



**WorleyParsons®**  
resources & energy

 **Greater Taree**  
City Council

# Greater Taree Coast

## Emergency Action Plan



Old Bar Beach 21 April 2009

19 December 2011

### **Infrastructure & Environment**

3 Warabrook Boulevard, Warabrook NSW 2304, Australia

Telephone: +61 2 4985 0000

Facsimile: +61 2 4985 0099

[www.worleyparsons.com](http://www.worleyparsons.com)

ABN 61 001 279 812

© Copyright 2011 WorleyParsons



## Disclaimer

*This report has been prepared on behalf of and for the exclusive use of Greater Taree City Council and is subject to and issued in accordance with the agreement between Greater Taree City Council and WorleyParsons. WorleyParsons accepts no liability or responsibility whatsoever for it in respect of any use of or reliance upon this report by any third party.*

*Copying this report without the permission of Greater Taree City Council or WorleyParsons is not permitted.*

### PROJECT 301020- 02273 – EMERGENCY ACTION PLAN

REV	DESCRIPTION	ORIG	REVIEW	WORLEY- PARSONS APPROVAL	DATE	CLIENT APPROVAL	DATE
A	Draft	H Nelson	P Moses		15/4/11		15/4/11
B	Revised Draft	H Nelson	P Moses		5/9/11		
C	Revised Draft	O Muenger	R Pamplin		6/10/11		6/10/11
D	Revised Draft	M Griffith	R Pamplin		19/12/11		
E	Final	Certified by the Honourable Robyn Parker MP under the <i>Coastal Protection Act 1979</i> on the 28 February 2012.					



## CONTENTS

1.	INTRODUCTION .....	2
1.1	Context and associated Plans and Guidelines .....	2
1.2	Purpose of Emergency Action Plan .....	2
1.3	Assets potentially affected by Beach Erosion .....	2
1.4	Coastal Zone Management Approach .....	4
1.4.1	Greater Taree Council .....	4
1.4.2	Land Owners .....	4
2.	ACTION PLAN .....	5
3.	REFERENCES .....	8

## Tables

**Table 2.1** Coastal Emergency Action Plan

## Appendix A

Contact List for Emergency Action Plan

Media etc for Dissemination of Emergency Warnings

Authorised Access for Owner Protection Works

## Appendix B

Hazard and Inundation Lines



## 1. INTRODUCTION

### 1.1 Context and associated Plans and Guidelines

This Emergency Action Plan (EAP) has been prepared in accordance with provisions of the *Coastal Protection Act 1979* and is intended as an interim measure, prior to the implementation of the Greater Taree Coastal Zone Management Plan. Associated plans and guidelines are the:

- *NSW State Storm Plan (SES 2007)* – prepared under the *State Emergency and Rescue Management Act 1989* and *State Emergency Service Act 1989*.
- *Greater Taree Local Disaster Plan (DISPLAN)* (GTCC 2006)
- *Coastal zone management guide note – Emergency action subplans* (OEH, July 2011)
- *Guide to the Statutory Requirements for Emergency Coastal Protection Works* (DECCW 2011a)
- *Code of Practice under the Coastal Protection Act 1979* (DECCW 2011b).

This EAP should be reviewed periodically in conjunction with the review of Council's DISPLAN. It may be necessary to adopt additional reviews following a coastal erosion emergency event as defined in **Section 1.2**.

### 1.2 Purpose of Emergency Action Plan

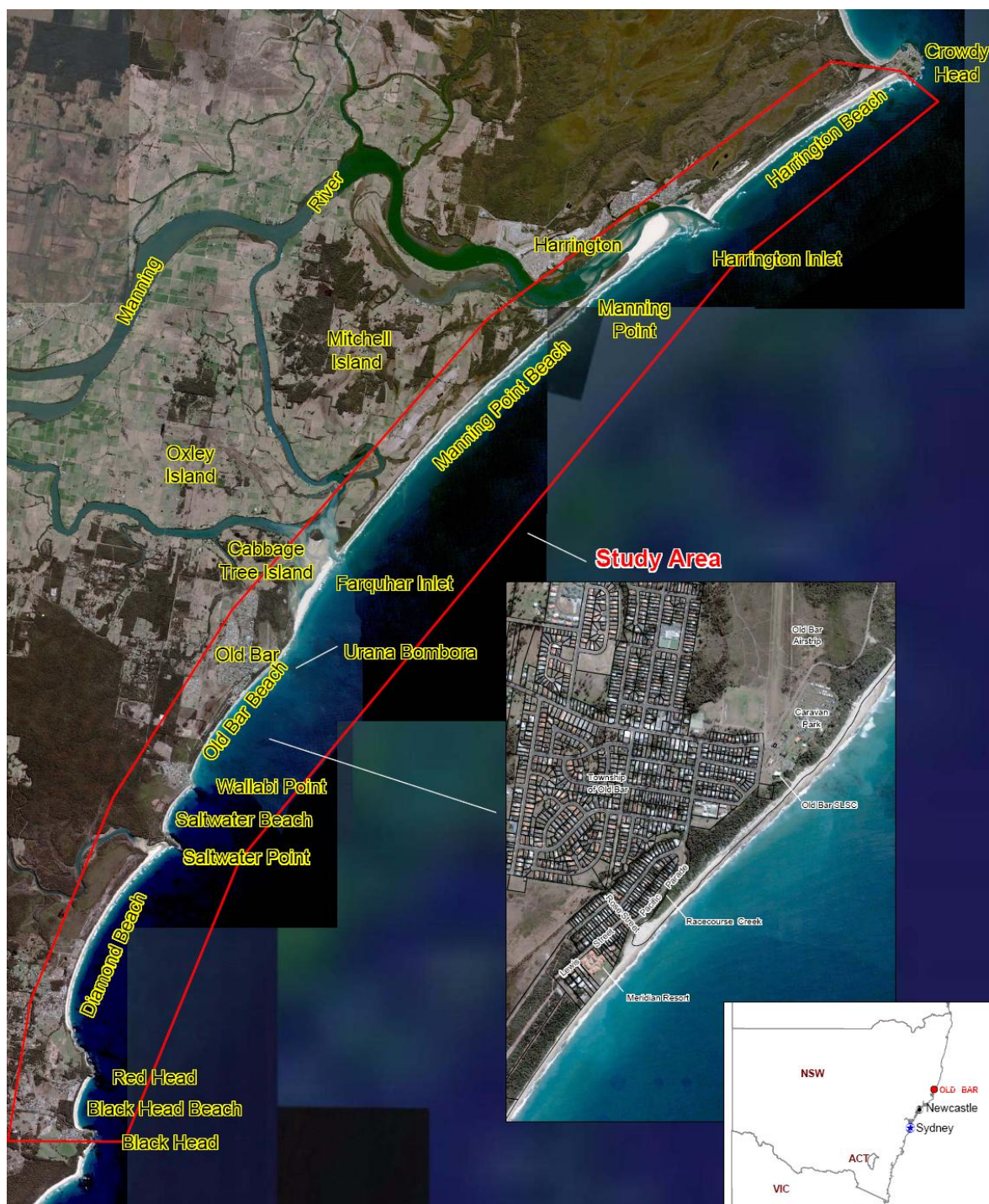
The purpose of the EAP is to specify:

- the actions Council will take before, during and after a coastal erosion emergency (see **Table 2.1**).
- site-specific requirements for owner constructed emergency protection works in '*Authorised Locations*', certified in accordance with provisions of the *Coastal Protection Act 1979* and the *Code of Practice under the Coastal Protection Act 1979* (DECCW 2011). A '*coastal erosion emergency*' is classified (for the purposes of this plan) as an oceanic event that is likely to result in high unstable erosion escarpments and/or direct threats to public and private assets from undermining or wave action.. A coastal erosion emergency could occur due to a combination of elevated ocean water levels and waves that are not generated by a severe weather event that would trigger actions under the State Storm Plan/ DISPLAN.

### 1.3 Assets potentially affected by Beach Erosion

Beach erosion has recently and in the past threatened development and beach amenity along Old Bar Beach and in particular the coastline adjacent to Lewis Street, where some dwellings have been demolished subsequent to storm events. Dwellings at the southern end of Diamond Beach are also at risk from beach erosion. Historically, Manning Point Beach has experienced significant beach erosion. See locality map (**Figure 1.1**). Council infrastructure may also be at risk in some locations, i.e. stormwater outlets (south side of Wallabi Point and near Taree Old Bar SLSC), beach accessways, and the southern end of the Pacific Parade roadway at Old Bar. Although other areas are affected by beach erosion the only authorised location for the placement of Emergency Action Works is at Old Bar Beach in the area identified in section 1.4.2.





**Figure 1.1 Locality Map**

Note that inundation caused by an ocean storm event is only likely to affect some dwellings along the foreshores of the Manning River near the entrance (parts of Manning Point and Harrington) and would not be as significant as a major catchment flooding event. Further detail regarding 2008 hazard and inundation lines is included within Appendix B.



## 1.4 Coastal Zone Management Approach

### 1.4.1 Greater Taree Council

At the Ordinary Meeting on the 16<sup>th</sup> February 2011 Council resolved to adopt a policy stance of “Planned Retreat” for the entire coastline. Accordingly, Council does not intend to construct coastal protection works. Activities before, during and after a coastal erosion event (whether or not due to a severe weather event) would generally comprise monitoring weather and beach conditions and carrying out clean-up and minor restoration works (e.g. repair of beach accessways) to ensure public safety on Council owned or managed lands and to assist in restoring beach amenity.

As noted in **Section 1.3**, dwellings at the southern end of Diamond Beach are at risk from coastal erosion. However, this would only be expected in a severe weather event when the State Emergency Services (SES) would be mobilised and Council would undertake activities (such as assisting with removal of readily moveable household contents) under the direction of the SES (as the main combat agency) and in accordance with DISPLAN.

### 1.4.2 Land Owners

- the Code of Practice under the *Coastal Protection Act 1979* (DECCW 2011b) sets out general requirements for temporary coastal protection works by land owners at authorised location. Old Bar Beach from opposite the Pacific Parade/Hall Street intersection south to opposite the south end of Lewis Street is an authorised location. Temporary works are permitted where: a certificate has been obtained from the Office of Environment & Heritage (OEH) to undertake the works; and
- storage of emergency protection materials and access to the beach are in accordance with this EAP (see **Appendix A**); and
- the works are carried out (and later removed) in accordance with the Code of Practice.

Further information to assist landholders contemplating the placement of emergency protection works can be found in the *Guide to the Statutory Requirements for Emergency Coastal Protection Works*, (OEH 2011a) available at [www.environment.nsw.gov.au/coasts/coastalmgtdocs.htm](http://www.environment.nsw.gov.au/coasts/coastalmgtdocs.htm).

**All other works, such as dumping rock etc are illegal at all locations.**



## 2. ACTION PLAN

Table 2.1 Coastal Emergency Action Plan

Category	Trigger	Responsible Council Officer/ Action/ Reporting
Pre-storm Phase	As a guide, significant offshore wave height is in the range of 3m to 5m and tides exceeding 1.8 m are predicted at Fort Denison.	<b>GTCC Coordinator</b>  Undertake web-based monitoring and reporting of weather, wave forecasts (BoM website) and beach conditions on a daily basis.
	As a guide, significant offshore wave height exceeds or is expected to exceed 5 m and tides exceeding 1.8 m are predicted at Fort Denison.	<b>GTCC Coordinator</b>  Notify Senior Leader Infrastructure Services that a coastal erosion event is likely.  Advise local community contacts and other stakeholders of the likelihood of coastal erosion. Advise foreshore residents/ property owners at Old Bar and Diamond Beach of the likelihood of coastal erosion. If Council becomes aware of any other location where coastal erosion is likely to threaten private property and assets it will endeavour to contact residents and property owners.



Category	Trigger	Responsible Council Officer/ Action/ Reporting
<b>Storm Phase</b>	<p>A significant erosion escarpment forms (taken to be if the escarpment begins receding landward, approaching property boundaries);</p> <p>and/ or</p> <p>there is a predicted increase in storm threat.</p>	<p><b>GTCC Coordinator</b></p> <p>Increase frequency of web-based monitoring and keep records of any weather warnings/ reports of erosion.</p> <p>Notify all appropriate persons including the Local Emergency Management Committee, Mayor, OEH, SES Incident Controller, LEOCON, GTCC staff and have them on alert for an emergency meeting.</p> <p><b>Senior Leader Infrastructure Services</b></p> <p>Erect "Closed Beach" signs and close beaches at eroded public access points with barrier tape.</p> <p>Take digital photos of erosion escarpment, location and any 'rip head' formation and forward these to the GTCC Coordinator.</p>
	<p>Ongoing storm activity is likely to result in beach erosion that threatens dwellings. Experienced judgement is required by those persons at the emergency meeting to assess whether this is likely. Some factors of significance in making this judgement would include:</p> <ul style="list-style-type: none"><li>-existing beach conditions (beach width, sand volume)</li><li>-location of rips</li><li>-coastal storm predicted behaviour (wave height, wave direction)</li><li>-water level predicted behaviour (particularly tide)</li></ul> <p>Advice from an experienced coastal engineer and/ or geotechnical engineer after a site inspection of areas at risk should be sought, if possible.</p>	<p><b>GTCC Coordinator</b></p> <p>Arrange emergency meeting with Mayor, OEH, SES Incident Controller, LEOCON, GTCC staff and any other relevant stakeholders.</p> <p><b>Senior Leader Infrastructure Services</b></p> <p>Inform residents in affected areas that structural damage to dwellings is possible.</p>



Category	Trigger	Responsible Council Officer/ Action/ Reporting
Post-storm Phase	Storm has abated and it is safe to conduct post-storm activities	<p><b>GTCC Coordinator</b></p> <p>Organise Senior Leader Asset Planning and Senior Leader Infrastructure Services to assess damage to property, roads, services etc.</p> <p>Liaise with other service providers, e.g. MidCoast Water.</p> <p>Organise Senior Leader Infrastructure Services and/ or structural engineer to assess any houses in imminent danger of collapse due to proximity to eroded dune escarpment.</p> <p>Advise Senior Leader Infrastructure Services that cleanup and restoration works can commence.</p> <p>Advise Senior Leader Infrastructure Services on reinstatement of damaged beach accessways.</p> <p>Advise Senior Leader Infrastructure Services to erect relevant safety warning signs where unstable dune escarpments present a public safety hazard – in high use areas collapse the erosion escarpment using machinery to achieve a more stable slope.</p> <p>Undertake a survey of the beach levels and other features e.g. position of erosion escarpments at Old Bar and Diamond Beach south to provide a greater understanding of the coastal hazard.</p> <p>Review and collate all records of the storm event, actions taken prior to and during storm event, lessons learned, photos of the event and retain for future reference.</p> <p>Liaise with OEH to determine any changes to the coastline and any new areas at risk.</p> <p>Review the <i>Greater Taree Coastal Zone Management Plan (CZMP)</i> in consultation with other stakeholders.</p> <p>Review the <i>Emergency Action Plan (EAP)</i> and update as necessary.</p>





### **3. REFERENCES**

Coastal zone management guide note – Emergency action subplans (OEH, July 2011)

DECCW 2011a, *Guide to the Statutory Requirements for Emergency Coastal Protection Works*

DECCW 2011b, *Code of Practice under the Coastal Protection Act 1979*

GTCC & SES 2007, *Greater Taree City Local Flood Plan – A Sub-plan of the Greater Taree City Local Disaster Plan (DISPLAN)*, Amendment 1, 2008

GTCC 2006, *Local Disaster Plan (DISPLAN)*

WorleyParsons 2010a, *Black Head to Crowdy Head Coastline Hazard Definition Study*

WorleyParsons 2010b, *Greater Taree Coastline Management Study Black Head to Crowdy Head*



## Appendix A

### Contact List for Emergency Action Plan

	Name	Phone Number
<b>Emergency Management Committee members:</b>		
<b>GTCC Coordinator:</b>		
<b>GTCC Mayor:</b>		
<b>GTCC Senior Leader Infrastructure Services (or delegate):</b>		
<b>GTCC Senior Leader Asset Planning (or delegate):</b>		
<b>Greater Taree LGA SES Local Controller:</b>		
<b>Local Emergency Operations Controller(s) (LEOCON):</b>		
<b>OEH representative:</b>		
<b>Local Community Contacts</b>		
<b>Diamond Beach:</b>		
<b>Old Bar Beach:</b>		

Note: names and contact details are blank due to confidentiality reasons and as a counter-terrorism reasons measure.

### Media etc for Dissemination of Emergency Warnings

- AM Radio, 2RE, ABC Radio, 2BOB
- FM Radio Stations - MAX FM
- Greater Taree City Television Networks NBN, PRIME, and TEN
- Marine Radio Networks through the Volunteer Coastal Patrol.
- Citizens Band Radio Networks (CREST)
- If time permits appropriate personnel will deliver warnings through a doorknock.

### Authorised Access for Owner Protection Works





As directed by Council, the following location is authorised for storage of materials for emergency protection works constructed by owners:

- reserve in the vicinity of the Taree-Old Bar SLSC, on the southern side of the Taree-Old Bar SLSC building.

The **only** authorised access point for transportation of materials to locations where owners are permitted to construct emergency protection works is:

- Taree-Old Bar SLSC emergency vehicle access



## **Appendix B - Hazard and Inundation Lines**



**WorleyParsons**

resources & energy



**Figure 5.1**  
**Hazard Lines Black Head –**  
**Diamond Beach**





#### Hazard Lines

- |   |   |
|---|---|
| <span style="color: yellow;">—</span> Immediate Hazard Line (2008 Baseline) | <span style="color: red;">—</span> 2100 High-Range Hazard Line                    |
| <span style="color: green;">—</span> 2050 Mid-Range Hazard Line             | <span style="color: red;">- - -</span> 2109 High-Range Zone of Reduced Foundation |
| <span style="color: blue;">—</span> 2050 High-Range Hazard Line             |   |
| <span style="color: purple;">—</span> 2100 Mid-Range Hazard Line            |   |



**WorleyParsons**

resources & energy



**Figure 6.1**  
**Hazard Lines Diamond**  
**Beach North**





#### Hazard Lines

- |   |  |
|---|--|
| — Immediate Hazard Line (2008 Baseline) | — 2100 High-Range Hazard Line                |
| — 2050 Mid-Range Hazard Line            | — 2108 High-Range Zone of Reduced Foundation |
| — 2050 High-Range Hazard Line           |  |
| — 2100 Mid-Range Hazard Line            |  |



**WorleyParsons**  
resources & energy



**Figure 7.1**  
**Hazard Lines Saltwater –**  
**Wallabi Point – Old Bar**





#### Hazard Lines

- Immediate Hazard Line (2008 Baseline)
- 2050 Mid-Range Hazard Line
- 2050 High-Range Hazard Line
- 2100 Mid-Range Hazard Line

- 2100 High-Range Hazard Line
- 2109 High-Range Zone of Reduced Foundation



**WorleyParsons**

resources & energy



**Figure 8.1**  
**Hazard Lines Old Bar –**  
**Farquhar Inlet**





#### Hazard Lines

- |   |   |
|---|---|
| <span style="color: yellow;">—</span> Immediate Hazard Line (2008 Baseline) | <span style="color: red;">—</span> 2100 High-Range Hazard Line                    |
| <span style="color: green;">—</span> 2050 Mid-Range Hazard Line             | <span style="color: red;">- - -</span> 2109 High-Range Zone of Reduced Foundation |
| <span style="color: blue;">—</span> 2050 High-Range Hazard Line             |   |
| <span style="color: purple;">—</span> 2100 Mid-Range Hazard Line            |   |



**WorleyParsons**  
resources & energy



**Figure 9.1**  
**Hazard Lines Manning Point**  
**Beach South**





#### Hazard Lines

- |   |   |
|---|---|
| <span style="color: yellow;">—</span> Immediate Hazard Line (2008 Baseline) | <span style="color: red;">—</span> 2100 High-Range Hazard Line                    |
| <span style="color: green;">—</span> 2050 Mid-Range Hazard Line             | <span style="color: red;">- - -</span> 2108 High-Range Zone of Reduced Foundation |
| <span style="color: blue;">—</span> 2050 High-Range Hazard Line             |   |
| <span style="color: purple;">—</span> 2100 Mid-Range Hazard Line            |   |



**WorleyParsons**

resources & energy



**Figure 9.2**  
Hazard Lines Manning Point  
Beach North





#### Hazard Lines

<span style="color: yellow;">—</span> Immediate Hazard Line (2008 Baseline)	<span style="color: red;">—</span> 2100 High-Range Hazard Line
<span style="color: green;">—</span> 2050 Mid-Range Hazard Line	<span style="color: red;">- - -</span> 2109 High-Range Zone of Reduced Foundation
<span style="color: blue;">—</span> 2050 High-Range Hazard Line	
<span style="color: purple;">—</span> 2100 Mid-Range Hazard Line	

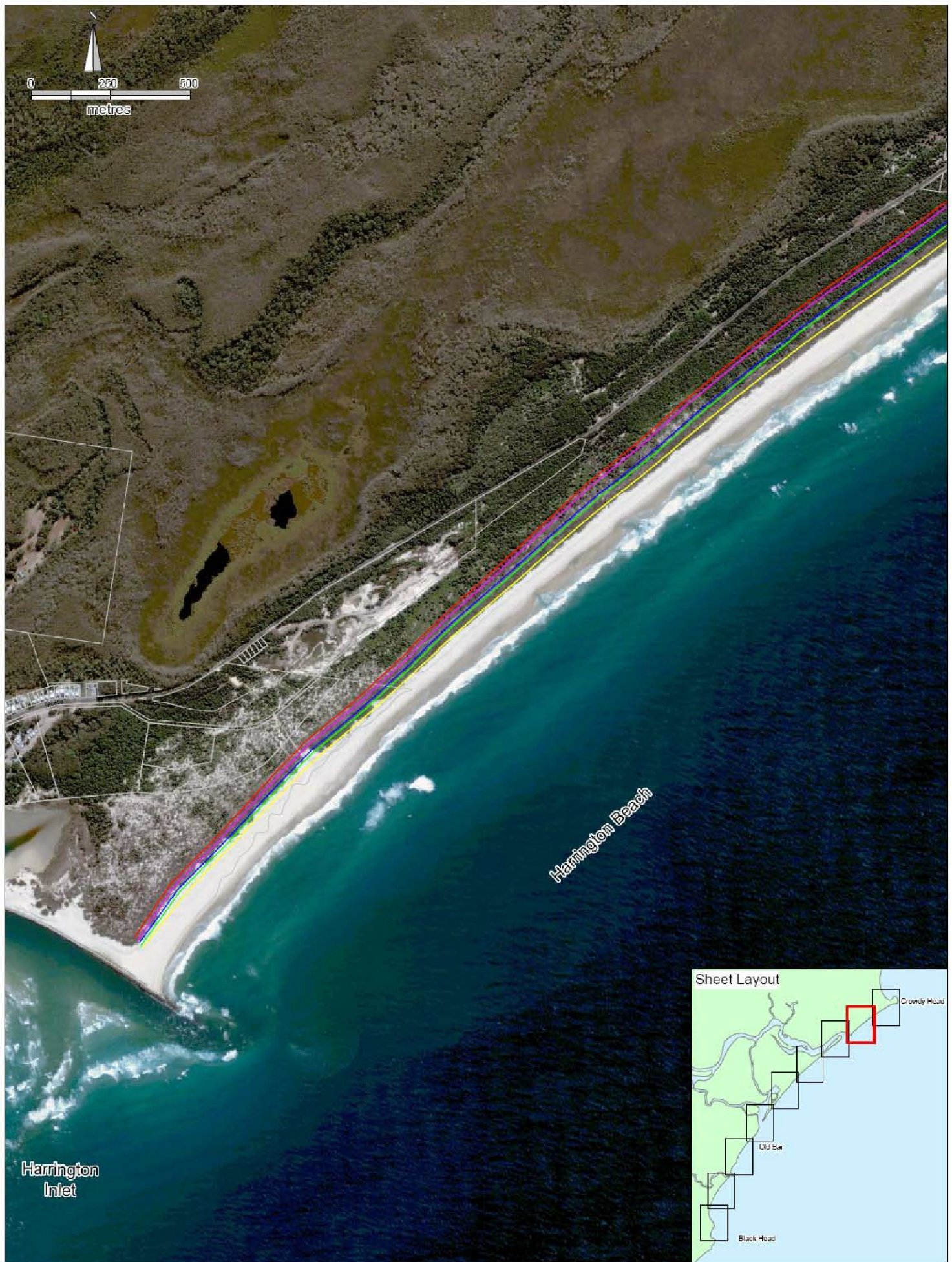


**WorleyParsons**  
resources & energy



**Figure 9.3**  
**Hazard Lines Harrington Inlet**





#### Hazard Lines

- |   |   |
|---|---|
| <span style="color: yellow;">—</span> Immediate Hazard Line (2008 Baseline) | <span style="color: red;">—</span> 2100 High-Range Hazard Line                    |
| <span style="color: green;">—</span> 2050 Mid-Range Hazard Line             | <span style="color: red;">- - -</span> 2100 High-Range Zone of Reduced Foundation |
| <span style="color: blue;">—</span> 2050 High-Range Hazard Line             |   |
| <span style="color: purple;">—</span> 2100 Mid-Range Hazard Line            |   |



**WorleyParsons**

resources & energy



**Figure 10.1**  
**Hazard Lines Harrington**  
**Beach South**





#### Hazard Lines

- |   |   |
|---|---|
| <span style="color: yellow;">—</span> Immediate Hazard Line (2008 Baseline) | <span style="color: red;">—</span> 2100 High-Range Hazard Line                  |
| <span style="color: green;">—</span> 2050 Mid-Range Hazard Line             | <span style="color: red;">---</span> 2109 High-Range Zone of Reduced Foundation |
| <span style="color: blue;">—</span> 2050 High-Range Hazard Line             |   |
| <span style="color: purple;">—</span> 2100 Mid-Range Hazard Line            |   |



**WorleyParsons**  
resources & energy



**Figure 10.2**  
**Hazard Lines Crowdy Head**