



Australian Government

BUILDING OUR FUTURE



Pacific Highway upgrade

Achievement report **October 2016**

Halfway Creek to Glenugie, looking south

Overview of the upgrade

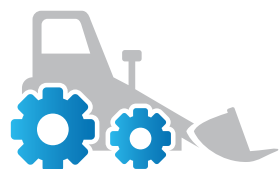


Pacific Highway upgrade

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

As of 31 October 2016, 459 kilometres are four lane divided road and about 153 kilometres are being built. The remaining sections of two lane highway are being prepared for major work.

About 70 per cent of the final highway length is now four lane divided road.



153 km
of highway
being built



about **2500**
workers on site



about **70%** of highway
length now four lane
divided road

The total number of workers includes workers on site for the Pacific Highway upgrade projects contained in this report, and workers on site preparing for work not yet reported on.

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 **October 2016**

Port Macquarie to Coffs Harbour

The remaining 57 kilometres of the Pacific Highway still to be upgraded to four lane divided road between Port Macquarie and Coffs Harbour is being built.

Five projects worth more than \$3.3 billion are either being built or recently opened. The 26 kilometre Frederickton to Eungai project opened to traffic in May 2016. The Nambucca Heads to Urunga project opened to traffic in July 2016. The remaining three projects will open to traffic throughout 2017, weather permitting.

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: 513

Pieces of large machinery: 120

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 October 2016

Five days were lost to wet weather during this time. 

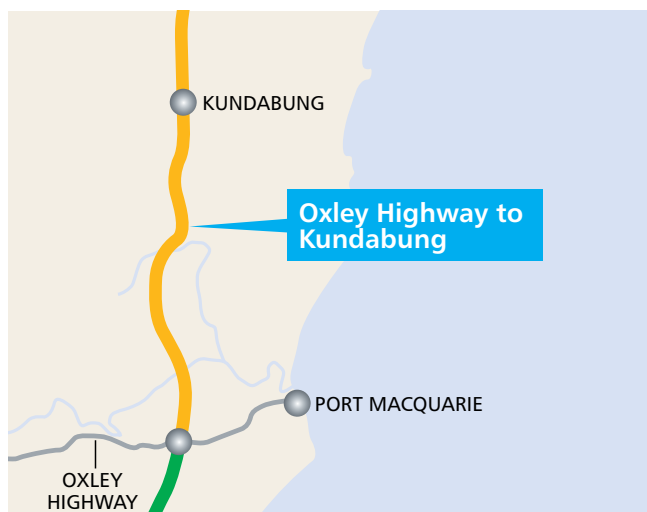
- Continued earthwork across the project, about 90 per cent complete
- Continued installing boundary fencing and fauna exclusion fencing
- Final girder installed on the new Hastings River bridge and continued placement of precast concrete parapets and steel traffic railings
- Continued installing drainage and fauna culverts
- Switched highway traffic onto the new northbound lanes between the Oxley Highway interchange and Fernbank Creek
- Continued piling work on Barrys Creek bridge

- Bridge work continued on Fernbank Creek bridges, Wilson River floodplain bridges and Hastings River floodplain bridges
- Continued scoping of work for acoustic treatments for properties affected by operational road noise
- Continued concrete road paving
- Started asphalt pavement along the Wilson River floodplain.

513 workers on site



120 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



The final girder lifted into place on the new Hastings River bridge



All girders are now in place on the new Wilson River bridge



Kerb work at the Sancrox Road intersection



Asphalt placed on the off ramp at the new Sancrox Road intersection



Preparations for the traffic switch between the Oxley Highway interchange and Fernbank Creek

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: McConnell Dowell-OHL joint venture

Form of contract: Build only

Workers on site: 229

Pieces of large machinery: 122

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 two new rest areas.

Key activities during October 2016

Five days were lost to wet weather during this time. 

- Traffic was switched onto new southbound carriageway under contra-flow
- Kundabung Bridge batter protection started
- Concrete paving continued, 53 per cent complete
- Verge work, safety barriers and landscaping ongoing
- Continued earthwork, 87 per cent complete
- Continued bridgework, 80 per cent complete
- Edge and trench drains ongoing, 86 per cent complete
- Heavy vehicle inspection bay work started
- Property adjustments and stock fencing ongoing
- Work started to build the southern abutment of the Smiths Creek northbound bridge.

229 workers on site



122 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



Traffic switch to new southbound carriageway, looking north from Kundabung bridge



Traffic on new southbound lane, looking south near Hambly Fish Farm



New off ramp for southbound traffic at Kundabung interchange



Wire roping and linemarking on new southbound traffic switch

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Acciona Ferrovial joint venture

Form of contract: Design and build

Workers on site: 515

Pieces of large machinery: 120

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 Department of 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 October 2016

Six days were lost to wet weather during this time. 

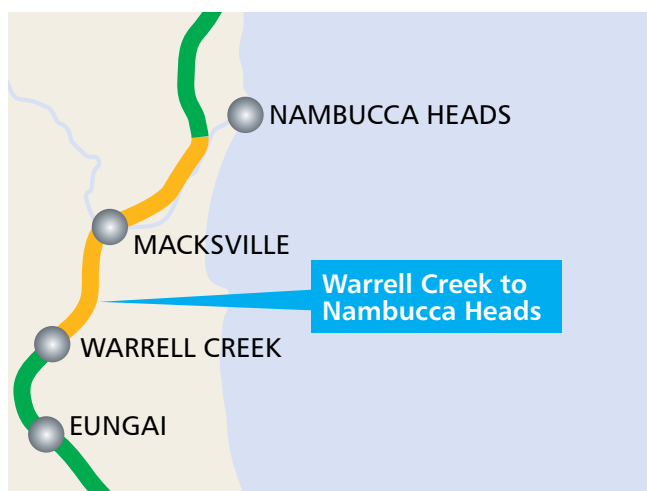
- Detailed design continued, 99 per cent complete
- Earthwork continued, 98.5 per cent complete
- Continued rock crushing opposite Scotts Head Road, 98 per cent complete
- Continued installing drainage, including box culverts, 95 per cent complete
- Continued drainage across the project
- Continued placing girders and transfloor panels for the new Nambucca bridge
- Completed pouring decks and link slab and approach slabs at Bald Hill, Mattick Road and Albert Drive bridges

- Reinforcing of bridge decks for Rosewood bridge, 95 per cent complete
- Completed Cockburns Lane bridge reinforcement of decks and pouring
- Completed Williamson Creek bridge piles and pouring of abutments base
- Continued piling work for Quarry Access bridge, 75 per cent complete
- Completed installing girders and transfloor panels at Old Coast south bridge.

515 workers on site



120 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



The rail diversion near Cockburns Lane, looking south



Concrete pour at Cockburns Lane bridge



Nambucca River bridge deck, looking north



Upper Warrell Creek bridge work, looking south

Port Macquarie to Coffs Harbour - projects being built

Project snapshot

Contractors: Lend Lease

Form of contract: Design and build

Workers on site: 106

Pieces of large machinery: 35

Start date of major construction: November 2013

Opened to traffic: July 2016

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 opened to traffic in July 2016. It 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.

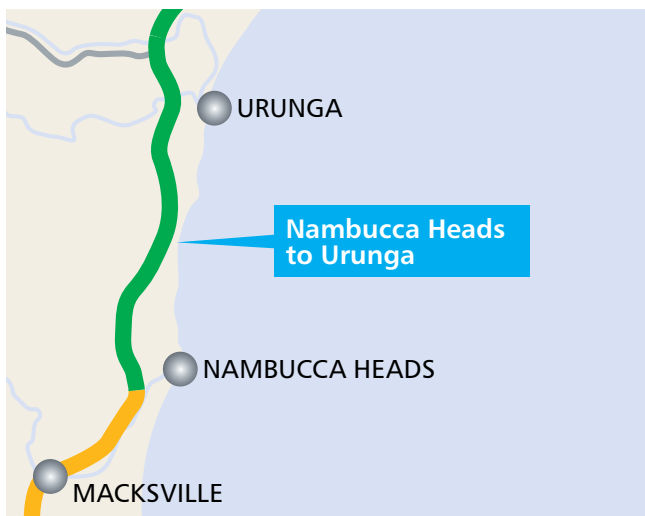
The project is jointly funded by the Australian and NSW governments.

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 October 2016

Two days were lost to wet weather during this time. 

- Continued batch plant remediation work
- Started profiling and asphaltting work on the new highway near the Waterfall Way interchange
- Continued local road work at Giinagay Way, Valla Road and South Arm Road.



106 workers on site



35 pieces of large machinery on site

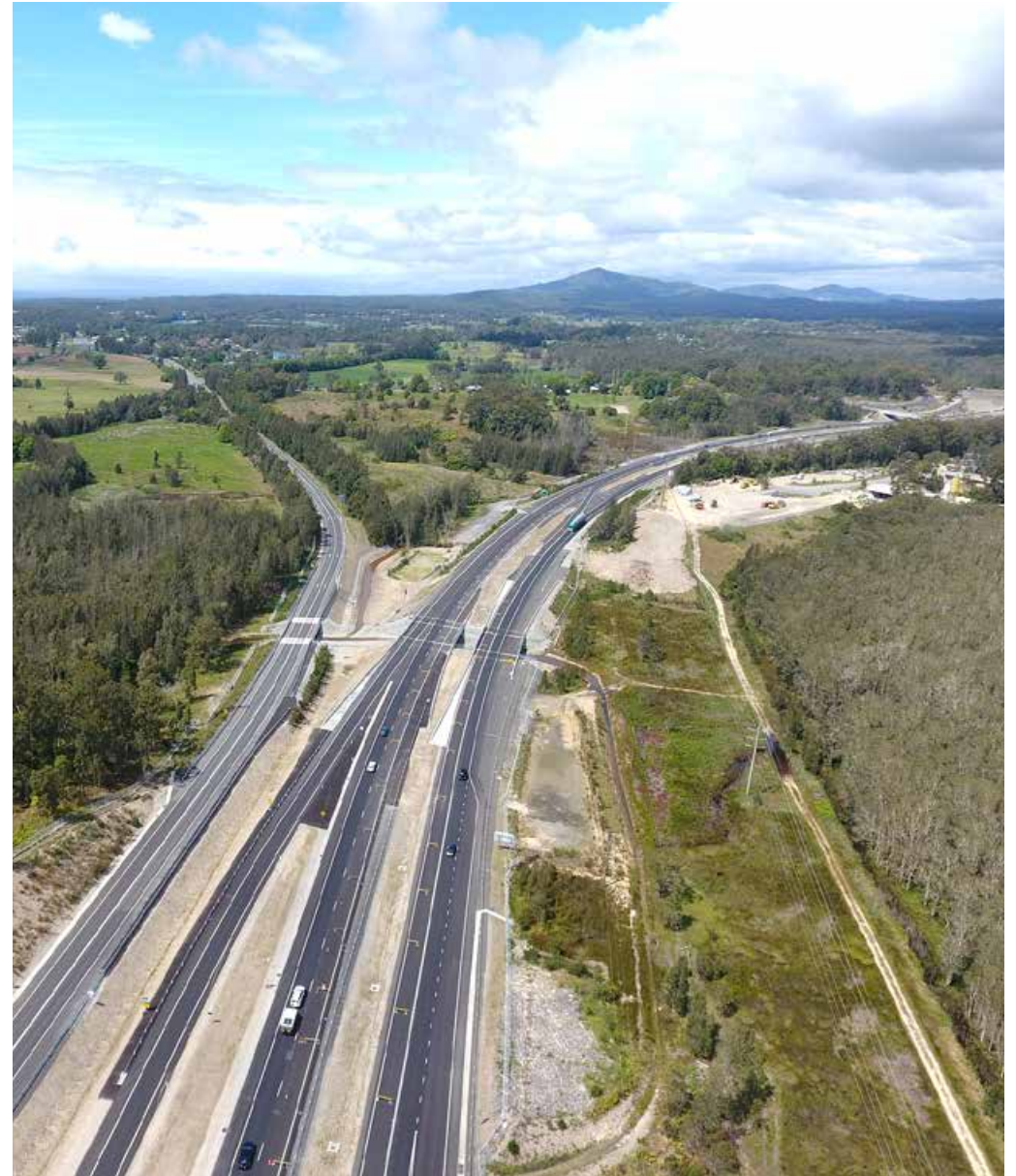


For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Nambucca Heads to Urunga



Northbound over Waterfall Way interchange



Looking south from Waterfall Way interchange

Pacific Highway upgrade

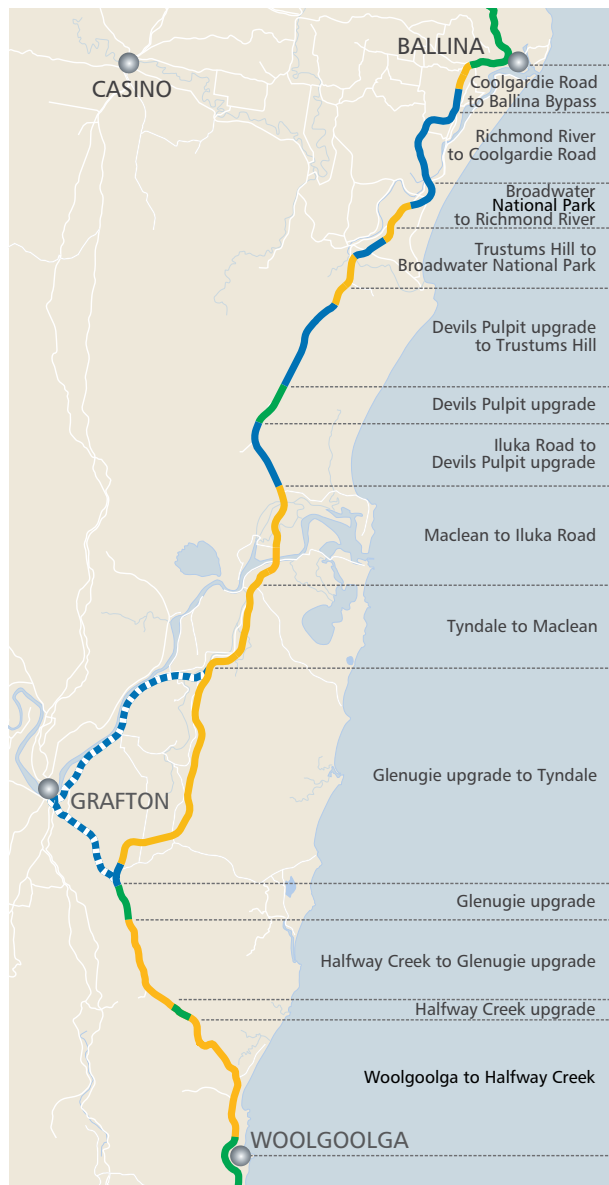
Achievement report **October 2016**

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 \$4.36 billion 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 underway during October 2016

Procurement

- Continued tender process for the Woodburn to Broadwater Service Road, ecological services and demolition work.

Design

- Continued design review for the realignment in the Picaninny Creek area.

Environment

- Implemented environmental protection strategies to conserve the endangered fish, *Oxleyan Pygmy Perch*.

Stakeholder and community engagement

- Continued to carry out consultation about the draft Urban Design and Landscape Plans and proposed design refinements
- Held meetings with councils.

825 workers 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 Ballina - soft soil work

Project snapshot

Contractors: FKG Group

Form of contract: Build only

Pieces of large machinery: 94

Start date of major construction: July 2016

Expected completion date:
October 2017 (weather permitting)

Project value: Forms part of the Woolgoolga to Ballina upgrade

Soft soil (Wave 3) Tyndale to Maclean

Background

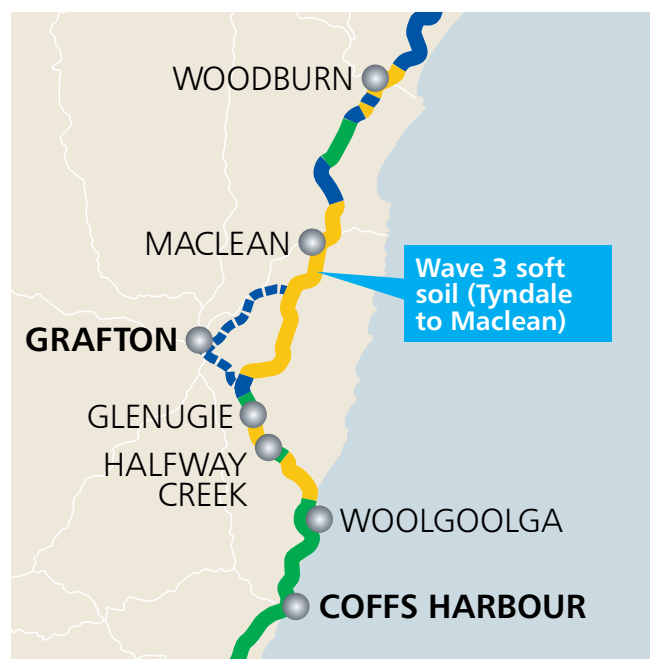
Soft soil work started between Tyndale and Maclean (around 11.5 kilometres) in July 2016. It is expected that the settlement of soft soils will be finished in October 2017, weather permitting. Following the settlement period, this early work will enable building to start on the main highway road. This work forms part of the Woolgoolga to Ballina upgrade which is jointly funded by the Australian and NSW governments.

Key activities during October 2016

No days were lost to wet weather during this time. 

- Installed drainage at Tyndale
- Completed preparation work for Green Hills to Shark Creek haul road
- Completed infill to the underside of upper zone fill
- Completed drainage, foundation treatment, and started wick drain installation, south of Edwards Drain.

94 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 Ballina - soft soil work

Project snapshot

Contractors: SEE Civil Pty Ltd

Form of contract: Build only

Pieces of large machinery: 16

Start date of construction: April 2016

Expected completion date:
March 2017 (weather permitting)

Project value: Forms part of the Woolgoolga to Ballina upgrade

Soft soil (Wave 4) Tuckombil, south of Woodburn

Background

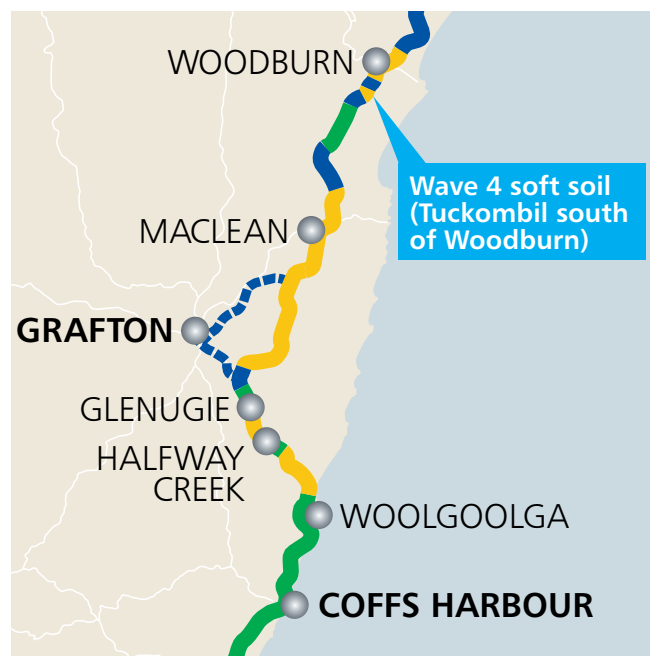
Soft soil work started at Tuckombil south of Woodburn (around 1.4 kilometres) in April 2016. It is expected that the settlement of soft soils will be finished in March 2017, weather permitting. Following the settlement period, this early work will enable building to start on the main highway road. This work forms part of the Woolgoolga to Ballina upgrade which is jointly funded by the Australian and NSW governments.

Key activities during October 2016

No days were lost to wet weather during this time. 

- Continued monitoring the embankment fill
- Started high strength geo-synthetic placement on the southern embankment
- Completed drainage installation on the southern embankment
- Started drainage installation on the northern embankment
- Continued high strength geo-synthetic placement on the northern embankment
- General fill placement on southern embankment.

16 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**

Soft Soil (Wave 4) Tuckombil, south of Woodburn



Building temporary drainage on the southern embankment



High strength geo-synthetic placement on the southern section



Placement of material over the high strength geosynthetic sheet on the southern embankment

Woolgoolga to Ballina

Project snapshot

Contractors: Seymour Whyte

Form of contract: Build only

Pieces of large machinery: 54

Expected completion date:
Late 2017 (weather permitting)

Project value: Forms part of the Woolgoolga to Ballina upgrade

Earthwork (Wave 5A) Glenugie to Tyndale

Background

Preparations for the start of clearing and foundation work between Glenugie and Tyndale (around 30 kilometres) began in July 2016. The early work in this section is expected to be completed in late 2017, weather permitting. This work forms part of the Woolgoolga to Ballina upgrade which is jointly funded by the Australian and NSW governments.

Key activities during October 2016

One day was lost to wet weather during this time. ☁️

- Continued clearing work
- Started excavation and preparation of the formation for the Tyndale site compound
- Started fill treatments at Pillar Valley and Coldstream Creek.

54 pieces of large machinery on site



Looking north from Tyndale over compound preparation work

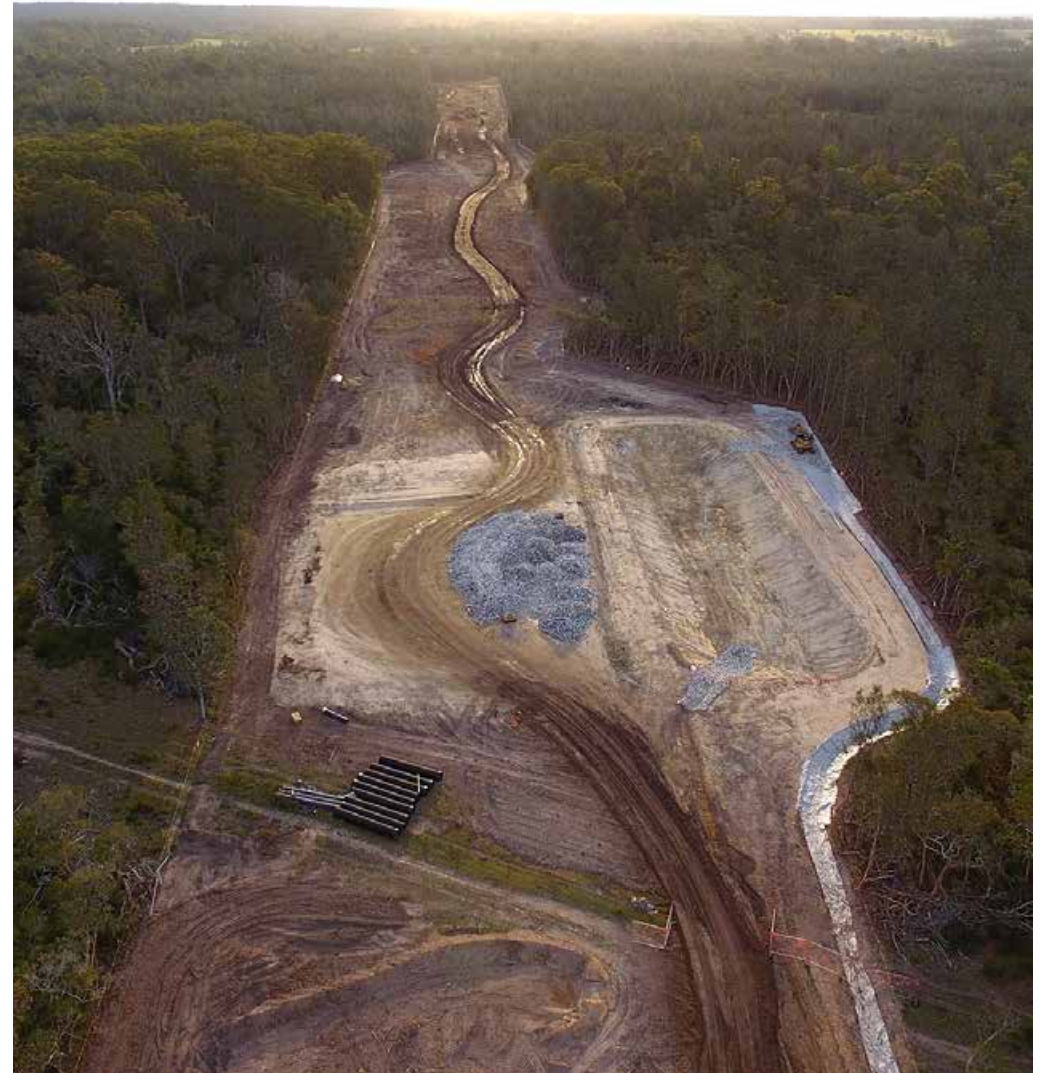


For more detailed information visit the project website at www.rms.nsw.gov.au/pacific or call the Pacific Highway office on 1800 653 092

Earthwork (Wave 5A) Glenugie to Tyndale



The scraper fleet ready to start following clearing works



Erosion and sediment control pond

Woolgoolga to Ballina - projects being prepared for major work

Project snapshot

Contractors: Pacifico

Form of contract: Design and build

Pieces of large machinery: 6

Start date of major construction: August 2016

Expected completion date:
Open to traffic by 2020

Project value: Forms part of the Woolgoolga to Ballina upgrade

Bridge over Clarence River at Harwood

Background

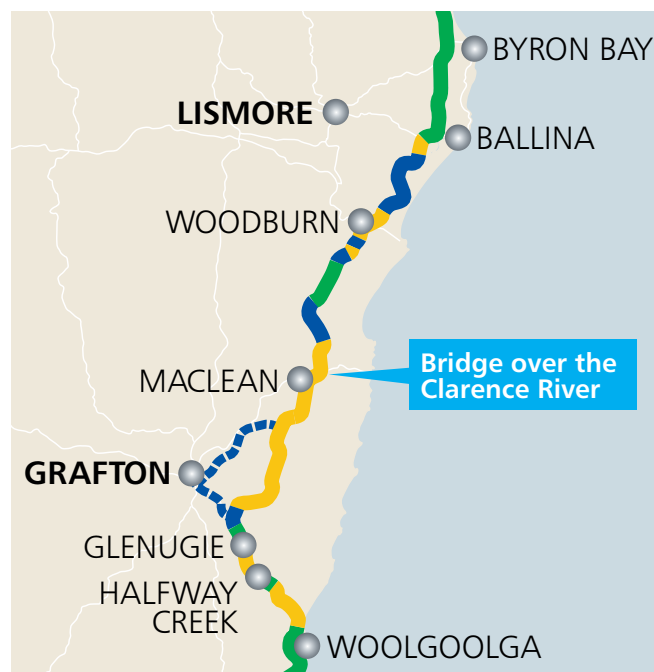
The bridge over the Clarence River at Harwood project is part of the Woolgoolga to Ballina Pacific Highway upgrade. The project is jointly funded by the Australian and NSW governments. It involves building a 1.5 kilometre long, four lane divided bridge, about 20 metres east of the existing Harwood Bridge. Work started in late August 2016 to provide important information for the design of the new bridge over the Clarence River at Harwood. Activities included drilling and investigation work so that ground condition information can be considered in the detailed design.

Key activities during October 2016

No days were lost to wet weather during this time. ☁️

- Continued geotechnical investigations
- Continued work on the detailed design development.

6 pieces of large machinery on site



Geotechnical investigations in progress

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: 160

Pieces of large machinery: 120

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

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 River 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 October 2016

Half a day was lost to wet weather during this time. 

- Continued earthworks, 92 per cent complete
- Continued placement of the shoulder pavement
- Continued landscaping work
- Minor controlled blasting started south of Range Road
- Lean mix concrete completed under approach slabs at Corindi Access Road bridge and Corindi River floodplain bridge.

160 workers on site



120 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



Hydroseeding the batters as part of the landscaping work



Shoulder pavement placement



Wax compound application on concrete

Woolgoolga to Ballina - projects being built

Project snapshot

Contractors: Civil Mining & Construction

Form of contract: Build only

Workers on site: 152

Pieces of large machinery: 45

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 new 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 October 2016

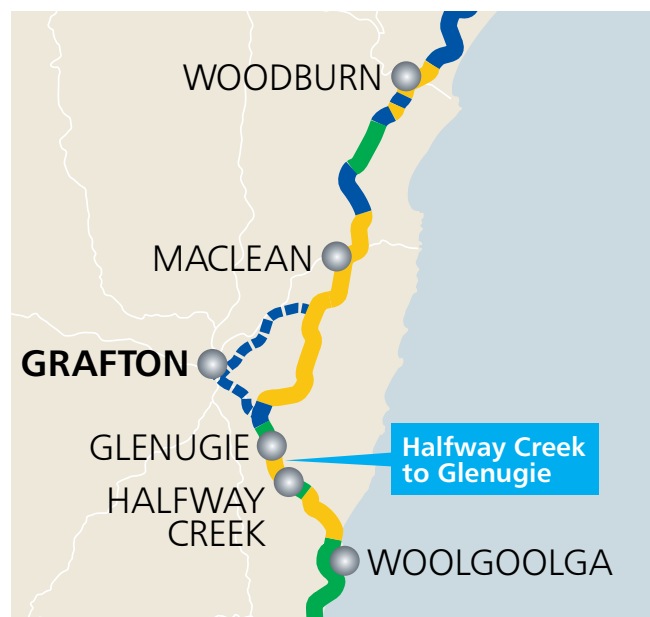
No days were lost to wet weather during this time. 

- Continued earthworks, 92 per cent complete
- Completed installation of bridge parapets and traffic barrier rails at the new Halfway Creek bridges
- Completed installation of bridge parapets at the new Wells Crossing bridges
- Installed stormwater drainage, 75 per cent complete
- Continued concrete paving, 35 per cent complete
- Completed concrete paving and started finishing work between Kungala Road and Wells Crossing.

152 workers on site



45 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



Concrete paving south of Bald Knob Road



Finishing work on the new northbound carriageway south of Wells Crossing



Concrete paving north of Wells Crossing



Northbound Halfway Creek bridge railing completed

Environment

Working together to secure the future of endangered fish

Roads and Maritime Services has worked with NSW Department of Primary Industries (DPI) and contractors to secure the future of endangered fish in waterways along the Pacific Highway upgrade.

Recent work on the Woolgoolga to Ballina upgrade involved environment protection strategies to conserve endangered fish, *Oxleyan Pygmy Perch*.

DPI Fisheries commended the site team for excellence in environmental performance and best practice for their work at Tabbimoble Floodway No 1 and sites north and south of Lang Hill, three creeks known to be habitat for the *Oxleyan Pygmy Perch*.

Working to strict deadlines, the team completed earthwork within 50 metres of the *Oxleyan Pygmy Perch* habitat that included innovative soft scour treatments, water quality measures and landscaping with over 8000 creek grass plants to stabilise the sites before the *Oxleyan Pygmy Perch* spawning season.

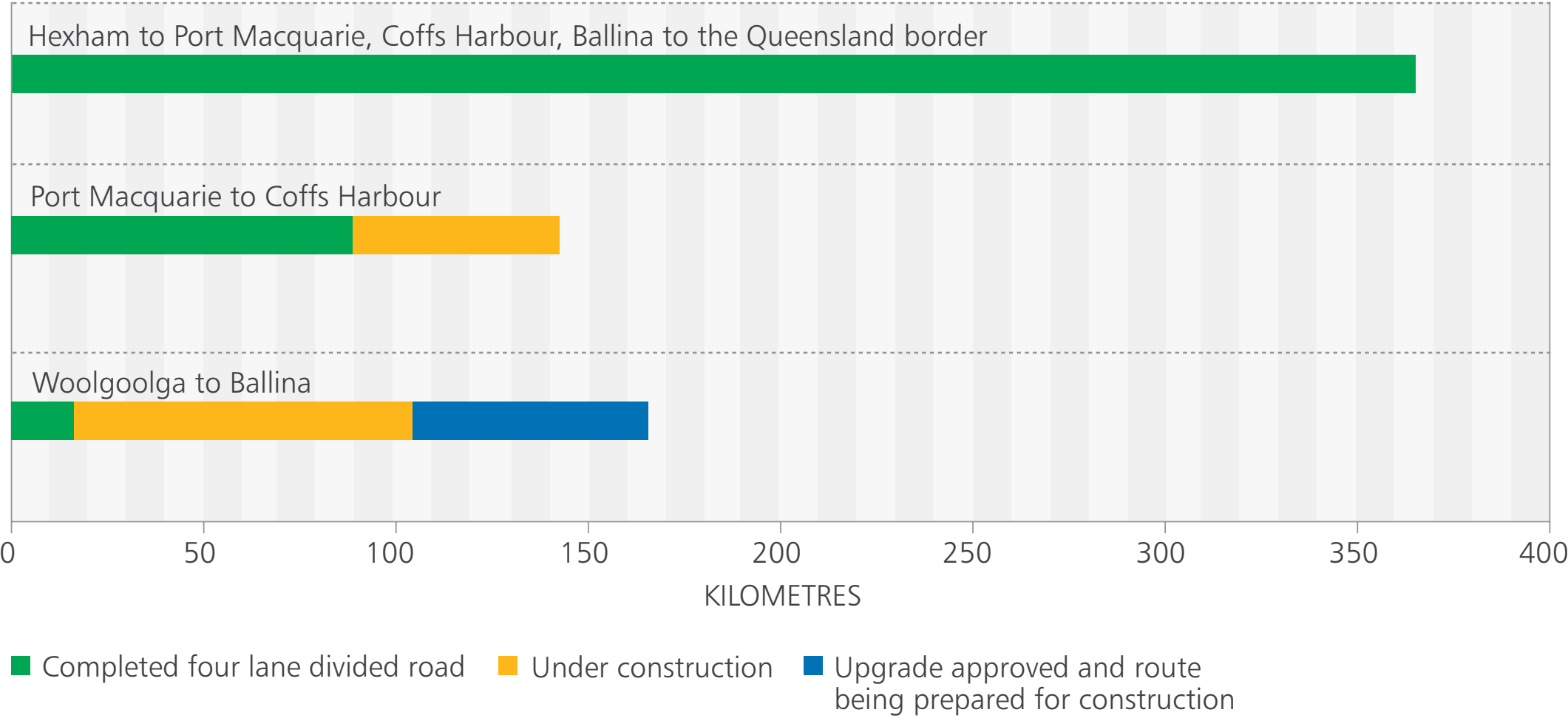
The team were recognised for their collaborative approach to overcoming a range of challenges as well as their monitored approach to clearing at all sites to ensure minimal disturbance to *Oxleyan Pygmy Perch* habitat.

In commending the project team staff and culture, for their promotion of aquatic biodiversity, DPI also acknowledged the support and collaboration of Soil Conservation Service, and environmental representatives for the NSW Department of Planning and Environment.



More than 8000 creek grass plants were used to stabilise the sites before the *Oxleyan Pygmy Perch* spawning season

Four lane divided road status



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

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**