



Australian Government

Nation Building Program



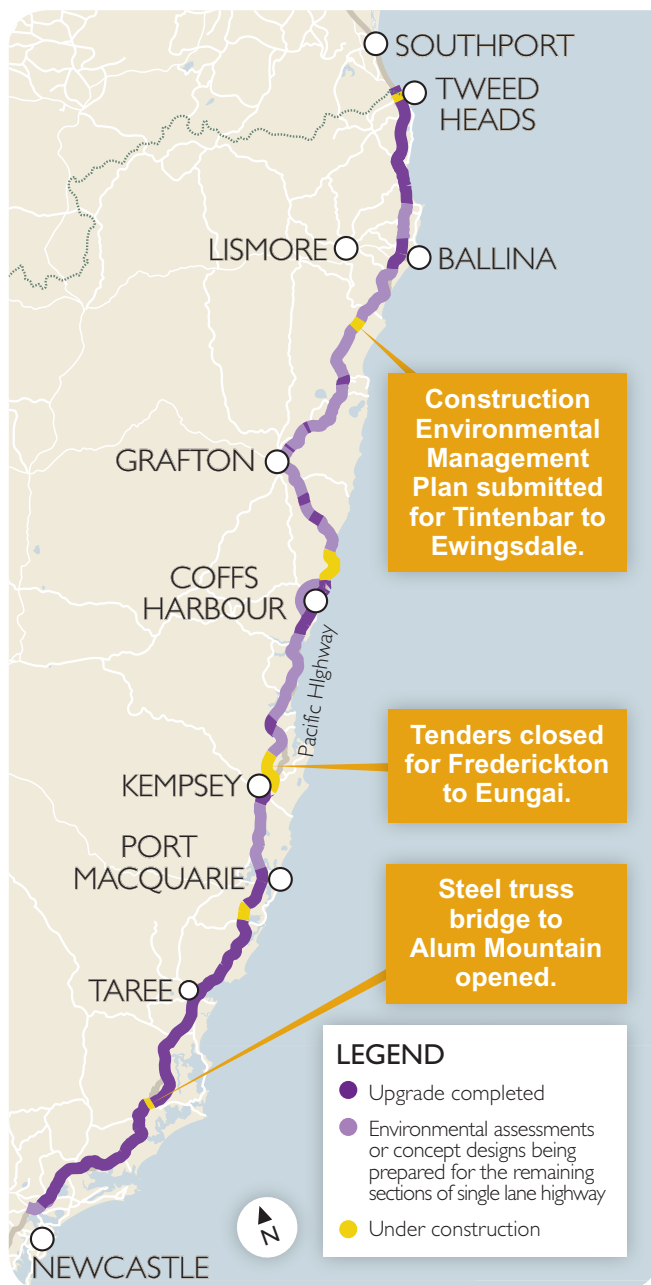
Transport  
Roads & Maritime  
Services

# Pacific Highway upgrade

Monthly achievement report **June/July 2012**



Banora Point upgrade – southern valley viaduct



## Pacific Highway upgrade

**This report will provide you with information about Pacific Highway upgrade projects, including the current status and key activities carried out on construction projects in the past two months.**

As at 31 July 2012, 346 kilometres are completed dual carriageway, about 59 kilometres are under construction, and about 121 kilometres have received planning approval and are being prepared for construction.

Planning is also being progressed on the remaining single carriageway sections of the highway.

About 52 per cent of the final highway length of 664 kilometres is now dual carriageway.



**59 km of highway under construction July 2012.**



**1800 workers on site.**



**For overall upgrading strategy refer to the second last page.**





**Contractors:** Boulderstone Pty Ltd

**Form of contract:** Construction contract

**Workers on site:** 227

**Pieces of large plant:** 59

**Start date of major construction:**  
August 2010

**Expected completion date:**  
First half of 2013 (weather permitting)

**Project value:** \$315 million

**Australian Government contribution:**  
\$303.6 million \*\*

**NSW State Government contribution:**  
\$11.4 million \*\*

\*\* Contribution amounts may vary from year to year.



View of the northern interchange  
under construction

## Bulahdelah upgrade

### Background

The Bulahdelah upgrade was approved by the NSW Minister for Planning on 9 July 2007.

The project is jointly funded by the Australian and NSW governments.

It involves the construction of about 8.5 kilometres of four-lane divided road with an eastern bypass of the Bulahdelah township.

### Key construction activities during June and July 2012

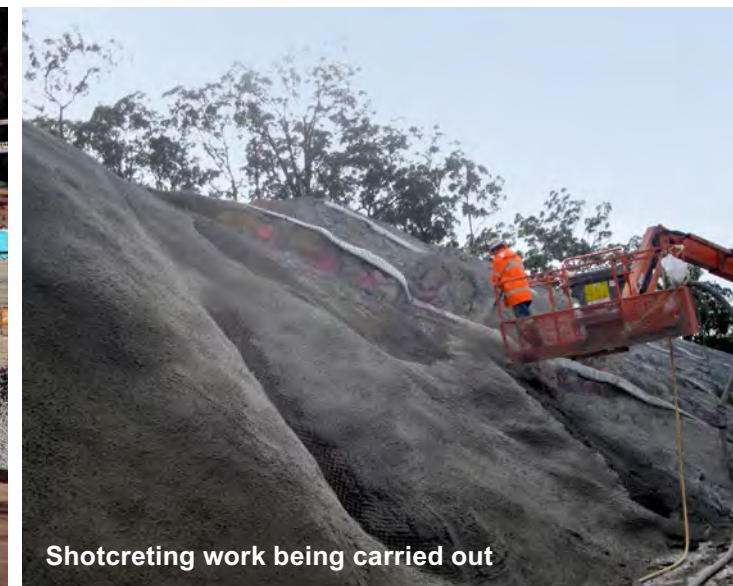
About 38 days were lost due to wet weather during this time.

- The Alum Mountain Park bridge was officially opened on 29 June 2012.
- Finishing work was carried out at the southern interchange, northern interchange, southern floodplain and Myall River bridges. All bridges are due for completion shortly.
- Crushing and processing of hard rock continued in the main cutting.
- Concrete paving of the final surface continued at the southern end of the project. Other paving work was carried out across the project.
- Rock bolting and shotcreting work continued in the main cutting north of Bombah Point Road.
- Treatment of basins for water quality continued.
- Topsoiling of slopes for revegetation continued.

While we allow for wet weather there have been four more months of wet weather than originally anticipated. Major traffic switches are planned at the northern and southern ends of the project in the next six months. The opening of a bypass by Christmas 2012 will not be possible and the project is now scheduled to open to traffic in early 2013.



# Bulahdelah upgrade under construction







**Contractors:** BMD Constructions Pty Ltd

**Form of contract:** Construction contract

**Workers on site:** 51

**Pieces of large plant:** 23

**Start date of major construction:**  
March 2011

**Expected completion date:**  
Second half of 2013 (weather permitting)

**Project value:** \$60 million

**Australian Government contribution:**  
\$53 million \*\*

**NSW State Government contribution:**  
\$7 million \*\*

\*\* Contribution amounts may vary from year to year.



Looking south along the  
new northbound carriageway

## Herons Creek to Stills Road upgrade

### Background

The Herons Creek to Stills Road upgrade was approved to proceed on 5 October 2007.

The project is jointly funded by the Australian and NSW governments.

It will upgrade 3.5 kilometres of highway between Herons Creek and Stills Road.

### Key construction activities during June and July 2012

About 40 days were lost due to wet weather during this time.

- Earthworks continued, including cut and fill operations north and south of Bago Road.
- Clearing work and preliminary site establishment work carried out for an onsite concrete batching plant.
- Manufacturing of precast concrete units continued offsite.
- Work continued on the Herons Creek floodway, Herons Creek bridge and Bago Road interchange.
- Installation of a reinforced earth wall neared completion at Cutty Creek.
- Topsoiling and hydroseeding work carried out.
- Installation of cross drainage pipelines continued.
- Stormwater inlet construction continued.
- Construction of clean water drains continued throughout the project.

- Construction continued for a future northern side track.
- Topsoil removal work carried out.
- Consultation continued with landowners and residents about the contaminated material investigation (see below).

### Incident investigation – possible site contamination

Roads and Maritime Services (RMS) is remediating a suspected contamination area on the project which affected the health of a number of workers. This contamination area is where in December 1980, a truck carrying a mixed load including radioactive waste, pesticide, food additives and other waste crashed on the Pacific Highway.

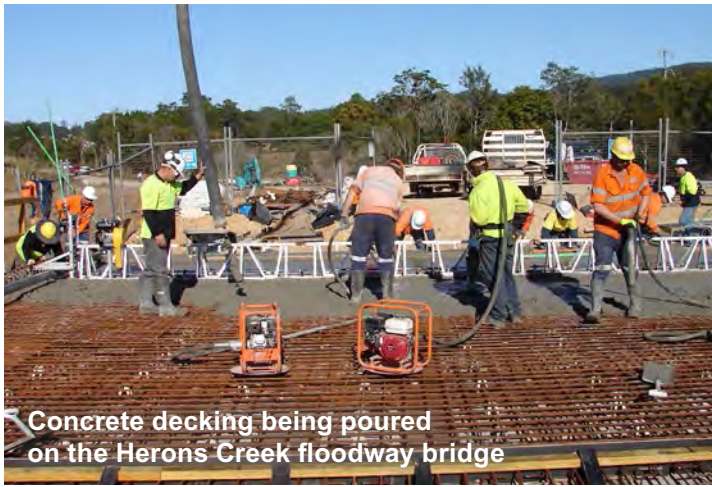
Further information is available on the project website (see address at the bottom of this page).



# Herons Creek to Stills Road upgrade under construction – before the site was shut down



New northbound carriageway looking south



Concrete decking being poured on the Herons Creek floodway bridge



Placing the final finish on concrete decking



Aerial view of the Herons Creek floodway bridge



Revegetation work near the Bago Road interchange



Concrete being poured at Herons Creek bridge



Girder being lifted at Herons Creek bridge



## Under construction



Australian Government

Nation Building Program



Transport  
Roads & Maritime  
Services

**Contractors:** RMS has formed an alliance with Leighton Contractors, AECOM and Coffey Geotechnics to build the Kempsey bypass.

The bridge over the Macleay River is being built by Abigroup Contractors under a separate design and construct contract.

**Form of contract:** Alliance and design and construct contract

**Workers on site:** 758

**Pieces of large plant:** 145

**Start date of major construction:**  
June 2010

**Expected completion date:**  
Early 2013 (weather permitting)

**Project value:** \$618 million

**Australian Government contribution:**  
Fully federally funded  
(Building Australia Fund) \$618 million



Finishing work being carried out on the Smithtown Link at the northern interchange

## Kempsey bypass

### Background

The Kempsey bypass was approved by the NSW Minister for Planning on 10 July 2008.

As part of the Building Australia Fund, the Australian Government is providing \$618 million for construction of the bypass. The 14.5 kilometre project is part of the larger 40 kilometre Kempsey to Eungai upgrade, which extends from the existing dual carriageway south of Kempsey to the existing dual carriageway at Eungai Rail.

The bridge over the Macleay River and floodplain will be 3.2 kilometres long, making it the longest bridge in Australia.

### Key construction activities during June and July 2012

About 15 days were lost due to wet weather during this time.

- A layer of concrete paving work completed on both carriageways between Crescent Head Road and the southern end of the Macleay River and floodplain bridge. A further base level completed from 300 metres north of Pola Creek to the southern end of the river and floodplain bridge.
- Earthworks completed for the main alignment at Frederickton.
- Bridge approach slabs completed for the bridges over the North Coast Railway Line and for the northern end of the Macleay River and floodplain bridge.
- General fill placement completed at the Boat Harbour Creek arch culvert.
- 61 deck pours completed on the floodplain section of the bridge and seven deck pours completed on the river section. The installation of bridge walls and railings started.
- Removal and relocation of the rock platform from the northern to the southern side of the river continued.
- 855 super-T girders manufactured to date. 782 girders put into position. Girders installed over South West Rocks Road.
- Work is continuing at the northern interchange, with the removal of material north of Yarrabandinni Road.
- Flood mitigation work continued, with 18 house raisings completed and finishing work being carried out on one remaining house.



# Kempsey bypass under construction



Pouring a deck segment on the northern half of the river section of the Macleay River and floodplain bridge



Looking south at the southern interchange



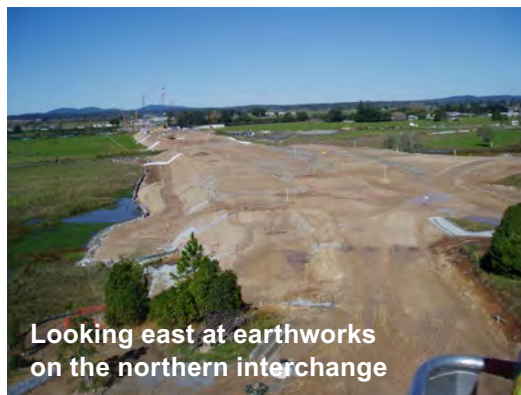
Looking south over the northern interchange



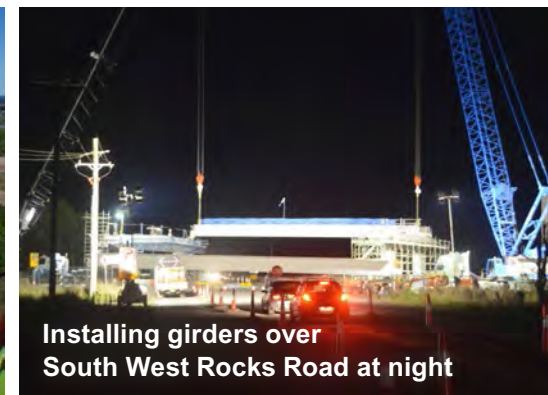
Building the levee bank next to the Macleay River



Completed approach slabs and installation of barriers and central median



Looking east at earthworks on the northern interchange



Installing girders over South West Rocks Road at night





**Contractors:**

Leighton Fulton Hogan Joint Venture

**Form of contract:**

Design and construct contract

**Workers on site:** 324

**Pieces of large plant:** 336

**Start date of major construction:**

August 2010

**Expected completion date:**

Early 2014 (weather permitting)

**Project value:** \$705 million

**Australian Government contribution:**

\$632 million \*\*

**NSW State Government contribution:**

\$73 million \*\*

\*\* Contribution amounts may vary from year to year.



Construction under way on the  
Hearn Lake Road roundabout

## Sapphire to Woolgoolga upgrade

### Background

The NSW Minister for Planning approved the Sapphire to Woolgoolga upgrade on 13 January 2009. The project is jointly funded by the Australian and NSW governments.

It will provide a four-lane divided highway extending about 25 kilometres from Campbell Close (at Sapphire) to Arrawarra Beach Road (at Arrawarra).

The project approval did not include a proposed rest area, which is being developed separately as part of an RMS rest area strategy for the Pacific Highway. The strategy aims to provide rest areas at about 50 kilometre intervals.

### Key construction activities during June and July 2012

About 18 days were lost due to wet weather during this time.

- The Greys Road overbridge was opened to traffic at Woolgoolga.
- Piling work and construction continued on substructures and superstructures for bridges.
- Construction of retaining walls continued.
- Construction continued on the service road between Gaudrons Road and Sugarmill Road and between Maccues Road and Wakelands Road.
- Construction continued on the Hearn Lake Road roundabout.
- Backfilling work continued at the Newmans Road underpass.
- Earthworks and bridge works continued for the Arrawarra interchange.
- Controlled blasting continued about two kilometres northwest of Woolgoolga.



# Sapphire to Woolgoolga upgrade under construction



Earthworks under way in the Wedding Bells State Forest



Completed culvert work in the Wedding Bells State Forest on the Woolgoolga bypass



Construction continuing on the Moonee Beach interchange



Looking north from the Moonee Beach interchange



Construction continues on the Arrawarra interchange





**Contractors:** John Holland

**Form of contract:** Construct only contract

**Workers on site:** 90

**Pieces of large plant:** 35

**Start date of major construction:**  
December 2011

**Expected completion date:**  
Mid 2013 (weather permitting)

**Project value:** \$77 million

**Australian Government contribution:**  
\$62 million \*\*

**NSW State Government contribution:**  
\$15 million \*\*

\*\* Contribution amounts may vary from year to year.



Piles at Tabbimoble prior to being cut off

## Devils Pulpit upgrade

### Background

The NSW Minister for Planning approved the project on 1 February 2011. The Devils Pulpit upgrade is jointly funded by the Australian and NSW governments.

It includes the upgrading of about seven kilometres of highway between Grafton and Ballina.

It forms part of the larger Woolgoolga to Ballina project.

### Key construction activities during June and July 2012

About 21 days were lost due to wet weather during this time.

- Clearing and top soil stripping work completed.
- Earthworks, bridge work, drainage work and fencing construction continued.
- Public utility relocations completed.
- Establishment of gate accesses for construction vehicles completed.
- Construction of sedimentation basins continued.



# Devils Pulpit upgrade under construction

Foundation treatment at southern end of project



Culvert construction at the southern end of the project



Start of construction on one of the bridges at Tabbimoble





## Under construction



Australian Government

Nation Building Program



Transport  
Roads & Maritime  
Services

**Contractors:** RMS has formed an alliance with Leighton Contractors, AECOM, SMEC and Coffey Geotechnics

**Form of contract:**

Alliance design and construct contract

**Workers on site:** 37

**Pieces of large plant:** 14

**Start date of major construction:**

May 2008

**Expected completion date:**

Open to traffic, finishing work under way

**Project value:** \$640 million

**Australian Government contribution:**

\$450 million \*\*

**NSW State Government contribution:**

\$190 million \*\*

\*\* Contribution amounts may vary from year to year.



Ballina bypass, opened in May 2012

## Ballina bypass

### Background

The NSW Minister for Planning approved the Ballina bypass project on 22 May 2003.

The \$640 million project is jointly funded by the Australian and NSW governments.

The project will provide 12 kilometres of dual carriageway, extending from south of Ballina at the intersection of the Bruxner and Pacific highways to north of Ballina at the intersection of Ross Lane at Tintenbar. Cumbalum to Ross Lane was opened on March 2011. The second stage from Teven Road to Cumbalum interchange was opened on November 2011. The final section of the project, which separated the Bruxner and Pacific highways, was opened in May 2012.

### Key construction activities during June and July 2012

About 14 days were lost due to wet weather during this time.

- Construction of the Teven Truck Rest Area access continued.
- Construction of the rest area toilet block and sewer connection completed.
- Placement of fill continued near Pimlico Road.
- Deep soil mixing continued for the ultimate Bruxner Highway embankment.
- Survey work started for the Pimlico to Teven section.

OPEN  
TO TRAFFIC





**Contractors:** Boulderstone Pty Ltd

**Form of contract:** Design and construct

**Workers on site:** 80

**Pieces of large plant:** 25

**Start date of major construction:**  
mid 2012

**Expected completion date:**  
Second half of 2014 (weather permitting)

**Project value:** \$862 million

**Australian Government contribution:**  
\$566.1 million \*\*

**NSW State Government contribution:**  
\$295.9 million \*\*

\*\* Contribution amounts may vary from year to year.



**Giant barred frog**

## Tintenbar to Ewingsdale upgrade

### Background

The NSW Minister for Planning approved the project on 29 January 2010.

The Tintenbar to Ewingsdale upgrade is jointly funded by the Australian and NSW governments.

It will provide 17 kilometres of four-lane divided road from the northern end of the Ballina bypass at Ross Lane to the existing Ewingsdale interchange.

A contract has been awarded to Boulderstone Pty Ltd to design and build the project. Construction is expected to start later this year.

### Key construction activities during June and July 2012

- The construction and environmental management plan for the project was finalised and submitted to the Department of Planning and Infrastructure for review and approval.
- Construction of the main site compound at Bangalow continued.
- Management activities started for the Giant Barred Frog.
- Fencing work continued.
- Detailed design work continued.
- Property adjustments and site access work started.
- Community information sessions were held on 26 June and 24 July to provide information on flora and fauna management, waste recycling and local road upgrades.



## Tintenbar to Ewingsdale upgrade under construction







**Contractors:** RMS has formed an alliance with Abigroup Contractors, Seymour Whyte and SMEC.

**Form of contract:**

Alliance design and construct contract

**Workers on site:** 109

**Pieces of large plant:** 55

**Start date of major construction:**

December 2009

**Expected completion date:**

Final completion in December 2012  
(weather permitting)

**Project value:** \$359 million

**Australian Government contribution:**

\$349 million \*\*

**NSW State Government contribution:**

\$10 million \*\*

\*\* Contribution amounts may vary from year to year.



Laura Street throw screens

## Banora Point upgrade

### Background

The NSW Minister for Planning approved the Pacific Highway upgrade at Banora Point on 26 February 2009.

The Banora Point upgrade is jointly funded by the Australian and NSW governments.

The upgrade is about 2.5 kilometres long running from the northern end of Barneys Point bridge to the southern end of the Tweed Heads bypass.

### Key construction activities during June and July 2012

About 13 days were lost due to wet weather during this time.

- The southbound on ramp from Terranorra opened to traffic.
- The northbound off ramp to Minjungbal Drive is nearing completion.
- Lighting installation completed.
- Noise walls at the northbound off ramp at Barneys Point completed.
- Painting work nearing completion.
- Demolition work completed on the existing Darlington underpass bridge.
- Ongoing nightwork, including pavement and stormwater work, sign and noise wall installations.
- Landscaping 50 per cent completed.

OPEN  
TO TRAFFIC



# Banora Point upgrade under construction



Banora Darlington Drive intersection



Laura street throw screens



Landscaping on new north bound off-ramp



Landscaping at the southern end of the project



Heritage terraces in southern valley



Looking south under viaduct bridge at the reinstated heritage terraces



## Preconstruction projects



Australian Government

Nation Building Program



Transport  
Roads & Maritime  
Services

### Completing the upgrade – priority two (Port Macquarie to Coffs Harbour)

The completion of the Pacific Highway upgrade has been divided into three key priorities. Priority one projects will be completed by mid 2014. Priority two projects will complete four-lane divided road between Port Macquarie and Coffs Harbour. Progress is already being made on this section with the construction of the Kempsey bypass.

Following completion of the Kempsey bypass, there are 105 kilometres left to be upgraded to four-lane divided road, in order to complete priority two. These projects are being prepared for major work to start. They include:

### Frederickton to Eungai

The NSW Minister for Planning approved the total Kempsey to Eungai upgrade in 2008. The Frederickton to Eungai section will provide about 26.5 kilometres of four-lane divided road between the Oxley Highway at Port Macquarie and the Kempsey bypass (now being built).

#### Activities under way in June and July 2012

- Tenders have closed and are being assessed for the design and construction of this section of the highway upgrade.
- The preferred tender is expected to be announced in the second half of the year.
- Land acquisitions and field investigations are continuing to prepare for the start of major work in 2013.
- Weather permitting, the project will open to traffic by 2016.

### Nambucca Heads to Urunga

(forms part of the larger Warrell Creek to Urunga project)

The NSW Minister for Planning approved the total Warrell Creek to Urunga upgrade in 2011. Planning for the project is jointly funded by the Australian and NSW governments. The 42 kilometre project involves an upgrade of the existing highway from the existing Allgomera deviation, south of Warrell Creek, to the existing Waterfall Way interchange at Raleigh. The project will be built in two sections from Nambucca Heads to Urunga and from Warrell Creek to Nambucca Heads.

#### Activities under way in June and July 2012

- Three shortlisted contractors, Abigroup, Boulderstone and Thiess, were announced to tender for the design and construction section. Tenders close in September 2012.
- The preferred tender is expected to be announced later this year.
- Land acquisitions are continuing.
- Field investigations (including plant and animal, geotechnical, survey, water quality, environmental and Aboriginal heritage) are continuing to prepare for the start of major work in 2013.



## Preconstruction projects



Australian Government

Nation Building Program



Transport  
Roads & Maritime  
Services



Caption

### Oxley Highway to Kempsey

The NSW Minister for Planning and Infrastructure approved the Oxley Highway to Kempsey upgrade on 8 February 2012. It will provide about 37 kilometres of four-lane divided highway between the Oxley Highway at Port Macquarie and the Kempsey bypass.

Planning for the project is jointly funded by the Australian and NSW governments. The project will be built in two sections from Oxley Highway to Kundabung and from Kundabung to Kempsey.

#### Activities under way in June and July 2012

- Geotechnical investigations and ground survey work continuing.
- Land acquisitions continuing.
- A concept design review is under way as part of preparations for the detailed design for the Kundabung to Kempsey section.

### Warrell Creek to Nambucca Heads

(forms part of the larger  
Warrell Creek to Urunga project)

The NSW Minister for Planning approved the total Warrell Creek to Urunga upgrade in 2011. Planning for the project is jointly funded by the Australian and NSW governments.

The 42 kilometre project involves an upgrade of the existing highway from the existing Allgomera deviation, south of Warrell Creek, to the existing Waterfall Way interchange at Raleigh. The project will be built in two sections from Nambucca Heads to Urunga and from Warrell Creek to Nambucca Heads.

#### Activities under way in June and July 2012

- Technical review finalised for an eight kilometre section of the approved alignment near Macksville.
- Draft report on the technical review released for public comment on 27 March 2012. A final decision on the review is expected in August 2012.



## Preconstruction projects



Australian Government

Nation Building Program



**Transport**  
Roads & Maritime  
Services

### Completing the upgrade – priority three (Woolgoolga to Ballina)

The completion of the Pacific Highway upgrade has been divided into three key priorities.

Priority one projects will be completed by mid 2014, weather permitting.

Priority two projects (to complete four-lane divided road between Port Macquarie and Coffs Harbour) are being prepared for major work to start.

Priority three involves completing the remaining single carriageway sections of the Pacific Highway between Woolgoolga and Ballina.

## Woolgoolga to Ballina

### Background

The Woolgoolga to Ballina project will upgrade about 155 kilometres of highway to four-lane divided road. It is made up of four previous planning projects:

- Woolgoolga to Wells Crossing.
- Wells Crossing to Iluka Road.
- Iluka Road to Woodburn.
- Woodburn to Ballina.

This project does not include the recently completed Glenugie upgrade or the Devils Pulpit upgrade (which is currently being built).

### Activities underway during June and July 2012

- Land acquisitions continued.
- Work continued on the preparation of an environmental impact statement which is expected to be placed on display for public comment in late 2012.
- Geotechnical investigations completed from barges in the Clarence River at Harwood and in the Serpentine Channel, at proposed bridge crossing locations.
- Bore hole drilling, test pits, excavator pits and seismic work carried out along the entire proposed highway alignment. This work was performed to provide design input for cuttings, embankments, bridges, drainage structures, material sources, and pavement reuse.
- Flooding focus group meetings.



Meeting with the community





## Safety improvement work

**Contractors:**

RMS, Road and Fleet Services

**Workers on site:** 15

**Pieces of large plant:** 18

**Start date of major construction:**

November 2009

**Expected completion date:**

Mid 2014 weather permitting

**Project value:** \$55 million



General fill over the bridging layer next to the existing highway at Farlows Flat

## Background

A program of safety improvement work has been developed as part of the Australian and NSW governments commitment to upgrade the Pacific Highway in the next five years to mid 2014.

While most of the funding will be directed to upgrading the highway to four-lane divided road, there is a need to address road safety and traffic issues on sections of two-lane highway.

A package of smaller work is being delivered to keep these sections safe and serviceable until upgrades can be completed. This work is also aimed at reducing the delays caused by local and major flood events.

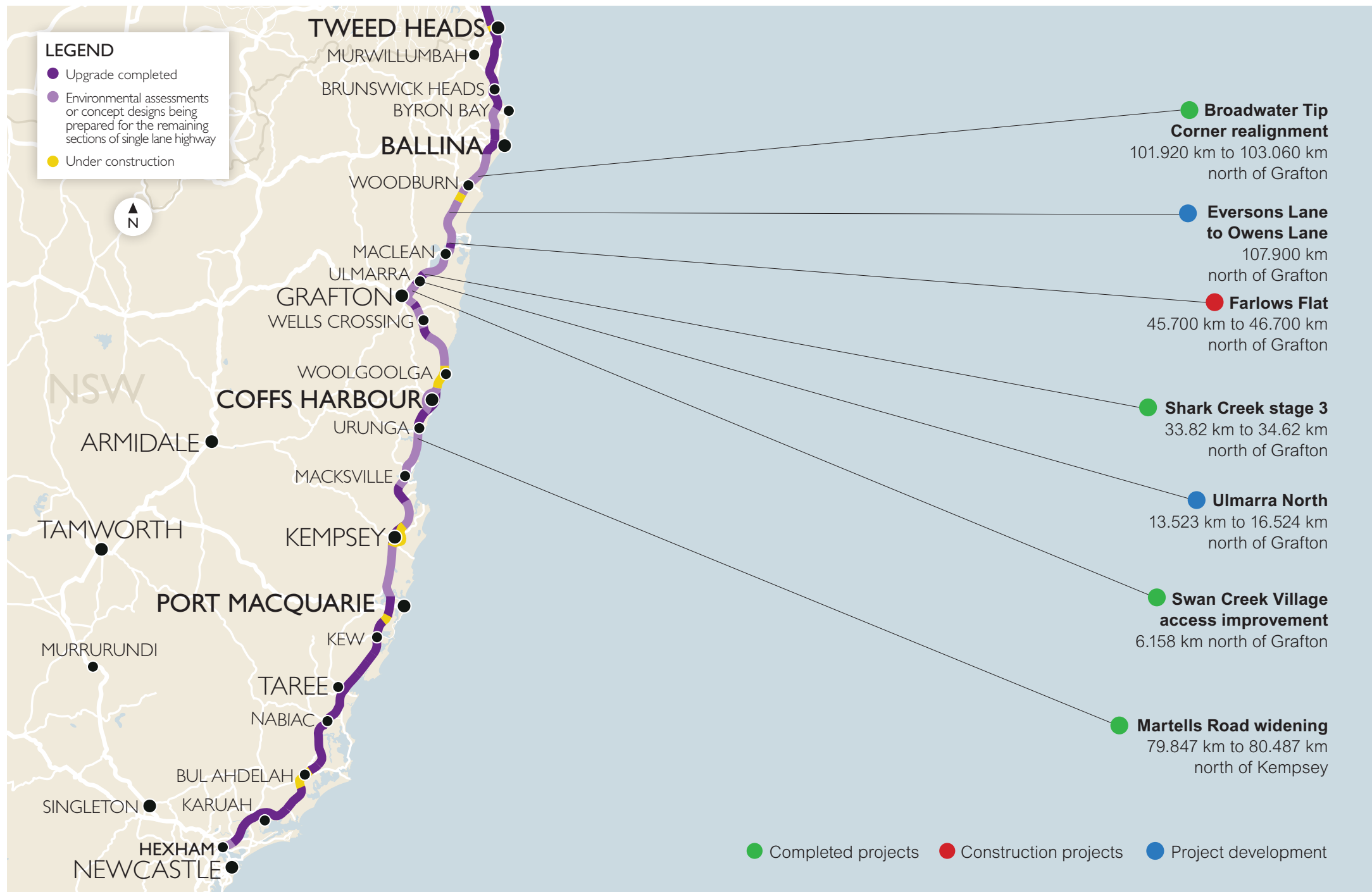
## Key construction activities during June and July 2012

About nine days were lost due to wet weather during this time.

- Work completed at Swan Creek in June.
- Placement of foam bitumen pavement continued at Farlows Flat.



# Safety improvement works under construction







## Environment

RMS has reached agreement with private property owners to purchase South Moonee Forest area at Moonee Beach, about 10 kilometres north of Coffs Harbour. This land is being purchased as part of the Pacific Highway Sapphire to Woolgoolga upgrade.



Proposed land for biodiversity offsets near Coffs Harbour

### Sapphire to Woolgoolga

#### Agreement reached on land for biodiversity offsets

The Minister for Planning's Condition of Approval for the upgrade required RMS to provide at least 98 hectares of native vegetation as part of meeting biodiversity offset requirements.

The South Moonee Forest area is considered to be a good purchase for this purpose.

About 100 hectares of land will be secured near the Coffs Coast Regional Park, which provides suitable or known habitat for more than 30 threatened species, including Ospreys, Koalas, Yellow-bellied gliders, Squirrel gliders, Phascogales and other threatened bat and frog species to name just a few.

South Moonee Forest will be a key part of the biodiversity offset package to offset the direct and indirect impacts of the Sapphire to Woolgoolga upgrade.

RMS has been working closely with the Environment Protection Authority, the National Parks and Wildlife Services (NPWS) and Coffs Harbour City Council.

It is likely the area will be transferred to NPWS to form part of the Coffs Coast Regional Park to ensure conservation values of the area are maintained going forward.

The area and its plant and animal inhabitants would be protected from future development.

As part of the biodiversity offset package RMS also proposes to provide an additional aerial-rope fauna crossing which will link the new offset area to vegetated areas to the west of the upgraded highway. This will help provide landscape connectivity for threatened glider species recorded in this area.







## Projects being delivered

