



Australian Government

Nation Building Program



Transport  
Roads & Maritime  
Services



# Pacific Highway upgrade

Six month report card (January – June 2012)



This report provides an update on progress on the Pacific Highway until 30 June 2012.

The 669 kilometre Pacific Highway corridor is a major contributor to Australia's economic activity. The road is a vital piece of the nation's infrastructure and is included in the National Land Transport Network.

The eastern seaboard of NSW is also one of the fastest growing areas in the country. An upgraded Pacific Highway must continue to service the needs of the travelling public, while also achieving transport efficiencies, ensuring ecological sustainability and meeting the needs of the coastal communities who live alongside the highway.

The Australian and NSW governments have been jointly upgrading the Pacific Highway since 1996. There is a shared commitment from both governments to finish its upgrading to a four-lane divided highway as soon as possible. Available funding is being directed to the areas of highest priority in terms of crash histories and traffic volumes while work also continues to be carried out to keep existing two-lane sections as safe as possible.

Projects currently under construction will see the completion of four-lane divided highway between Hexham and Port Macquarie, around the growing suburbs of Coffs Harbour and between Ballina and the Queensland border in 2014.

Funding discussions are ongoing between the Australian and NSW governments to continue the upgrading of the Pacific Highway.



Ballina bypass, opened in May 2012.



# Summary



At the end of June 2012, more than half of the final length of the highway between Hexham and the Queensland border was a four-lane divided highway.

Between January and June 2012, major work was under way on eight upgrade projects (almost 80 kilometres). The Glenugie, Ballina and Banora Point upgrades recently opened to traffic. 59 kilometres now remain under construction. The remaining sections of the highway are being prepared for construction. Safety work is being completed on sections that are yet to be upgraded.

In addition to the opening of the final sections of the Ballina bypass and Glenugie upgrade and the opening of the Banora Point upgrade, other key pieces of infrastructure were also opened.

These include:

- The steel truss bridge to Alum Mountain at Bulahdelah.
- The Frederickton interchange and Inches Road.
- The Inches Road and Old Station Road overpasses on the Kempsey bypass.

In the first half of 2012, five projects were being prepared for major work with activities including finalising planning requirements, acquiring properties needed for construction, carrying out geotechnical investigations and starting detailed design work.

Project teams continue to liaise with communities and stakeholders about projects and address environmental, planning and other concerns relating to the upgrade.

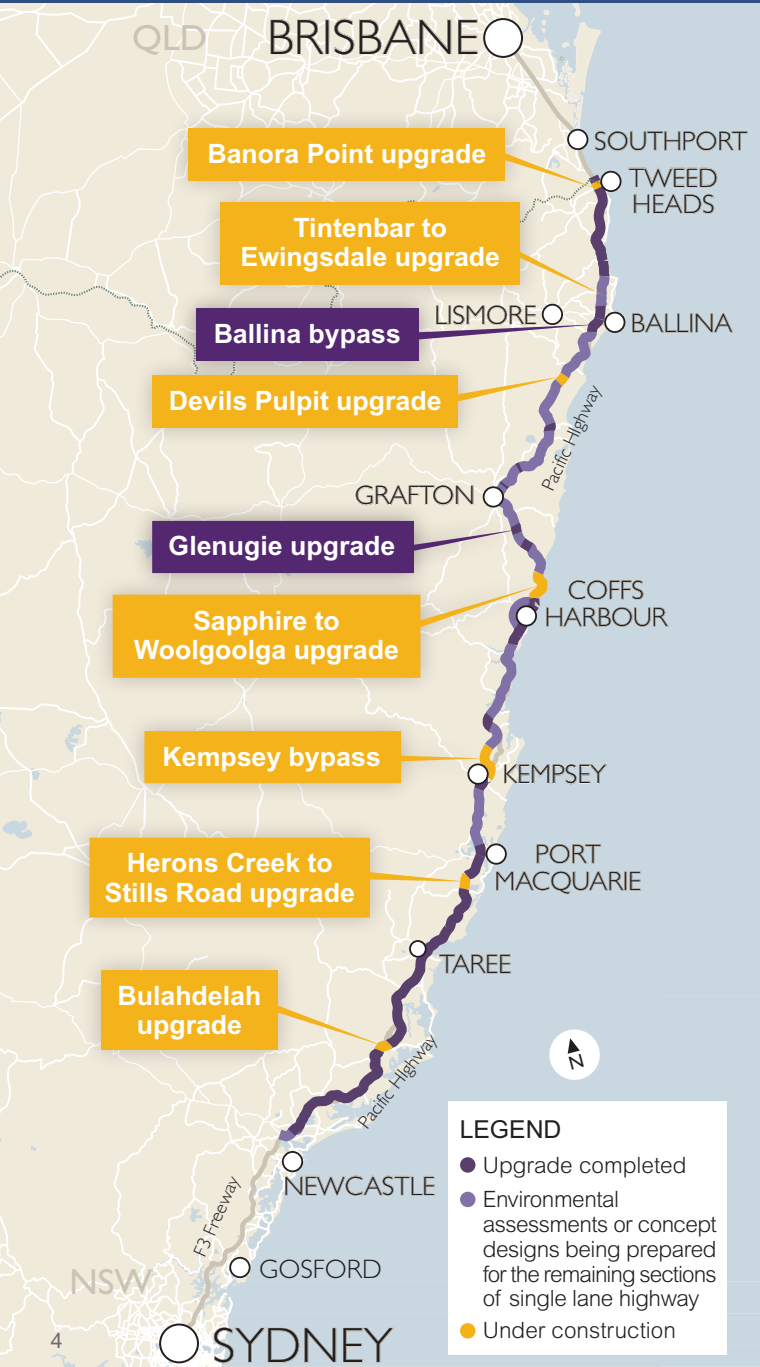
During the reporting period, Roads and Maritime Services (RMS) and its alliance partners have held a number of community site tours at Kempsey and a major community site inspection at Banora Point, giving residents a first hand look at the major construction work along the highway.

Work is also under way on at-home noise treatments to provide early improvements in noise for residents.



Opening the steel truss bridge at Bulahdelah (June 2012)

# Current status



Since 2008-09, the Australian Government has committed \$4.1 billion under the Nation Building Program, with the NSW Government committing almost \$1 billion since mid 2009, to further the upgrading of the Pacific Highway to a four-lane divided road standard.

Future funding share arrangements on the additional Australian and NSW governments commitments from the 2012-13 Federal and State Budgets are currently under negotiation.

More than half of the final length of the Pacific Highway between Hexham and the Queensland border is now open to a four-lane divided highway standard.

Almost 80 kilometres were under construction in the last six months. Of that, more than 18 kilometres of new dual carriageway has recently been opened. Major work remains under way on another 59 kilometres.

Major work will start on a further 17 kilometres in the second half of 2012.

Contracts for major work have also started on another 48 kilometres.



Cyclist at Banora Point upgrade admiring Laura Street throw screens (August 2012)



# Current status



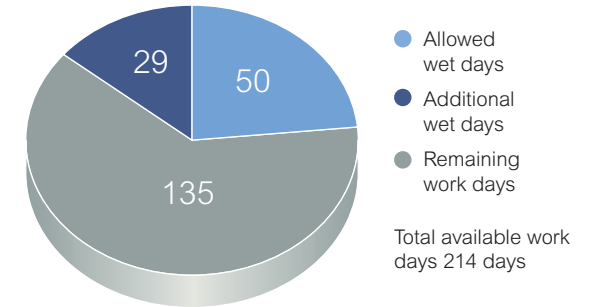
Banora Point upgrade looking south (August 2012)

Since the start of the Pacific Highway Upgrade in the mid 1990's, light vehicles have saved on average 80 minutes and heavy vehicles on average 90 minutes in travel time between Hexham and the Queensland border.

Crash data for 2011 also shows crashes are continuing to trend downwards. In 2011, there were 24 fatalities compared to the mid 1990's when there were around 460 casualty crashes and fatalities were in the high 40s.

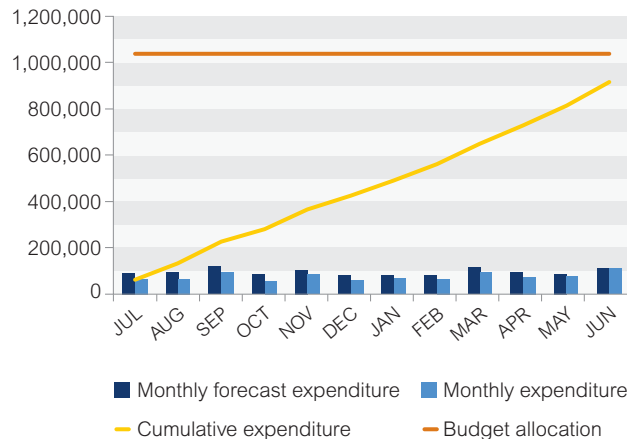
The upgrade program is a major generator of employment for areas along the east coast with between 1700 and 1800 staff working on upgrade projects over the last six months from Bulahdelah to Banora Point.

## PACIFIC HIGHWAY UPGRADE WET WEATHER DAYS JULY 2011 - JUNE 2012



In the last financial year (July 2011 to June 2012) we planned for an average of 50 wet weather days across each of the Pacific Highway construction projects. However, extensive wet weather meant we actually lost an average of 79 of the 214 available work days (or 37 per cent) and we have not been able to make much progress.

## PACIFIC HIGHWAY PROGRAM JULY 2011 - JUNE 2012



Heavy rain on the Herons Creek to Stills Road upgrade (January 2012)



# Current status



For the 2011/12 financial year, just over \$910 million of the \$1.035 billion planned was spent. The shortfall was mainly due to:

- Impacts of excessive wet weather on those projects under construction.
- Delays in finalising the pre-construction approval documents for the Tintenbar to Ewingsdale upgrade.
- Delays in finalising property acquisitions for the Warrell Creek to Urunga section upgrade due to later than expected planning approval and a review of part of the route.



Demolition work at Tintenbar to Ewingsdale

## Despite these challenges, between January and June 2012, we have:

### Opened to traffic:

- ✓ The final section of the Ballina bypass.
- ✓ The final section of the Glenugie upgrade, south of Grafton.
- ✓ The Frederickton interchange, Inches Road and Old Station Road overpasses on the Kempsey bypass.
- ✓ The Myall River bridges have been opened to construction traffic, continuing RMS's commitment to reducing construction vehicle movements through the town.
- ✓ The Alum Mountain steel truss bridge.
- ✓ The new highway through the Sexton Hill cutting at Banora Point, eliminating the last set of traffic lights on the Pacific Highway between the Brisbane CBD and Coffs Harbour.

### Progress on work:

- ✓ Started major earthwork on the Devils Pulpit upgrade.
- ✓ Advanced major work on five other upgrade projects, including bypasses of Bulahdelah, Kempsey, Frederickton, Woolgoolga and Ballina.
- ✓ Continued building on the longest bridge in Australia, across the Macleay River and floodplain near Kempsey.
- ✓ Completed major traffic switches on the Bulahdelah and Banora Point upgrades.
- ✓ Worked towards improved flood immunity for the highway by reducing flood prone sections north of Ballina (as part of the completed Ballina bypass); and between Grafton and Coffs Harbour (Blackadder Creek).
- ✓ Work is also well advanced at Farlows Flat near the Clarence River and on the Kempsey bypass along the Macleay River.



6 Bridge in progress at the Kempsey bypass

# Current status



## Prepared for construction:

- ✓ Invited tenders for building 48 kilometres of highway as part of the Frederickton to Eungai and Nambucca Heads to Urunga upgrades.
- ✓ Completed geotechnical studies for the Oxley Highway to Kempsey upgrade.
- ✓ Advanced geotechnical investigations for the Frederickton to Eungai and Warrell Creek to Nambucca Heads upgrades.
- ✓ Awarded contracts and started detailed design work for 42 kilometres as part of the Woolgoolga to Glenugie and Kundabung to Kempsey upgrades.
- ✓ Awarded a contract and started work on site for geotechnical investigations for the Woolgoolga to Ballina upgrade.

## Planned for construction:

- ✓ Received planning approval for the Oxley Highway to Kempsey upgrade.
- ✓ Advanced environmental investigations for the Woolgoolga to Ballina upgrade.
- ✓ Carried out reviews of alternative options for the previously approved Bangalow interchange on the Tintenbar to Ewingsdale upgrade, and an eight kilometre section of the highway at Macksville as part of the approved Warrell Creek to Urunga upgrade.



Wire rope installed at Blackadder Creek

## Safety and minor works program:

- ✓ Completed intersection safety improvements at Swan Creek (north of Grafton).
- ✓ Progressed paving work for flood immunity improvement work and Farlows Flat (near Maclean).
- ✓ Completed safety work at Plummers Lane and Blackadder Creek.
- ✓ Continued to implement safety improvements between Frederickton and Urunga (including central wire rope, vegetation clearing, pavement correction, linemarking and speed zone changes) and improved and repaired pavement damaged in the extended period of wet weather.



New section of the Bruxner Highway under construction, as part of the Ballina bypass



# Upgrade outcomes

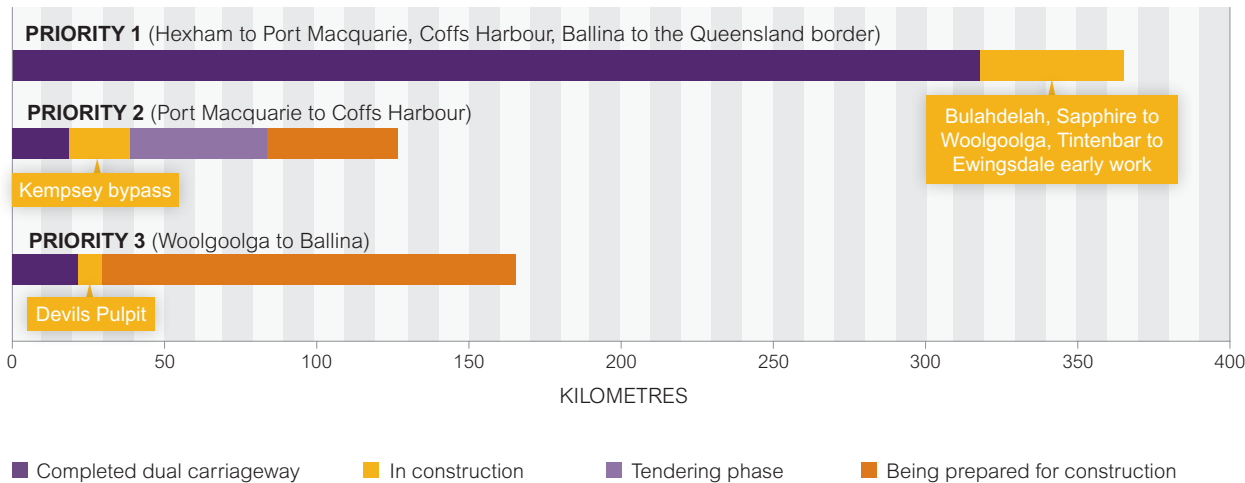


Banora Point after it was opened to traffic in May 2012

## Dual carriageway status

The graphs below show the status of completing highway priorities 1, 2 and 3.

### DUAL CARRIAGEWAY STATUS



## Where are we now?

At 30 June 2012:

**346 kilometres** are dual carriageway - about 52 per cent.

**59 kilometres** are being built.

**121 kilometres** have received planning approval and are being prepared for construction.

**The remaining sections** of single-lane highway are being prepared for major work.

For the first half of 2012, there was an average of **1800** people working on the various construction projects.

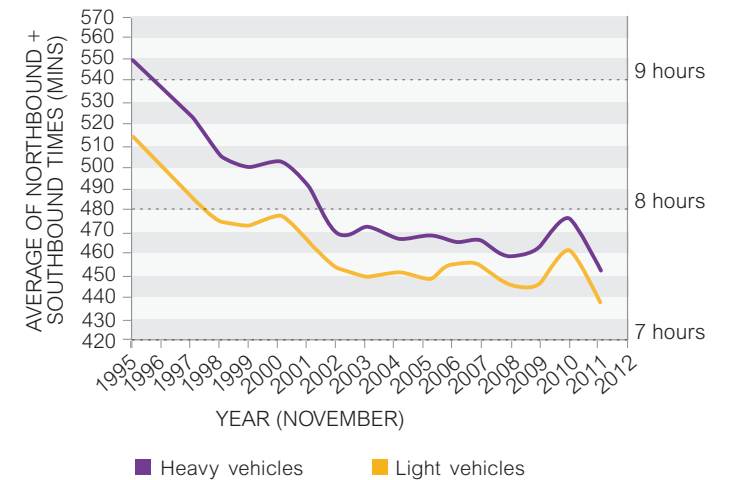
## Travel times

Since the start of the Pacific Highway upgrade program in the mid 1990's travel time between Hexham and the Queensland border has been tracked.

End of 2011 travel time surveys showed travel times are becoming shorter, with light vehicles save 80 minutes and heavy vehicles save 90 minutes, compared to when the upgrade program started. These savings include about 12 minutes from the recently opened Ballina bypass.

### TRAVEL TIMES ON THE PACIFIC HIGHWAY, HEXHAM TO QUEENSLAND BORDER

(adjusted for work site delays from November 97 onwards)





# Upgrade outcomes



## Crashes

Since the start of the Pacific Highway upgrade, fatal crashes have almost halved, down from the mid 40s to the 20s in recent years.

In 2011, there were 24 persons killed in 21 fatal crashes. This compares with the previous five year average of 26 persons killed.

Crash data for 2011 also shows there were 862 overall crashes on the highway with 366 casualty crashes and 540 persons injured. This compares to the previous five year average of around 360 casualty crashes and 511 persons injured.

Preliminary data for the first half of 2012 shows there have been seven fatal crashes with nine persons killed between January and June of this year.

All 2011 crash data is now available and trends in fatal crashes and casualty (fatal and injury combined) crashes are now able to be reported from the start of the program in 1996 to the end of 2011. Note that traffic has increased by around 60 per cent over the same period.

## From dirt road to four-lane divided highway



Bulahdelah to Coolongolook project in 1955

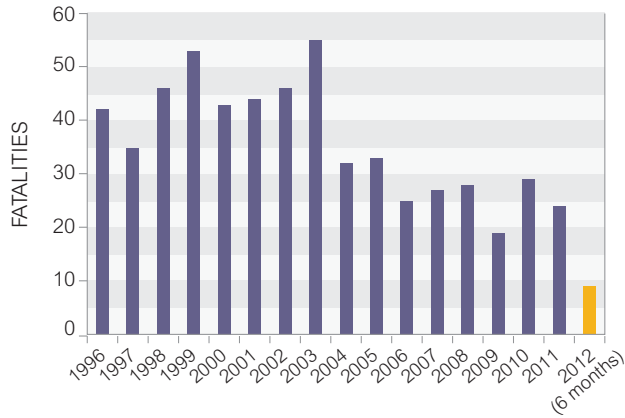


Bulahdelah to Coolongolook project and its dangerous bends before the upgrade program (circa 1990)

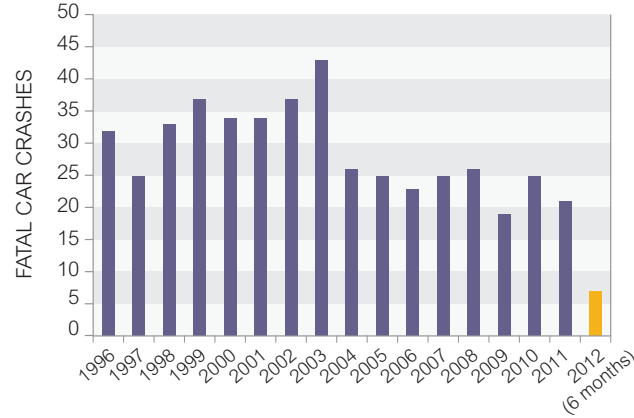


The Bulahdelah to Coolongolook section now

THE NUMBER OF FATALITIES ON THE HIGHWAY EACH YEAR



THE NUMBER OF CRASHES ON THE HIGHWAY EACH YEAR





# Finishing the job



Early completion of a four-lane divided highway between Hexham and the NSW/Queensland border remains an important issue for local communities and is a priority for the NSW State and Australian governments.

By 2014:

- 63 per cent of the highway will be opened to a four-lane divided highway standard.
- Another 7 per cent will be under construction.
- The remaining 30 per cent will be fully prepared for construction.

Current funding commitments will go a long way towards completing the upgrade.

Discussions are continuing on:

- Finalising the funding arrangements for the extra funding announced by both governments in their 2011/12 and 2012/13 budgets.
- The outstanding funds required to finish the job.

RMS will engage contractors to complete the remaining sections of highway as soon as funding becomes available.



The final section of the Glenugie upgrade is now open to traffic

## Key project milestones – how are we travelling?

Did we do what we said we would between January and June of this year?

### Open to traffic:

- ✓ The final section of the Glenugie upgrade.
- ✓ The final section of the Ballina bypass.
- ✓ The Frederickton interchange as part of the Kempsey bypass.
- ✓ The Banora Point upgrade project to highway traffic (traffic is on the highway with finishing work under way).

### Major construction work progress:

- ✓ Continue major work on a further 68 kilometres of highway including bypasses of Bulahdelah, Kempsey, Frederickton and Woolgoolga.
- ✓ Complete the Myall River bridges at Bulahdelah and open the Alum Mountain steel truss bridge across the new highway for local use.
- ✗ Complete a southbound traffic switch for Herons Creek to Stills Roads. Extensive wet weather and the discovery of contaminated soil significantly and unexpectedly delayed the project. Work restarted at the end of May.



# Finishing the job



- ✓ Start road work on the Kempsey bypass. The bypass is now expected to be completed a further three months ahead of schedule with the new highway now expected to open to traffic before Easter 2013.
- ✗ Start building the Tintenbar to Ewingsdale upgrade. Early work has started including setting up the site compound at Bangalow. (The *Construction Environmental Management Plan* was submitted to the Department of Planning and Infrastructure for approval in July, with substantial construction expected to start in the second half of 2012).

## Preparation for major construction work:

- ✓ Complete geotechnical investigations for the Oxley Highway to Kempsey upgrade.
- ✓ Advance the selection of a contractor to design and build the Frederickton to Eungai upgrade.
- ✓ Start detailed design work for the upgrade from Kundabung to Kempsey.
- ✓ Start detailed design work for the upgrade from Woolgoolga to Glenugie.
- ✓ Start geotechnical investigations for the Woolgoolga to Ballina upgrade.

## Planning for construction work:

- ✓ Obtain advice about planning approval for the Oxley Highway to Kempsey upgrade.

## In addition to the commitments made in the January 2012 Pacific Highway report card, we have also:

- ✓ Invited tenders to build the Nambucca Heads to Urunga upgrade.
- ✓ Reached agreement on key pieces of land to be purchased to offset environmental impacts.
- ✓ Finalised a review of the Bangalow interchange.

## In the next six months (July – December 2012) RMS will:

### Open to traffic:

- ✓ Complete finishing work for the Banora Point upgrade.
- ✓ Complete the Farlows Flat flood immunity improvement work (near Maclean) as part of the safety and minor works program.

### Achieve major work progress:

- ✓ Start major construction on the Tintenbar to Ewingsdale upgrade.
- ✓ Complete major traffic switches for the Bulahdelah, Herons Creek to Stills Road and Sapphire to Woolgoolga upgrades.
- ✓ Advance construction of the Kempsey bypass, including completing major bridge crossing of the Macleay River and concrete paving.

## Prepare for major work:

- ✓ Complete geotechnical investigations for the Frederickton to Eungai and Nambucca Heads to Urunga upgrades.
- ✓ Award a contract for the design and construction of the Frederickton to Eungai upgrade.
- ✓ Announce a preferred tenderer for the Nambucca Heads to Urunga upgrade.
- ✓ Announce a decision on the review of the alternative alignment at Macksville (as part of the Warrell Creek to Nambucca Heads project).
- ✓ Start the procurement process for the Warrell Creek to Nambucca Heads and Oxley Highway to Kundabung upgrades.
- ✓ Start the procurement process for early works for the Kundabung to Kempsey section.
- ✓ Start the process for selecting a contractor of the Sancrox Road interchange on the Oxley Highway to Kundabung section of the Pacific Highway.
- ✓ Continue land acquisitions.

## Plan for remaining sections:

- ✓ Display the environmental impact statement for the Woolgoolga to Ballina upgrade for public comment.
- ✓ Continue land acquisitions.



# Community



Tintenbar to Ewingsdale community information session



Sapphire to Woolgoolga display centre



Kempsey bypass foreman teaching TAFE formwork students

## How are we travelling?

Between January and June 2012, RMS and its project teams have:

- ✓ Attended more than 130 community and stakeholder meetings or information sessions.
- ✓ Carried out more than 2500 individual meetings with property owners and other stakeholders across the upgrade projects from Hexham to the Queensland border.
- ✓ Maintained five static displays.
- ✓ Issued 26 community updates (including progress advertisements).
- ✓ Distributed about 125 separate letters to householders and traffic updates.
- ✓ Held 23 community events (including site tours and opening events).
- ✓ Worked with the community on the review of alternative suggestions for two previously approved sections of the highway at Bangalow and Macksville. The outcomes of the review of the Bangalow interchange were announced in May 2012. A decision on the review of an eight kilometre section of the Warrell Creek to Urunga upgrade (near Macksville) is expected shortly.



New online community noticeboard

## Online community notice board

Following the live webcast held in November 2011, RMS is trying a more collaborative online experience for local communities living along the Pacific Highway.

RMS has developed an online community noticeboard for the Pacific Highway residents. The noticeboard provides a facility for interested community members to share information and local knowledge quickly and easily, about what is happening in their area.

RMS will also post on the noticeboard about upcoming community events. The new noticeboard is an interactive and fun way for residents to post notes, images and information.

It is a great addition to the extensive Pacific Highway website, which has over 62,000 pageviews per month.

The noticeboard started in July 2012.

# Environment



## How are we travelling?

Between January and June 2012, RMS and its project teams have:

- ✓ Reached agreement with a private property owner to acquire 102 hectares of high conservation value habitat near Moonee Beach as part of compensatory habitat for the Sapphire to Woolgoogla upgrade.
- ✓ Worked with the NSW Environment Protection Authority to finalise practice notes for dewatering and temporary clean water diversions on upgrade projects.
- ✓ Continued rehabilitation work on a mangrove site as part of the Banora Point upgrade.
- ✓ Developed construction environmental management plan templates as part of the Nambucca Heads to Urunga upgrade, with the aim of speeding up the preconstruction approval processes on future upgrade projects.
- ✓ Carried out more than 65 environmental inspections for project sites from Bulahdelah to Banora Point, with the majority of the results identifying low priority issues for resolution.
- ✓ Initiated a pilot research program to obtain genetic information for the endangered coastal emu to the east of Grafton. This information will help RMS learn more about how the proposed highway upgrade could impact on the emu population.

- ✓ Successfully translocated a threatened flora population of 'hairy joint grass' before construction on the Tintenbar to Ewingsdale upgrade.
- ✓ Publicly released the outcomes of koala research for the construction and post construction phases of the Bonville and Yelgun to Chinderah upgrade projects.
- ✓ Won the International Erosion Control Association Environmental Achievement Award for 2011 for the Banora Point upgrade project.

## Environmental issues for the past six months

Environmental incidents recorded between January and June 2012 generally relate to:

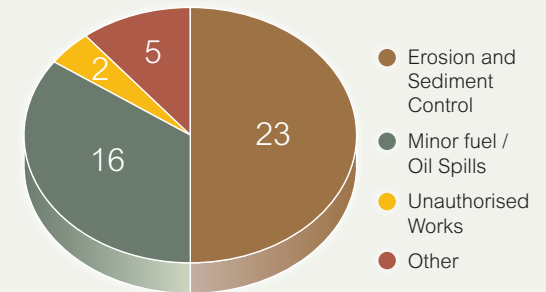
- Minor fuel and hydraulic oil spills from machinery on construction sites and compounds.
- Erosion and sediment control (water quality) issues within construction sites.
- Unauthorised work (i.e. outside of approved areas and/or construction hours).
- Other issues relating to air quality, heritage, and waste management.

We have had significant wet weather on our construction sites. In many cases, this weather was greater than the best practice design for rainfall events. Some sediment basins on construction sites were overtopped. These events were responsible for 70 per cent of the reportable erosion and sedimentation issues indicated in the graph to the right.



Heavy rain on the Bulahdelah upgrade (January 2012)

## THERE WERE 46 ENVIRONMENTAL ISSUES IN THE PAST SIX MONTHS:



In March 2012, potentially contaminated material was discovered at the Herons Creek to Stills Road construction site. The area is where a truck carrying a mixed load of waste crashed on the Pacific Highway in 1980. RMS and its contractor have been investigating the potentially contaminated area. More information is available on page 15 of this report.



# Projects being built



**Contractor:**

Baulderstone

**Form of contract:**

Construction

**Average workers on site during the past six months:** 252

**Average pieces of large plant on site during the past six months:** 66

**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.



## Bulahdelah upgrade

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

The upgrade of the Pacific Highway at Bulahdelah will involve building about 8.5 kilometres of four-lane divided highway with an eastern bypass of the Bulahdelah township.

**55 days were lost to wet weather** ☁️  
**in the past six months.**

**January – June 2012,** 🚧  
**work progress:**

- ✓ The Myall River bridges were opened to construction vehicles, which allowed for the removal of the temporary Smith bridge.
- ✓ The Alum Mountain steel truss bridge across the new highway was opened to the public.
- ✓ The local access to the wastewater treatment plant was completed.
- ✓ Frys Creek bridge was completed.
- ✓ The final bridge decks were poured at the northern interchange, which means that the bridge decks for the project are complete.
- ✓ Traffic was switched onto a temporary road between Lee Street and the Bulahdelah Golf Club.

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.

**July – December 2012,** 🚧  
**expected work progress:**  
Weather permitting ☀️

- ✓ Bombah Point Road will be opened to local traffic.
- ✓ Traffic will be temporarily switched on the future northbound carriageway between the Bulahdelah Golf Club and Wootton Way so the existing highway can be reconstructed into the new southbound carriageway.
- ✓ A section of dual carriageway will be opened to traffic south of the southern interchange.
- ✓ Drainage, paving and landscaping work, as well as noise and safety fence installation, will continue.

**Community issues** 👥

- ✓ The project team is working through concerns raised about property damage.

**Environmental issues** 🌿

- ✓ Ongoing monitoring of the threatened orchid species.



# Projects being built

**Contractor:**

BMD Constructions

**Form of contract:**

Construction

**Average workers on site during the past six months:** 65

**Average pieces of large plant on site during the past six months:** 38

**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.



## Herons Creek to Stills Road upgrade

The Herons Creek to Stills Road upgrade project is jointly funded by the Australian and NSW governments. The project will upgrade three and a half kilometres of highway to four-lane divided highway with a multi-level interchange at Bago Road.

### 66 days were lost to wet weather ☁️ in the past six months.

In addition, the construction site was closed between 8 May and 30 May while RMS and its contractor investigated a contamination issue on the work site (see right for details).

### January – June 2012, 🚧 work progress:

- ✓ Earthwork, drainage and bridge work were the primary activities carried out in the past six months.
- ✓ Progress has been significantly impacted by extensive wet weather and the need to investigate the potential soil contamination.

### July – December 2012, 🚧 expected work progress:

- Weather permitting ☀️
- ✓ Completion of earthworks and drainage on the main upgrade section.
  - ✓ Completion of the Herons Creek bridges.
  - ✓ Start of concrete paving.

### Community issues 👥

- ✓ The project team is continuing to work through concerns relating to road safety, dust, noise and other property impacts from work, including at Bobs Creek Road.

### Environmental issues 🌿

#### Incident investigation – possible site contamination

RMS and its contractor BMD Construction are investigating a suspected contamination area on the project, which may have affected the health of several workers. The area is where, in December 1980, a truck carrying a mixed load of waste crashed on the Pacific Highway.

On 27 March 2012, a construction worker received medical attention as a precaution and other workers reported feeling unwell while spreading material from a nearby cutting on the construction site.

RMS and its contractor are taking this investigation seriously. Based on the advise of experts, it would appear there are no long term health affects to the workers.

Independent chemical specialists have detected organochlorine pesticides, however the maximum levels of these pesticides are generally at levels below the relevant criteria endorsed by the Environment Protection Authority and there is no evidence that these chemicals would pose a risk to human health.

Volatile fatty acids (including acetic acid and propionic acid) were also found to be distributed in the soils.

On the basis of these findings the independent specialists recommended a remedial action plan be prepared and put in place, given that the exposed workers reported health concerns in addition to the materials posing an aesthetic issue (odours and discolouration) at the site.

The metals present were within natural levels and did not exceed NSW Environment Protection Authority endorsed criteria.

For more information visit the project website:

[www.rms.nsw.gov.au/pacific](http://www.rms.nsw.gov.au/pacific)



# Projects being built



### Contractor:

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

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

### Form of contract:

Alliance and design & construct contract

**Average workers on site during the past six months:** 558

**Average pieces of large plant on site during the past six months:** 152

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

**Expected completion date:** By early 2013 (weather permitting) ☀️

**Project value:** \$618 million

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

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



## Kempsey bypass

As part of the Building Australia Fund, the Australian Government is funding the \$618 million Kempsey bypass.

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

**46 days were lost to wet weather in the past six months.** ☁️

### Delivery methodology

The project has been split into two separate contracts:

- ✓ An alliance contract for the main roadwork and minor bridge work.
- ✓ A design and construct contract to build the bridge over the Macleay River and floodplain.

The project is now scheduled to open 15 months earlier than originally expected, by Easter 2013, weather permitting.

### January – June 2012, work progress:

- ✓ Completed all piling for the Macleay River and floodplain bridge.
- ✓ Continued construction of piers, supports, decks and walls for the Macleay River and floodplain bridge.
- ✓ Continued delivery and erection of super-T girders for the bridge.
- ✓ Opened the Frederickton interchange to traffic.
- ✓ Opened the Inches Road and Old Station Road overpasses to traffic.

- ✓ Completed minor bridge work.
- ✓ Started concrete paving work.
- ✓ Started house treatments as part of noise mitigation work.
- ✓ Completed flood mitigation work, in the form of house raising and building stock mounds.

### July – December 2012, expected work progress:

Weather permitting ☀️

- ✓ Traffic switch at South Kempsey to allow completion of the South Kempsey interchange.
- ✓ Complete the concrete pavement on the main upgrade.
- ✓ Complete the Frederickton levee and boat ramp.
- ✓ Complete the Macleay River and floodplain bridge.
- ✓ Start asphalt paving of bridge deck.
- ✓ Complete noise mitigation measures, including noise mounds and at house property treatments.
- ✓ Remove temporary rock platform from the Macleay River.

### Community issues

- ✓ The project team is working through concerns relating to noise.

### Environmental issues

- ✓ Nil.

# Projects being built



**Contractor:**

Leighton Fulton Hogan joint venture

**Form of contract:**

Design and construct contract

**Average workers on site during the past six months:** 340

**Average pieces of large plant on site during the past six months:** 234

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

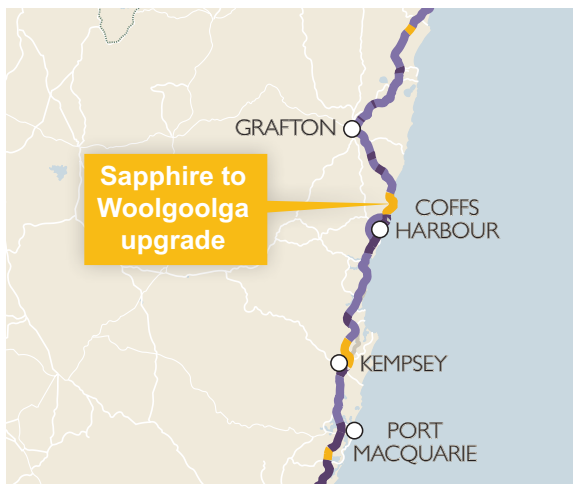
**Expected completion date:** Early 2014 (weather permitting) ☀️

**Project value:** \$705 million

**Australian Government contribution:** \$632 million \*\*

**NSW State Government contribution:** \$73 million \*\*

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



## Sapphire to Woolgoolga upgrade

The Sapphire to Woolgoolga upgrade project is jointly funded by the Australian and NSW governments. This project will provide a four-lane divided highway extending about 25 kilometres from Campbell Close at Sapphire to Arrawarra Beach Road at Arrawarra.

**71 days were lost to wet weather** ☁️  
**in the past six months.**

**January – June 2012,** 🏗️  
**work progress:**

- ✓ A temporary road was opened at Bark Hut Road.
- ✓ Construction continued on the service road between Gaudrons Road and Sugarmill Road.
- ✓ Construction continued on the Moonee Beach interchange.
- ✓ Earthwork continued on the Arrawarra interchange.
- ✓ Bridge work, public utility relocation work, vegetation clearing, bulk earthwork and drainage and blasting work.
- ✓ Detailed design work was completed.

**July – December 2012,** 🏗️  
**expected work progress:**

**Weather permitting** ☀️

- ✓ Temporary traffic diversions.
- ✓ The Greys Road overbridge will be opened to traffic.
- ✓ Bridge work, public utility relocation work, bulk earthwork and drainage and blasting work.
- ✓ A series of major traffic switches will take place.

### Community issues

 👤

- ✓ The project team is working through concerns relating to noise and other property impacts from the upgrade work.

### Environmental issues

 🌿

- ✓ Unexpected asbestos pipe was uncovered at a number of locations on site. Incident management, OHS and environmental management procedures have all been followed to minimise risks and to quarantine, inspect and safely remove any asbestos material to a licensed facility.
- ✓ Woolgoolga Creek has been rehabilitated following 230ml of rainfall on Australia Day and a wash out of material. Following the reinstatement of the low flow diversion channel, a number of eels, crustaceans and native fish are using the channel.



Construction continues on the Arrawarra interchange



# Projects being built



**Contractor:**

RMS has formed an alliance with Macmahon Contractors and Arup

**Form of contract:**

Alliance design and construct contract

**Average workers on site during the past six months:** 55

**Average pieces of large plant on site during the past six months:** 31

**Start date of major work:**

March 2010

**Expected completion date:**

Open to traffic

**Project value:** \$60 million

**Australian Government contribution:** \$54 million \*\*

**NSW State Government contribution:** \$6 million \*\*

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



## Glenugie upgrade

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

The seven kilometre Glenugie upgrade forms part of the larger Woolgoolga to Ballina project. This section extends from Franklins Road to Eight Mile Lane, about 15 kilometres south of Grafton.

**12 days were lost to wet weather in the past six months.** ☁️

**January – June 2012, work progress:** 🚧

- ✓ The final section was opened to traffic.
- ✓ Forestry and local road access roads were completed.

**July – December 2012, expected work progress:** 🚧

**Weather permitting:** ☀️

- ✓ Work will start on an animal monitoring program.
- ✓ Work will start on a plant biodiversity offset program.
- ✓ Operational noise monitoring.
- ✓ A final road seal will be put down.

**Community issues:** 👤

- ✓ Nil.

**Environmental issues:** 🌿

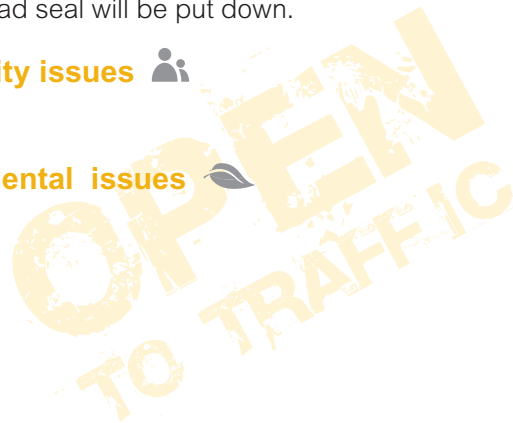
- ✓ Nil.



Traffic switch onto a new section of road at Glenugie upgrade



Construction of a concrete drainage structure



# Projects being built



**Contractor:**

John Holland

**Form of contract:**

Construct only

**Average workers on site during the past six months:** 31

**Average pieces of large plant on site during the past six months:** 86

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

**Expected completion date:**

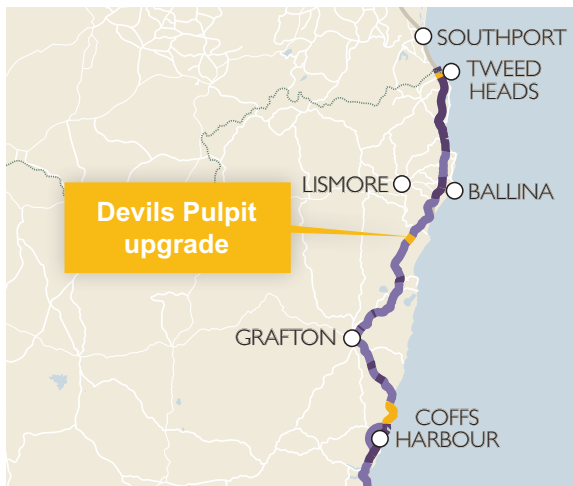
Mid 2013 (weather permitting) ☀️

**Project value:** \$77 million

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

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

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



## Devils Pulpit upgrade

The Devils Pulpit upgrade is jointly funded by the Australian and NSW governments.

It will provide more than seven kilometres of four-lane divided highway and additional wire rope fencing, north of Iluka Road (between Grafton and Ballina). The upgrade forms part of the larger Woolgoolga to Ballina project.

**37 days were lost to wet weather** ☁️  
**in the past six months.**

**January – June 2012,** 🚧  
**work progress:**

- ✓ Utility relocations were completed.
- ✓ Clearing work was ongoing.
- ✓ Major earthwork started on site.
- ✓ Major culvert construction started.
- ✓ Manufacturing of bridge piles started.
- ✓ Site compounds were established.
- ✓ Sedimentation and erosion controls were established.

**July – December 2012,** 🚧  
**expected work progress:**  
Weather permitting ☀️

- ✓ Earthworks.
- ✓ Major culvert construction.
- ✓ Bridge construction will start.

**Community issues** 👤

- ✓ Nil.

**Environmental issues** 🌿

- ✓ Nil.



Installing bridging rocks on the floodplain



Installing the first culvert for the project



# Projects being built



**Contractors:**

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

**Form of contract:**

Alliance design and construct contract

**Average workers on site during the past six months:** 130

**Average pieces of large plant on site during the past six months:** 71

**Start date of major construction:** May 2008

**Expected completion date:** Open to traffic

**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

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

The project provides 12 kilometres of four-lane divided highway, 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.

**61 days were lost to wet weather** ☁️  
**in the past six months.**

**January – June 2012,** 🚧  
**work progress:**

- ✓ The final section of the upgrade, which included the separation of the Bruxner and Pacific highways, was opened to traffic.
- ✓ Construction continued on the truck rest area.
- ✓ Enabling works continued between Pimlico Road and Teven Road.

**July – December 2012,** 🚧  
**expected work progress:**

**Weather permitting** ☀️

- ✓ The temporary truck rest area will be opened.
- ✓ Operational noise monitoring.
- ✓ The old sections of the highway will be officially handed over to RMS assets section and Ballina Shire Council.

**Community issues** 👤

- ✓ The project team is working through concerns relating to noise.

**Environmental issues** 🌿

- ✓ Nil.



Marking the opening of the final Bruxner Highway connection

👍 **The Ballina bypass also won a Civil Contractor Federation Earth Award for Excellence in Civil Construction and received a highly commended award in the International Project of the Year for the 2012 Ground Engineering Awards.**

# Projects being built



**Contractor:**

Baulderstone

**Form of contract:**

Design and construct

**Average workers on site during the past six months:** 37

**Average pieces of large plant on site during the past six months:** 5

**Start date of major construction:** Second half of 2012

**Expected completion date:**

Second half of 2014 (weather permitting) ☀️

**Project value:** \$862 million

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

**NSW State Government contribution:** \$434 million \*\*

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



## Tintenbar to Ewingsdale upgrade

The Tintenbar to Ewingsdale upgrade is jointly funded by the Australian and NSW governments. The upgrade will provide 17 kilometres of four-lane divided highway from the northern end of the Ballina bypass at Ross Lane to the Ewingsdale interchange.

### January – June 2012, 🚧 work progress:

- ✓ Public utility relocations were completed.
- ✓ Construction started on the main site compound at Bangalow.
- ✓ Boundary fencing was installed.
- ✓ At-home noise treatments were carried out.
- ✓ Detailed design work was ongoing.
- ✓ The *Construction Environmental Management Plan* was finalised and submitted to the Department of Planning and Infrastructure.
- ✓ A threatened flora species, 'hairy joint grass', was successfully relocated.
- ✓ Micro bat habitats were installed.
- ✓ Six community information sessions that discussed topics such as the revised concept design for the Bangalow interchange, construction of the St Helena Hill tunnels, water quality management and urban design and landscaping.
- ✓ Discussions with directly affected landowners about building condition surveys, property access arrangements, property adjustment details and construction staging.
- ✓ Discussions with residents on St Helena Road about controlled blasting and St Helena tunnel work.

### July – December 2012, 🚧 expected work progress:

Weather permitting ☀️

- ✓ Major work will start, including vegetation clearing, bulk earthwork, drainage, bridge work and tunnel work.
- ✓ Detailed design work.
- ✓ Community consultation on the business signage strategy.

### Community issues 👥

- ✓ Noise issues continued to be discussed.
- ✓ Outcomes of the Bangalow interchange discussions and incident management for the St Helena tunnel.

### Environmental issues 🌿

- ✓ Nil.



Early work at the Bangalow site compound



# Projects being built



**Contractor:**

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

**Form of contract:**

Alliance design and construct contract

**Average workers on site during the past six months:** 170

**Average pieces of large plant on site during the past six months:** 104

**Start date of major construction:** December 2009

**Expected completion date:** Final completion 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.



## Banora Point upgrade

The Banora Point upgrade project is jointly funded by the Australian and NSW governments. The upgrade extends over about two and a half kilometres from the northern end of Barneys Point bridge to the southern end of the Tweed Heads bypass.

**25 days were lost to wet weather** ☁️ **in the past six months.**

**January – June 2012,** 🚧 **work progress:**

- ✓ Sections of the northbound and southbound carriageways were opened to traffic.
- ✓ A major community site inspection that attracted more than 4000 people was held on 18 March.
- ✓ Work continued on the Wilson Park landbridge.
- ✓ Drainage work, paving work and noise wall construction were ongoing.
- ✓ Work started on the Kirkwood Road extension.

**July – December 2012,** 🚧 **expected work progress:**

**Weather permitting** ☀️

- ✓ On and off ramps will be finished.
- ✓ Local road work will be completed.
- ✓ Work will continue on the Kirkwood Road extension, which is being managed by Tweed Shire Council, separate to the Banora Point upgrade.



Banora Point upgrade – southern valley viaduct

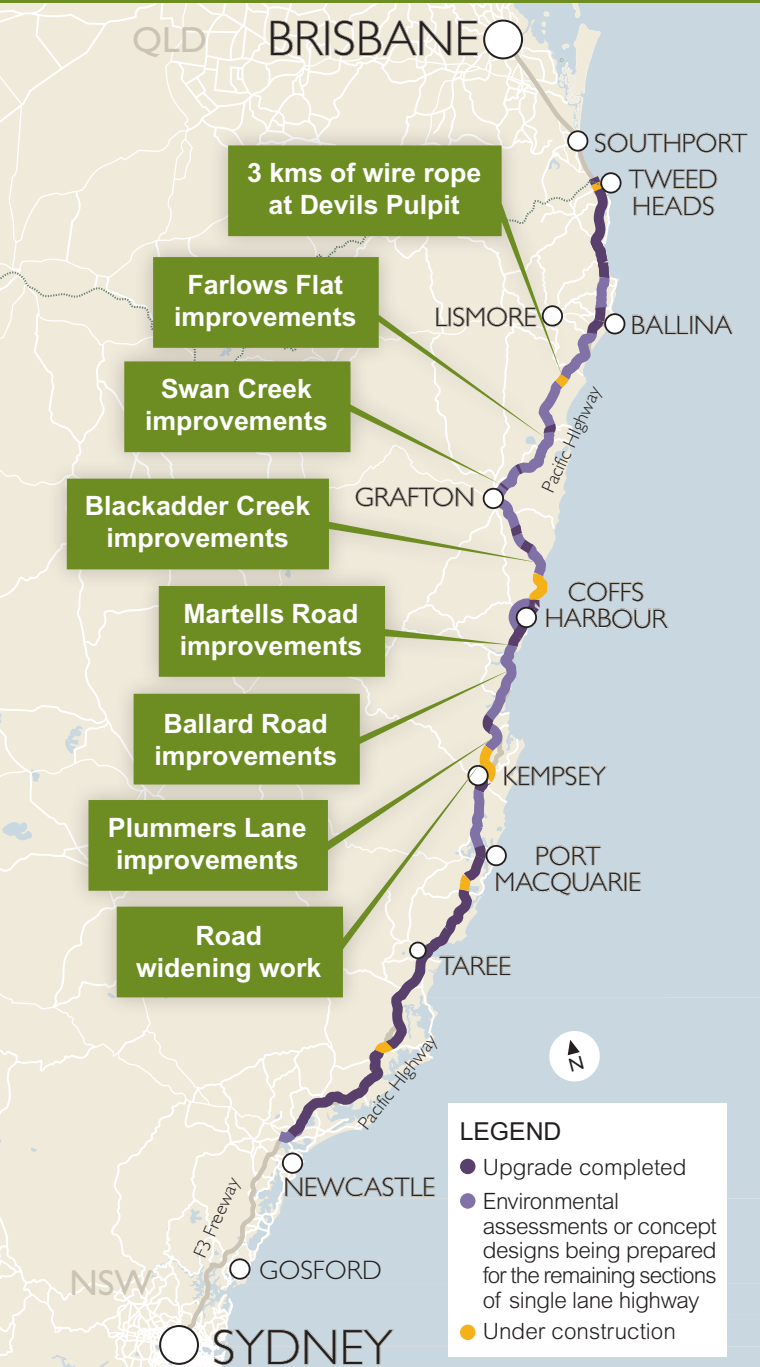
**Community issues** 👥

- ✓ The project team is working through concerns relating to noise and other property impacts.
- ✓ Concerns have been raised about damage to properties and project work.

**Environmental issues** 🌿

- ✓ Nil.

# Safety improvements



While most of the funding will be directed to upgrading the highway to a four-lane divided highway, there is a need to address road safety and traffic issues on sections of two-lane highway which are not being upgraded as part of the current five year program.

Safety improvements are a part of the Australian and NSW governments' commitment to upgrade the Pacific Highway during the five years to mid 2014. Additional work is fully state funded.

Work is being delivered to improve safety until upgrades can be completed. This work is to reduce the delays caused by local and major flood events.

**Contractor:**  
RMS Road and Fleet Services

**Average workers on site during the past six months:** 15

**Average pieces of large plant on site during the past six months:** 9

**Start date of major work:**  
November 2009

**Expected completion date:**  
Mid 2014 (weather permitting) ☀️

**Project value:** \$55 million



Loading gravel into the batch plant at Farlows Flat

## January – June 2012, work progress:

- ✓ Swan Creek village intersection improvements, completed in March.
- ✓ Paving work progressed for the Farlows Flat flood immunity improvement work (near Maclean).
- ✓ Through the NSW Government's Road Toll Response package, safety work at Plummers Lane and Blackadder Creek were completed.
- ✓ Safety improvements between Frederickton and Urunga (including central wire rope, vegetation clearing, pavement correction, linemarking and speed zone changes) and improved and repaired pavement damaged in the extended period of wet weather.
- ✓ Tree trimming at Shark Creek as part of river bank stabilising work.
- ✓ Tree trimming at Pimlico Road (near Ballina) to improve visibility for motorists.

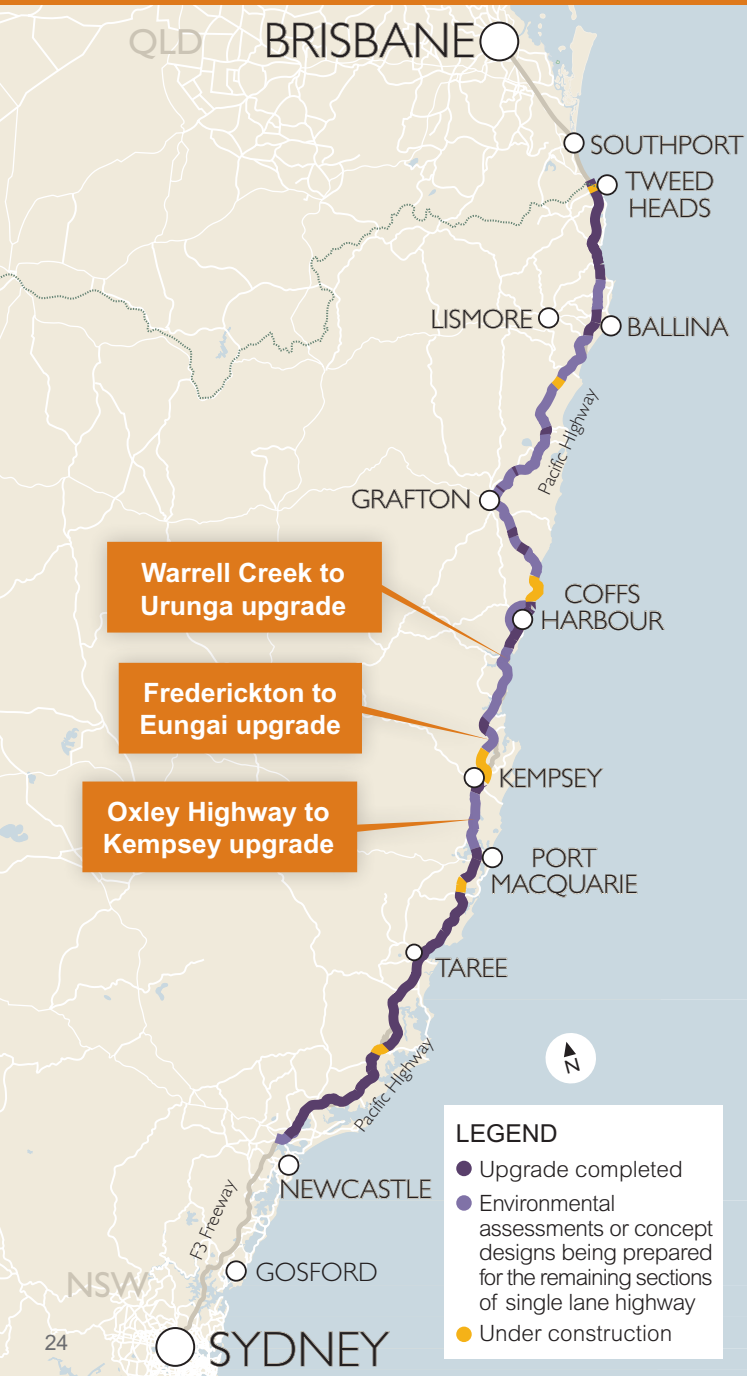
## July – December, expected work progress:

Weather permitting ☀️

- ✓ Farlows Flat flood immunity improvement work.
- ✓ Work will start on intersection improvements and shoulder widening at Old Post Office Lane (near Ulmarra).



# Projects being prepared for major work: Priority 2



## Oxley Highway to Kempsey upgrade

The Oxley Highway to Kempsey upgrade will provide 37 kilometres of four-lane divided highway between the Oxley Highway at Port Macquarie and the Kempsey bypass.

Planning for the Oxley Highway to Kempsey upgrade is jointly funded by the Australian and NSW governments.

### January – June 2012, work progress:

- ✓ NSW planning approval was received on 8 February.
- ✓ This project is being referred to the Federal Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) due to *Environment Protection and Biodiversity Act* considerations.
- ✓ Geotechnical field investigations.
- ✓ Detailed ground survey.
- ✓ A contract was awarded to the joint venture of SMEC/Hyder for the detailed design of the Kundabung to Kempsey section.
- ✓ Land acquisitions continued, about 25 per cent now complete.

### July – December 2012, expected work progress:

Weather permitting ☀

- ✓ Land acquisitions will continue.
- ✓ Resolution of the referral to the Federal Department of Sustainability, Environment, Water, Population and Communities.
- ✓ Detailed ground survey will be completed.
- ✓ Additional geotechnical investigation will be carried out as property access becomes available.
- ✓ The concept design will be finalised.
- ✓ Detailed design will be completed for sections of the project at Sancrox Road and near Kundabung. Detailed design work will continue on the rest of the Kundabung to Kempsey section.



The existing Oxley Highway to Kempsey section

# Projects being prepared for major work: Priority 2



## Frederickton to Eungai upgrade

The Frederickton to Eungai upgrade is jointly funded by the Australian and NSW governments.

The Frederickton to Eungai upgrade is stage two of the 40 kilometre Kempsey to Eungai project and will provide 26 kilometres of four-lane divided highway.

The Frederickton to Eungai upgrade will connect to the Kempsey bypass and will bypass the site of the 1989 Clybucca bus crash.

### January – June 2012, work progress:

- ✓ Abigroup Contractors, Leighton Contractors and a Thiess / Macmahon Joint Venture were invited to submit tenders for the design and construction.
- ✓ Ground survey work neared completion.
- ✓ Geotechnical investigations neared completion.
- ✓ Land acquisitions continued with about 60 per cent complete .
- ✓ The access track across the Collombatti Creek floodplain was completed.

### July – December 2012, expected work progress:

#### Weather permitting

- ✓ Aboriginal archaeological salvage work is to be completed.
- ✓ Utilities relocation will start.
- ✓ A design and construction contract is to be awarded.
- ✓ At-home noise mitigation treatments will start.

## Warrell Creek to Urunga upgrade

Planning for the Warrell Creek to Urunga upgrade is jointly funded by the Australian and NSW governments.

The 42 kilometre project involves an upgrade of the existing highway to four-lane divided highway from the existing Allgomera deviation, south of Warrell Creek, to the existing Waterfall Way interchange at Raleigh.

The project is being built in two sections from Warrell Creek to Nambucca Heads and from Nambucca Heads to Urunga.

## Warrell Creek to Nambucca Heads upgrade

### January – June 2012, work progress:

- ✓ A draft report on the review of the alternative alignment was displayed for comment.
- ✓ A submissions report has been finalised.
- ✓ Geotechnical investigations continued.
- ✓ Land acquisitions continued with about 58 per cent complete.

### July – December 2012, expected work progress:

#### Weather permitting

- ✓ A decision will be made on the review of the alternative alignment.
- ✓ Geotechnical investigations will continue.
- ✓ Land acquisitions will continue.
- ✓ RMS will prepare contracts for the design and construction of this section.

## Nambucca Heads to Urunga upgrade

### January – June 2012, work progress:

- ✓ Abigroup Contractors Pty Ltd, Boulderstone Pty Ltd and Thiess Contractors Pty Ltd were invited to submit tenders for the design and construction.
- ✓ Land acquisitions continued with about 45 per cent complete.

### July – December 2012, expected work progress:

#### Weather permitting

- ✓ Announce the preferred tenderer for design and construction of the upgrade.
- ✓ Land acquisitions will continue.



# Projects in planning: Priority 3



## Woolgoolga to Ballina upgrade

The Woolgoolga to Ballina project is made up of four previous Pacific Highway planning projects:

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

The Woolgoolga to Ballina project will upgrade about 155 kilometres of highway to four-lane divided highway.

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



Aerial view of the highway at Mororo

### January – June 2012, work progress:

- ✓ A contract has been awarded for the detailed design work for the Woolgoolga to Glenugie section.
- ✓ Contracts were also awarded for geotechnical work. Work started on site in March.
- ✓ Investigations for the environmental impact statement were completed, including ecology, Aboriginal heritage and noise.
- ✓ Community discussions continued about flooding impacts, mitigation measures and design refinements for the major Richmond and Clarence river systems.
- ✓ Land acquisitions were ongoing with 21 per cent complete.

### July – December 2012, expected work progress:

Weather permitting 

- ✓ The environment impact statement is expected to be placed on display for public comment.
- ✓ Geotechnical field investigations will be substantially completed.
- ✓ Detailed design will continue for Woolgoolga to Glenugie.
- ✓ We will continue to acquire the necessary properties.

\* The F3 Freeway to Raymond Terrace upgrade, Failford Road to Tritton Road upgrade and Coffs Harbour bypass projects do not form part of the joint commitment to upgrade the Pacific Highway to four-lane divided highway







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### For detailed information

about any of the projects, visit the project website at [www.rms.nsw.gov.au/pacific](http://www.rms.nsw.gov.au/pacific) or call the Pacific Highway office on **1800 653 092** or **02 6640 1000**

To receive progress information about work and initiatives on the highway, go to the website to register your details.

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