



Transport  
Roads & Maritime  
Services

# **NSW North Coast**

## **Marine Oil & Chemical Spill Contingency Plan**

**January 2017**

## NSW North Coast Marine Oil and Chemical Spill Contingency Plan

### **Authorisation**

The NSW North Coast Marine Oil & Chemical Spill Contingency Plan (this Plan) has been prepared as a supporting plan to the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan* to coordinate local resources in responding to a maritime incident in the NSW North Coast area. This Plan complies with the State emergency management arrangements and the National Plan arrangements.

The Plan has been endorsed by the Regional Emergency Management Committee.

## NSW North Coast Marine Oil and Chemical Spill Contingency Plan

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**Amendments**

This Plan will be subject to annual review and updating. It is essential however, that all organisations listed in this Plan reports any relevant alterations and changes regarding their agency's structure or functions. Suggested amendments or additions to the contents of this Plan are to be forwarded to:

Manager, Marine Pollution  
 NSW Maritime Division  
 Roads and Maritime Services  
 Locked Bag 5100  
 CAMPERDOWN NSW 1450

Amendments promulgated should be recorded in the table below.

Number	Type	Section Number	Date

## NSW North Coast Marine Oil and Chemical Spill Contingency Plan

### **Definitions**

For the purposes of this Plan, except where the context otherwise indicates, the following definitions apply.

**Assessment** - in relation to an incident includes the confirmation of a spill, an initial assessment of the extent of the spill and reporting the finding to the appropriate agency/individual.

**Combat agency** - the agency identified in EMPLAN as the agency primarily responsible for controlling the response to a particular emergency. [Source: *State Emergency and Rescue Management Act 1989 (SERM Act)*].

**EMPLAN** - the NSW Emergency Management Plan. The object of EMPLAN is to ensure the coordinated response to emergencies by all agencies having responsibilities and functions in emergencies. [Source: *SERM Act*]

**Functional Area** - a category of services involved in preparations for an emergency, including the following:

- (a) Agriculture and Animal Services;
- (b) Communication Services;
- (c) Energy and Utility Services;
- (d) Engineering Services;
- (e) Environmental Services;
- (f) Health Services;
- (g) Public Information Services;
- (h) Transport Services; and
- (i) Welfare Services;

[Source: EMPLAN]

**Incident** - any discharge or escape, or potential discharge or escape, of any oil or chemical substance into State waters during its handling, transport or storage that can be dealt with at a local level usually by a single agency with no or limited support by other local agencies/organisations.

**Incident Control Centre** – the centre established at a state, district or local level as a centre for the control and coordination of operations during an emergency. There is only one incident control centre for a response. Other centres established by supporting agencies are referred to as emergency operations centres.

**Incident Controller** - the individual responsible for the management of all operations in response to an incident.

**Marine Pollution Controller** - is responsible for overall management of a Level Two/Three response to an incident and supports the Incident Controller at a senior management level. This person must be capable of high level liaison with Ministers as well as senior government and industry representatives and media liaison.

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**National Plan** – means 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 maritime oil and chemical spills.

**State waters** - as defined in the *Marine Pollution Act, 2012*. (See the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan* for full explanation.)

State waters consist of the territorial sea from the low water mark seaward for three nautical miles as well as those waters prescribed by the *Marine Pollution Regulation 2014*, being:

- Port of 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).

Note: State waters does not include bays such as Port Hacking or local fishing ports or coastal rivers which are inland waters.



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**Abbreviations**

<b>AASFAC</b> – Agriculture and Animal Services Functional Area Coordinator
<b>AIIMS</b> - Australasian Inter-service Incident Management System
<b>AMSA</b> - Australian Maritime Safety Authority
<b>DPI</b> – NSW Department of Primary Industries
<b>EMPLAN</b> – NSW State Emergency Management Plan
<b>EPA</b> – NSW Environment Protection Authority
<b>FRNSW</b> – Fire & Rescue NSW
<b>IAP</b> – Incident Action Plan
<b>ICC</b> - Incident Control Centre
<b>IGA</b> - Intergovernmental Agreement
<b>LEMO</b> - Local Emergency Management Officer
<b>MPC</b> - Marine Pollution Controller
<b>NPWS</b> – National Parks and Wildlife Service
<b>National Plan</b> - National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances
<b>OEH</b> – Office of Environment and Heritage
<b>OSRA</b> – Oil Spill Response Atlas
<b>OSRICS</b> – Oil Spill Response Incident Control System
<b>POEO</b> - <i>Protection of the Environment Operations Act 1997</i>
<b>POLREP</b> - Pollution Report
<b>REMO</b> – Regional Emergency Management Officer
<b>RMS</b> – Roads and Maritime Services (Maritime Division)
<b>SERM Act</b> - <i>State Emergency and Rescue Management Act 1989</i>
<b>SITREP</b> – Situation Report

## Part 1 Introduction

### 1 Introduction

As a signatory to the Intergovernmental Agreement (IGA) for the *National Plan for Maritime Environmental Emergencies* (National Plan), NSW has prepared the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan* which sets out the State arrangements for responding to maritime oil and chemical spills.

This Plan is titled the *NSW North Coast Marine Oil and Chemical Spill Contingency Plan*. It also describes the roles and responsibilities of Roads and Maritime Services (RMS), the Port Authority of New South Wales (PANSW) and other relevant government agencies. Under these arrangements RMS is the combat agency for maritime incidents in State waters from the Queensland Border (Point Danger) to Fingal Head (south of the entrance to Port Stephens), which includes the adjacent coastal waters for three nautical miles seaward (NSW North Coast). Responses in the State waters of Port of Yamba (Clarence River) and Lord Howe Island are covered by the local contingency plans.

This Plan should be read in conjunction with the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan* and is also supported by the *North Coast Emergency Management District Disaster Plan*.<sup>1</sup>

#### 1.1 Aim

The aim of this Plan is to outline the arrangements to deal with oil or chemical spills and maritime incidents that could lead to an oil or chemical spill within the NSW North Coast and the adjacent coastal waters seaward to three nautical miles.

In this Plan a reference to an oil or chemical spill includes a reference to any maritime incident that has the potential to result in an oil or chemical spill.

#### 1.2 Scope of the Plan

This Plan covers the State waters of the NSW North Coast and adjacent foreshores, see Figure 1.

This Plan details procedures for:

- ◆ notification of a maritime incident to relevant agencies;
- ◆ assessment of, and initial response to, the incident;
- ◆ establishing a response structure using the Oil Spill Response Incident Control System (OSRICS); and
- ◆ escalating the response if the local resources are unable to deal with the incident.

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<sup>1</sup> Endorsement – November 2013.

NSW North Coast Marine Oil and Chemical Spill Contingency Plan

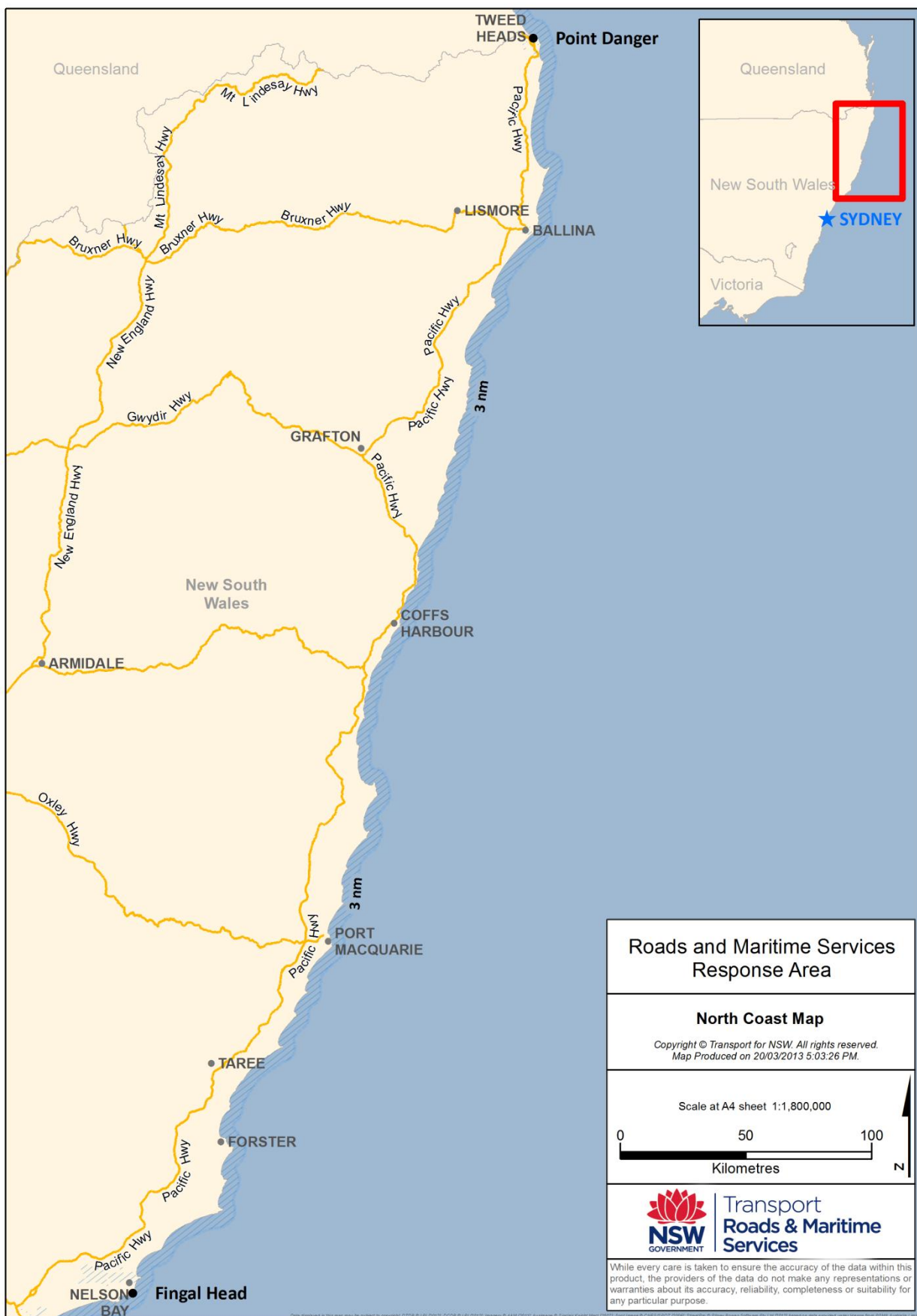


Figure 1 Map of NSW North Coast Response Area

NSW North Coast Marine Oil and Chemical Spill Contingency Plan

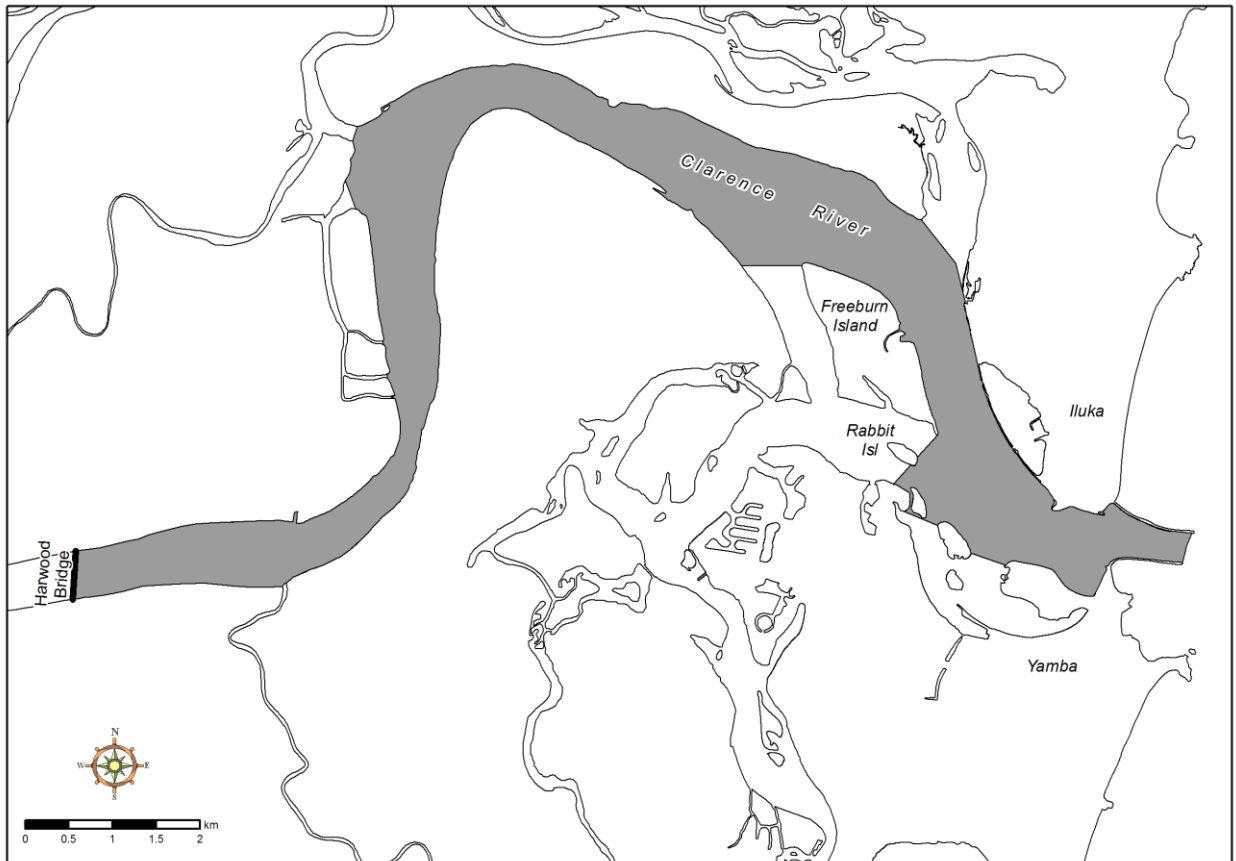


Figure 2. Yamba (Clarence River) - Port Boundaries / State Waters

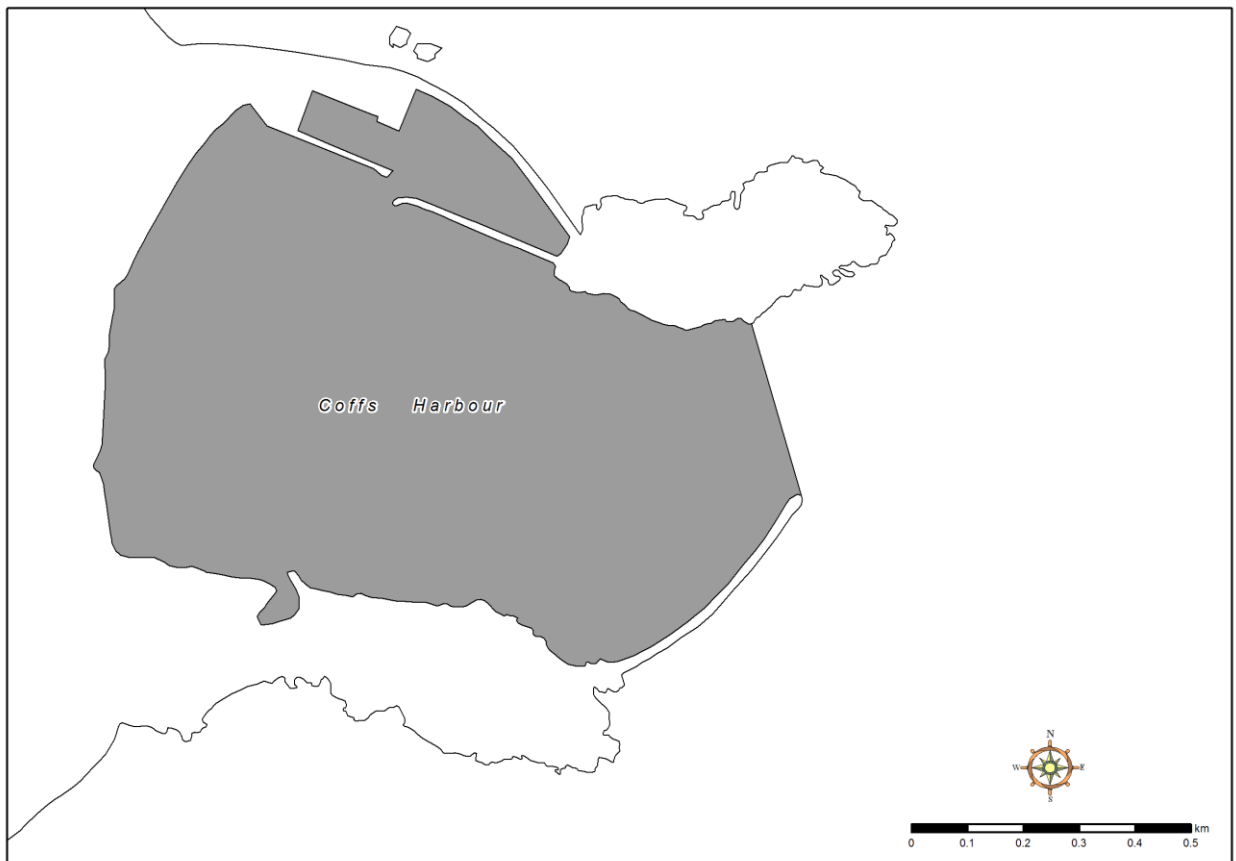


Figure 3. Coffs Harbour - State Waters

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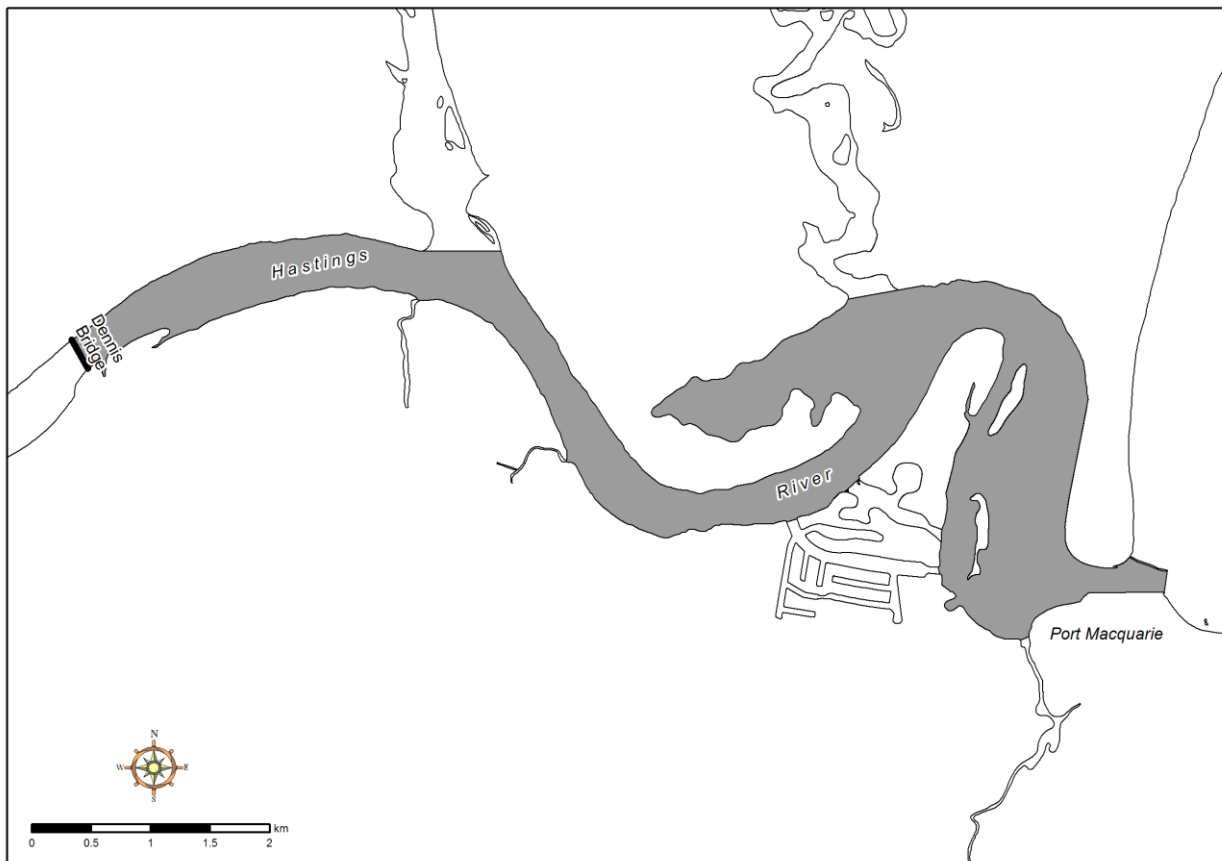


Figure 4. Port Macquarie (Hastings River) - State Waters

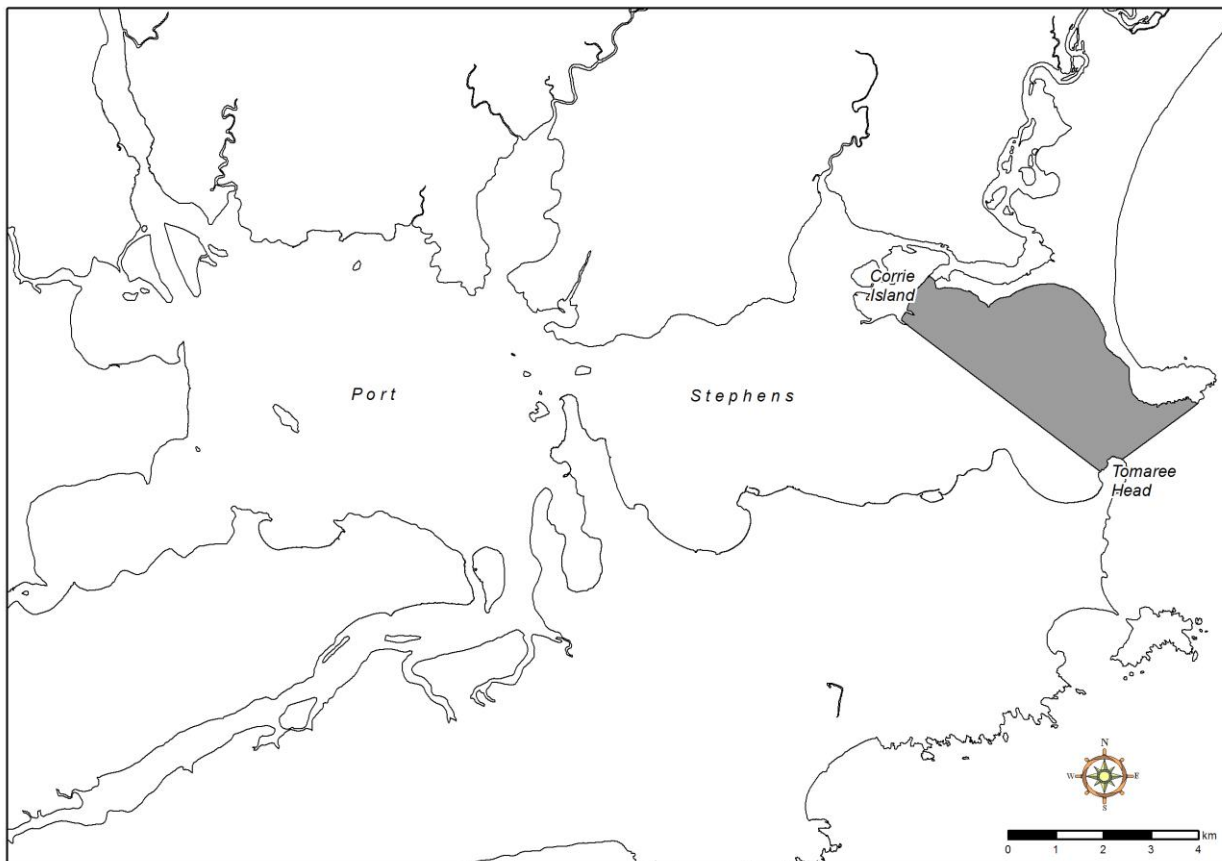


Figure 5. Port Stephens - State Waters

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### 1.3 Legislation

Maritime incidents involving trading ships and commercial vessels are covered under the *Marine Pollution Act 2012*, however, recreational vessels are specifically excluded from the *Marine Pollution Act 2012*.

The *Protection of the Environment Operations Act 1997* (POEO) also covers commercial vessels as well as recreational vessels. Hence commercial vessels such as fishing boats and passenger ferries are covered by both Acts with respect to dealing with pollution from these vessels.

These Acts give RMS the flexibility and power to respond to, and clean up, oil and chemical spills from any type of vessel.

#### 1.3.1 NSW Marine Pollution Act 2012

The *Marine Pollution Act 2012* provides the Minister with powers of intervention in regard to the detention or direction of commercial and trading vessels and for preventing, combating and cleaning up of oil and other noxious substance spills in State waters. The Minister has delegated these functions to RMS.

RMS personnel are delegated powers under Section 183 of the *Marine Pollution Act 2012* which provides the authority to:

- ◆ prevent or limit a discharge;
- ◆ disperse or contain any oil or oily mixture or noxious liquid substance that has been discharged;
- ◆ remove any oil or oily mixture or noxious liquid substance from waters or land affected by any discharge; and
- ◆ minimise the damage from pollution resulting from or likely to result from any discharge.

The RMS Chief Executive, Executive Director Maritime, and General Manager Operations and Compliance, Principal Manager, Industry and Environment, and Manager Marine Pollution Response have additional powers to direct and/or detain a vessel.

#### 1.3.2 State Waters as Defined in the Marine Pollution Act, 2012

State waters are defined in section 3 (1) of the *Marine Pollution Act, 2012* and a detailed explanation can be found in the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*. For the purpose of this Plan, State waters include the coastal waters seaward for three nautical miles, including the prescribed waters of Yamba, Coffs Harbour, Port Macquarie and Port Stephens (Figures 2 to 5).



### **1.3.3 Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (General) Regulation 2009**

The *POEO Act* applies to all navigable waters. RMS Authorised Officers have certain powers delegated under the *POEO Act*. These powers apply to non-pilotage vessels<sup>2</sup> in navigable waters. This may include:

- ♦ give clean up direction to the owner or occupier of a vessel in writing or orally;
- ♦ direct a person to take preventative action by notice in writing; and
- ♦ take action to cause the notice to be complied with.

Additionally, an Authorised Officer has the power to enter premises for the purpose of taking action to cause the notice to be complied with.

The Marine Parks Authority (Marine Estate Management Authority) is listed as the Appropriate Regulatory Authority (ARA) under Clause 85 of the Regulation for non-scheduled activities within Marine Parks. Under Clause 86 RMS is listed as the ARA for non-scheduled activities involving non-pilotage vessels, therefore consultation with the relevant Marine Park representative should be undertaken during the early stages of any pollution incident from a vessel within a Marine Park to determine the combat agency and most appropriate response.

### **1.4 Planning Assumptions**

This Plan is applicable to maritime oil and chemical spills and any maritime incident that could lead to an oil or chemical spill in the State waters, and assumes that the resources on which this Plan relies are available when required and additional support is available through the *North Coast Emergency Management District Disaster Plan*.<sup>3</sup>, the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*, the National Plan and the NSW emergency management arrangements.

### **1.5 Activation**

The NSW EMPLAN and other NSW emergency management plans, including this Plan, do not require formal activation, they are active at all times. However, the notification procedures in Section 3.6.1 must be followed.

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<sup>2</sup> A non-pilotage vessel means any vessel other than:

- (a) a vessel for which pilotage is compulsory under Part 6 of the *Marine Safety Act 1998* in any port, and
- (b) a vessel for which pilotage would be compulsory under Part 6 of the *Marine Safety Act 1998* in any port if the master did not hold a pilotage exemption certificate.

Source – Clause 86 Protection of the Environment Operations (General) Regulation 2009

## Part 2 Roles and Responsibilities

### 2 Roles and Responsibilities

Responsibility for responding to maritime oil and chemical spill incidents is set out in the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*. NSW Maritime (RMS) is the combat agency for maritime incidents within the NSW North Coast and coastal waters seaward to three nautical miles from Queensland Border (Point Danger) to Fingal Head (south of the entrance to Port Stephens).

NSW Maritime (RMS) has overall responsibility for ensuring that marine oil and chemical spills are responded to quickly and effectively. This includes providing an Incident Controller, personnel and expert advice where required.

The Port Authority of New South Wales, as the manager of the Port of Yamba is the combat agency for the State waters of the Clarence River. The Port Authority of New South Wales (Newcastle) is the combat agency for State waters between Fingal Head and Catherine Hill Bay, including the Port of Newcastle. Fire & Rescue NSW (FRNSW) is the combat agency for oil and chemical spills in all inland waters. Maritime Safety Queensland (MSQ) is responsible for responses in the adjacent Queensland waters.

Regardless of which agency bears combat responsibility, other agencies shall assist in accordance with this Plan and the NSW EMPLAN arrangements.

Depending on the size of an oil or chemical spill a number of different agencies may be involved. Section 2 of the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan* sets out the roles and responsibilities of agencies that may be involved in a major maritime incident response. For the purposes of this Plan the agencies most likely to be involved in a Level One response are:

#### 2.1 Roads and Maritime Services (Combat Agency)

NSW Maritime in its capacity as Combat Agency is to:

- ◆ provide an Incident Controller;
- ◆ provide trained emergency response staff to fill OSRICS positions to control the incident/emergency response;
- ◆ make available emergency response equipment under its control;
- ◆ provide trained equipment operators;
- ◆ notify the appropriate agencies and higher level control within the agency; and
- ◆ establish an incident control centre from which the incident/emergency will be controlled.

NSW Maritime, when supporting the Combat Agency is to:

- ◆ provide trained emergency response staff;
- ◆ make available emergency response equipment under its control; and
- ◆ provide a liaison officer.



## 2.2 Port Authority of New South Wales

The Port Authority when supporting the Combat Agency is to:

- provide trained emergency response staff to fill AIIMS positions to control the incident/emergency response;
- provide trained equipment operators;
- make available emergency response equipment under its control; and
- establish an incident control centre from which the incident/emergency will be controlled.

## 2.3 Fire & Rescue NSW

FRNSW is a supporting agency that may be called upon to provide advice and support to the combat agency as follows:

- ♦ protecting and saving life and property endangered by chemical spill incidents;
- ♦ provision and coordination of the supply of specialist resources for oil and chemical spills;
- ♦ rendering the site of an incident safe; and
- ♦ provide a liaison officer on request.

## 2.4 Functional Areas

Under the NSW emergency management planning arrangements, Functional Areas are a category of Government agency involved in the provision of support and resources for emergency response and initial recovery operations. Functional Areas are coordinated by various government agencies and would support a maritime incident response. The most likely agencies to be involved in a local response are listed below.

### 2.4.1 NSW Environment Protection Authority

The Environment Protection Authority (EPA) is the coordinating agency for the Environmental Services Functional Area and is to:

- ♦ provide environmental and scientific advice to the Incident Controller;
- ♦ provide advice on suitable disposal strategies for the recovered oil and oiled debris; and
- ♦ provide a liaison officer on request.

### 2.4.2 NSW Department of Primary Industries (DPI)

The Department of Primary Industries (DPI) is the coordination agency for the Agricultural and Animal Services Functional Area and is responsible for the rescue and rehabilitation of oiled wildlife. The Agricultural and Animal Services Functional Area is to activate the Agriculture and Animal Services Plan utilising the assistance of the participating and supporting agencies. Activation of the plan may include:

- ♦ establishing a wildlife treatment centre;
- ♦ on-site assessment of wildlife;
- ♦ coordinate the transport of wildlife as needed;

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- ◆ provide appropriate personnel for the response; and
- ◆ provide a Liaison Officer on request.

### **2.5 NSW Office of Environment and Heritage**

The Office of Environment and Heritage (OEH) is to:

- ◆ provide heritage advice to the Incident Controller;
- ◆ provide National Parks and Wildlife Service support to the Incident;
- ◆ provide Marine Parks support to the Incident;
- ◆ provide a liaison officer on request.

### **2.6 Emergency Operations Controller (EOCON) Local, Regional and/or State**

The EOCON at local, district and/or state level may be called upon to support the Combat Agency as follows:

- monitor the response;
- coordinate support resources at the appropriate level if requested to do so by the Combat Agency.

### **2.7 Local Government**

The local council has a significant role in providing local knowledge and linkages to communities that may be impacted by an oil or chemical spill. The local council via the Local Emergency Management Officer (LEMO) will:

- ◆ provide advice and resources to support the incident response particularly for shoreline clean-up activities;
- ◆ assist in community liaison if the incident has the potential to adversely impact the local community; and
- ◆ provide a liaison officer on request.

## Part 3 Control and Coordination

### 3 Response Policy

#### 3.1 Levels of Response

In Australia, oil and chemical spills and the responses they require are categorised into 'levels'. The National Plan has adopted the concept of three (3) Levels which links the credible spill scenarios to attainable scales of response and, by linking joint arrangements, enables escalation from one level response to another, should the need arise. It is a practical method of planning a spill response in terms of impacts and thus required resources. The National Plan's three levels of response are described in section 3.1 of the NSW State Waters Marine Oil and Chemical Spill Contingency Plan. This Plan is designed to respond to Level One spills as described in Section 2.0 and Table 1.

The quantity of oil or chemical discharged does not automatically determine the response level but is used as a guide to determine the most appropriate response. The level of response will depend 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 the available combat resources.

For oil or chemical spills of greater than 10 tonnes or where the local resources are inadequate, the response will be escalated and the provisions in the NSW State Waters Marine Oil and Chemical Spill Contingency Plan would be implemented as well as the Regional EMPLAN.

##### 3.1.1 Escalation of a Response

Control and co-ordination of incidents are conducted at the lowest effective level. Responsibility for response to and recovery from oil or chemical pollution incidents rests initially at the local level. Initially oil spill response equipment will be mobilised from the stockpile held in the NSW North Coast, including the Port of Yamba and Port of Newcastle and also use any other suitable local resources. For an incident that cannot be effectively managed at the local or regional level the arrangements in the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan* will be used to mobilise additional resources.

Once an accurate picture is obtained of the incident the Incident Controller, in consultation with the Principal Manager North Operations and the Manager, Marine Pollution will decide the level of response required to combat the spill. As the combat phase proceeds resource requirements will be constantly re-evaluated.

**Table 1. Level of Response Used in the National Plan**

Level	Levels of Response
<b>1</b>	<p><b>Potential Emergency Condition - small spill/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 a spill utilising 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>
<b>2</b>	<p><b>Limited Emergency Condition - a medium or significant spill/incident</b></p> <p>A significant incident/emergency that can be responded to within the boundaries of the berth, vessel or geographical area, but which may have a serious impact on public health and/or the environment.</p> <p>The Combat Agency will initiate a response with support being provided by other agencies, including and 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>
<b>3</b>	<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, district 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>

### 3.2 Oil Spill Response Incident Control System

The National Plan arrangements use the AIIMS (Australasian Inter-service Incident Management System) model to manage the response to a maritime oil or chemical spill. In NSW AIIMS has been modified to suit the nature of a maritime incident response.

A more detailed description of the system is provided in Section 3 of the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*. At a local level, for Level One oil spills that are likely to be encountered in the port, a small team is usually sufficient to manage the response. AIIMS is implemented in a simplified structure, as shown in Figure 2. For large or complex incidents the structure shown in Appendix 3 would be implemented

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Initially the Incident Controller may carry out all of the AIIMS functions (operations, planning, logistics and administration). As the response develops some of these functions may be delegated to other persons as the workload increases. The Operations Officer is typically the first position to be delegated functions.

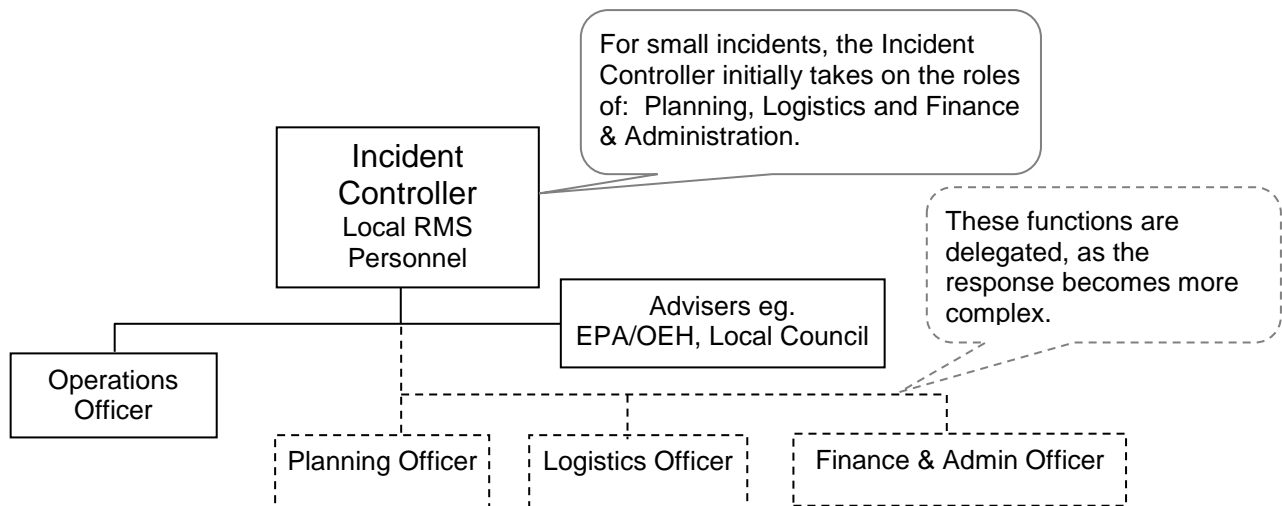


Figure 2 AIIMS structure for small incidents.

### 3.2.1 Marine Pollution Controller (MPC)

The portfolio Minister has appointed the Executive Director NSW Maritime as the MPC who is responsible for coordinating the overall State response to an actual or potential oil or chemical spill into State waters.

The MPC supports the combat agency in responding to a maritime incident and will take responsibility for liaison with the relevant Ministers, industry representatives, vessel owner, salvor and media as required in consultation with the Port Authority. This will allow the Incident Controller to focus on managing the operational aspects of the response.

At times when the MPC is not available an appointed alternate will act as the MPC. This role is generally not activated for Level One incidents. However, the MPC will monitor the response and provide additional support as necessary.

### 3.2.2 Incident Controller

The Incident Controller will be the Principal Manager North Operations, or Manager, Marine Pollution or other designated RMS personnel, who will take action to:

- ◆ ensure that the appropriate organisations and individuals are notified of the spill and kept informed of events;
- ◆ establish an incident control centre (ICC) with the appropriate personnel;
- ◆ control the combat area;
- ◆ if possible, stop the discharge of oil or chemicals;
- ◆ deploy local equipment for initial response;

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- ◆ contain and collect the spilled pollutant or disperse it based upon operational and scientific advice;
- ◆ clean any polluted foreshores;
- ◆ facilitate the establishment of a wildlife rescue and rehabilitation capacity if required;
- ◆ establish communication links with local and district emergency management officers if necessary; and
- ◆ ensure that proper records are kept of all actions and progress.

### **3.2.3 Operations Section**

The Operations Section is responsible for implementing the operational requirements of a response and providing operational input to the planning process. For small incidents that only require a simple response the Incident Controller may also undertake this role, eg removing scattered tar balls from a beach. If the incident requires a complex response then an Operations Officer may need to be appointed.

### **3.2.4 Planning Section**

The Planning Section is responsible for the provision of information on all aspects of an incident, the response to that incident and the development of an Incident Action Plan. For small incidents the Incident Controller usually undertakes the planning role. If the incident requires a complex response then a Planning Officer may need to be appointed.

### **3.2.5 Logistics Section**

The Logistics Section is responsible for the supply of services and resources to support and sustain the operational response to an incident. For small incidents the Incident Controller usually undertakes the logistics role. If the incident requires a complex response then a Logistics Officer may need to be appointed.

Both the planning and logistics roles can be undertaken by the same officer for small incidents.

### **3.2.6 Finance and Administration Section**

The Finance and Administration Section is responsible for the provision of finance and administrative services to the response organisation and for the collation of costs and all records related to an incident. During small incidents the Incident Controller can usually manage this aspect of a response. The local RMS Area Coordinator or Product Services Officer may also assist in this aspect of a response.

### **3.2.7 Support Staff**

Depending on the size and complexity of an incident, the Incident Controller will be assisted and advised by designated support staff from RMS and other local agencies. The Local Emergency Management Officer (LEMO) should be available to support the Incident Controller.



### 3.2.8 Liaison Officers

Each organisation involved in a response may be asked to provide a liaison officer to be deployed to the ICC. Liaison officers represent their organisation or functional area and maintain communications with and convey directions/requests to their organisation or functional area, and provide advice on the status, capabilities, actions and requirements of their organisation or functional area.

### 3.2.9 Workplace Health and Safety

The health and safety of emergency responders and the general public is of paramount importance in any response operation. The NSW *Work Health and Safety Act 2011* places a duty on all persons conducting a business or undertaking (PCBU), for example a Combat Agency or a Functional Area agency, 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.

The AIIMS structure (Appendix 2) provides for the appointment of an Incident Safety Officer. This appointment should be made as early as possible in a response. The Incident Safety Officer reports directly to the Incident Controller. The Incident Safety Officer is responsible for developing and maintaining an incident work health and safety (WHS) plan. It is important that all risks be evaluated prior to any personnel entering the incident/emergency area. Operations must be suspended or terminated if any unsafe conditions arise during a response. Issues including the management of volunteers and the management of fatigue should be considered in a response.

All response personnel must understand that their safety, the safety of other responders and that of the community is paramount. Consequently, all personnel engaged in clean-up activities must be instructed in the WHS risks in their area of activity and how to perform tasks safely. All personnel must be provided with personal protective equipment including clothing, appropriate to the activity being undertaken, to protect them from injury. Where necessary, personal flotation devices should be worn in the proper manner.

The limitations of available equipment and vessels should be identified and managed throughout all phases of the operation. Responders should be made aware that many chemicals can be destructive to equipment and fresh crude oil and many petroleum products emit flammable gases. The risk of fire or explosion should always be considered, particularly when fresh oil is confined by booms or under harbour/wharf structures (for example, in a confined space), etc. The risk of fire must also be considered in shoreline disposal operations. The degree of risk will depend on the type of oil, its location and the extent of weathering.

Equipment deployed in close proximity to fresh oil and chemicals must be safe. Operators of vessels used in clean-up operations should be made aware of the dangers that exist through:

- the use of internal combustion engines and electric motors;
- concentrations of flammable gases entering the air intakes of diesel engines, causing the machinery to race;

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- personnel smoking; and
- exposure and contact with wildlife.

Materials which may assist a Combat Agency or Functional Area Agency to manage WHS issues in response to an incident include:

- a generic WHS Plan that can be used as the basis for the preparation of a detailed site specific WHS plan (contact NSW Maritime for copy);
  - the Volunteer Management Policy for Marine Incident Response in NSW; and
  - the Fatigue Management Guidelines for Marine Incident Response in NSW.
- (Contact NSW Maritime for copy)

### **3.3 Incident Control Centre (ICC)**

The ICC used by the Incident Controller will vary depending upon the size of the incident. At the simplest level the ICC may be the Incident Controller's vehicle at the scene of the incident. For more complex incidents the ICC will initially be located at the local RMS Maritime Division office or alternative locations decided upon by the Incident Controller in consultation with the Local Emergency Management Officer. Location details are provided in Appendix 10.

For Level 2/3 incidents the designated ICC will be determined in conjunction with the Regional Emergency Management Officer (REMO). This may include the use of Emergency Operation Centres (EOC) located in each of the Local Government Areas within the area covered by the Plan. Location details are provided on Appendix 10.

### **3.4 Financial Procedures**

Response costs associated with oil spills are generally recovered from the polluter, where identified. A range of International agreements and conventions exist generally ensuring that costs of response to and clean-up of ship sourced oil spills can ultimately be recovered. Where the responsible person cannot be identified, or costs cannot be recovered (after due effort has been taken to recover them), response costs beyond an agreed limit can be claimed from the National Plan.

Where the polluter is identified or suspected, an acceptable financial guarantee should be sought from the vessel's insurers (Protection and Indemnity Club) prior to allowing the vessel to depart. A request for a financial guarantee should be made as early as possible after determining the source of the spill. Any request must be made by Executive Director, Maritime or Marine Pollution Controller (including Deputies) who have the delegated authority to make such a request.

Throughout a maritime oil pollution incident detailed records must be kept of the cost of all operations (use of personnel, equipment, etc.). This will assist in cost recovery from the polluter and any legal action that may be required to recover costs.

Agencies providing oil spill response equipment must be reimbursed hire and maintenance costs following each occasion when their equipment and consumables are used.



### **3.5 Obtaining Samples for Evidence**

It is the responsibility of the local Boating Safety Officer or Incident Controller to ensure that adequate samples are taken for analysis. The vessel suspected of causing the pollution and any other vessels in the vicinity of the incident as well as the pollutant itself should be sampled. The number of samples taken will be dependent on the nature of the incident. Samples should be taken without delay to minimise changes in composition of the pollutant. Every effort should be made to obtain an uncontaminated sample of pollutant for comparison purposes, particularly if prosecution is envisaged.

Sampling bottles used must be specially prepared to ensure that they are free from any contamination. Once samples are taken (Appendix 6 provides guideline for sampling) it is of the utmost importance to ensure a verifiable 'chain of custody' is recorded and maintained and given to the analytical laboratory along with the samples.

Appendix 6 describes the behaviour on water of four representative petroleum products and Appendix 7 describes the behaviour on water of four representative crude oils.

### **3.6 Response**

#### **3.6.1 Initial Notification**

The Principal Manager North Operations and Manager Marine Pollution must be notified as soon as possible of any oil or chemical spills or shipping incidents within the State waters of the NSW North Coast (See Appendix 1).

The local Boating Safety Officer is to provide initial notification of all incidents, as soon as possible, to the Duty Officer via the 24 hour Marine Pollution response telephone number.

#### **3.6.2 Incident Assessment and POLREP**

The local Boating Safety Officer will normally investigate all reported spills within their respective operational areas. Once the assessment is made the information must be sent to, the Principal Manager North Operations and the Manager Marine Pollution in the form of a Pollution Report (POLREP) see Appendix 4.

#### **3.6.3 Initial Response**

Initial response will depend on the size and location of the spill and is shown below:

For a Level One spill, the Incident Controller:

- ◆ provides the Principal Manager North Operations and the Manager Marine Pollution with an initial Pollution Report (POLREP);
- ◆ notifies local agencies and coordinates the clean-up, using local resources;
- ◆ sends daily Situation Reports (SITREP) to the Principal Manager North Operations and the Manager Marine Pollution, and
- ◆ provides a final report of the incident to the Principal Manager North Operations, and the Manager Marine Pollution when the incident response is completed.

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For a Level Two or three spill the Incident Controller:

- ◆ provides the Principal Manager North Operations, and the Manager Marine Pollution with a POLREP;
- ◆ notifies local agencies;
- ◆ initiates a first strike response using local resources; and
- ◆ request additional resources and support.

It is important that appropriate agencies are kept advised of all significant developments during a response. The Incident Controller should ensure that periodic SITREPs are dispatched to the appropriate agencies.

SITREPs should take the form outlined in Appendix 5. The last SITREP in a series covering one incident should display the words FINAL SITREP.

### **3.6.4 Overall Protection Priorities**

Protection priorities to be employed during a response to an oil or chemical spill are, in order of descending priority:

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

In assessing protection priorities, a balanced view needs to be maintained on the likely success of protection strategies. This is of particular importance 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.

Every oil and chemical spill incident has its own unique health and safety dangers to which response personnel may be exposed. The protection of the public and that of response personnel should always be of prime importance in the decision making. Any response should be carried out in accordance with expert advice regarding the health and safety of personnel and the public. It is important that all risks are evaluated prior to personnel entering the incident area. Operations must be suspended or terminated if an unsafe condition arises during a response.

### **3.7 Level One Response Equipment**

The NSW North Coast has a Level One response capability for up to a ten tonne oil spill response. The equipment is stored at the NSW Maritime office in Port Macquarie, with an additional two trailers with equipment located at Port Stephens and Coffs Harbour. Level one response equipment is also stored at the Port of Yamba (Goodwood Island). A list of the equipment is at Appendix 8. Additional Equipment is also located at Port of Newcastle.

FRNSW also maintains standard HAZMAT capabilities at a number of local fire stations (see Appendix 8) and additional higher level capability at Newcastle.

### 3.8 Level Two/Three Equipment

In addition to the Level One stockpiles discussed above, the Port Authority of New South Wales maintains its own stockpile of Level Two/Three equipment which is stored with its Level One equipment locations in Sydney and Newcastle. Oil companies also own a quantity of oil spill response equipment which is stored on their individual premises.

NSW Maritime also owns a purpose built Wildlife Wash Facility that is available for deployment to anywhere in the state which is stored and maintained by the Port Authority of NSW at its Glebe Island base. Incorporated into a 20' shipping container the facility can be transported to a site to enable immediate setup for wildlife treatment and washing pending development of a larger capability.

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

Some port authorities in other states/NT also own response equipment and this is also available for use.

### 3.9 Oil Spill Response Options

A number of options exist for the treatment of oil, which has been released into the marine environment. These are described in the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*. All may be effective to a degree, according to the type of oil, the prevailing conditions and the sensitivity of the environment under threat.

The following basic oil spill response options are available to the Incident Controller in the NSW North Coast:

- ◆ if possible, control or stop the discharge of oil or chemical from the source;
- ◆ monitor;
- ◆ containment and recovery;
- ◆ application of dispersant; and
- ◆ shoreline clean-up.

The response options for chemicals spills are limited in number due to the range of behaviours of chemicals in the marine environment and generally not tested due to the infrequency of such spills. It is paramount that when a chemical spill does occur specialist advice is sought from the FRNSW, Environment Protection Authority and the chemical industry. A detailed chemical supplement can be found in section 4.11 of the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*.

Before decisions can be made on a control strategy, specific local information is essential. Apart from determining the exact location of the slick, information must be obtained on:

- ◆ The quantity of oil spilled and its chemical and physical characteristics. Crude oils and petroleum products have a wide range of characteristics, which will influence spreading, evaporation, dissolution, emulsification and weathering.
- ◆ The quantity of oil spilled will govern the “scale” of control operations.

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- ◆ Conditions affecting the direction and speed travelled by the slick. Surface-wind velocity and direction and surface-current velocity and direction will influence the movement of the slick, the current having more influence than the wind. Forecasts of wind and weather changes must be considered.
- ◆ Conditions affecting the likely choice of strategy. Surface conditions such as wave heights and directions of swells, water temperature and meteorological conditions (rain, mist, visibility, cloud cover) will influence the practicability of either containment and recovery or chemical dispersion.

### **3.9.1 Monitor**

Depending on the location of the spill, if there are no threats to environmentally sensitive areas or it is unlikely that the oil will come ashore, biological and physical processes will naturally disperse most of the oil over a period of time. In these circumstances the most appropriate action may be to do nothing other than monitor the movement of the oil.

Leaving the oil to disperse and degrade naturally creates the least disturbance to the marine environment, however, the 'do nothing' option requires sound advice to the media to clearly explain why no other action, apart from monitoring the pollutant, has been taken.

### **3.9.2 Containment and Recovery**

The traditional response to an oil spill is containment and recovery of the oil on the water. The decision to contain and recover the oil will be greatly influenced by prevailing weather conditions. In some cases it may be appropriate to allow the oil to come ashore, then undertake a shoreline clean-up.

Oil may be recovered from the surface of the water using booms and skimmers. This method is generally only effective:

- ◆ in relatively smooth waters with a minimum influence of wind, tide or currents;
- ◆ an adequate supply of storage facilities are available for recovered oil and debris; and
- ◆ access to the area is possible without causing additional damage to the environment.

Use of booms alone may protect environmentally sensitive areas, allowing oil to be deflected to other areas from where it may be recovered or allowed to degrade naturally.

### **3.9.3 Application of Dispersants to Oil Spills**

There will be occasions when offshore containment is impractical. Depending on the resources at risk and the feasibility of other response options, the use of dispersant to accelerate the dispersal of the oil slick can be an effective option.

Dispersants reduce the surface tension of the oil, allowing the formation of very small droplets, which become suspended in the water column, where they can be rapidly dispersed, thus increasing the rate of natural biodegradation.

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Where a sensitive environment is under threat, the use of dispersants will be considered as an early response option. It should be recognised that the decision to use dispersants needs to be made as early as possible in the assessment of response options as there is a limited “window of opportunity” during which dispersant use can be successful before weathering of the oil commences.

The use of dispersant should be done in conjunction with expert environmental advice from the ESC who will undertake a Net Environmental Benefit Analysis. Only those dispersants that have been tested and approved in accordance with ‘National Plan Guidelines for Acceptance’ will be considered for use in NSW State waters. In determining whether or not to use dispersants there are a number of criteria that need to be considered including:

- is the oil of a type amenable to dispersion?
- does the area have active water exchange?
- is there an adequate depth of water? and
- resources available to undertake the operation.

The Incident Controller will maintain close consultation with the planning section to ensure that all environmental considerations are taken into account including the nature of the resource under threat and the distance between the resource and the spill. The ESC has access to a dispersant test kit and should deploy the kit if dispersant spraying is being considered.

### **3.9.4 Shoreline Clean-up**

Weather and other circumstances permitting, every effort should be made to either disperse or contain and recover oil as close as possible to the source of the spill. However, it is inevitable that some oil may come ashore. The location of a spill, oil type, weather conditions, rate of oil movement and speed will determine whether the bulk of the spilled oil can be recovered before it reaches the shore.

Where oil does come ashore, the extent of clean-up of oiled shorelines is to be carefully planned with the view of minimising further environmental damage which may result from the clean-up operation.

Sometimes, oil on shorelines may best be left to weather and degrade naturally. This option must be considered where oil impacts a sensitive area such as mangroves, salt marshes, mud flats or remote areas. In these areas the clean-up operations can result in more environmental damage than the oil itself due to physical disturbance and substrate erosion.

The selection of shoreline clean-up techniques depends on many different factors, including:

- ◆ type of substrate;
- ◆ characteristics of oil (tar balls, pooled, thin coating, etc);
- ◆ amount of oil on the shoreline;
- ◆ depth of oil in the sediments;
- ◆ presence of wildlife and/or environmental or culturally significant sites;

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- ◆ prevailing oceanographic and meteorological conditions; and
- ◆ access for personnel and equipment.

Shoreline clean-up methods may consist of one or more of the following methods, depending on the extent of oiling and the shoreline environment:

- ◆ removal of floating or pooled oil;
- ◆ use of sorbent materials;
- ◆ low pressure flushing;
- ◆ high pressure flushing;
- ◆ mechanical collection and removal of oiled material and vegetation;
- ◆ manual collection and removal of oiled material and vegetation; and
- ◆ use of bioremediation agents.

When planning a shoreline cleanup the decision making procedures and cleanup methods as described in the “Shoreline Response Handbook” published by Wardrop Consulting should be followed.

### **3.9.5 Disposal of Oil and Oily Waste**

Oil recovery operations can generate large amounts of oil and oiled materials. It is therefore crucial that management strategies and disposal methods be addressed as early as possible by the combat agency and relevant authorities. As oil spills have the potential to generate differing types of waste it is important that these products be kept segregated if they are in significant quantities. A management strategy should be developed for each of the different waste streams.

Oil recovered from the sea surface may be emulsified and also 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 have to be selected for the particular circumstances.

Oil recovered from the shoreline may also contain sand and gravel, pebbles, rocks, seaweed and beach debris.

When removing sand or structural material from a beach it is paramount that a minimum volume should be taken to preserve the integrity of the beach and to minimise the volume of waste requiring disposal.

Disposable personal protective equipment and other products such as absorbent materials, rags etc can also generate large amounts of waste that need a collection, management and disposal strategy to be detailed in a waste management plan.

The type and volume of waste will depend upon the size and location of the spill and the clean-up methods employed. Generally, significant volumes of solid debris will be generated and collected as a result of clean-up efforts. It has been estimated that for an oil spill at sea the volume of any recovered oil requiring disposal will be the collected oil volume multiplied by a factor of five to take into account the entrained water content. For shore based clean-up, the volume of collected oil should be multiplied by a factor of ten.



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The collected mass of oil spill debris must be properly stored, transported and disposed of to minimise the potential for further adverse environmental impacts.

The Engineering Services Functional Area and Environmental Services Function Area can assist in the management of waste disposal.

### **3.9.6 Termination Phase**

In any clean-up operation a point is reached when the marginal benefits of further clean up are outweighed by the effort and costs of continuing. The Incident Controller should determine the point at which further effort and expenditure in the clean-up becomes unreasonable and terminate the clean-up phase of the response. Guidelines for determining the degree of cleanness required can be found in the *NSW State Waters Marine Oil and Chemical Spill Contingency Plan*.

It is the responsibility of the Incident Controller to ensure that:

- ◆ Shoreline areas are agreed by relevant stakeholders to be clean to a satisfactory level and “signed off” as requiring completed;
- ◆ plant and equipment is clean and returned to its owners;
- ◆ any labour contracts are terminated;
- ◆ any requirements for ongoing site monitoring is put into place and the appropriate agency has responsibility for it; and
- ◆ the necessary paperwork for claims against either the polluter or the National Plan Levy Fund is completed.

### **3.10 Debriefing Arrangements**

As soon as practicable after completion of the clean-up operations, a full debriefing session should be held to evaluate the response and to assist in planning future operations.

The debriefing session should be organised by the Incident Controller and attended by all key personnel and appropriate members of the support teams.

### **3.11 Contingency Plan Support**

#### **3.11.1 Description of the Area**

The NSW North Coast Oil and Chemical Spill Contingency Plan covers the State waters from Queensland Border (Point Danger - approximately 740 km North of Sydney) to Fingal Head (south of the entrance to Port Stephens – approximately 160 km north of Sydney) which lay in the local government areas of the Tweed Shire, Ballina Shire, Byron Shire, Richmond Valley, Bellingen Shire, Clarence Valley, Coffs Harbour City, Greater Taree City, Port Macquarie-Hastings, Kempsey Shire, Nambucca Shire, Great Lakes, and Port Stephens Councils

The region is a prime recreational and tourist area with a large number of coastal settlements, beaches, rocky headlands and national parks. The region supports a large aquaculture industry and a highly productive commercial fishing industry, and is popular with recreational fishing and boating.

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The region also includes three (3) of the six (6) NSW Marine Parks, being Cape Byron, Solitary Islands and Port Stephens–Great Lakes.

### **3.11.2 Geographical Scope**

The geographical area of this plan is the State waters from Queensland Border (Point Danger to Fingal Head (south of the entrance to Port Stephens) bounded by a line 3 nautical miles east of the territorial sea baseline and the mean low water mark, including the prescribed waters of Yamba, Coffs Harbour, Port Macquarie and Port Stephens (Figures 2 to 5).

Charts and map references covering the area are contained in Appendix 2.

**Note.** The Port of Yamba (Clarence River) is covered by a separate plan.

### **3.11.3 Natural and Cultural Environment**

The NSW North Coast is comprised of numerous complex and major river estuaries and associated wetlands systems, many of which are open to the sea. Coastal estuaries and associated wetlands are fundamental to the terrestrial and ocean food chains and are therefore critical resources.

Many beach and foredune areas are managed by the NSW National Parks and Wildlife Service (NPWS) and are a part of a large National Park/Nature Reserve system along the NSW North Coast.

The region covers a diverse range of habitats, including continental shelf sea floor along with sponge gardens, beaches, rocky shores, kelp beds, coralline algal banks, rocky reefs, islands, seagrass, mangroves and estuarine habitats<sup>4</sup>. Important oceanic islands, major estuarine wetlands and lake systems feature among a variety of coastal habitats.

Marine life includes many species of dolphins, turtles, fish, invertebrates, seabirds, seagrass and marine algae along with several protected and / or threatened species and such as the weedy sea dragon, eastern blue devil fish, elegant wrasse and the grey nurse shark.

A variety of whales can be observed along the coastline during their migration months, May to November, as they travel north to breeding grounds and return south again later in the year. This includes Humpback Whales, Southern Right Whales, Pilot Whales and Killer Whales<sup>1</sup>.

Many significant Aboriginal cultural and spiritual sites are located within marine parks and coastal areas. This includes some beaches, foredune and headland areas that contain significant artefacts with others considered sacred sites. These include middens, burial sites and traditional campsites. Aboriginal people's association with the sea and land in the area dates back thousands of years and many people still gather food in the traditional way.

### **Cape Byron Marine Park**

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<sup>4</sup> NSW Marine Parks Authority (2013), [www.mpa.nsw.gov.au](http://www.mpa.nsw.gov.au)



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Cape Byron Marine Park<sup>5</sup> covers approximately 22 000 hectares, extending from Brunswick Heads in the north to Lennox Head in the south and extends seaward to the three (3) nautical mile limit of state waters. The tidal waters of the Brunswick River and its tributaries as well as Belongil and Tallow creeks are also within the marine park.

Local marine habitats include exposed and sheltered sandy beaches, rocky shores, rocky reefs, submerged pinnacles, small rocky islands, coral communities, riverine estuaries, coastal creeks and lakes, and sandy seabed habitats.

Marine life includes many species of dolphins, fish, seabirds and marine plants along with threatened species such as little terns, grey nurse sharks and sea turtles. Many of the fascinating animals that inhabit the waters surrounding Julian rocks including, sharks, rays, turtles, eels, starfish, and corals.

Sites of cultural significance to Aboriginal people include Julian Rocks, Cocked Hat Rocks, Cape Byron and beaches around Broken Head.

### **Solitary Islands Marine Park**

The first marine park established in NSW, the Solitary Islands Marine Park<sup>6</sup> covers an area around 72,000 hectares from Muttonbird Island in the south 75 km to the Sandon River and Plover Island in the north and extends seaward to the 3 nautical mile limit of state waters.

The marine park contains a diverse range of habitats including estuaries, sandy beaches, intertidal rocky shores, sub-tidal reefs and open oceans. It also contains the important island group, the "Solitary Islands", from which the marine park is named.

Researchers have identified over 550 species of reef fish, 90 species of hard coral and 600 species of molluscs (shelled animals) in the marine park. The marine park also supports a range of threatened and protected species such as the grey nurse shark, black cod, turtles, whales, shore birds and rare marine algae.

### **Port Stephens-Great Lakes Marine Park**

Port Stephens–Great Lakes Marine Park<sup>7</sup> extends from Cape Hawke Surf Life Saving Club near Forster south to Birubi Beach Life Saving Club at the northern end of Stockton Beach and extends seaward to the three (3) nautical mile limit of state waters. It includes Port Stephens and the Karuah River, the Myall River, Myall and Smiths Lakes and all their creeks and tributaries to the tidal limit.

The park's diverse marine life includes many species of dolphins, turtles, fish, invertebrates, seabirds and seaweeds along with threatened species such as the Gould's petrel, little tern, grey nurse shark and green turtle.

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<sup>5</sup> NSW Marine Parks Authority (2013), [www.mpa.nsw.gov.au](http://www.mpa.nsw.gov.au)

<sup>6</sup> NSW Marine Parks Authority (2013), [www.mpa.nsw.gov.au](http://www.mpa.nsw.gov.au)

<sup>7</sup> NSW Marine Parks Authority (2013), [www.mpa.nsw.gov.au](http://www.mpa.nsw.gov.au)

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### 3.11.4 Environmental Considerations

The NSW Environment Protection Authority (EPA) coordinate scientific support in the event of an oil spill in NSW State waters, which also includes expert advice from the Office of Environment and Heritage (OEH). To support the EPA and OEH in this role, an Oil Spill Response Atlas (OSRA) exists which is designed to provide information on environmentally and socio-economically sensitive areas, potential conflicts of interest and oil spill countermeasures for resource protection. The OSRA can be accessed by contacting the NSW Maritime Incident Duty Officer

### 3.11.5 Climatic Conditions

The climate of the North Coast region is sub-tropical with warm to mild temperatures. It is generally the wettest region in New South Wales with an average annual rainfall of more than 1200 mm, which peaks at an average of over 1750 mm/year in the far north-east coastal region. Rainfall is greatest in summer and early autumn, and is lowest in winter and spring.

In the northern area of the North Coast region summer temperatures range 20-27°C, while the mean winter temperatures range from 12-20°C. The rainfall is high with a summer monthly average of 15 days of rain measuring 167 mm and 11 days measuring 121 mm during the winter months. Total rainfall averages around 1730 mm per year.

#### Temperature and Rainfall Data – Northern Area\*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max (°C)	27.5	27.6	26.5	24.5	22	19.7	19.3	20.3	22.2	23.3	24.7	26.4
Min (°C)	20.8	20.6	19.5	17.2	15	12.5	11.7	12.5	14.3	16.1	17.8	19.5
Rainfall (mm)	165.4	189.4	202.9	188.5	180.9	165.1	106.6	91	65.9	108	120.2	146.9
Rain Days	14.9	15.7	17.1	15.4	14.4	12.3	10.5	9.3	9.3	11.5	12.2	12.9

\*BoM 2016– Cape Byron

In the central area of the North Coast region summer temperatures range 19-27°C while the mean winter temperatures range from 8-19°C. The rainfall is high with a summer monthly average of 15 days of rain measuring 185 mm and 9 days measuring 92mm during the winter months. Total rainfall averages around 1700 mm per year.

#### Temperature and Rainfall Data – Central Area\*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max (°C)	26.9	26.8	25.9	24	21.4	19.3	18.7	19.8	22	23.6	24.9	26.3
Min (°C)	19.4	19.5	18.1	15.2	11.7	9	7.6	8.2	11	13.8	16.2	18.1
Rainfall (mm)	189.1	222.4	235.8	179.2	157.7	123.5	73.8	78.4	61	98.3	142.7	144.6
Rain Days	15	14.9	16.5	12.6	11.5	10	8	7.7	8.2	11.3	12.2	13.7

\*BoM – Coffs Harbour

In the southern area of the North Coast summer temperatures in the region ranges from 19-26°C while the mean winter temperatures range from 9-19°C. The rainfall is

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moderate with a summer monthly average of 8 days of rain measuring 108 mm and 8 days measuring 93 mm during the winter months. Rainfall averages around 1225 mm per year.

### Temperature and Rainfall Data – Southern Area\*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max (°C)	26.4	26.3	25.5	23.6	21	18.8	18	19.3	21.6	22.7	23.6	25.5
Min (°C)	19.6	19.5	17.6	15.1	11.8	9.8	8.7	9.2	11.8	13.8	16.3	18
Rainfall (mm)	109.8	121.4	148.4	128.9	117.8	119.6	87.5	71.6	66.5	78.7	82	92.5
Rain Days	8.3	8.6	9.9	8.9	9.1	8.7	7.9	7.2	6.9	8.1	8.5	7.9

\*BoM 2016- Forster / Tuncurry

The maximum tidal range in the region is approximately 2 metres, however, local weather and river flood conditions may alter this at times.

The prevailing winds are from the north east during summer, while cold south westerly winds dominate during winter. Cold fronts with south east to south west winds pass through the region. During the period of autumn to spring East Coast Lows, severe thunderstorms and ex-tropical cyclones and associated frontal systems can be prevalent resulting in high winds and sea conditions. Average wave climate of 1–2 m from the south-east with wave heights up to 7.5 metres during severe weather events.

Ocean currents consist of two streams; the outer, warm East Australian Current flowing south, and a colder, inshore coastal counter current, which flows northward. The East Australian Current comes to within 2 kilometres of the shore and flows at a speed of up to 3 knots. The inner current flows close to the coastline at much slower speeds and is more prone to eddies.

Sea surface temperatures are listed below for Cape Byron, Coffs Harbour, Forster as indicative of what may be encountered in the area covered by this plan.

### Sea surface Temperatures – Northern Area (Cape Byron)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
26.0	26.1	25.6	25.1	23.5	22.4	21.2	21.0	21.5	22.3	22.5	24.1

Min	Max	Yearly Average
21.0	26.1	23.4

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### Sea surface Temperatures – Central Area (Coffs Harbour)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
25.9	25.9	25.6	24.8	23.3	22.4	20.9	20.4	20.6	21.0	22.4	23.2

Min	Max	Yearly Average
20.4	25.9	23.0

### Sea surface Temperatures – Southern Area (Forster)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
22.9	23.6	23.7	22.5	21.5	20.3	19.0	18.9	18.8	19.6	20.4	21.1

Min	Max	Yearly Average
18.8	23.7	21.0

**Note.** Average sea surface temperatures can vary by 0.1 – 1.5°C

#### **3.11.6 Risk Assessment**

The NSW North Coast ocean waters are a thoroughfare for over 3,800 passing ships. Locally the Port of Yamba services supply vessels and general cargo vessels. The Port of Yamba currently services about 30 visits each year from trading ships.

There is also a coastal and river fishing fleet at Yamba which consists of about 30 vessels. In addition, several minor ports are the home to commercial fishing fleets of varying numbers, as well as cruising yachts.

Due to the diverse nature of vessels plying the coast, marine oil spill threats exist from heavy fuel oil, gasoline and marine diesel oil. Passing ships can carry quantities of Heavy Fuel Oil up to 4,500 mt.

#### **3.11.7 Animal Response**

In accordance with the Agriculture and Animal Services Functional Area Supporting Plan and associated policies and procedures, the response will assess agriculture (including fisheries and aquaculture) and animals (livestock, companion and wildlife) at risk and coordinate appropriate response and recovery measures to minimise harm to agriculture and animals and ensure the welfare of animals through:

- rescue, evacuation and emergency care;
- assessment, humane destruction and disposal; and
- treatment and rehabilitation.

A containerised oiled wildlife wash facility owned by NSW Maritime and an AMSA wildlife kit are stored by Port Authority of New South Wales at Glebe Island. These can be mobilised by contacting the NSW Maritime Incident Duty Officer. Associated veterinary supplies are held by Taronga Park Zoo.

## **Part 4 Administration**

### **4 Administration**

#### **4.1 Training**

Oil spill response training is carried out by NSW Maritime, the Port Authority of New South Wales and AMSA. NSW Maritime will ensure that training opportunities are made available for personnel and other supporting agencies.

Dates and venues for these and other courses will be promulgated through the NSW Technical Working Group and the Regional Emergency Management Committee.

#### **4.2 Updating of the Plan**

This Plan will be exercised and reviewed annually and after any Level One oil or chemical spill in NSW North Coast that has required a significant response or a Level 2/3 spill response.

The most recent version of this Plan will be available on the RMS Intranet and Internet sites. Plan holders are encouraged to check the website for the latest version of the Plan.

Update information will be described in the amendments section on Page 6 of the Plan.



## Appendices

## Appendix 1. Contact List

### Initial Notification

Contact	24 Hour Contact Number
Roads and Maritime Services	Via 24 Hour Pager
Principal Manager North Operations, Roads and Maritime Services	Number not for Publication
Manager Marine Pollution, Roads and Maritime Services	Number not for Publication
Port of Yamba (Port Authority of New South Wales)	Office: (02) 6646 2002 Mobile: 0419 462 002 <b>VHF Maritime</b> Channel 16 Channel 11  Or Via Sydney Ports VTS (02) 9296-4001 (24 Hrs)
Newcastle Port (PANSW)	(02) 4985 8301
Fire & Rescue NSW	Number not for Publication
Australian Maritime Safety Authority - Rescue Coordination Centre	1800 641 792

## Appendix 2. Chart and Map References

The following chart and map references cover the areas under this Plan:

### Hydrographic Charts

Number	Name
<b>AUS 209</b>	Port Stephens
<b>AUS 221</b>	Solitary Islands
<b>AUS 222</b>	Clarence River and Approaches
<b>AUS 219</b>	Plans in New South Wales (Sheet 2) (Hastings River, Port Macquarie, Broughton Island, Cape Hawke Harbour, Sugarloaf Anchorage, Camden Haven)
<b>AUS 220</b>	Plans in New South Wales (Sheet 1) (Trial Bay, Richmond River Entrance, Tweed River Entrance, Brunswick River Entrance, Coffs Harbour, Evans Head).
<b>AUS 810</b>	AUS 810 - Port Stephens to Crowdy Head
<b>AUS 811</b>	Crowdy Head to Nambucca Heads
<b>AUS 812</b>	Nambucca Heads to Clarence River
<b>AUS 813</b>	Clarence River to Danger Point

### Topographical Maps (1:100,000)

Number	Name
<b>9641</b>	Tweed Heads
<b>9540</b>	Lismore
<b>9640</b>	Ballina
<b>9539</b>	Woodburn
<b>9538</b>	Bare Point
<b>9537</b>	Coffs Harbour
<b>9436</b>	Macksville
<b>9536</b>	Nambucca
<b>9435</b>	Kempsey
<b>9535</b>	Korogoro Point
<b>9434</b>	Camden Haven



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<b>9355</b>	Bulahdelah
<b>9332</b>	Port Stephens

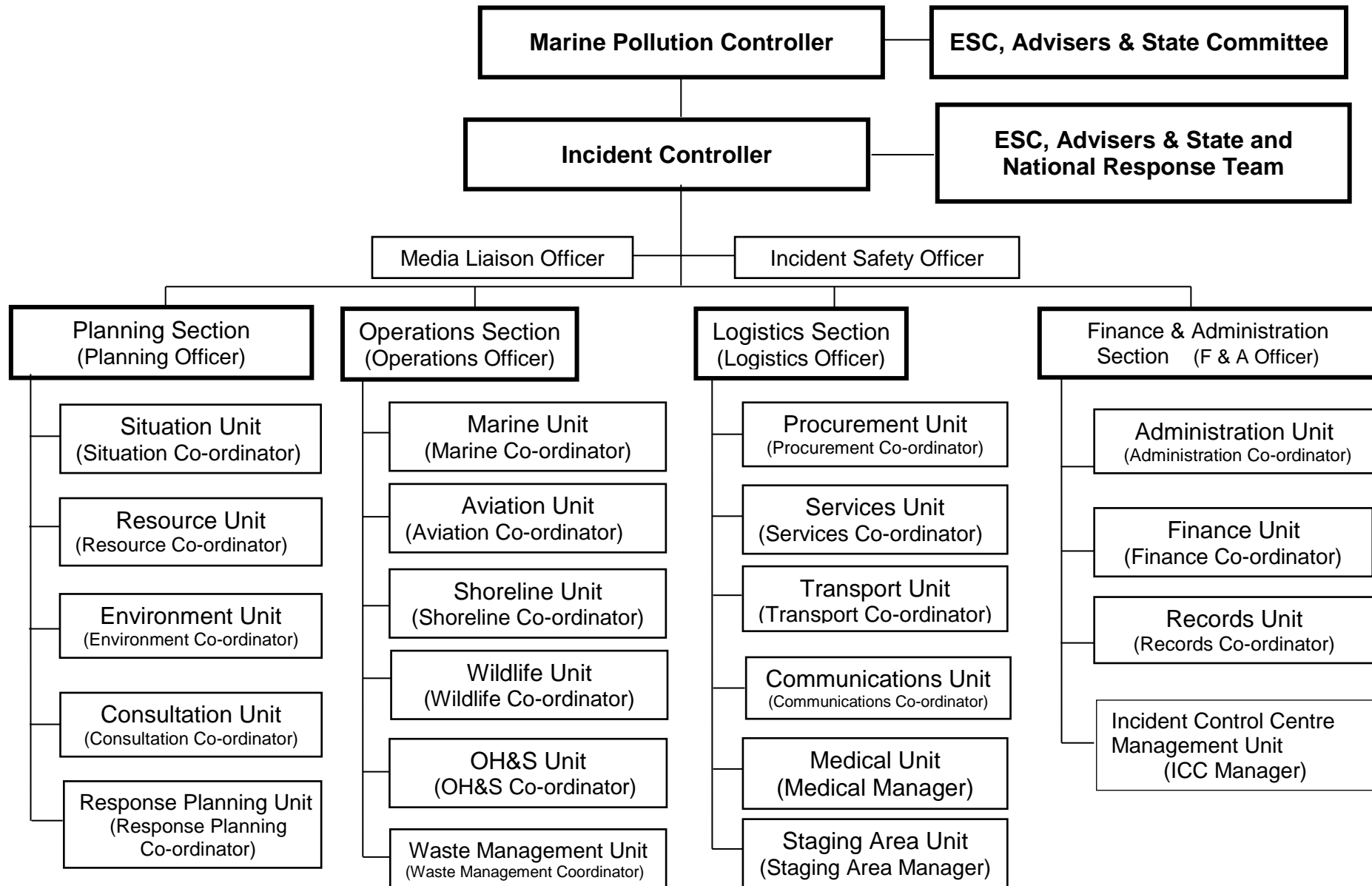
**Topographical Maps (1:25,000)**

<b>Number</b>	<b>Name</b>
<b>9641-4-S</b>	Tweed Heads
<b>9641-3-N</b>	Cudgen
<b>9641-3-S</b>	Pottsville
<b>9640-4-N</b>	Brunswick Heads
<b>9640-4-S</b>	Byron Bay
<b>9640-3-N</b>	Ballina
<b>9640-3-S</b>	Empire Vale
<b>9540-2-S</b>	Wardell
<b>9539-1-N</b>	Woodburn
<b>9539-1-S</b>	Tabbimoble
<b>9539-2-N</b>	Woombah
<b>9538-2-S</b>	Yamba
<b>9538-1-N</b>	Brooms Head
<b>9538-1-S</b>	Sandon
<b>9538-2-N</b>	Bare Point
<b>9538-3-S</b>	Red Rock
<b>9538-2-S</b>	North Solitary Islands
<b>9537-4-N</b>	Woolgoolga
<b>9537-4-S</b>	Moonee Beach
<b>9537-3-N</b>	Coffs Harbour
<b>9537-3-S</b>	Raleigh
<b>9536-4-N</b>	Wenonah Head
<b>9436-1-S</b>	Macksville
<b>9436-2-N</b>	Eungai
<b>9536-3-S</b>	South West Rocks
<b>9535-4-N</b>	Korogoro Point
<b>9435-1-S</b>	Kundabung

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<b>9435-2-N</b>	Telegraph Point
<b>9435-2-S</b>	Port Macquarie
<b>9434-1-N</b>	Grants Head
<b>9434-1-S</b>	Laurieton
<b>9434-3-N</b>	Cooperook
<b>9434-3-S</b>	Cundletown
<b>9433-4-N</b>	Hallidays Point
<b>9333-1-S</b>	Coolongolook
<b>9433-4-S</b>	Forster
<b>9433-3-N</b>	Pacific Palms
<b>9333-2-S</b>	Myall Lake
<b>9433-3-S</b>	Seal Rocks
<b>9332-1-N</b>	Bombah Point
<b>9332-4-S</b>	Port Stephens
<b>9332-3-N</b>	Morna Point

### Appendix 3. Incident Control System Response Structure for Major Responses



## **Appendix 4. Pollution Report (POLREP)**

A POLREP should be sent to Principal Manager North Operations and the Manager Marine Pollution once an initial assessment of an incident has been completed. The POLREP can also be filled out online using the RMS intranet page (<http://intranet/PSS/OilSpillResponse/default.aspx>).

The online POLREP will be automatically emailed to the Principal Manager North Operations and the Manager, Marine Pollution once the form is submitted.

The Principal Manager North Operations and the Manager Marine Pollution must also be notified verbally as soon as possible of the incident.

The hardcopy form of the POLREP is shown on the following page. This form can be filled out and faxed to the respective officers and should be followed up by a telephone call to inform that the POLREP fax has been sent.

# Pollution Report (POLREP)

Report prepared by:		Contact Details:	
Location:			
		Latitude:	Longitude:
Original Report Source:		Date/Time of Incident:	
		Date/Time Reported:	
Safe Approach Possible: <input type="checkbox"/> Yes <input type="checkbox"/> No		Injuries: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Description of Injuries:			
Description of Incident:			
Sea/Tide (calm etc./ebb, flood):		Movement & Speed of Pollution:	
Weather:		Wind Speed & Direction:	

**POLLUTION INCIDENT:**

Type of Substance:			
Alleged Source of Spill:			
<b>Current Situation:</b>	<b>Yes</b>	<b>No</b>	<b>Remarks:</b>
Has discharge stopped?	<input type="checkbox"/>	<input type="checkbox"/>	
Estimated volume (specify units)			
Size of spill (length & width)			
Fauna affected	<input type="checkbox"/>	<input type="checkbox"/>	
Samples taken	<input type="checkbox"/>	<input type="checkbox"/>	
Photographs/video taken	<input type="checkbox"/>	<input type="checkbox"/>	
Records of interview taken	<input type="checkbox"/>	<input type="checkbox"/>	
P&I Club undertaking obtained	<input type="checkbox"/>	<input type="checkbox"/>	
Financial guarantee obtained	<input type="checkbox"/>	<input type="checkbox"/>	
Salvor engaged	<input type="checkbox"/>	<input type="checkbox"/>	
Any additional comments			
<b>Response Action Taken:</b>			

**COPY TO: Principal Manager North Operations and Manager, Marine Pollution**

## **Appendix 5. Situation Report (SITREP)**

During a maritime pollution incident SITREPS should be sent regularly from the Incident Control Centre to keep relevant authorities advised of significant developments during the spill response.

The SITREP form is available on the RMS Intranet.

Alternatively a hard copy SITREP form can be used and the preferred form of the SITREP is shown on the following page.

The last SITREP in a series covering one incident should display the words:  
“FINAL SITREP”

# ICS2 - SITUATION REPORT - (SITREP)

Incident Name  Reference No.

Date  Time  Sitrep No.

Priority  Urgent  Immediate  Standard

Final Sitrep  Yes  No

Next Sitrep Date  Time

Incident Co-ordinates	Lat.	<input type="text"/>
	Long.	

Brief Description of Incident & Impact

Summary Weather Conditions

Summary of Response Actions to Date

Current Strategies



## ICS2 - SITUATION REPORT - (SITREP)

Resources Available and Deployed	

Expected Developments	

Other Information	

**SITREP Prepared By:**

Name		Role	
------	--	------	--

Phone		Fax		Mobile	
-------	--	-----	--	--------	--

Attachments    Number of Pages Attached   

Incident Controller		
	Name (print)	Approved (Signature)

**Distribution**

Status Board	IC and IMT	Records	NSWMPC	AMSA RCC	SEOC	REMO	Email list	

Internal use only – not for distribution

## Appendix 6. Guidelines for Collection of Oil Samples

The following guidelines are to be adhered to for the taking of oil samples and the transportation of samples:

- 1 Samples, of at least 100 grams, must be taken with the minimum of delay to minimise changes in composition. Every effort should be made to obtain an uncontaminated sample of oil for comparison purposes, particularly if prosecution is envisaged.
- 2 They are to be placed in clean glass jars/bottles with a secure lid and are to be individually sealed with a paper or wax seal.
- 3 Sample bottles are to appropriately numbered and noted with:
  - a. Name of officer taking the sample;
  - b. Time and Date of sample taken;
  - c. Location at which sample was taken;
  - d. Reference to the incident being investigated;
  - e. For those samples taken from a vessel, a signature on the sample bottle from a representative of that vessel; and
  - f. Direction of the movement of the oil, wind and current details.
- 4 Once taken the sample bottles are to be placed in a lockable transportation bag, locked and sealed with a lead seal. If more than one officer is involved with the collection of samples, each officer should have a box for the samples that they have taken.
- 5 When the sampling has been completed, the transportation box is to be kept in the possession of the officer that collected the samples until he/she delivers it, or sends it by courier, to the designated laboratory. (TNT Failsafe ☎ 13 11 50)
- 6 The sealed transportation box is then taken or delivered by courier to the designated laboratory where written confirmation of delivery is obtained.
- 7 The chemist analysing the samples is the only person to break the lead seal on the box.

### Designated Laboratory

**Leeder Consulting**  
U 5/18 Redland Drive  
MITCHAM VIC 3132

Ph (03) 9874 1988  
Mob 0418 344 987  
Fax (03) 9874 1933

## Appendix 7. Behaviour on Water of Four Representative Petroleum Products

	Gasoline (Petrol)	Kerosene	Diesel	Fuel Oil 650 Sec
Risk of fire or explosion	Yes	Yes	Yes	No
Evaporation 100%	Yes	Yes	No	No
Containable in boom	No	No	Yes	Yes
Skimming feasible	No	No	Yes	Yes
Pumping feasible	No	No	Yes	Yes
Vacuum equipment useable	No	No	Yes	Yes
Containable in fish nets	No	No	Yes	No
Containable in hessian	No	No	Yes	No
Physical removal on shore	No	No	Yes	Yes
Synthetic absorbent	No	No	Yes	Yes
Organic absorbent	No	No	No	No
Dispersant effective	No	No	Yes	Yes
Persistent	No	No	Yes	Yes
Flash Point °C	15	43	70	>70
Specific Gravity at 15°C	0.74	0.78	0.94	0.94
Viscosity cSt at 15°C	0.57	1.5	5.0	0.65
Pour Point °C	<-18	-18	-9	15

## Appendix 8. Oil Pollution Combat Resources

### RMS (NSW Maritime) Yamba

ITEM	QUANTITY	Comment
Shoreline response trailer	1	Tradesman trailer
Decontamination Station	1	Stored on trailer

### RMS (NSW Maritime) Port Macquarie:

ITEM	QUANTITY	Comment
General Purpose (500mm) self buoyant boom	120m	Pollution storage racks
Anchor Packs (15kg) with line & buoys	8	Pollution storage racks
Foilex Weir Skimmer and ELRO Diesel Transfer Pump	1	Pollution storage racks
Flexidam 5000 litre Recovery Tanks complete with valves and fittings	1	Pollution storage racks
Structurflex Shoreline Boom, + air blower + water pump (20 metre lengths)	60 m	Pollution storage racks
Absorbent Booms (3 metre lengths)	40	Pollution storage racks
Absorbent Pads (Grabol) 100/pack	6 packs	Pollution storage racks
Shoreline and Response Trailers	1	Tweed Heads

### Port of Yamba (Port Authority of New South Wales)

ITEM	QUANTITY	Comment
General Purpose (500mm) self-buoyant boom	600m	Pollution Container
Anchor Packs (Small) with line & buoys	4	Pollution Container
Desmi Min Max Weir Skimmer and Spate Pump	1	Pollution Container
Flexidam 10,000 litre Recovery Tanks complete with valves and fittings	2	Pollution Container
Structurflex Shoreline Boom, + air blower + water pump (20 metre lengths)	60 m	Pollution Container
Absorbent Booms (3 metre lengths)	34	Pollution Container

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Absorbent Pads (Grabol) 100/pack	4 packs	Pollution Container
Oilsnare Mop Heads (30/pack)	3 packs	Pollution Container
Shoreline and Response Trailers	1	Pilot Station

**Newcastle Port (Port Authority of New South Wales)**

ITEM	QUANTITY	Comment
Airmax – Offshore Boom	300 metres	Dyke 6
Airmax – Offshore Boom	300 metres	Oil Spill Store
Austpol Cube Boom (for Dredge)	45 metres	Darling St. Depot
Beach-Structurfex Land- Sea Boom	360 metres	Darling St. Depot
Self buoyant Structurfex GP Boom	210 metres	Basin cut shed
Pacific GP 500 Boom	330 metres	Darling St. Depot
Pacific GP 500 Boom	660 metres	Darling St. Depot (Trailer K62687)
ITEM	QUANTITY	Comment
Pacific GP 500 Boom	120 metres	Darling St. Depot (Trailer K42488)
Pacific GP 500 Boom	225 metres	Basin Cut Container
Pacific GP 350 Boom	38.4 metres	Darling St. Depot
Austpol Shoreline (350mm) Boom	50 metres	Darling St. Depot
Self buoyant inflatable 250mm Boom	45 metres	Darling St. Depot
Omi 260 mop Skimmer	1	Darling St. Depot (Trailer L42440)
Komara MK1 Skimmer & Power Pack	1	Darling St. Depot
Foilex Weir Skimmer and Power Pack	1	Darling St. Depot
Desmi 250 Weir Skimmer & Power Pack	1	Darling St. Depot
Ardrox 6120 Dispersant	9,000 ltrs	Darling St. Depot
Spray Pack (Back Packs)	3	Pilot Station Store
Box-single axel-Enclosed-Equipment	1	Darling St. Depot K62653
Box-single axel-beach recovery	1	Darling St. Depot L40894
Box-single axel-beach recovery	1	Darling St. Depot L40895
Box-single axel-beach recovery	1	Darling St. Depot L40896
Work Punt “Fred’s Flyer” Aluminium 50HP o/bd	1	Darling St. Depot (Trailer M80275)

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Twin Cab T/T truck w/- Hiab MSB270	1	Darling St. Depot
Absorbent boom – 180mm dia	168 metres	Darling St. Depot
Absorbent boom – 180mm dia	12 metres	Pilot Station (Ute YGB192)
Absorbent boom – 180mm dia	36 metres	Pilot Station (Trailer D32733)
Absorbent boom – 180mm dia	48 metres	Dredge
Absorbent boom – 180mm dia	102 metres	Darling St. Depot
Absorbent boom – 180mm dia	36 metres	Dredge
Absorbent Pads - 5mm	1300 pads	Darling St. Depot
Absorbent Pads - 5mm	20 pads	Pilot Station (Ute YGB192)
Absorbent Pads - 5mm	200 pads	Pilot Station (Trailer D32733)
<b>ITEM</b>	<b>QUANTITY</b>	<b>Comment</b>
Absorbent Pads - 5mm	100 pads	Dredge
Absorbent Poly mop	200 mops	Darling St. Depot
Absorbent Poly mop	30 mops	Pilot Station Store
Absorbent Polypropylene (omi 260 mop)	140 metres	Darling St. Depot

**Fire & Rescue NSW**

A number of FRNSW Fire Stations in the area have an intermediate Hazmat capability. This includes Stations at Taree, Port Macquarie, Coffs Harbour, Grafton, Goonellabah and Tweed Heads

Local resources are further supported by Heavy hazmat capability located at Newcastle and a flyaway capability located at Sydney.

Nelson Bay has a store of containment booms and have an MOU with local marine vessels for assistance with incidents.

## Appendix 9. Vessel Resources

### RMS (NSW Maritime Division)

Location	Contact	Vessel
Tweed Heads	Boating Safety Officer x 2	7.0m Leisurecat (22635) 2 x 150hp Suzuki Outboards VHF and 27MHz <i>(to be replaced earl 2017)</i>  5.7m Cobia RHIB (22704) 2 x 90hp Suzuki Outboards VHF and 27 MHz  3.2m SeaDoo PWC (MA708C) Hand-held VHF
Ballina	Boating Safety Officer X 2	7.3m Cobia RHIB (22944) 2 x 175hp Suzuki Outboard VHF and 27MHz  6.3m Naiad RHIB (24583) 2 x 140hp Suzuki Outboard VHF 27 MHz  4.45 Hornet Quintrex (55857) 1 x 60HP Honda
Yamba	Boating Safety Officer	8.0m KevlaCat (MA096) 2 x 250hp Suzuki Outboards VHF and 27MHz
Coffs Harbour	Boating Safety Officer	6.0m Leisurecat (56495) 2 x 115hp Suzuki Outboards VHF and 27Mhz  5.5m Gemini RHIB (23046) 2 x 60hp Suzuki Outboards VHF Only  5.39m Stacer (AGN370N) 1 x 115hp Mercury Outboard VHF and 27MHz



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Location	Contact	Vessel
South West Rocks	Boating Safety Officer	8m Noosa Cat (MA234) 2 x 225hp Yamaha Outboards VHF and 27MHz,Radar  5.7m Cobia RHIB (22902) 2 x 90hp Suzuki Outboards VHF and 27MHz  3.2m SeaDoo PWC (MA705C) Hand-held VHF
Port Macquarie	Boating Safety Officer	7.3m Cobia RHIB (24038) 2 x 200hp Yamaha Outboards VHF and 27MHz
Lord Howe Island	Assistant Port Operations Manager	7.5m Cobia MA080 2 x175 Suzuki VHF,27mhz
Taree	Boating Safety Officer	5.7m Cobia RHIB (22401) 2 x 115 Yamaha Outboards VHF and 27MHz  3.2m SeaDoo PWC (MA703C)
Forster	Boating Safety Officer x 2	6.3 Niaid RHIB (24629) 2 x 140hp Suzuki Outboards VHF and 27MHz  5.8m Niaid RHIB (24582) 2 x 140hp Suzuki Outboards VHF and 27MHz
Port Stephens/Nelson Bay	Boating Safety Officer x 2	8.0m Kevla Cat (24164) 2 x 250hp Suzuki Outboards VHF and 27MHz GRN Radio  6.9m Sailfish (22438) 2 x 150hp Honda Outboards VHF and 27MHz GRN Radio <i>(to be replaced 8m Noosa Cat to be delivered January 2017)</i>  3.2m SeaDoo PWC (58356) <i>(to be replaced early 2017)</i>

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Newcastle (Carrington)	Boating Safety Officer	6.9m Sailfish (22621) 2 x 150hp Honda Outboards VHF and 27MHz GRN Radio <i>(To be replaced 8m Naiad February 2017)</i>  6.3m Naiad RHIB (24560) 2 X 115hp Suzuki Outboard VHF Only 27MHz
Lake Macquarie (Pelican)	Boating Safety Officer x 3	7.3m Sailfish (22920) 2 x 225hp Yamaha Outboards VHF and 27MHz GRN Radio  8m Noosacat (24637) 2 x 225hp Yamaha Outboards VHF and 27MHz,Radar  8m Noosacat (24638) 2 x 225hp Yamaha Outboards VHF and 27MHz,Radar

Additional resources for the area are also located at RMS Tamworth and Dubbo which can be deployed if required.

## Appendix 10. Location of Initial Incident Control Centres

### RMS (Maritime Division) Regional Offices

Location	Address
Tweed Heads	20 River Terrace Tweed Heads NSW 2485
Ballina	Suite 3, 118 Tamar Street Ballina NSW 2478
Yamba	Suite 5, 19-21 Coldstream Street Yamba NSW 2464
Coffs Harbour	2/16 Isles Drive Coffs Harbour NSW 2450
South West Rocks	Shop 2, 4 Landsborough Street South West Rocks NSW 2431
Port Macquarie	Shop 1, Cnr. Uralla & Merrigal Streets Port Macquarie NSW 2444
Taree Co-located with DPI Catchments and Lands	98 Victoria Street Taree NSW 2430
Forster	1/16 Little Street Forster NSW 2428
Port Stephens/Nelson Bay	12 Teramby Road Nelson Bay NSW 2315
Newcastle (Carrington)	8 Cowper Street, Carrington NSW 2294
Lake Macquarie (Pelican)	Pelican Marina, 89 Soldiers Road Pelican NSW 2281

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**Local Emergency Operations Centres**

<b>Local Government Area</b>	<b>Address</b>
Tweed Byron Council	Tweed Heads Administration Building 21 Brett Street Tweed Heads
Tweed-Byron Council	Training Rooms Byron Shire Depot Bayshore Drive Byron Bay
Ballina Shire	Education Centre Waste Management Facility 167 Southern Cross Drive Ballina
Richmond Valley Shire	RFS Headquarters 40 Neville Bienke Drive Casino
Clarence Valley Council	Primary EOC NSW State Emergency Service Clarence Nambucca Region Building 26 Induna Street SOUTH GRAFTON NSW 2460  Secondary EOC Local Land Services Building 24-26 Mulgi Drive SOUTH GRAFTON NSW 2460
Coffs Harbour City / Bellingen Shire	RFS Coffs Harbour Headquarters 1 Aviation Drive Coffs Harbour
Nambucca Shire	Nambucca EOC Kelly Close Macksville
Kempsey Shire	Kempsey Police Station 5-9 Elbow Street West Kempsey
Port Macquarie- Hastings Council	Port Macquarie Hastings EOC 9 Central Road Port Macquarie
MidCoast Council	RFS Taree Headquarters 28 Muldoon Street Taree
MidCoast Council	MidCoast Council EOC Rear 5a South Street Tuncurry

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## Appendix 11. Communications Equipment

Company / Location	Address	Radio Equipment
RMS (Maritime Division) Tweed Heads	20 River Terrace Tweed Heads NSW 2485	Hand-held VHF
RMS (Maritime Division) South West Rocks	Shop 2, 4 Landsborough Street South West Rocks NSW 2431	Hand-held VHF
RMS (Maritime Division) Port Stephens/Nelson Bay	12 Teramby Road Nelson Bay NSW 2315	GRN Radio Base Station
RMS (Maritime Division) Newcastle (Carrington)	8 Cowper Street, Carrington NSW 2294	GRN Radio Base Station GRN Portables (10) Hand-held VHF (2)
Port of Yamba	<i>Pilot Station</i> Pilot Street Yamba NSW 2464	VHF Radio Base Station Hand-held VHF (2) GRN Radio Base Station Vehicle mounted VHF

End of Document