



Australian Government

BUILDING OUR FUTURE

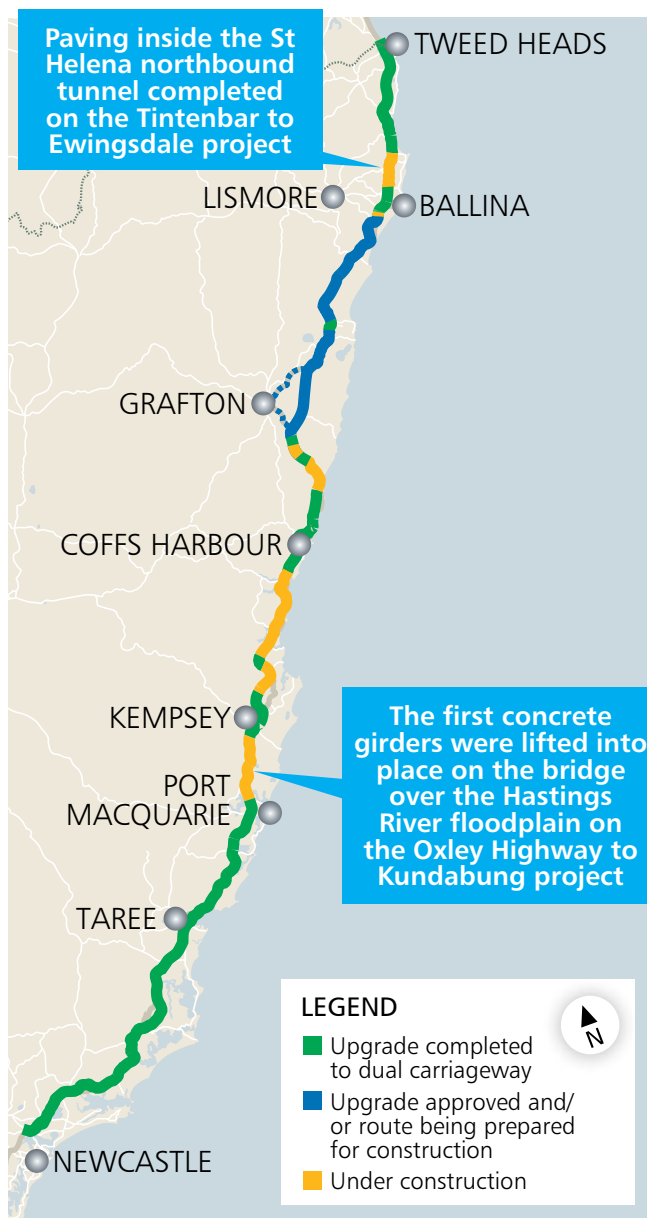


Pacific Highway upgrade

Achievement report **August 2015**

View inside the northbound tunnel on the Tintenbar to Ewingsdale project

Overview of the upgrade

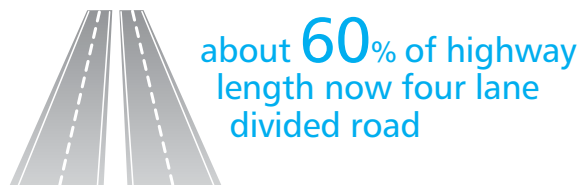


Pacific Highway upgrade

This report will provide you with information about Pacific Highway upgrade projects, including the current status and key activities.

As of 31 August 2015, 397 kilometres are four lane divided road and about 149 kilometres are being built. The remaining sections of two lane highway are being prepared for major work.

About 60 per cent of the final highway length is now four lane divided road.



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Pacific Highway upgrade

Achievement report **August 2015**

Port Macquarie to Coffs Harbour

The remaining 105 kilometres of the Pacific Highway still to be upgraded to four lane divided road between Port Macquarie and Coffs Harbour is being built.

Six projects, including the Sancrox interchange early work project, worth more than \$3.3 billion, are at various stages of construction and will begin opening to traffic throughout 2016 and 2017.

The summaries on the following pages outline progress in completing this section of the Pacific Highway upgrade, including key building activities.

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Lend Lease

Form of contract: Design and build

Workers on site: 614

Pieces of large machinery: 135

Start date of major construction: October 2014

Expected completion date:
2017 (weather permitting)

Project value: \$820 million

Australian Government contribution: \$542.4 million*

NSW State Government contribution: \$277.6 million*

*Contribution amounts may vary from year to year

Oxley Highway to Kundabung

Background

The Oxley Highway to Kundabung project is the southern section of the Oxley Highway to Kempsey upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2012 and the Federal Department of the Environment in January 2014.

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

It involves building 23 kilometres of four lane divided road, including bridges over the Hastings and Wilson rivers.

Key activities during August 2015

2.5 days were lost to wet weather during this time. 

- Construction of the bridge over the Wilson River continued, including piling. About 40 per cent of the piles completed
- Piling for the bridge over the Hastings River continued
- Bridge piling work started on the Fernbank Creek bridges, the Blackmans Point Road interchange bridges, the Bill Hill Road bridge and northbound Cooperabung Creek bridge
- Clearing and mulching continued at Sancrox Road. Overall clearing was 95 per cent complete
- Earthwork continued across the project and was about 46 per cent complete by volume
- Controlled blasting in the Cooperabung Range cuttings continued, with each blast yielding about 8000-10,000 cubic metres of rock
- The first concrete girders were lifted into place on the bridge over the Hastings River floodplain
- Building a temporary traffic crossover just north of the Oxley Highway/Pacific Highway intersection started in August. This

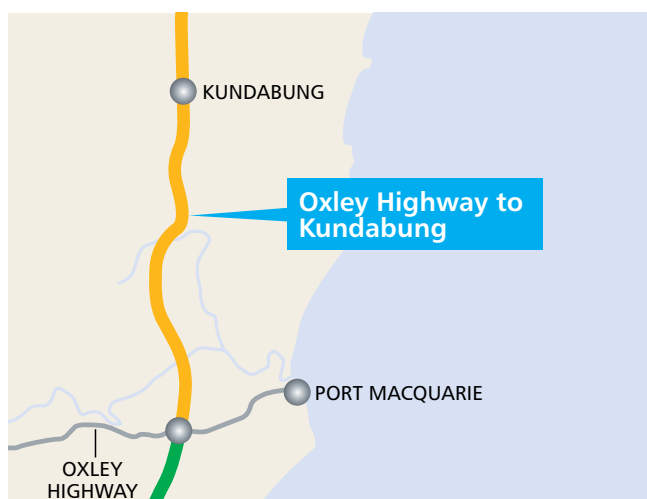
will allow the diversion of northbound traffic and enable the building of the new northbound carriageway to start soon

- Project staff attended the Wauchope Caravan and Camping Expo, distributing project information

614 workers on site



135 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Oxley Highway to Kundabung



Earthwork foundations are now continuous across the Wilson River floodplain. Earthwork started from each end of the floodplain, and met in the middle, during August



Steel tubular piles are driven through the alluvial river bed and into rock. Reinforced concrete is later placed inside the steel tube



Concrete is pumped into place on the floodplain bridge being built just north of the Hastings River



Working on the Cooperabung cutting, where controlled blasting has removed the rock and formed benches that improve the long term stability of the rock face



Steel tubular piles being delivered by barge to the larger main piling barge on the Hastings River



Animal refuge poles are being placed near box culverts, which allow wildlife to cross under the new highway

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Ferrovial Agroman

Form of contract: Build only

Workers on site: 113

Pieces of large machinery: 26

Start date of major construction: August 2014

Expected completion date:

Second half of 2015

Project value: Forms part of the Oxley Highway to Kempsey upgrade

Sancrox interchange

Background

The Sancrox interchange is early work for the Oxley Highway to Kempsey upgrade.

It includes building local service roads and a bridge over the Pacific Highway at Sancrox about 600 metres south of the existing Sancrox Road intersection.

Key activities during August 2015

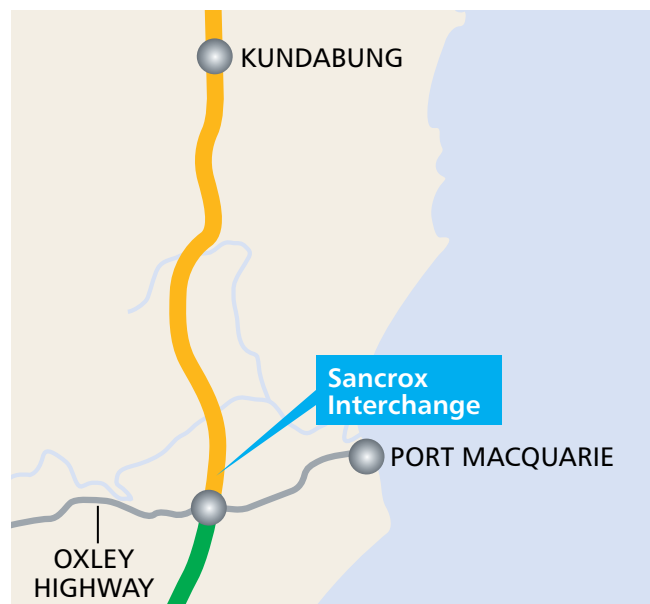
Two days were lost to wet weather during this time. 

- Earthwork continued on Sancrox Road and local access roads
- Stormwater and sub-surface drainage work continued and was about 90 per cent complete
- Almost 70 per cent of total length of new roads prepared for start of pavement construction
- Sancrox overbridge was nearing completion with concrete slabs for approaches remaining to be poured
- The lower layer of concrete paving to Sancrox Road and Fernbank Creek Road roundabouts started and was substantially completed in August. The upper layer of concrete paving continued on the south eastern roundabout.

113 workers on site



26 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Sancrox interchange



Pouring the lower layer concrete paving at the Fernbank Creek Road roundabout



Finishing the top layer of earthwork in preparation for the start of pavement construction



Pouring the lower layer of concrete paving for the Sancrox Road roundabout

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: McConnell Dowell-OHL joint venture

Form of contract: Build only

Workers on site: 268

Pieces of large machinery: 90

Start date of major construction: November 2014

Expected completion date: 2017 (weather permitting)

Project value: \$230 million

Australian Government contribution: \$115 million*

NSW State Government contribution: \$115 million*

*Contribution amounts may vary from year to year

Kundabung to Kempsey

Background

The Kundabung to Kempsey project is the northern section of the Oxley Highway to Kempsey upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2012 and the Federal Department of the Environment in January 2014.

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

It involves building 14 kilometres of four lane divided road, including a new interchange at Kundabung and new rest areas.

Key activities during August 2015

Two days were lost to wet weather during this time. 

- Clearing and grubbing complete for southbound carriageways
- Property adjustment work and installation of stock fencing continued
- Installation of frog, animal and boundary fencing continued
- Installation of drainage continued
- Earthwork continued
- Bridge piling continued
- Controlled blasting continued south of Mingaletta and Mobbs roads and in Maria River State Forest
- Building concrete batching plant continued
- Relocation of utilities (electricity and phone lines) continued.

268 workers on site



90 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Kundabung to Kempsey



New box culvert under realigned Mingaletta Road



Work on Smiths Creek bridge, looking south



The centre pier erected for the Kundabung Road overbridge



Progress on the new Kundabung interchange, looking south

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Leighton Contractors
(formerly Thiess Pty Ltd)

Form of contract: Design and build

Workers on site: 376

Pieces of large machinery: 145

Start date of major construction: August 2013

Expected completion date:
Mid 2016 (weather permitting)

Project value: \$675 million

Australian Government contribution: \$337.5 million*

NSW State Government contribution: \$337.5 million*

*Contribution amounts may vary from year to year

Frederickton to Eungai

Background

The Frederickton to Eungai project is the second stage of the Kempsey to Eungai upgrade, which was approved in 2008. The Kempsey bypass was the first stage and opened to traffic in March 2013.

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

It will provide about 26.5 kilometres of four lane divided road from the completed Kempsey bypass to Eungai Rail.

Key activities during August 2015

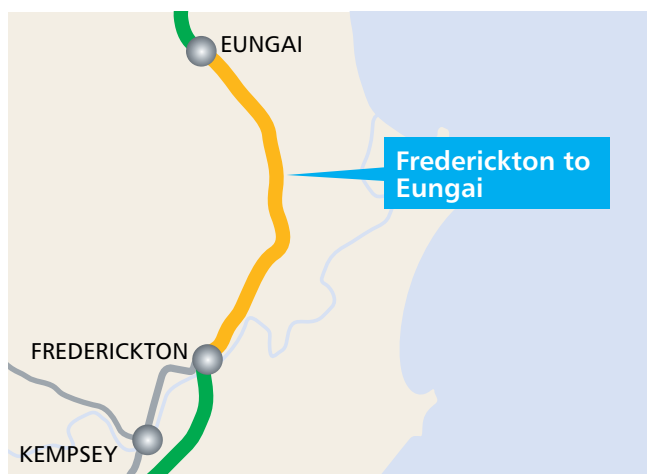
Two days were lost to wet weather during this time. 

- Concrete paving continued at various locations throughout the project. By volume, almost 55 per cent of the total amount of 213,000 cubic metres had been placed. This represents about 31 carriageway kilometres of the 57.5 carriageway kilometres in the project.
- Bridge building continued and was about 89 per cent complete. Girders were erected for the Barraganyatti Road overpass bridge. All piling work was complete and only 10 bridge girders remained to be delivered to site
- Drainage work continued and was almost complete
- Removal of the old Pacific Highway, opened by the June traffic switch, enabled the re-use of this material in the new northern road pavement
- Landscaping work continued in the median areas of the southern section of the project
- Installation of boundary and animal fencing continued.

376 workers on site



145 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Frederickton to Eungai



Crane working at the Borigalla Creek twin bridges



Erecting a girder at Barraganyatti Road overpass bridge



Work on the Borigalla Creek twin bridges



Installing bridge railings on bridge over Seven Oaks drain, looking south



Sub-base pavement near the Borigalla Creek twin bridges

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Acciona Ferrovial joint venture

Form of contract: Design and build

Workers on site: 635

Pieces of large machinery: 211

Start date of major construction: December 2014

Expected completion date:
Late 2017 (weather permitting)

Project value: \$830 million

Australian Government contribution: \$415 million*

NSW State Government contribution: \$415 million*

*Contribution amounts may vary from year to year

Warrell Creek to Nambucca Heads

Background

The Warrell Creek to Nambucca Heads project is the second stage of the Warrell Creek to Urunga upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2011. The Federal Minister for the Environment approved this upgrade in December 2014.

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

The 20 kilometre project involves upgrading the existing highway to a four lane divided road between the Allgomera deviation, south of Warrell Creek and Nambucca Heads, just south of the North Coast railway line where it will join the Nambucca Heads to Urunga upgrade.

Key activities during August 2015

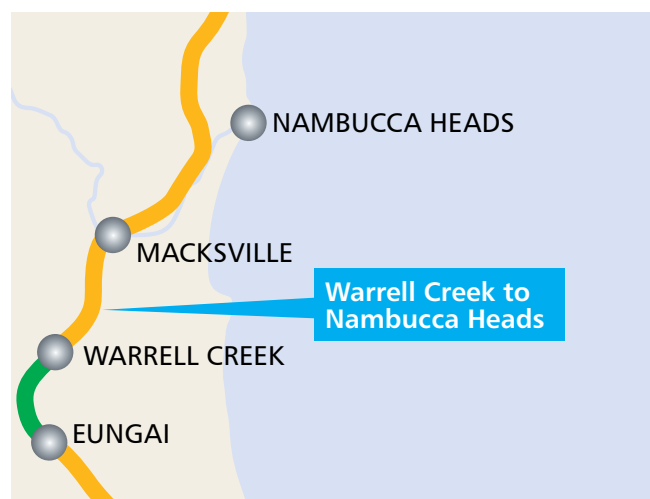
Four days were lost to wet weather during this time: 

- Early work for new Albert Drive started
- Piling platform at Upper Warrell Creek was completed
- Mainline vegetation clearing was completed
- Vegetation clearing along Old Coast Road (for sedimentation basins) completed
- Detailed design work continued
- Piling and building a working platform for the bridge over Nambucca River continued
- Drainage work continued across the project
- Establishment of precast facility on Old Coast Road continued
- Earthwork continued at various locations across the project
- Drainage work at Cockburns Lane continued
- Controlled blasting continued at various locations
- Construction access between Bald Hill Road and Gumma Road via new alignment completed.

635 workers on site



211 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Warrell Creek to Nambucca Heads



Aerial shot of construction access joining Bald Hill Road to Gumma Road



Earthwork at Lower Warrell Creek, looking north



Crushing work being carried out at the cut north of Lower Warrell Creek



Start of piling for the bridge over the Nambucca River

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Lend Lease

Form of contract: Design and build

Workers on site: 885

Pieces of large machinery: 238

Start date of major construction: November 2013

Expected completion date:
Second half 2016 (weather permitting)

Project value: \$780 million

Australian Government contribution: \$390 million*

NSW State Government contribution: \$390 million*

*Contribution amounts may vary from year to year

Nambucca Heads to Urunga

Background

The Nambucca Heads to Urunga project is the first stage of the Warrell Creek to Urunga upgrade, which was approved by the NSW Minister for Planning and Infrastructure in 2011. The Federal Minister for the Environment approved this upgrade in November 2013.

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

It will provide about 22 kilometres of four lane divided road from Nambucca Heads to the existing Waterfall Way interchange at Raleigh.

Key activities during August 2015

Three days were lost to wet weather during this time. 

- Asphalt paving, line marking and other work completed at the intersection of Ballards Road and the Pacific Highway, allowing the speed limit to be increased to 80km/h
- Completed concrete paving (the final road surface) from McGraths Creek Bridge to Burkes Lane
- Completed sub-base paving (the layer below the final road surface) between Burkes Lane and Deep Creek Road
- Started concrete paving south of Burkes Lane
- Bulk earthwork and lime stabilisation continued south of the bridge over the North Coast Railway and was about 90 per cent complete
- Upper earthwork layers continued between the bridge over the North Coast Railway and Deep Creek Road and was about 60 per cent complete
- Blasting and rock crushing work continued at the largest cut on the alignment within the Newry State Forest and was about 85 per cent complete.

885 workers on site



238 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Nambucca Heads to Urunga



Aerial view of the existing highway, new alignment and Deep Creek Road, looking south



Aerial view of the Ballards Road intersection



Aerial view of the East West Road overbridge



Looking north at the bridge over Cow Creek

Pacific Highway upgrade

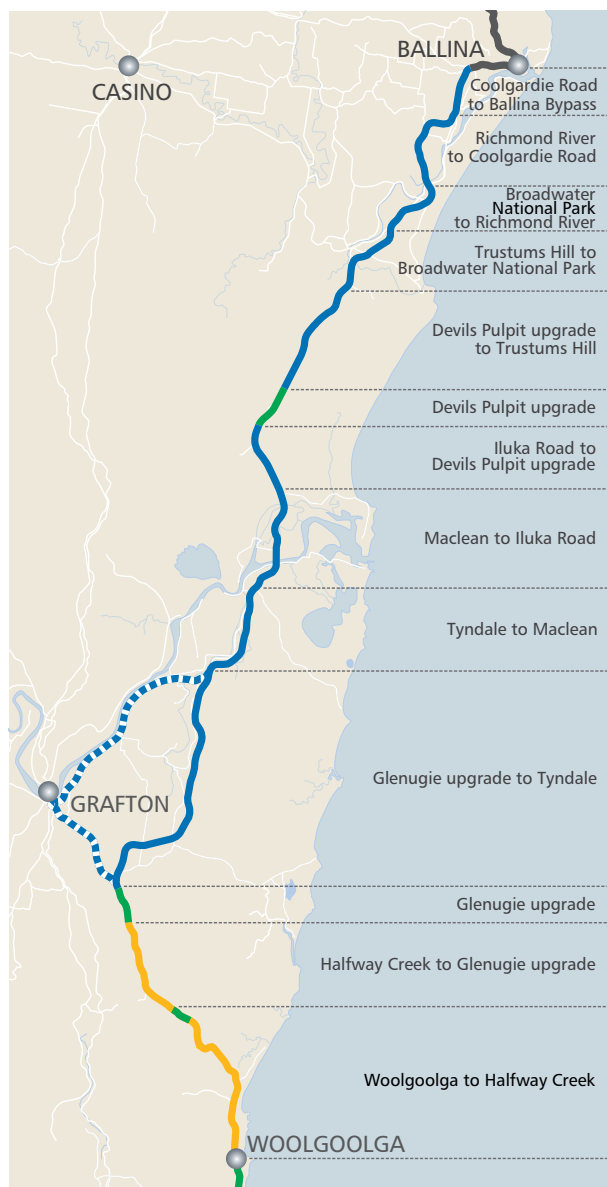
Achievement report **August 2015**

Woolgoolga to Ballina

The 155 kilometre upgrade between Woolgoolga and Ballina is Australia's largest regional infrastructure project and the last highway link between Hexham and the Queensland border to be upgraded to four lanes.

Roads and Maritime has selected Pacific Complete from the private sector as the delivery partner for the Woolgoolga to Ballina Pacific Highway upgrade. The delivery partner model is based on the approach used to oversee construction of infrastructure for the London Olympics and supports collaboration and innovation by bringing businesses, workers, consumers and suppliers together. It encourages the best ideas and solutions from the private sector while also drawing on Roads and Maritime's knowledge to ensure better engineering and design, customer outcomes and public value.

Woolgoolga to Ballina - projects being prepared for major work



Woolgoolga to Ballina

Background

The Woolgoolga to Ballina upgrade was approved by the NSW Minister for Planning in June 2014 and the Federal Minister for the Environment in August 2014. The 155 kilometre project will provide a four lane divided road from the northern end of the Woolgoolga Bypass to the southern end of the Ballina Bypass.

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

Activities under way during August 2015

Contracts

- Agreements in place on 90 per cent of land acquisitions, with negotiations continuing on the remainder
- Confirmed a shortlist of companies invited to tender to design and build the bridge over the Clarence River at Harwood
- Registration of Interest sought for the remaining four detailed design packages
- An industry briefing session was held in Ballina to explain procurement strategy and timing.

Design

- Continued to refine the concept design for the length of the project
- Continued to work on design for soft soil early work – Wave 3 (Shark Creek, Maclean).

Environment

- Carried out a contamination assessment in section 5 (Maclean to Iluka Road)
- Continued emu fencing trial
- Continued with threatened species baseline surveys including frogs, koalas, emus, long-nosed potoroos and gliders
- Continued work on the biodiversity offset strategy
- Continued to submit threatened species management plans to the NSW Department of Planning and Environment and Federal Department of the Environment for approval
- Continued to work on the Ballina koala plan, which will be publicly available after it is submitted to the Federal Minister for the Environment later this year for consideration

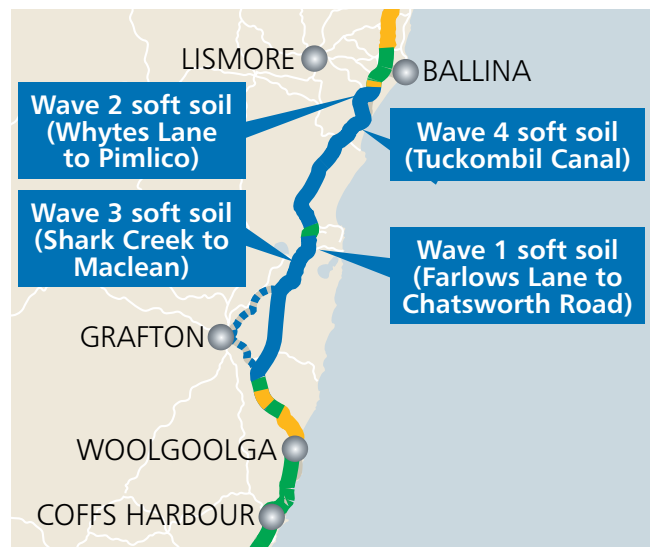
- Started to develop a strategy for planting koala feed trees
- Aboriginal salvage work continued in sections 1 (Woolgoolga to Halfway Creek) and 9 (Broadwater National Park to Richmond River)
- Continued to carry out non-Aboriginal archival recording and historical research
- Pacific Complete continued to develop its Construction Environmental Management Plan.

Stakeholder engagement

- Roads and Maritime and Pacific Complete have been working in partnership to meet with key stakeholder groups and provide updates on the project.

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Woolgoolga to Ballina - soft soil work



Background

Soft soils are an important design consideration for the Woolgoolga to Ballina upgrade as there are deep soft soils in floodplain areas along the upgrade. Key features of soft soils include high water content, low capacity for allowing water to pass through and low strength. Without soft soil treatment there is the potential for highway foundations and main alignment to sink and be damaged. This is because the bearing capacity of the soil is not strong enough to support the highway.

The soft soil work, which includes installing vertical wick drains into the soft soils and building road embankments, will prepare the foundation and allow the road base to settle before paving is carried out. This will reduce the overall time and cost of the project.

It may take some sections up to two and a half years for the soil to consolidate, which is why soft soil work is starting early. Soft soil work will occur in four waves:

Wave 1: Farlows Lane to Chatsworth Road

Wave 2: Whytes Lane to Pimlico

Wave 3: Shark Creek to Maclean

Wave 4: Tuckombil Canal

Preparation has started for the first phase of early work activities on Waves 1 and 2, including:

- Mobilising staff to site
- Preparing and establishing the main site compound
- Installing nest boxes
- Installing dust gauges
- Carrying out building condition inspections



Wick drain construction

- Building fences
- Installing environmental controls and surveying and removing weeds
- Carrying out survey work along the road corridor

The soft soils work is jointly funded by the Australian and New South Wales governments.

Wave 1

Golding Contractors has been engaged to carry out soft soil work at selected sites between Farlows Lane and Chatsworth Road.

It is expected the main embankment will be finished in late 2016, weather permitting.

Following the settlement period, this early work will enable building to start on the main highway road pavement.

Activities under way during August 2015

Development of construction environmental management plans continued and were nearing completion.

Wave 2

SEE Civil Pty Ltd has been engaged to carry out soft soil work between Whytes Lane and Pimlico Road.

It is expected the main embankment will be finished in the second half of 2016, weather permitting.

Following the settlement period, this early work will enable building to start on the main highway road.

Activities under way during August 2015

Development of construction environmental management plans continued and were nearing completion.

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Woolgoolga to Ballina - projects being built

Project snapshot

Contractors: OHL and York joint venture

Form of contract: Build only

Workers on site: 121

Pieces of large machinery: 44

Start date of major construction: June 2015

Expected completion date:
2017 (weather permitting)

Project value: Forms part of the Woolgoolga to Ballina upgrade

Woolgoolga to Halfway Creek section


Background

The Woolgoolga to Halfway Creek project – the first section of the overall Woolgoolga to Ballina upgrade – will link the Sapphire to Woolgoolga project in the south and the existing Halfway Creek upgrade in the north, providing about 14 kilometres of divided road.

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

The key features of the Woolgoolga to Halfway Creek upgrade include a 300 metre long twin bridge over the Corindi floodplain to allow flood waters to pass under the highway and bridges over the highway at Sherwood Creek Road and Kangaroo Trail Road for local road access.

Key activities during August 2015

Three days were lost to wet weather during this time. 

- Intersection upgrades at Kangaroo Trail Road continued
- Clearing and grubbing work continued
- Property adjustments completed
- First concrete pour at Sherwood Creek bridge completed, continuing at a rate of two piers per day in good weather
- Earthwork in the southern and middle sections continued
- Work across the Corindi floodplain started
- Installation of culverts continued.

121 workers on site



44 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Woolgoolga to Halfway Creek



Pouring concrete for a culvert



The first concrete pour for a culvert base slab was carried out in August



A concrete washout area



Installation of drainage continued in August

Woolgoolga to Ballina - projects being built

Project snapshot

Contractors: Civil Mining & Construction

Form of contract: Build only

Workers on site: 100

Pieces of large machinery: 36

Start date of major construction: June 2015

Expected completion date:
2017 (weather permitting)

Project value: Forms part of the
Woolgoolga to Ballina upgrade

Halfway Creek to Glenugie

Background

The Halfway Creek to Glenugie project – the second section of the overall Woolgoolga to Ballina upgrade – will link the completed Halfway Creek upgrade in the south and the existing Glenugie upgrade in the north, providing about 12 kilometres of divided road.

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

Key features of the Halfway Creek to Glenugie section include twin bridges over Halfway Creek and Wells Crossing Creek, as well as a wide median to assist animals crossing at Newfoundland State Forest.

Key activities during August 2015

3.5 days were lost to wet weather during this time. 

- Installation of environmental controls, including temporary frog exclusion fencing, clean and dirty water separation and sedimentation basins continued
- Clearing continued
- Installation of survey and boundary fencing continued
- Started topsoil stripping and earthwork north of Bald Knob Road
- Started early work for bridge at Halfway Creek
- Establishment of concrete batch plant at Parkers Road started
- Upgrade of intersection north of Luthers Road complete
- Relocation of utilities complete.

100 workers on site



36 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Halfway Creek to Glenugie



Work at Halfway Creek opposite Luthers Road, looking south



Collection of millable timber at Bald Knob Road, looking north



Wells Crossing east, looking north to Wells Crossing bridge



View of the main alignment at Franklins Road, looking south



Clearing at Halfway Creek opposite Luthers Road, looking north

Woolgoolga to Ballina - projects being built

Project snapshot

Contractors: Leighton Contractors

Form of contract: Build only

Workers on site: 123

Pieces of large machinery: 8

Start date of major construction: November 2013

Expected completion date: Mid 2016

Project value: Forms part of the Woolgoolga to Ballina upgrade

Pimlico to Teven

Background

The Pimlico to Teven project will upgrade about two kilometres of the Pacific Highway between Pimlico Road and Teven Road. This enabling work will facilitate the next phase of the highway upgrade, which is part of the overall Woolgoolga to Ballina project.

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

The Pimlico to Teven project involves building bridges over Duck and Emigrant creeks and more than one kilometre of new road on the Bruxner Highway.

The project is being carried out in three stages. Stage one was completed by the Ballina Bypass Alliance. Stage two is now under construction. Stage three, which provides a four lane divided road, will be completed as part of the larger Woolgoolga to Ballina upgrade.

Key construction activities during August 2015

No days were lost to wet weather during this time. 

- Traffic moved onto the new Bruxner Highway alignment
- Started removing surcharge south of Duck Creek
- Removed the old Bruxner Highway road pavement
- Started concrete injected column ground treatment north of Duck Creek
- Transition barriers, approach slabs and links slabs on Duck Creek bridge completed
- Started drainage and parapet installation on Duck Creek bridge
- Started foundation work for the crossovers north of Emigrant Creek.

123 workers on site



8 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Pimlico to Teven



Removing surcharge south of Duck Creek



Removing surcharge south of Duck Creek



Traffic using the new Bruxner Highway



Spraying bitumen seal on the new Bruxner Highway alignment

Pacific Highway upgrade

Achievement report **August 2015**

Ballina to the Queensland border

Tintenbar to Ewingsdale, the final project to complete the Pacific Highway upgrade between Ballina and the Queensland border, is nearing completion.

Ballina to the Queensland border - projects being built

Project snapshot

Contractors: Lend Lease

Form of contract: Design and build

Workers on site: 185

Pieces of large machinery: 145

Start date of major construction: September 2012

Expected completion date:
Late 2015 (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

Tintenbar to Ewingsdale

Background

The Tintenbar to Ewingsdale project was approved on 29 January 2010.

The project 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.

Key activities during August 2015

Five days were lost to wet weather during this time. 

- Paving inside the St Helena northbound tunnel completed
- Completed the last structural concrete pours for bridges at Emigrant Creek, Bangalow Road, Byron Creek and Tinderbox Creek
- Connected electrical supply to both St Helena tunnels
- Opened the residential access bridge at Arundel Hill
- Diverted all Pacific Highway traffic through new roundabout at Bangalow
- Removed the existing northbound overpass at Bangalow Road
- Sub-base paving (the layer below the final road surface) was 94 per cent complete base paving was 82 per cent complete and tunnel paving was 65 per cent complete
- Progressed finishing work (landscaping, safety barriers, headlight screen painting, signage installation) from Bangalow to Ewingsdale

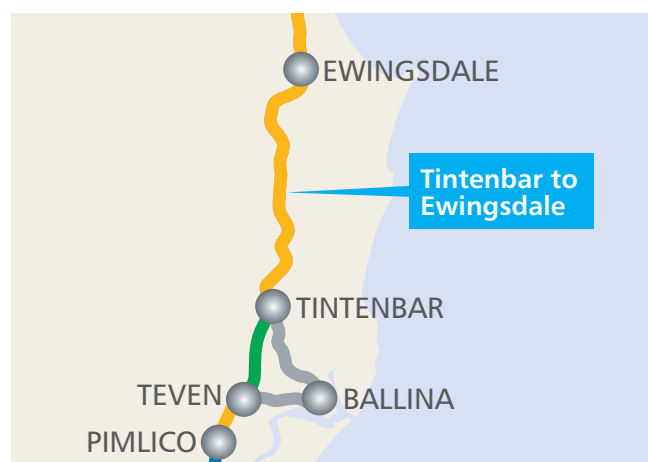


- Mainline earthwork, stormwater drainage and select material placement were substantially complete across the project
- Ewingsdale Road interchange work was progressing and will continue after the upgrade is opened to traffic.

185 workers on site



145 pieces of large machinery on site



For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Tintenbar to Ewingsdale



Landscaping just south of Bangalow



Removing the Bangalow Road overpass



Topsoil and creek stabilisation at Tinderbox Creek



Roadwork adjacent to northern portal



Paving leading to northern portals

Environment

Protecting koalas across the Pacific Highway upgrade



Animal fencing installed on the Oxley Highway to Kundabung project

Wildlife management and protection is a major consideration in all Pacific Highway upgrades. Teams delivering the projects seek to minimise the risk of wildlife, including koalas, being injured or killed on the highway while the upgrades are being built and after opening to traffic.

To achieve this a range of measures are implemented during the various building and operating phases. These measures, designed in consultation with ecologists and environmental experts, include:

- New designs for roadside concrete barriers, which have been implemented at work sites near known koala populations to minimise injuries or chance of strike
- Messaging on permanent electronic signs between Port Macquarie and the Queensland border to help to raise driver awareness of koala movements on the region's roads during breeding season
- Installation of animal crossings
- Where possible, early installation of permanent animal fencing along projects
- Installation of temporary animal fencing in areas where it is not possible to install the permanent fence
- Installation of additional koala fencing on construction projects
- Installation of plastic mesh tied around concrete barriers to provide an area for the koalas to climb off the road as an interim measure until the animal fence can be installed.

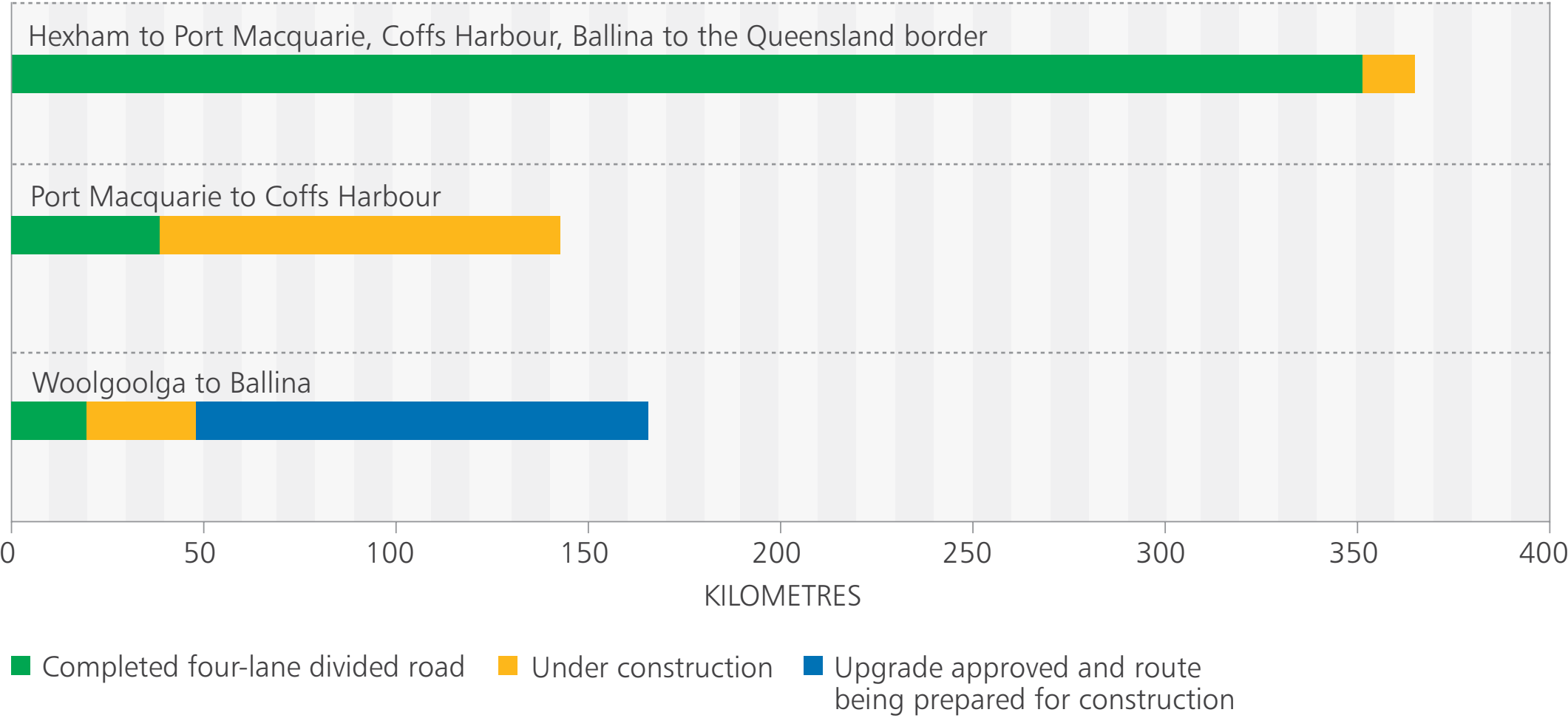
Roads and Maritime will continue to work with all stakeholders to manage and mitigate the impact on koala populations along the highway.



Koala using a fauna crossing

For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on **1800 653 092**

Four-lane divided road status



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