <li>• establish an incident control centre</li> <li>• provide an Incident Controller</li> <li>• provide trained emergency response staff, including equipment operators</li> <li>• sourcing additional staff if needed in the smaller ports</li> <li>• make available emergency response equipment under its control</li> </ul> <p>when supporting a Combat Agency (NSW Maritime or FRNSW)</p> <ul style="list-style-type: none"> <li>• provide trained emergency response staff</li> <li>• make available emergency response equipment under its control</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• coordinate community liaison</li> <li>• assist with planning transition from response to recovery</li> <li>• keep the SERCON briefed</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Public Information Functional Area (PIFA)</b></p> <p>Through NSW Police Force</p>	<p><i>Role: to provide specialist public information advice and resources to the Combat Agency</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of marine pollution risks and impact</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• support the Incident Controller or Public Information Officer in accordance with the Public Information Functional Area Supporting Plan</li> <li>• provide appropriate personnel as requested</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with public information and community engagement as requested</li> </ul>
<p><b>Royal Australian Navy</b></p>	<p><i>Role: to control incidents in Naval Waters and support the Combat Agency on request</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• Comply with the <i>Marine Pollution Act 2012 (NSW)</i></li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain a spill response capability for spills in Naval Waters</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• control marine pollution within Naval Waters</li> <li>• advise the relevant Combat Agency if the spill extends, or is likely to extend, outside Naval Waters</li> <li>• make oil spill equipment and resources immediately available in Sydney Harbour on request to the Duty Fleet Operations Officer (DACC Category 1)</li> <li>• provide RAN personnel on request (DACC Category 1)</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with planning transition from response to recovery</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Rural Fire Service (RFS)</b></p>	<p><i>Role: to provide specialist aviation support to the Combat Agency</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain NSW aviation support contracts and assets</li> <li>• train and maintain trained aviation support staff</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• support the response by providing aviation assets through the RFS State Air Desk</li> <li>• assist with community liaison and engagement activities</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul>
<p><b>Transport Services Functional Area (TSFA)</b></p> <p>(A functional area of Transport for NSW working alongside NSW Maritime)</p>	<p><i>Role: to provide support and resources to support the Combat Agency</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• supports the risk and hazard mitigation strategies of the Combat Agency as per the Transport Services Functional Area (TSFA) Supporting Plan</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• ensures the preparedness of the transport cluster to support the Combat agency in emergency and recovery operations</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• coordinates transport services support in accordance with the Transport Services Functional Area Supporting Plan</li> <li>• provide appropriate personnel as requested</li> <li>• provide Transport Liaison Officer's on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist the Combat Agency with restoration and recovery operations</li> <li>• supports the combat agency in meeting the state recovery arrangement requirements</li> </ul>

Agency or Functional Area	Roles and responsibilities
<p><b>Welfare Services Functional Area (WSFA)</b></p> <p>Through Resilience NSW</p>	<p><i>Role: to provide specialist welfare support to the community and Combat Agency</i></p> <p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• n/a</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• maintain awareness of marine pollution risks and impact</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• support the response by providing welfare services to victims of a marine pollution emergency in accordance with the Welfare Services Functional Area Support Plan</li> <li>• assist with community liaison and engagement activities</li> <li>• provide a liaison officer on request</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• assist with transition from response planning</li> </ul>

## Appendix B—Glossary

Readers should refer to [EMPLAN](#) Annexure 9 – Definitions. Additional terms not found in the EMPLAN are defined below:

<b>AIIMS</b>	The Australasian Inter-service Incident Management System, which has been adopted as the approach to managing emergencies under the National Plan.
<b>AMOSC</b>	The Australian Marine Oil Spill Centre
<b>AMOSPlan</b>	The cooperative arrangements for response to oil spills by Australian oil companies and associated industries. (Source: National Plan)
<b>AMSA</b>	The Australian Maritime Safety Authority
<b>Assessment</b>	Includes the confirmation of a spill, an initial assessment of the extent of the spill and reporting the finding to the appropriate organisation/individual
<b>Coastal waters</b>	Coastal waters of the State (within the meaning of Part 10 of the <i>Interpretation Act 1987</i> ) – which includes the section of State waters extending three nautical miles seaward. For this Plan, it includes the major and regional ports and other waterways listed in 1.4.1 but excludes rivers, estuaries and other local harbours
<b>IGA</b>	Inter-governmental Agreement (of the National Plan for Maritime Environmental Emergencies). The IGA ensures that the national approach to preparedness and response to oil and chemical spills in the marine environment is continued and strengthened. It provides a mechanism to ensure decision making under the National Plan is co-operative and that the obligations of all parties are met.
<b>Incident</b>	Any discharge or escape, or potential discharge or escape, of any oil or chemical substance into Coastal waters during its handling, transport or storage. (Contextual application of EMPLAN definition.)
<b>Incident Control Centre</b>	the centre established by the Combat Agency to control and coordinate the response to an incident/emergency. There is only one incident control centre for an incident/emergency response.
<b>Joint Rescue Coordination Centre (JRCC)</b>	The national centre for the notification of maritime incidents and the coordination of sea search and rescue (operated by AMSA).
<b>Marine Pollution Controller (MPC)</b>	The officer responsible for coordinating the overall State response to an actual or potential oil or chemical spill into Coastal waters and responsible for liaison with the relevant ministers, SEOCON, industry representatives, ship owner, salvor and media.

<b>Maritime casualty</b>	A collision of ships, grounding or other incident of navigation or other occurrence on board a ship or external to it resulting in material damage or imminent threat of material damage to a ship or cargo as defined in the international convention relating to intervention on the high seas in cases of oil pollution casualties.
<b>Maritime Casualty Officer (MCO)</b>	A qualified marine surveyor, with extensive knowledge of ship structures and stability and experience in salvage operations, who is placed on board a vessel during an incident or emergency by the Combat Agency or AMSA to provide independent and objective advice.
<b>Maritime Emergency Response Commander (MERCOCOM)</b>	Appointed by AMSA, the MERCOCOM is the national decision maker responsible for control of responses to maritime casualties, with intervention powers to take such measures as may be necessary to prevent, mitigate, or eliminate a risk of significant pollution, including the power to direct a port to release a tug or designate a place of refuge for a ship in emergency situations that present a risk of significant pollution.
<b>National Maritime Emergency Response Arrangement (NMERA)</b>	An arrangement between jurisdictions to ensure continuing provision of an appropriate level of maritime emergency towage capability around the Australian coastline and the enhancement of the emergency response management framework, including the appointment of a single national decision maker to coordinate a response to a maritime casualty (see MERCOCOM).
<b>National Plan</b>	The National Plan for Maritime Environmental Emergencies. A plan agreed to by the Commonwealth and state/NT governments and the oil, shipping and exploration industries to provide a response capability to the threat posed to the coastal environment by marine oil and chemical spills.
<b>Naval Waters</b>	Those waters defined in section 3B of the <i>Control of Naval Waters Act 1918 (Cth)</i> and are as marked on Australian navigational charts.
<b>NSW Maritime</b>	Transport for NSW constituted under section 3C of the <i>Transport Administration Act 1988 (NSW)</i> .
<b>Place of refuge</b>	A place where a ship in need of assistance can find favourable conditions enabling it to take action to stabilise its condition, protect human life and reduce the hazards to navigation and to the environment. (Source: <a href="#">National Maritime Place of Refuge Risk Assessment Guidelines</a> .) A place of refuge may include, but is not confined to, ports.



<b>Port Safety Operating Licence</b>	The licence issued to Port Authority under the <i>Ports and Maritime Administration Act, 1995 (NSW)</i> , which sets out the safety functions that Port Authority is to carry out on behalf of the State government. These include emergency response to incidents including oil and chemical spills from ships.
<b>RPAS</b>	Remotely Piloted Aircraft System (drone)
<b>Salvor</b>	A person or organisation who salvages a ship and or cargo.
<b>State Waters</b>	as defined in Section 3 the <i>Marine Pollution Act, 2012</i> (a) coastal waters of the State (within the meaning of Part 10 of the <i>Interpretation Act 1987</i> ), and (b) waters within the limits of the State.
<b>Statutory Agency</b>	The state, NT or Commonwealth agency having legislative responsibility for marine pollution matters in their area of jurisdiction. (Source: National Plan Intergovernmental Agreement.) NSW Maritime is the Statutory Authority for NSW.

## Appendix C—AIIMS structure

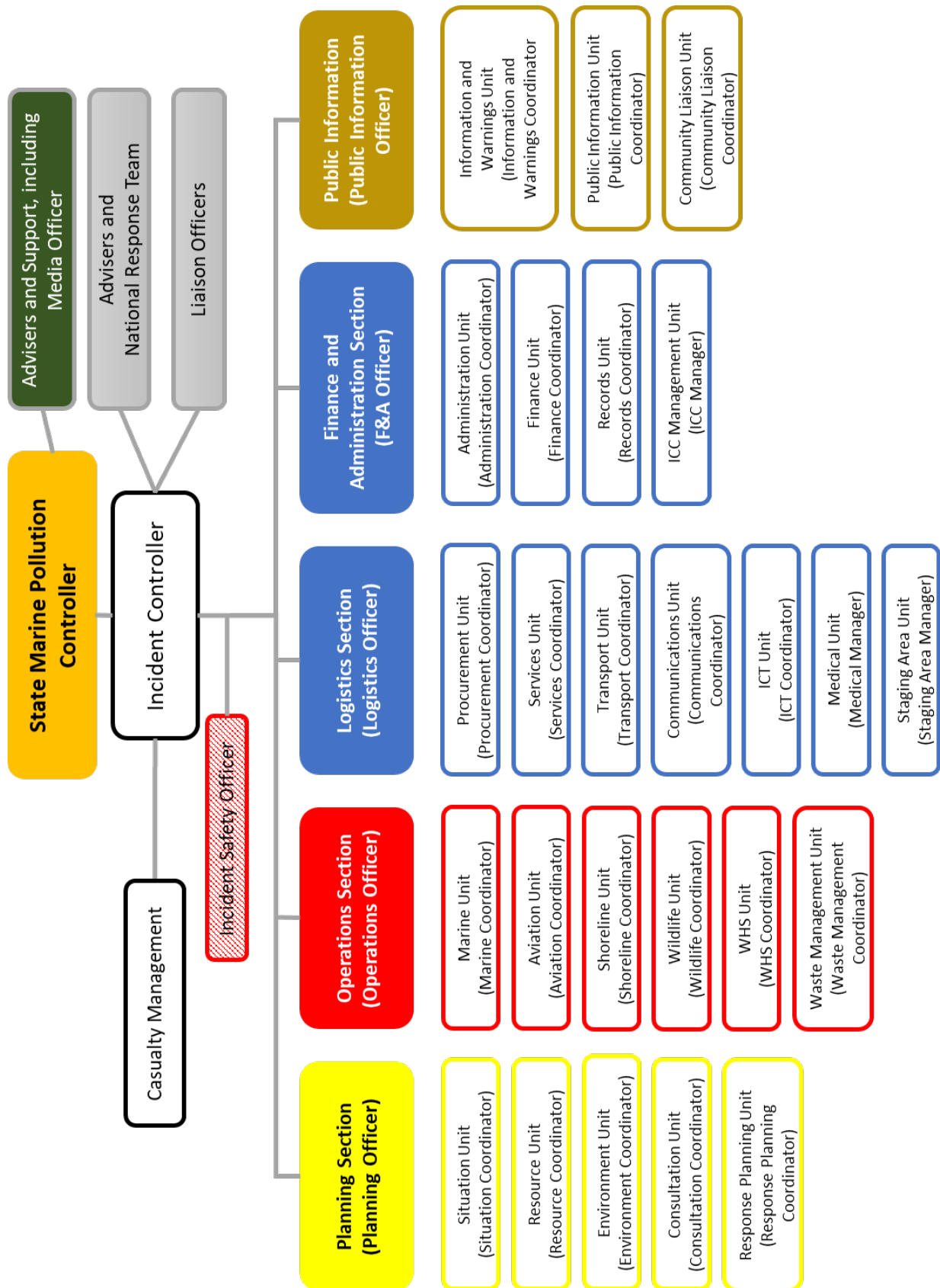


Figure 4 - AIIMS structure for marine pollution response

## Appendix D—Criteria for terminating a spill response

Developing a shoreline sign off plan should begin as soon as practicable after a shoreline response is initiated. The plan is implemented once the Incident Controller considers that no further environmental benefit is likely to be achieved from further clean-up operations. At this point a comprehensive foreshore inspection should be undertaken by a “Sign-Off” team comprising relevant agencies and stakeholders.

Further information is in the AMSA document [NP-GUI-025: National Plan response, assessment and termination of cleaning for oil contaminated foreshores](#)

### Shoreline sign-off plan

The table below shows the agreed environmental values and acceptable levels of cleanliness to be achieved if reasonably practicable.

Resource/environmental value	Acceptable level of cleanliness
<p><b>Contact surfaces</b></p> <p>Includes water surfaces, sediment surfaces and hard surfaces. Intended to encompass hard/sediment surfaces that organisms slide across; water surface that animals might broach to breathe, feed or flee and air/water interface for air-breathing organisms. Definition of clean would mean that air is suitable to breathe as no surface oil would mean no air contamination.</p>	<p>No visible tar balls, slicks or sheens that could adhere to organisms or interfere with normal animal/plant feeding, movement, life history processes and behaviour.</p> <p>Compliance with <a href="#">ANZECC Water Quality Guidelines</a> to the required level of environmental protection.</p>
<p><b>Shoreline – intertidal sediments as habitat and subtidal substrata as habitat</b></p> <p>Habitat is the place where organisms live. Habitat should be suitable for all organisms that naturally occur in the area e.g., algae, seagrasses, mangroves, molluscs, crustaceans, annelids, etc.</p>	<p>Need not be totally clean but remaining residues must not inhibit potential for recovery through toxic or smothering effects.</p> <p>In some circumstances oiling may be preferable to disturbing the site.</p> <p>Compliance with <a href="#">ANZECC Water Quality Guidelines</a> to the required level of environmental protection.</p>
<p><b>Subsurface water as habitat</b></p> <p>In this value the water is considered as habitat for plankton, fish, corals, mammals, seagrasses, aquaculture species etc. Habitat includes suitable conditions to live in as well as an appropriate environment to feed (particularly filter feeders) and to otherwise sustain viable populations (i.e., support life cycle processes).</p>	<p>Oil contamination should not interfere with normal animal or plant feeding, movement, life history processes and behaviour.</p> <p>Must not be toxic to all life stages of key species or exceed recommended concentrations from <a href="#">ANZECC Water Quality Guidelines</a> if required.</p>

<b>Resource/environmental value</b>	<b>Acceptable level of cleanliness</b>
<b>Shoreline (as an ecosystem interacting with other aquatic near shore ecosystems)</b>	Remaining residues must not be mobile such that they will leach out into near-shore waters.
<b>Cultural and historic value</b> Cultural values will be very diverse and particular to each resource. Responders should consult closely and be aware that in some circumstances oiling may be preferable to disturbance of sites.	Sensitive to and where possible address needs of cultural custodians.
<b>Food organisms and water that may be abstracted for human consumption</b>	Must meet statutory specification for residues and taints (e.g., NHMRC, NFA, ANZECC) as required.
<b>Amenity and/or safety of beaches and structures</b> (e.g., jetties and slipways)	No visible oil No oil that rubs off on people, boats or infrastructure causes slip hazard. Compliance with <i>ANZECC Water Quality Guidelines</i> if required. Compliance with OHS requirements if required.

Order in the table does not imply any priority of values.

If the initial foreshore assessment revealed an unacceptable level of oiling in particular areas, those areas may be subsequently monitored and, where appropriate, further clean-up activities initiated, prior to a further foreshore inspection for sign off.

Any new areas of foreshore contamination discovered during ongoing monitoring will also require clean up action where necessary.

The Incident Controller will make the final determination of when the shoreline clean-up operation will cease based on advice from the Foreshore Inspection and Sign-Off Team.

## Appendix E—Support resources: Oil Spill Trajectory Model

AMSA provides the states and NT with 24 hour access to the interactive spill computer model known as Oil Spill Trajectory Model ([OSTM](#)) that is designed to predict the trajectory of an oil slick, and some floating chemicals.

Basic data necessary for predictions in ports and port approaches is already prepared thus enabling an estimate of the movement and extent of an oil slick to be provided within a reasonable time frame. Updated predictions can be made for specific time intervals or for as long as the slick is a threat. On-scene visual observations obtained from aircraft reconnaissance should be used to confirm the accuracy of OSTM predictions. This information should then be used to update inputs for the model predictions.

AMSA will require the following information to initiate an OSTM:

- the time of the spill
- location of the spill (latitude and longitude)
- quantity and type of pollutant
- whether or not the spill is continuing
- local tide heights and timing
- surface current data
- the prevailing and forecast wind speeds and directions

An OSTM request can be made online through the AMSA National Environmental Operations (NEMO) portal or via the [OSTM request proforma](#). The request must be completed to provide the relevant data for the computer model

Output from the OSTM can be displayed and analysed using the oil spill response atlas (OSRA).

### Cautionary Note:

A disclaimer will accompany all oil spill trajectory model predictions provided by AMSA. Oil spill trajectory modelling is a predictive tool only. The accuracy of the predictions is only as good as the data supplied and the predictions should be used as a guide only in response planning. Ground truthing should be undertaken to confirm predictions where possible.

## **Appendix F—Support resources: Oil Spill Response Atlas**

The Oil Spill Response Atlas (OSRA) is designed to provide the Incident Controller and planning section with information about environmentally sensitive marine and foreshore ecosystems, biological resources and socioeconomic resources. This information is essential to help identify resources at risk, as early as possible, to allow protection decisions to be made.

The OSRA can also be used to assist in response planning, particularly for any shoreline assessment and clean-up.

NSW Maritime in conjunction with the Transport for NSW Spatial Unit maintains OSRA on the Transport for NSW Transport Website.

Access to the OSRA can be requested during an incident via the NSW Maritime Marine Pollution Response Duty Officer.

## **Appendix G—Support resources: Cultural Heritage and Indigenous Site Registers**

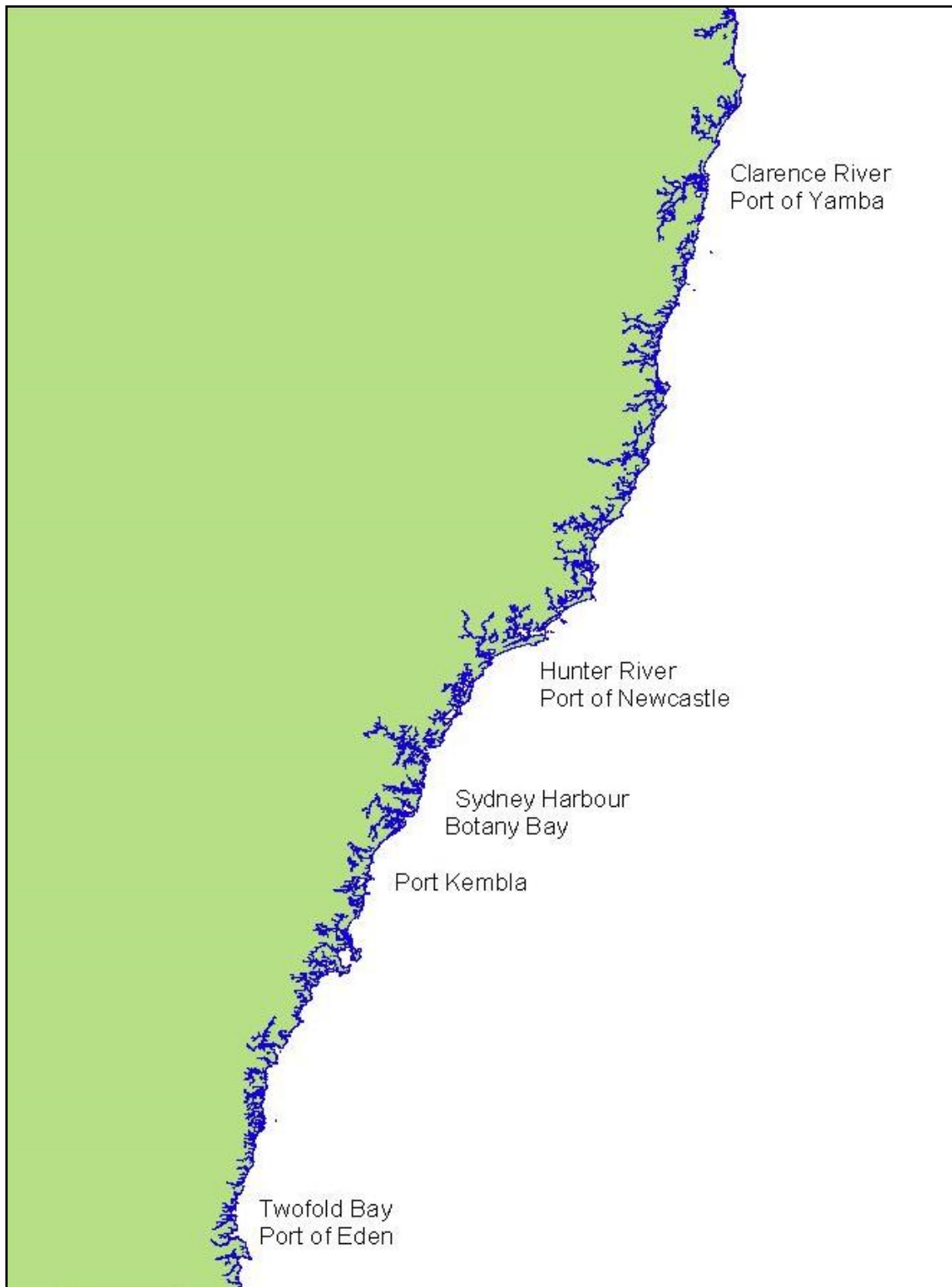
About 85 percent of the NSW population live in the coastal zone, consequently there are many European heritage items near the coast. The OSRA shows some of the more important locations. Local councils should be consulted about heritage areas within their localities, especially if there is to be significant shoreline clean-up activity. The more significant heritage sites are listed with the National Heritage Trust.

The NSW coast has many Aboriginal sites that are considered culturally and historically important. They may be at risk through mechanical disturbance during equipment deployment and during foreshore clean-up operations.

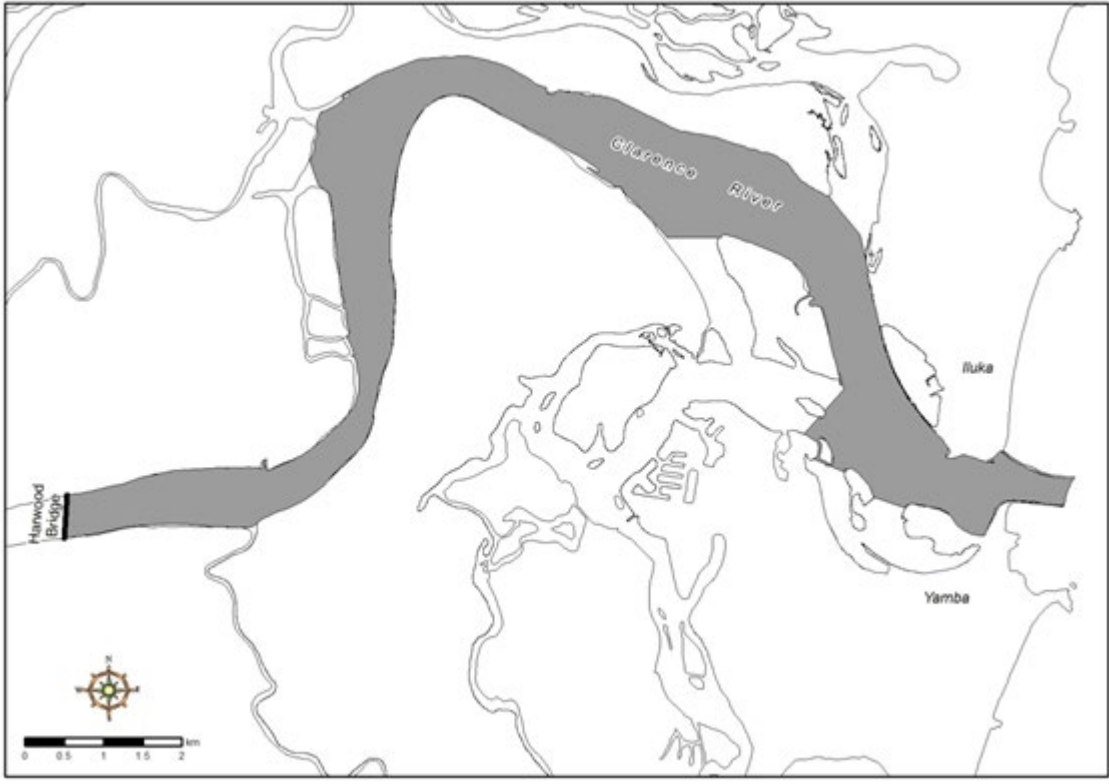
Aboriginal relics and places are protected under the *National Parks and Wildlife Act 1974*, and consent must be sought from the Environmental Services Functional Area (EnvSFA) before disturbing an Aboriginal place or relic. A register of Aboriginal sites is maintained by the Department of Planning and Environment and currently there are more than 35,000 registered sites in NSW and a large proportion of these sites are along the coastal fringe.

If there is a need to gain access to a beach or shoreline and there are no constructed roads, or ground disturbing works of any kind are proposed, consultation must occur with the Engineering Services Functional Area (ESFA) before access is attempted.

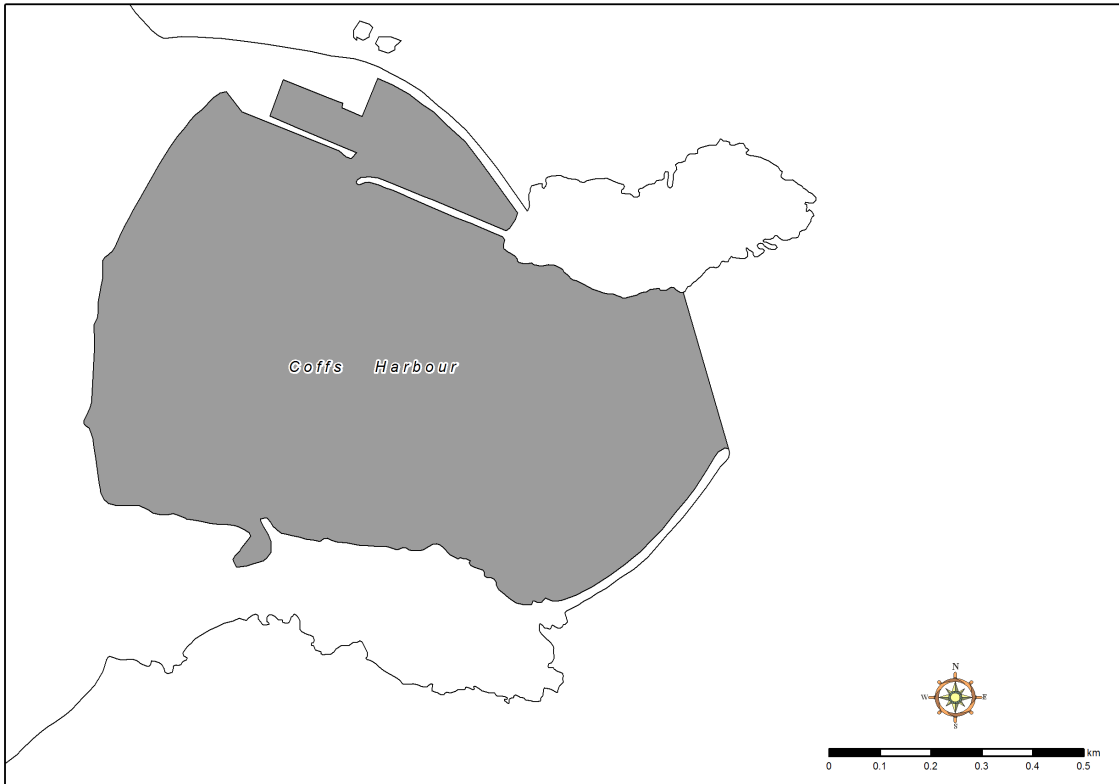
## Map 1—NSW Coastal Waters and areas of responsibility







*Coastal waters/Port Boundaries for the Clarence River (Yamba).*

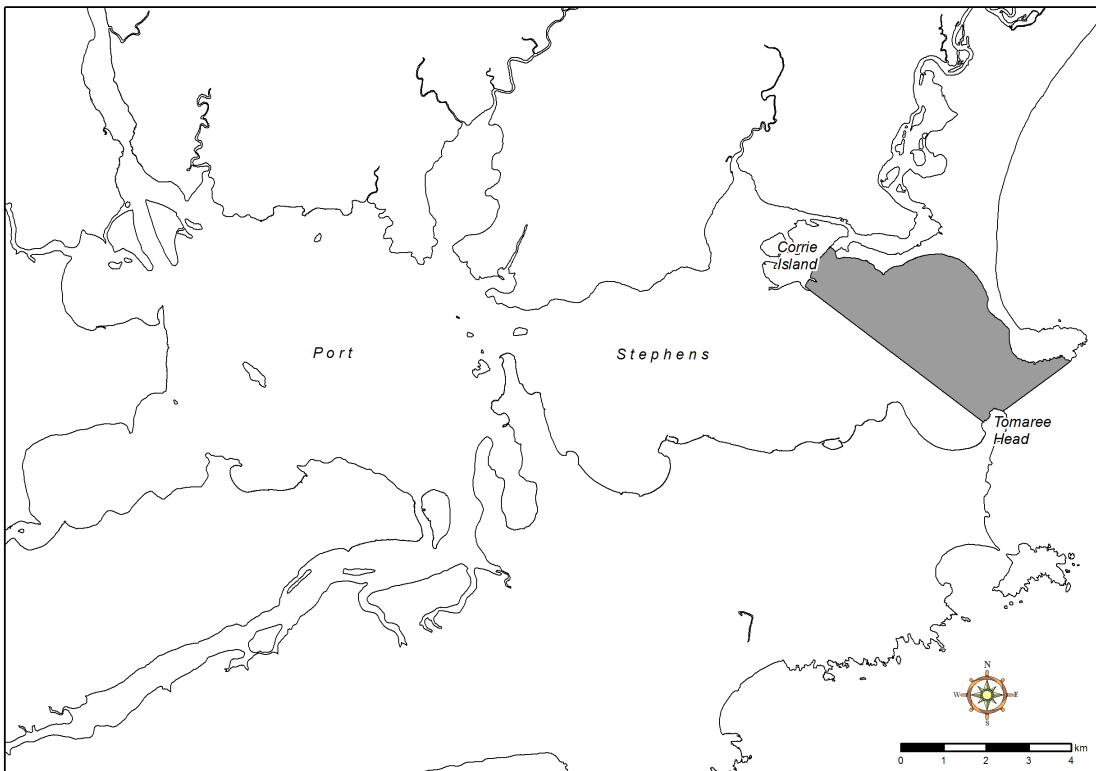


*Coffs Harbour - Coastal waters*

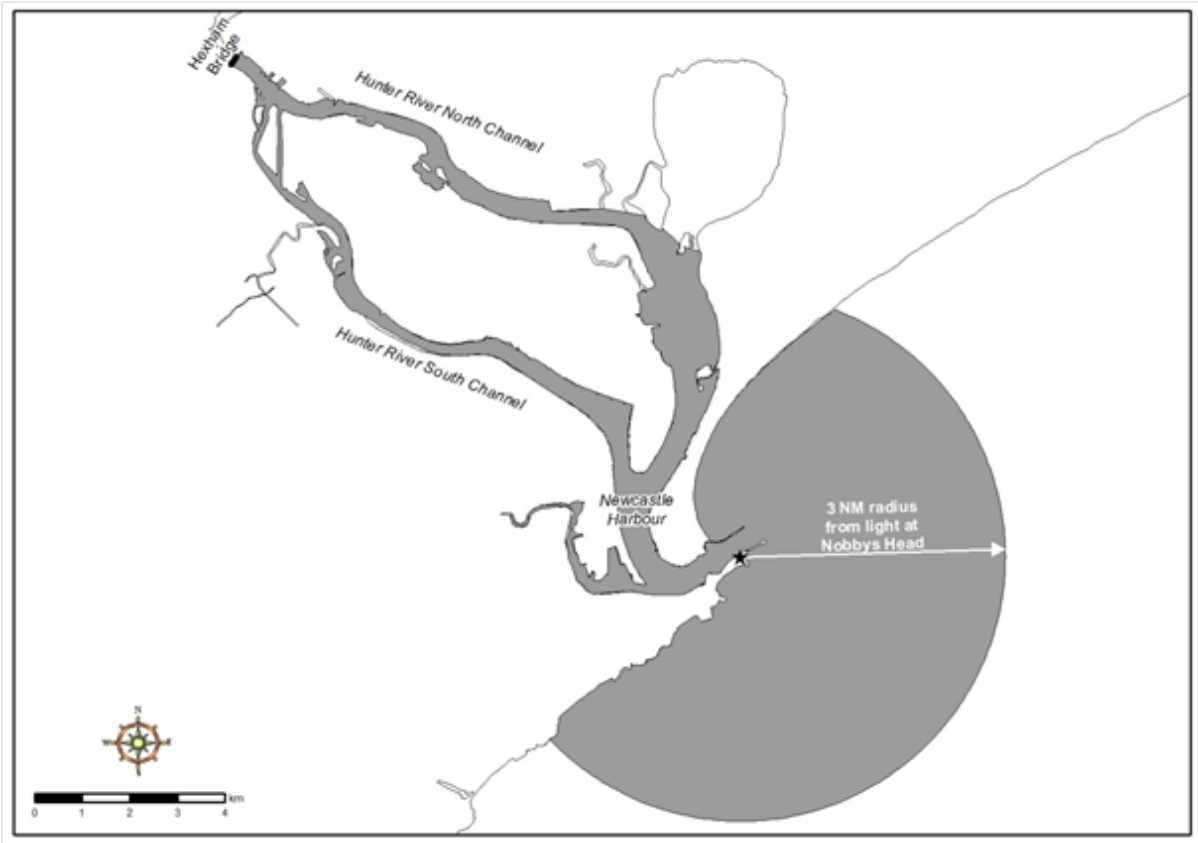




*Port Macquarie - Coastal waters*



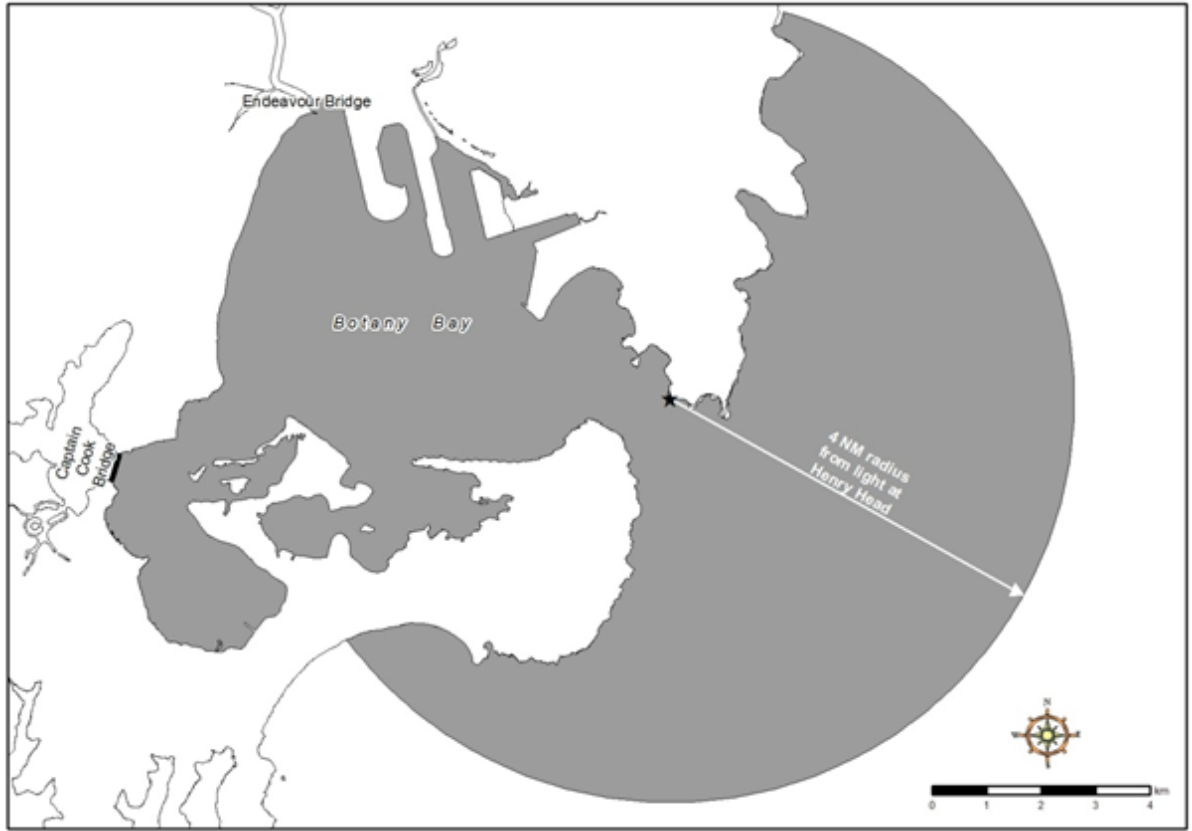
*Port Stephens - Coastal waters*



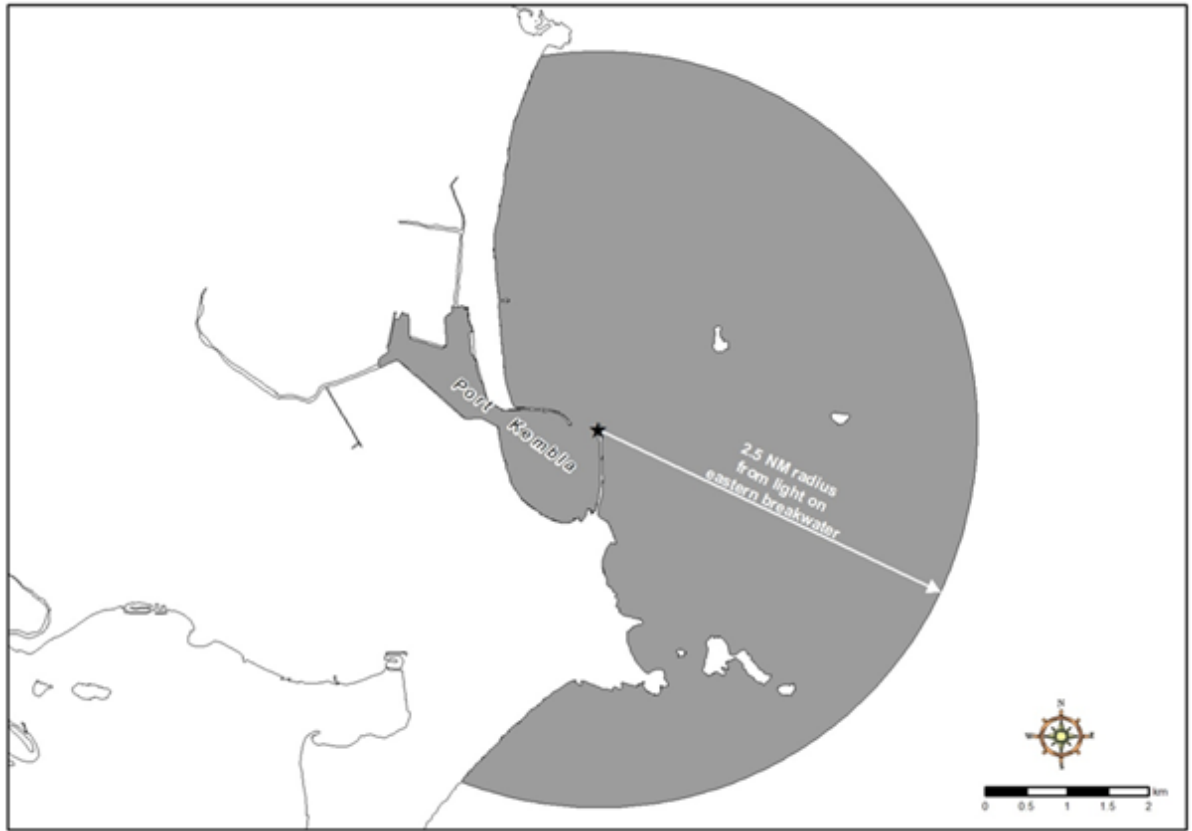
*Port boundaries for Newcastle Harbour (Hunter River).*



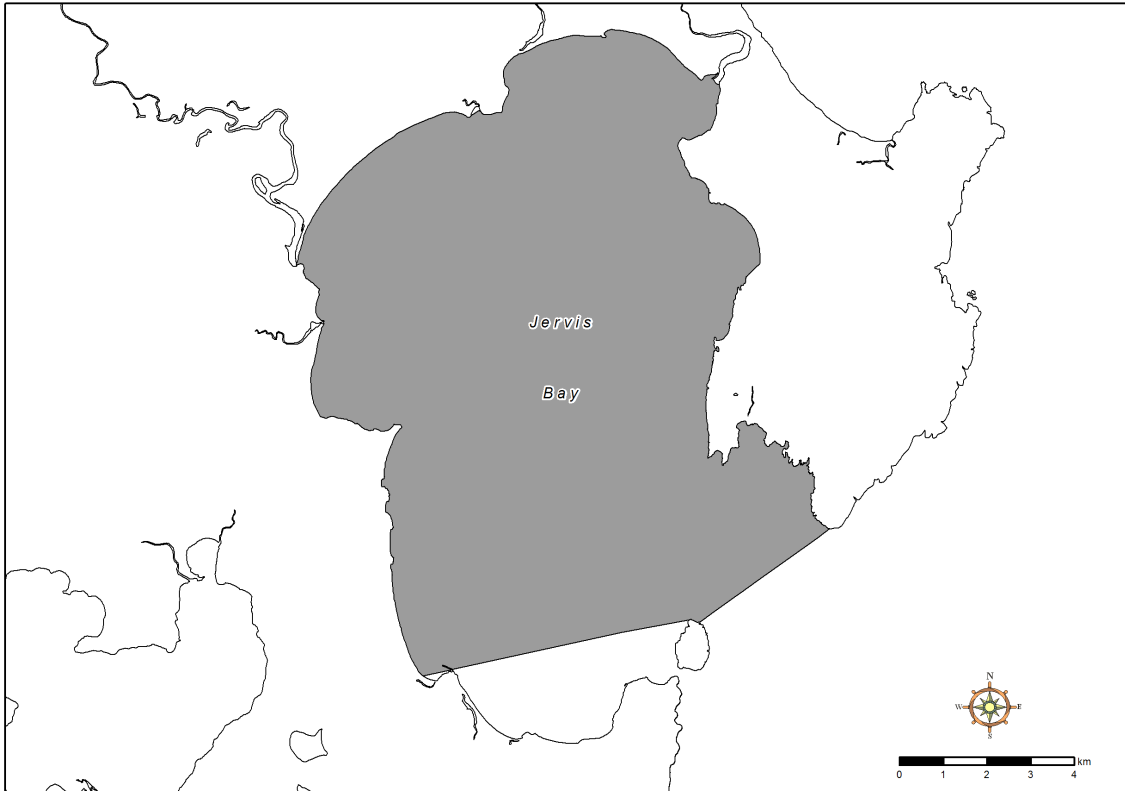
*Port boundaries for Sydney Harbour*



*Port boundaries for Port Botany*



*Port boundaries for Port Kembla*



*Jervis Bay – Coastal Waters*



*Port boundaries for Eden (Twofold Bay)*

## Map 2—Marine pollution risk assessment

