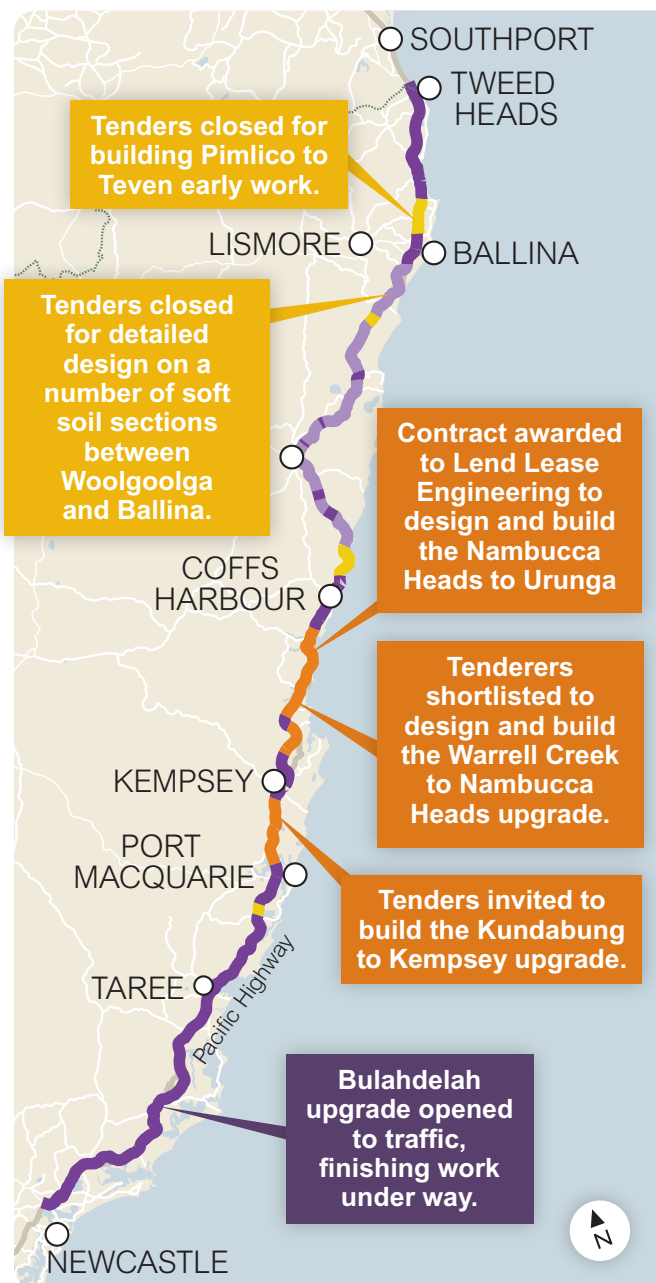


Pacific Highway upgrade

Achievement report **June / July 2013**





Pacific Highway upgrade

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

As at 31 July 2013, 368 kilometres of four-lane divided road have been completed, about 50 kilometres are under construction and the remaining sections of two-lane highway are being prepared for major work.

About 56 per cent of the final highway length is now four-lane divided road.



50 km of highway under construction during June and July 2013.



An average of 830 construction workers on site.



For overall upgrading strategy refer to the second last page.

LEGEND

- Four-lane divided road
- Environmental assessments or concept designs being prepared for the remaining sections of single lane highway
- Tendering phase
- Under construction

Open to traffic

Contractors: Lend Lease Engineering
Form of contract: Construction contract
Average workers on site: 159
Average pieces of large machinery: 57
Start date of major construction:
August 2010
Open to traffic:
June 2013, finishing work under way
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.



Sign installation south
of the northern interchange

Bulahdelah upgrade

Background

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

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

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

Key construction activities during June and July 2013

About 10 days were lost due to wet weather during this time. 

- Community day held on 22 June to mark the opening of the project to traffic.
- Bypass opened to traffic on 27 June. Finishing work continued in July:
 - ✓ Asphalt paving and line marking on the northbound lanes of the main highway alignment and at the Booral Road turn off.
 - ✓ Noise wall construction.
 - ✓ Permanent highway signs, wire rope and safety barrier installation.
 - ✓ Landscaping work.

Bulahdelah upgrade open to traffic



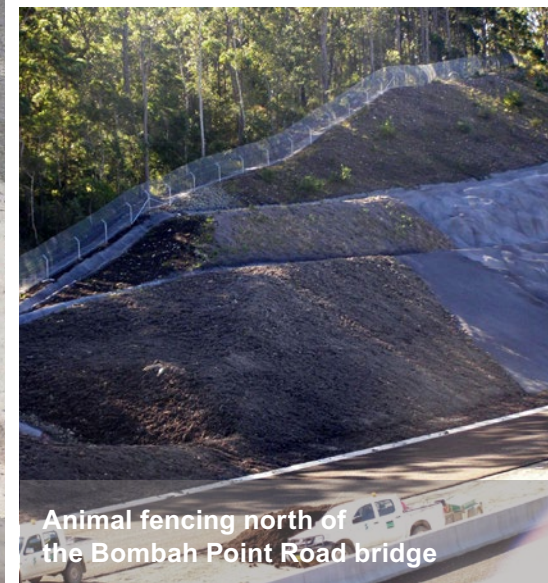
Sign and noise wall installation on the northbound lanes, near the northern interchange



Concrete gutter installation south of the northern interchange



Southbound lanes open to traffic, south of Alum Mountain



Animal fencing north of the Bombah Point Road bridge

Under construction

Contractors: BMD Constructions Pty Ltd

Form of contract: Construction contract

Average workers on site: 46

Average pieces of large machinery: 50

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.



New northbound lanes opened to traffic

Hérons Creek to Stills Road upgrade


Background

The Herons Creek to Stills Road upgrade was approved to proceed on 5 October 2007 by the then Roads and Traffic Authority.

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

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

Key construction activities during June and July 2013

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

- Finishing work continued on Herons Creek twin bridges and the Bago Road interchange including paving work on southbound on and off ramps.
- Earth work and finishing work continued for local roads and connections including paving.
- Asphalt paving 90 per cent completed on Banks Road, which is now open to school traffic.
- Construction continued on a traffic diversion next to Cutty Creek to allow for the construction of the animal underpass beneath the existing highway. The highway will be reduced to a single lane in this area while the underpass work is carried out.
- Rope bridge installation continued at Cutty Creek for overhead animal passage.
- Temporary sedimentation bases removed.
- Topsoiling and revegetation work continued throughout the project.

Incident investigation – site contamination

Roads and Maritime Services (RMS) has remediated a contaminated area on the project which affected the health of a number of workers. The location of this site is where, in December 1980, a truck carrying a mixed load of waste crashed on the Pacific Highway.

Advice from a third party auditor supports the findings the site has been successfully remediated.

RMS has started to remediate about 4,000m³ of material at the Hastings Valley Motorcycle Club bike track.

More information is available on the project website at www.rms.nsw.gov.au/pacific (by clicking on Herons Creek to Stills Road).

Herons Creek to Stills Road upgrade under construction



Flood protection work



Bago Road interchange overpass



Animal underpass construction at Cutty Creek



Placing base fill



Milling old pavement on Burrawan Forest Drive

Under construction

Contractors:

Leighton Fulton Hogan Joint Venture

Form of contract:

Design and construct contract

Average workers on site: 269

Average pieces of large machinery: 175

Start date of major construction:

August 2010

Expected completion date:

Second half of 2014 (weather permitting)

Project value: \$850 million

Australian Government contribution:

\$705 million *

NSW State Government contribution:

\$145 million *

* Contribution amounts may vary from year to year.



Earth work continues on southbound lanes,
looking north to Double Crossing Creek

Sapphire to Woolgoolga upgrade

Background

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

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

Key construction activities during June and July 2013

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

- Construction completed on Diamond Head Drive overpass and local road connections.
- Construction continued on the Arrawarra interchange.
- Construction continued on local roads.
- Bridge decks poured at Eggins Drive at Arrawarra, Graham Drive north at South Woolgoolga and at Fiddamans Road and Smiths Road at Emerald Beach.
- Other bridge work, pavement construction and retaining wall construction continued on the project.
- Earth work and drainage work continued across the project.
- Controlled blasting continued about two kilometres northwest of Woolgoolga.

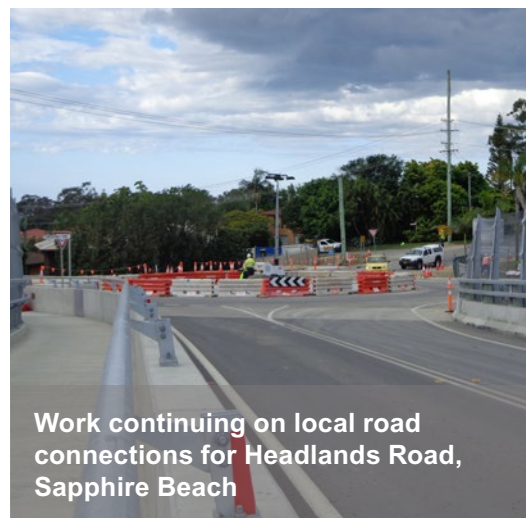
Sapphire to Woolgoolga upgrade under construction



Sugar Gliders in a nest box located in the Wedding Bells State Forest



Drainage and earthwork under way between Moonee Beach and Wakelands Road



Work continuing on local road connections for Headlands Road, Sapphire Beach



Construction continuing on the north and southbound lanes to the north of Headland Road at Sapphire Beach

Under construction

Contractors: John Holland

Form of contract: Construct only contract

Average workers on site: 83

Average pieces of large machinery: 35

Start date of major construction:
December 2011

Expected completion date:
Early 2014 (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.



Widening work at the
northern end of the project

Devils Pulpit upgrade

Background

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

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

It forms part of the larger Woolgoolga to Ballina project.

Key construction activities during June and July 2013

About 12 days were lost due to wet weather. 

- Earth work completed on the middle and southern sections of the project, with work 70 per cent completed on the northern section.
- Spray seal completed for six kilometres of the main highway alignment.
- Paving work continued, with about five kilometres of sub base paving and three kilometres of concrete paving completed.
- Work started on road shoulders including paving.
- Earth work 90 per cent completed at the northern end of the project.
- Topsoiling and stabilisation work continued.
- Sub-contract awarded for rectification work for the existing highway.
- Tenders closed for landscaping and revegetation work.
- Tender documents being prepared for rest area facilities.

Devils Pulpit upgrade under construction



Concrete base paving for road shoulders



Kerb work in between the north and southbound lanes in the middle section of the project



Base concrete paving in the middle of the project



View of the concrete batch plant on the project site



Curing sub-base concrete paving in the middle of the project

Under construction

Contractors: Lend Lease Engineering
Form of contract: Design and construct
Average workers on site: 246
Average pieces of large machinery: 180
Start date of major construction:
September 2012
Expected completion date:
End of 2014 (weather permitting)
Project value: \$862 million
Australian Government contribution:
\$566.1 million **
NSW State Government contribution:
\$295.9 million **

** Contribution amounts may vary from year to year.



Earth work at Knockrow

Tintenbar to Ewingsdale upgrade


Background

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

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

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

Key construction activities during June and July 2013

Extensive wet weather was experienced on the construction site during this period.
About 34 days were lost to wet weather. 

- Limited earth work continued, due to ongoing wet weather.
- Excavation work continued on the northern and southern entrances to the St Helena twin tunnels.
- Controlled blasting continued at the twin tunnels.
- Detailed design work continued.
- Bridge work continued at Emigrant, Skinners, Byron and Minor creeks and at Broken Head Road. Arch construction continued near the local fish farm and at Martins Lane West.
- Drainage work continued.
- Watsons Lane remains closed to allow for construction activities.

Tintenbar to Ewingsdale upgrade under construction



Drainage installation work



Bridge work at Emigrant Creek near Newrybar



Arch structure at Knockrow



Paving work on Broken Head Road



View of the northern entrances to the twin tunnels at St Helena

Preconstruction projects

Priority two

(Port Macquarie to Raleigh)

The completion of the Pacific Highway upgrade has been divided into three key priorities. Priority one projects will be completed by the end of 2014.

Priority two projects will provide completion of a four-lane divided road between Port Macquarie and Raleigh (south of Coffs Harbour). Progress has already been made on this section with the completion of the Kempsey bypass.

There are 105 kilometres left to be upgraded to four-lane divided road, in order to complete priority two. These projects are being prepared for major work to start.

Oxley Highway to Kempsey upgrade

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

Planning for the project is jointly funded by the Australian and NSW governments. The project will be built in two sections.

Oxley Highway to Kundabung

Activities under way during June and July 2013

- Geotechnical investigations and ground survey work completed.
- Land acquisitions continued.
- Environmental assessment and consistency reviews being finalised for design refinements.
- Tenders invited to design and build the upgrade.
- Tenders closed and assessed for Sancroix Road interchange early work building contract.
- Investigations started for animal nesting and roosting boxes.

Kundabung to Kempsey

Activities under way during June and July 2013

- Tenders invited to build the upgrade.
- Pre-tender meeting held for construction of the upgrade.
- Environmental assessment and consistency reviews being finalised for design refinements.
- Land acquisitions continued.
- Investigations started for animal nesting and roosting boxes.

Preconstruction projects

Frederickton to Eungai

The NSW Minister for Planning approved the total Kempsey to Eungai upgrade in 2008.

The Frederickton to Eungai section is the second stage of this upgrade and will provide about 26.5 kilometres of four-lane divided road from the Kempsey bypass to Eungai Rail.

A contract for the design and construction of the upgrade was awarded to Thiess Pty Ltd in December 2012.

Activities under way during June and July 2013

- Utility relocations and field investigations continued in preparation for the start of major work in August 2013.
- Detailed design 85 per cent completed.
- Completion and submission of construction environmental management plan to Department of Planning and Infrastructure for approval.
- Early work started including construction of access tracks and boundary fencing, installation of site sheds at the southern end of the project and provision of nest boxes for biodiversity.
- Weather permitting, the project will open to traffic by the end of 2016.

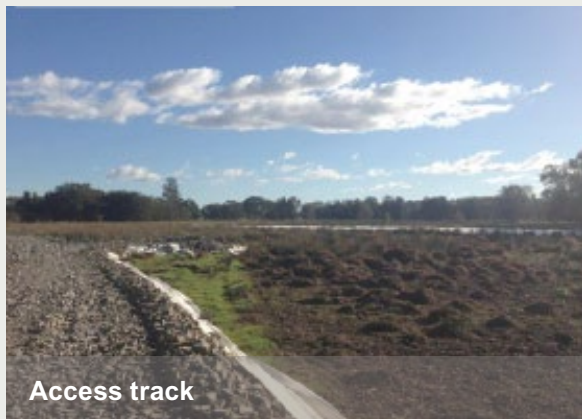
Installing nest boxes



Preparing the site compound
at the southern end of the project



Access track



Preconstruction projects

Warrell Creek to Urunga

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

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

Lend Lease Engineering was selected as the preferred tenderer for the design and construction of the Nambucca Heads to Urunga section in December 2012.

Warrell Creek to Nambucca Heads

Activities under way during June and July 2013

- Geotechnical investigations and survey work to identify ground levels completed.
- Preconstruction activities continued, including land acquisitions and environmental work.
- Lend Lease Engineering and the Acciona Ferrovia Joint Venture were shortlisted to design and build the upgrade.
- Revised noise and flood modelling continued.
- Investigations continued into a colony of flying foxes which has recently occupied an area on the approved project alignment.
- Report on options for the highway alignment in the vicinity of the flying fox colony being prepared for public display. Comments in response to the display will be considered before a preferred route in the vicinity of the colony is selected.

Nambucca Heads to Urunga

Activities under way during June and July 2013

- Contract awarded to Lend Lease Engineering to design and build the upgrade.
- Detailed design work continued.
- Utility relocations continued.
- Field investigations continued including plant and animal, ground level survey, water quality, environmental and Aboriginal heritage.
- Architectural noise treatments continued.
- Preconstruction activities under way including establishment of site compound and community information centre.
- Weather permitting, the project will open to traffic by the end of 2016.

Preconstruction projects

Priority three

(Woolgoolga to Ballina)

The completion of the Pacific Highway upgrade has been divided into three key priorities. Priority one projects will be completed by the end of 2014, weather permitting.

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

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



Floodplain drilling at Broadwater

Woolgoolga to Ballina

Background

The Woolgoolga to Ballina project will upgrade about 155 kilometres of highway to four-lane divided road. This project does not include the completed Glenugie upgrade or the Devils Pulpit upgrade (which is being built).

Activities under way during June and July 2013

- Submissions and preferred infrastructure report on the environmental impact statement being considered by NSW Department of Planning and Infrastructure and federal Department of Sustainability, Environment, Water, Population and Communities.
- Survey investigations continued to gather data for design purposes.
- Detailed design work completed on Woolgoolga to Glenugie section, with some further modifications being made in response to community consultation.
- A number of tenders closed and currently being considered including for the detailed design of a number of soft soil sections, for updating flood modelling for the Richmond and Clarence river floodplains, and for forming a number of environmental panels to assist with specialist support services for the upgrade.
- Land acquisitions continued.

Pimlico to Teven

Soft soil and building preparation work is being carried out between Pimlico and Teven, just south of the completed Ballina bypass, so that this location will be ready for major work to start as part of the larger Woolgoolga to Ballina upgrade.

The Pimlico to Teven project will involve building a bridge over Duck and Emigrant creeks, upgrading the Pacific Highway and Bruxner Highway intersection just south of Ballina, providing about two kilometres of new road on the Pacific Highway and more than one kilometre of new road on the Bruxner Highway. The project is being carried out in three stages.

The first stage was completed by the Ballina Bypass Alliance.

- Tenders for building stage two closed 12 June 2013 and are currently being considered.
- Tenders for site management have also closed and are currently being considered.
- Utility relocations being arranged.
- Land acquisitions continued.
- Stage three will be completed as part of the larger upgrade.

Under construction

Safety improvement work

Contractors:

RMS, Road and Fleet Services

Current work site:

Old Post Office Lane, Ulmarra
(north of Grafton)

Average workers on site: 10

Average pieces of large machinery: 0

Start date of major construction:

November 2009

Expected completion date:

Mid 2014, weather permitting

Project value: \$55 million



Improvement work nearing completion
at Old Post Office Lane

Background

A program of safety improvements work has been developed as part of the Australian and NSW governments' commitment to upgrade the Pacific Highway to mid 2014.

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

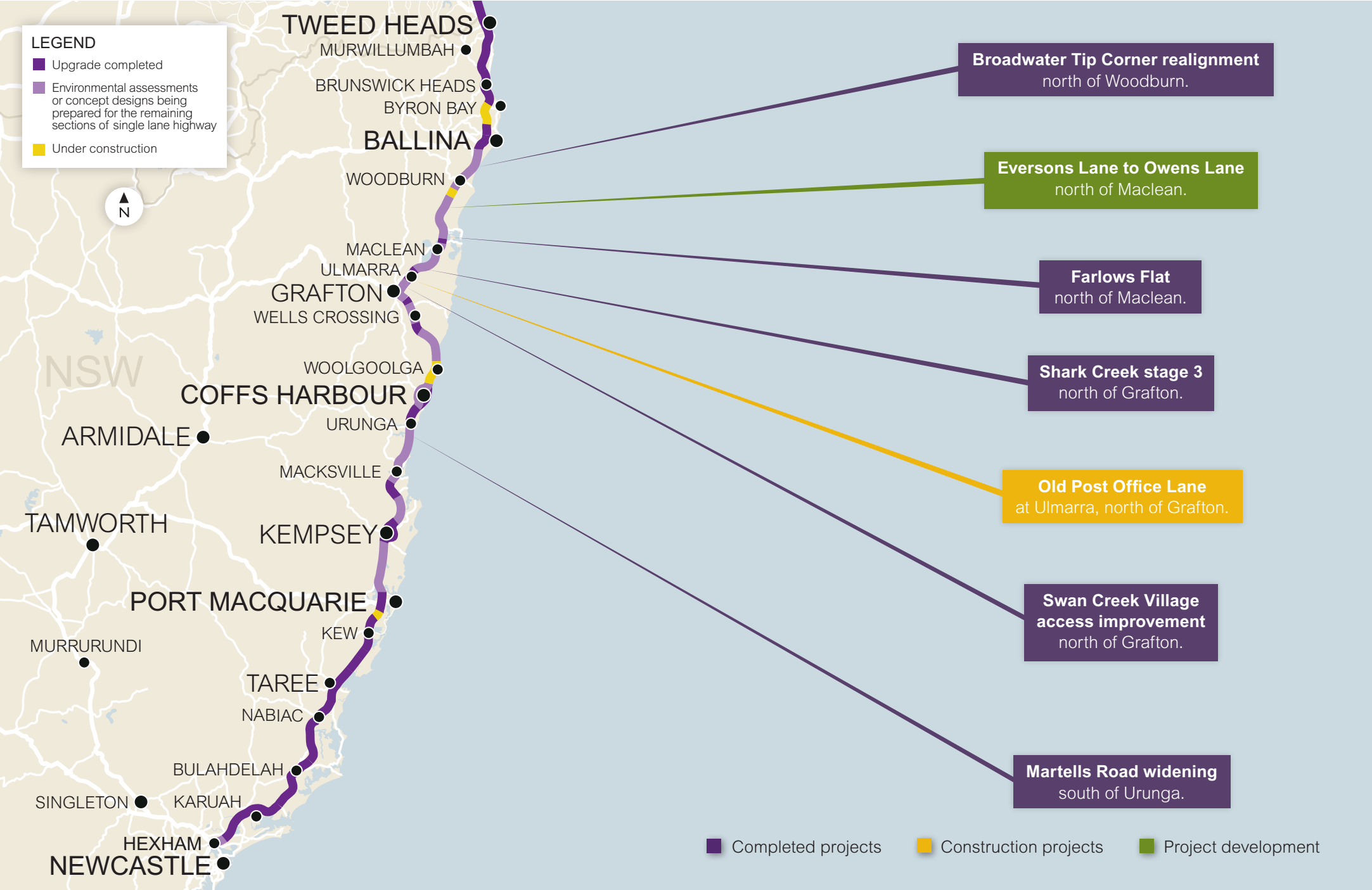
A package of smaller work is being delivered to keep these sections safe and serviceable until upgrades can be completed. This work is also aimed at reducing the delays caused by local and major flood events.

Work is currently under way near Old Post Office Lane, Ulmarra. It involves widening the road, realigning the curve of the road and providing turning lanes at the Old Post Office Lane intersection.

Key construction activities under way during June and July 2013

- Lean mix concrete paving work finished.
- Shoulder widening work under way, with underlying rock layer 60 per cent completed.

Safety improvement work under construction



Environment



Kempsey bypass paves the way for major awards

The Kempsey Bypass Alliance has been twice recognised for its significant environmental achievements.

On 7 June 2013, the Alliance, which is made up of Roads and Maritime Services (RMS), Leighton Contractors Pty Ltd, AECOM and Coffey, won a 2013 United Nations Associate of Australia World Environment Day Award.

The award was presented for Sustainability Leadership in the large organisations category.

On 28 June 2013, the Alliance won a further Civil Contractors Federation (CCF) Earth Award under the category of projects totalling more than \$75 million.

The World Environment Day Awards are held each year in support of World Environment Day (on 5 June 2013) to recognise innovative and outstanding environmental programs and initiatives from across Australia and the important work of Australian environmental leaders.

The CCF Earth Awards are also held annually and recognise construction and environmental excellence in civil construction throughout Australia.

In designing and building the recently completed Kempsey bypass, the Alliance put in place a series of best practice environmental controls to minimise impacts and promote environmentally sustainable practices.

This included:

- Sustainable and energy efficient initiatives like a reed-bed based natural wastewater system at the main site compound.
- Haul roads to minimise the construction footprint and allow heavy vehicles to operate more efficiently.
- Reuse of excavated materials to minimise waste.
- Use of biological controls in pest management.
- An efficient blast program to minimise amenity impacts on the community and reduce the number of blasts.

The Kempsey Bypass Alliance has also been shortlisted for a third major Engineering Excellence honour as part of the Engineering Australia awards, which are also held annually and showcase outstanding engineering achievements throughout Australia. The award ceremony will be held on 23 August 2013.

The 14.5km Kempsey bypass was opened to traffic on 27 March 2013. It is the first stage of the larger Kempsey to Eungai upgrade and includes a major crossing of the Macleay River and floodplain, which at 3.2km long is currently the longest road bridge in Australia.

RMS formed the Kempsey Bypass Alliance to design and build the main highway upgrade. The bridge crossing of the Macleay River and the Macleay River floodplain was built under a separate contract.

Four-lane divided road status

