

Inland Rail

Community Consultative Committee update

Narromine
28 March 2022

ARTC Inland Rail



ACKNOWLEDGMENT OF COUNTRY

Inland Rail acknowledges
the Traditional custodians of
the land on which we work,
and we pay our respects to
Elders past and present.

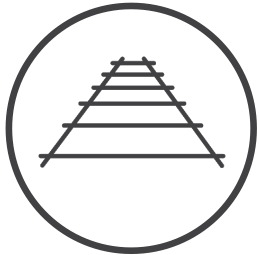
AGENDA

1. N2N Project Update – Duncan Mitchell
2. EIS Update – Matthew Errington
3. Hydrology Update – Akhter Hossain
4. Route Selection Update – Duncan Mitchell
5. Engagement Update – Louise Johnson

N2N PROJECT UPDATE



KEY PROJECT FEATURES



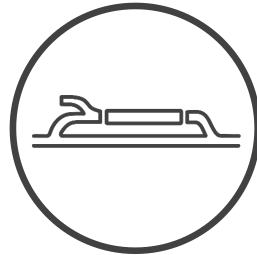
RAIL CORRIDOR

Constructing approx. 306km of new rail corridor



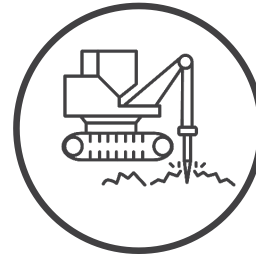
CAPACITY

Accommodating 1.8km-long double-stacked freight trains



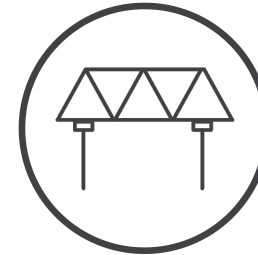
CROSSING LOOPS

7 crossing loops up to 2.2km long



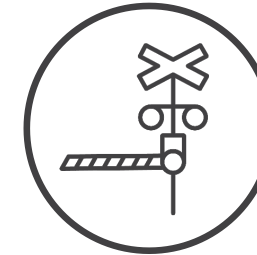
ANCILLARY WORKS

Signaling and communications, road re-alignments, utility relocations, drainage, signage, fencing, embankments and cuttings



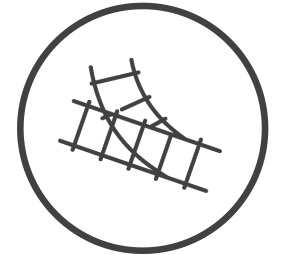
BRIDGES

75 new bridges and viaducts, ranging in length from 15m to 3.9km



PUBLIC LEVEL CROSSINGS

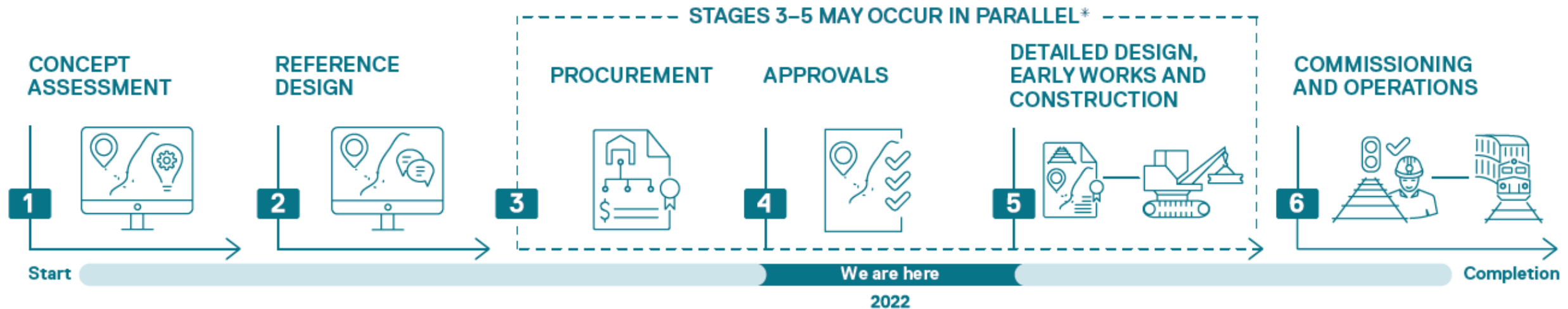
51 new level crossings
+ 12 active crossings with flashing lights, bells and boom gates



NEW CONNECTIONS

New rail connections and possible future connections with existing ARTC and Country Regional Network rail lines

WHERE WE ARE IN THE PROCESS



Inland Rail will not start any major construction works on the Narromine to Narrabri section until all regulatory and environmental approvals are obtained

January – Community shopfront opening



February - Meet the Contractor event



A MAJOR BOOST FOR NEW SOUTH WALES



* Revised analysis by PricewaterhouseCoopers December 2020

A MAJOR BOOST FOR JOBS

MORE THAN
21,500

DIRECT AND INDIRECT JOBS
at the peak of construction*

- + Construction roles across more than 20 disciplines
- + Manufacturing roles in steel plants, quarries and with major suppliers
- + Ongoing roles including engineering, geotech, communications, and logistics



WE NEED TO WORK TOGETHER TO MAXIMISE THE VALUE

- + Better connections to state rail networks
- + New enterprise opportunities
- + Special Activation Precincts and the 'Inland Port'
- + Intermodal access along the alignment
- + Intermodal terminals for Brisbane and Melbourne
- + Enhanced port connections (Melbourne + Brisbane) to be determined (separate to Inland Rail scope)



IGNITING THE SUPPLY CHAIN

Local governments are seizing the opportunity to plan and invest in complementary infrastructure and play to their regions' strengths

Australian Government has committed \$44 million to an Inland Rail Interface Improvement Program



Parkes – Special Activation Precinct



Moree – Special Activation Precinct



Narrabri – 'Inland Port'

ARTC

INLAND
RAIL
An Australian Government Initiative

Community Benefits

Narrabri to North Star Phase 1

September 2020
to December 2021

920

PEOPLE

have worked on the project
since September 2020



135

of whom are
Indigenous

281 LOCAL
RESIDENTS

have worked on the project

71 of whom are local
and Indigenous

487

people employed
for 26 weeks or over
for a minimum of
15 hours a week

SUSTAINABLE JOBS

62

TRADESPEOPLE
EMPLOYED



90

WOMEN EMPLOYED



127

local businesses
have supplied to
the project

9

Indigenous
businesses
Australia-wide

\$72.7M

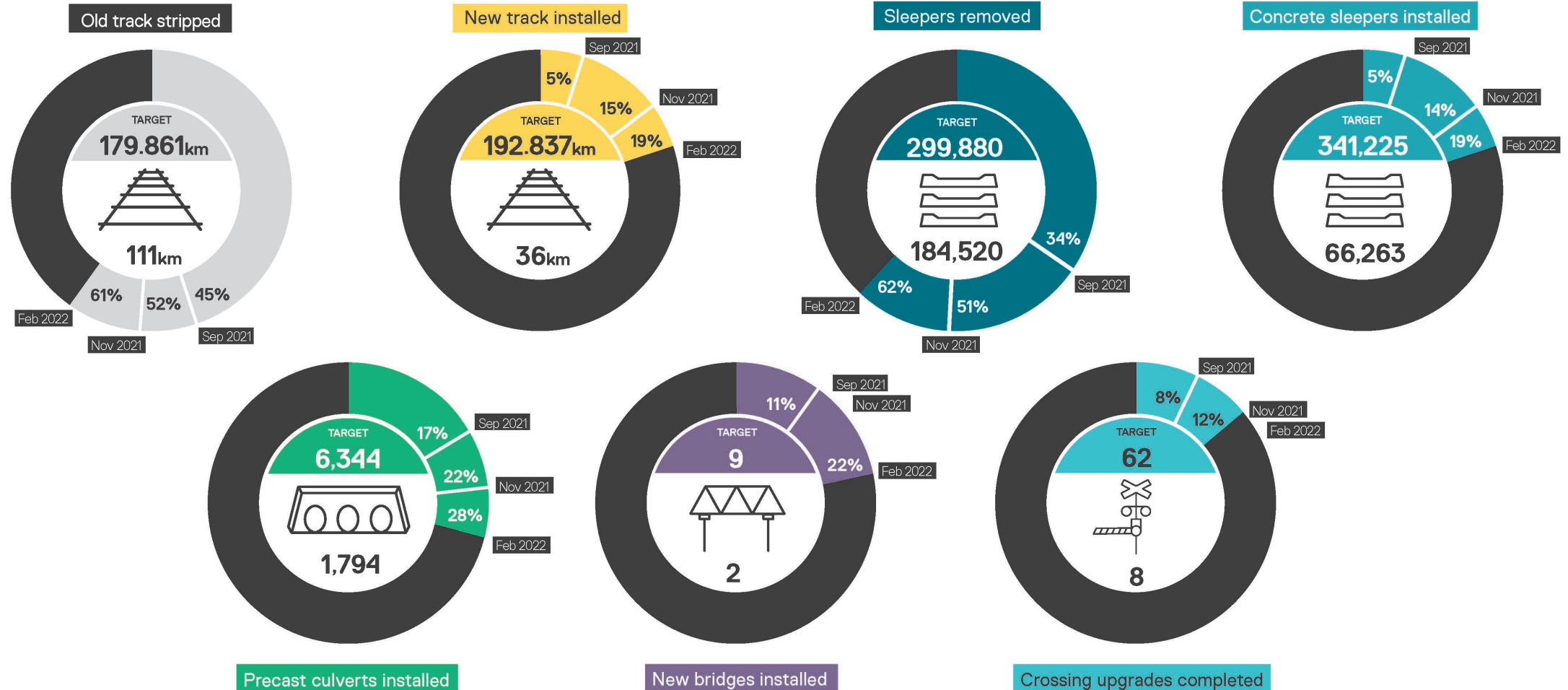
total spend
with local
businesses

\$5.8M

total spend with
Indigenous businesses
Australia-wide

Narrabri to North Star Phase 1 construction progress

Each quarter, we're tracking the N2NS Phase 1 project team's construction progress against completion targets across key activity areas.



EIS UPDATE



OVERVIEW

- EIS Process
- Response to Submissions Report
- Preferred Infrastructure Report
- Route Selection Summary Report
- Amendment Report
- Additional Environmental Assessment
- Biodiversity Update
- Next Steps



EIS PROCESS

Next steps	Status response	
Concept Assessment	<ul style="list-style-type: none"> - Prepare State Significant Infrastructure Application Report - Lodge State Significant Infrastructure Application Report 	<ul style="list-style-type: none"> ✓ ✓
Reference Design and EIS	<ul style="list-style-type: none"> - Receive Secretary's Environmental Assessment Requirements (SEARS) - Corridor refinements (Study Area, Focused Area and Rail Corridor) - Prepare EIS 	<ul style="list-style-type: none"> ✓ ✓ ✓
Project Assessment	<ul style="list-style-type: none"> - Exhibit EIS - Prepare Response to Submissions Report - Prepare Preferred Infrastructure/ Amendment Report - DPE assessment and determination 	<ul style="list-style-type: none"> ✓ - We are here - We are here - Ongoing
Project approval	<ul style="list-style-type: none"> - Receive planning approval 	<ul style="list-style-type: none"> - Late 2022
Construction	<ul style="list-style-type: none"> - begin early works, followed by major civil construction and rail and signalling work 	<ul style="list-style-type: none"> - Late 2022–2025
Operation	<ul style="list-style-type: none"> - Inland Rail Melbourne to Brisbane freight network to become operational 	<ul style="list-style-type: none"> - From 2027*

*N2N section is expected commence operation in 2026, however dates are indicative only and subject to change due to ongoing design development and community consultation

RESPONSE TO SUBMISSIONS REPORT

Top submission themes

116 submissions were received from the public, public authorities and organisations

Property – impacts, value

Noise and vibration impacts

Environmental issues – dust, native vegetation clearing, native fauna/wildlife impact

Vegetation management – fire risk

Visual impact

Route selection, level crossing, access issues and crossing points.

Borrow pits during construction

Use of local businesses

Aboriginal heritage

Rigour of flood modelling and consideration of local knowledge

Fencing and welfare of stock around the rail line



PREFERRED INFRASTRUCTURE REPORT

In April 2021, the Planning Secretary directed ARTC to provide a Preferred Infrastructure Report (PIR) which:

- Addresses the hydrology and flooding impacts of the Project
- Provides appropriate justification and information on the design of the Project and alternative rail alignments considered
- Provides design alternatives to demonstrate how residual flooding impacts can be reduced



ROUTE SELECTION SUMMARY REPORT

01



Location of the proposed alignment and exploration of alternate routes, such as using existing rail lines in the area

02



Consideration of floodplains when identifying routes

03



Analysis of the assessment criteria for determining routes

04




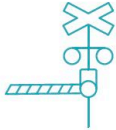




Property and business impacts associated with the final rail alignment

05



Environmental and cultural heritage concerns over the final rail alignment

AMENDMENT REPORT

PROPOSED FEATURE	PROPOSED AMENDMENT
 Crossing loops	Relocation of seven crossing loops to new locations to minimise overall impacts.
 Public level crossings	Changes to public level crossing numbers, locations and treatments due to changes to updated traffic data and refinement of sight distances.
 Public road closures	Reduction in the number of public roads and access tracks that would need to be closed, mainly as a result of crossing loop relocations.
 Public road realignments	Changes to public roads requiring realignment to minimise property impacts.
 Temporary workforce accommodation	<p>Changes to the locations of the Narromine North and Baradine temporary workforce accommodation facilities based on consultation with key stakeholders.</p> <p>Mobile accommodation facilities are now proposed be provided within some of the general compounds for improved workforce flexibility.</p>
 Construction and operation footprints	Adjustments to the construction and operational footprints to accommodate the above amendments and other proposed design refinements, and to minimise the amount of disturbance where possible.

Biodiversity

Flooding/hydrology

Noise and vibration

**Aboriginal cultural
heritage**

Social

... considered and responded to issues raised in submissions and during consultation with stakeholders

...assessed the impacts of the proposed amendments

...further progressed commitments made in the EIS

...responded to the request of the Planning Secretary in relation to flooding and hydrology.



Ongoing consultation with Biodiversity Conservation and Science division of DPE

...completed additional targeted flora and fauna surveys in September 2020 in a number of new areas where property access had not previously been available. Surveys also took advantage of wet spring conditions.

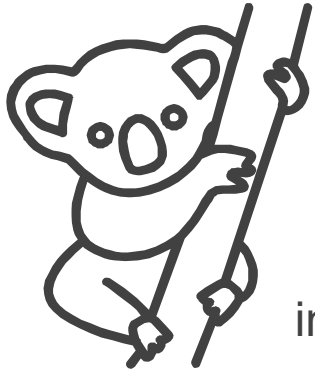
...revised construction and operation footprints have been mapped and assessed

...targeted fauna surveys in August 2021 using independent experts

...threatened flora surveys in Pilliga in March 2022



KEY TARGETED ADDITIONAL FAUNA SURVEYS



Thermal drone surveys were flown at night in August 2021 over the Pilliga to search for presence of Koalas.

Follow up day-time surveys were conducted to confirm initial findings from the drone surveys for Koalas.

Independent certified (by BCS) experts were engaged to provide advice on presence/absence of Koala, Little Eagle and Square-tailed Kite.



Findings used to confirm the presence/absence mapping of these species for use in the updated biodiversity impact assessment.



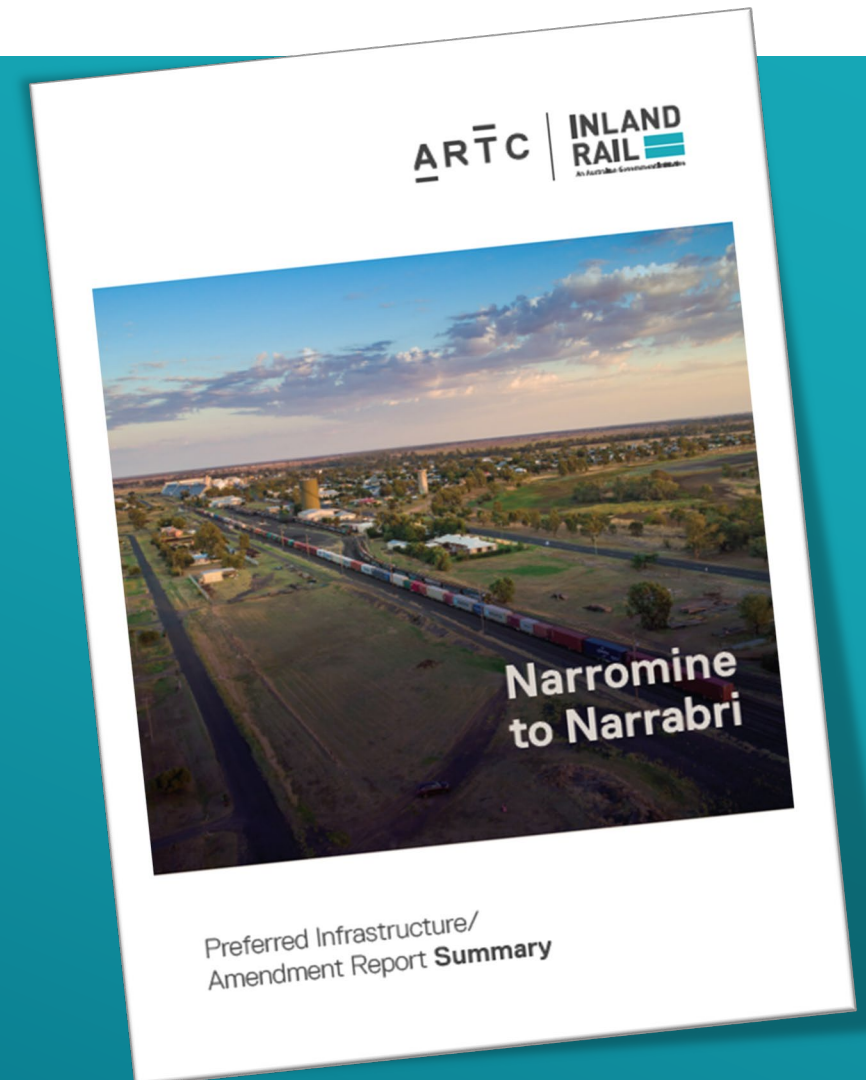
NEXT STEPS

Documentation will be publicly available on DPE's Major Projects Portal

PIR/Amendment Report Summary to help community navigate the documents

Social PinPoint to make detailed flood mapping publicly available along the entire alignment

Upcoming community consultation and stakeholder engagement activities

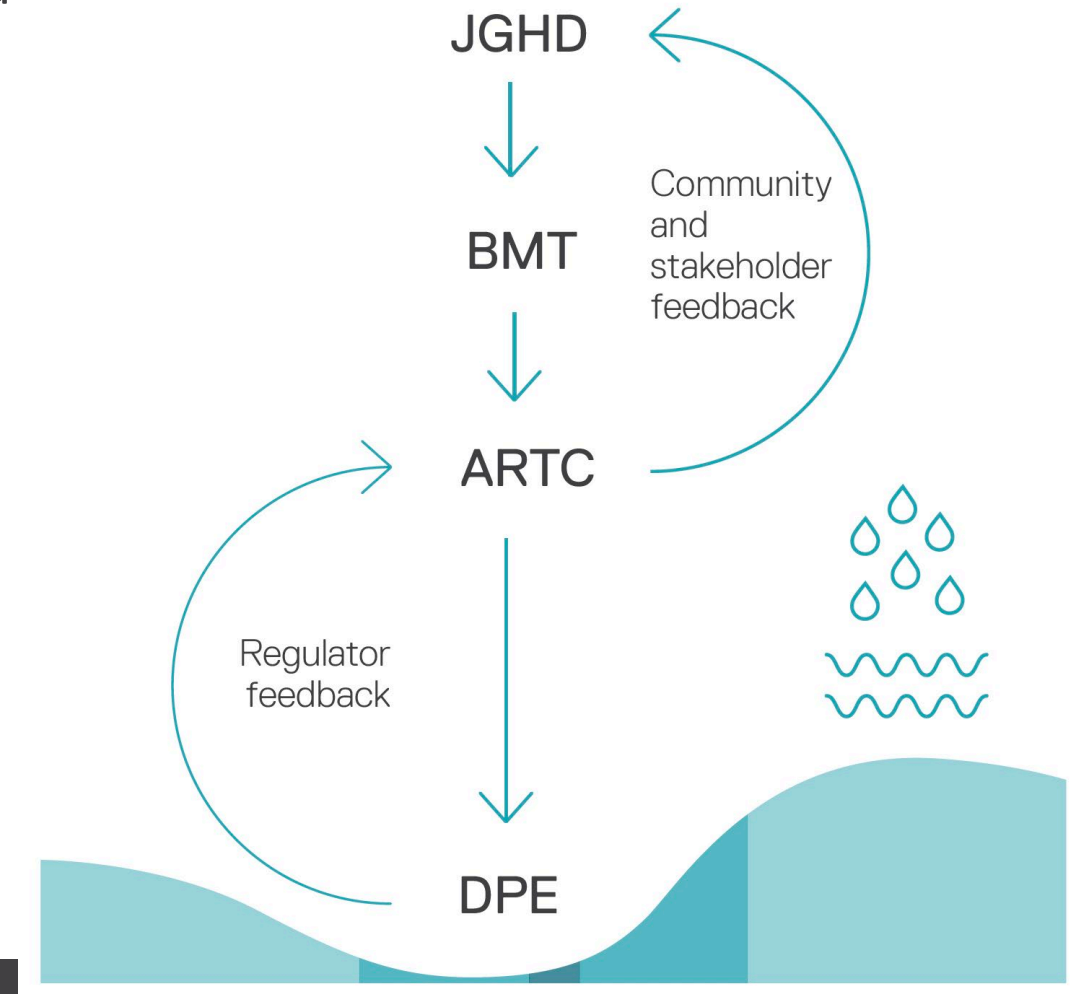


HYDROLOGY UPDATE



Updated flooding and hydrology assessment report (FHAR)

- Updated FHAR prepared to support Preferred Infrastructure / Amendment Report
- Regular and ongoing consultation with Department of Planning and Environment (DPE)

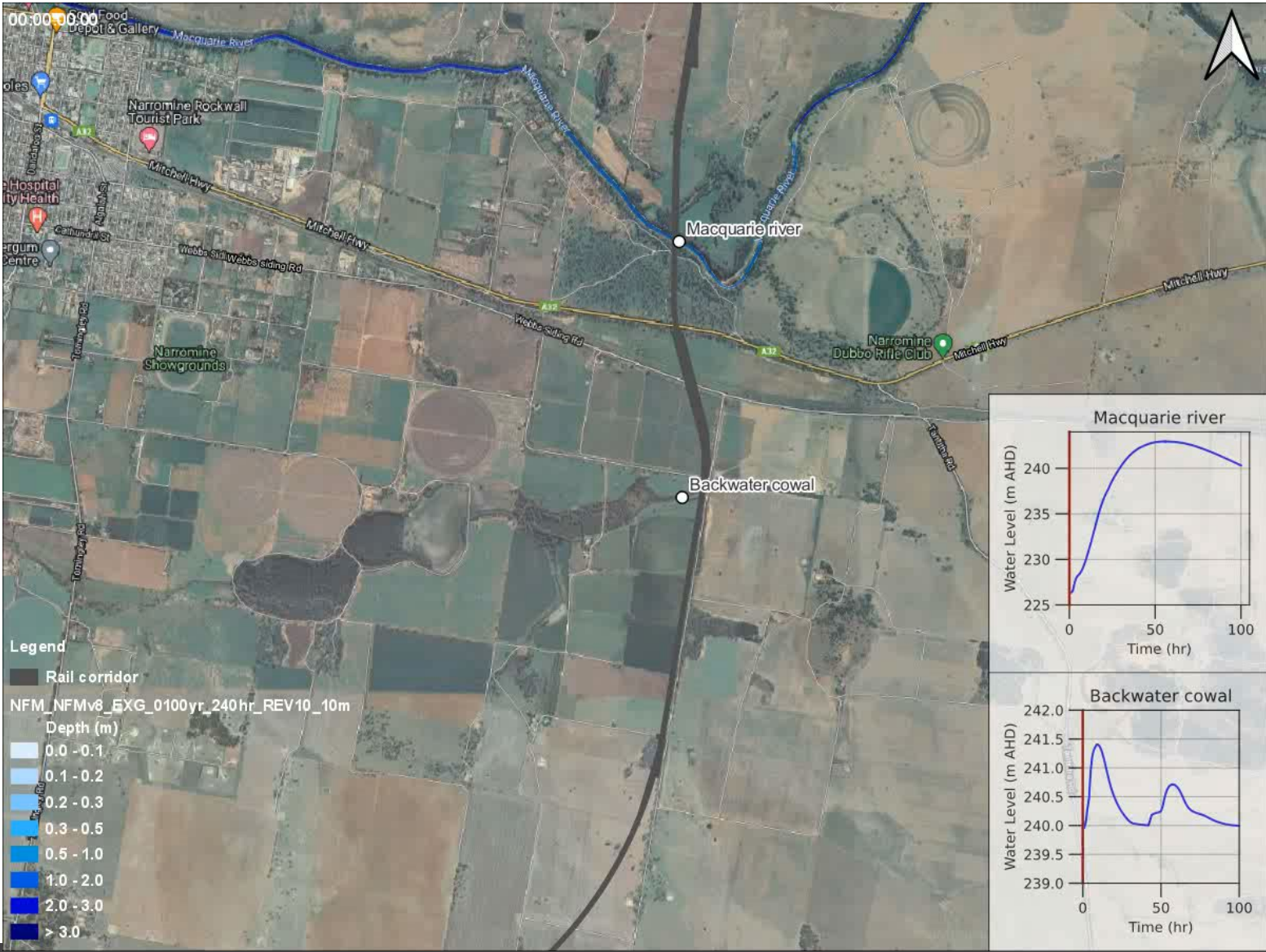


Assessment changes

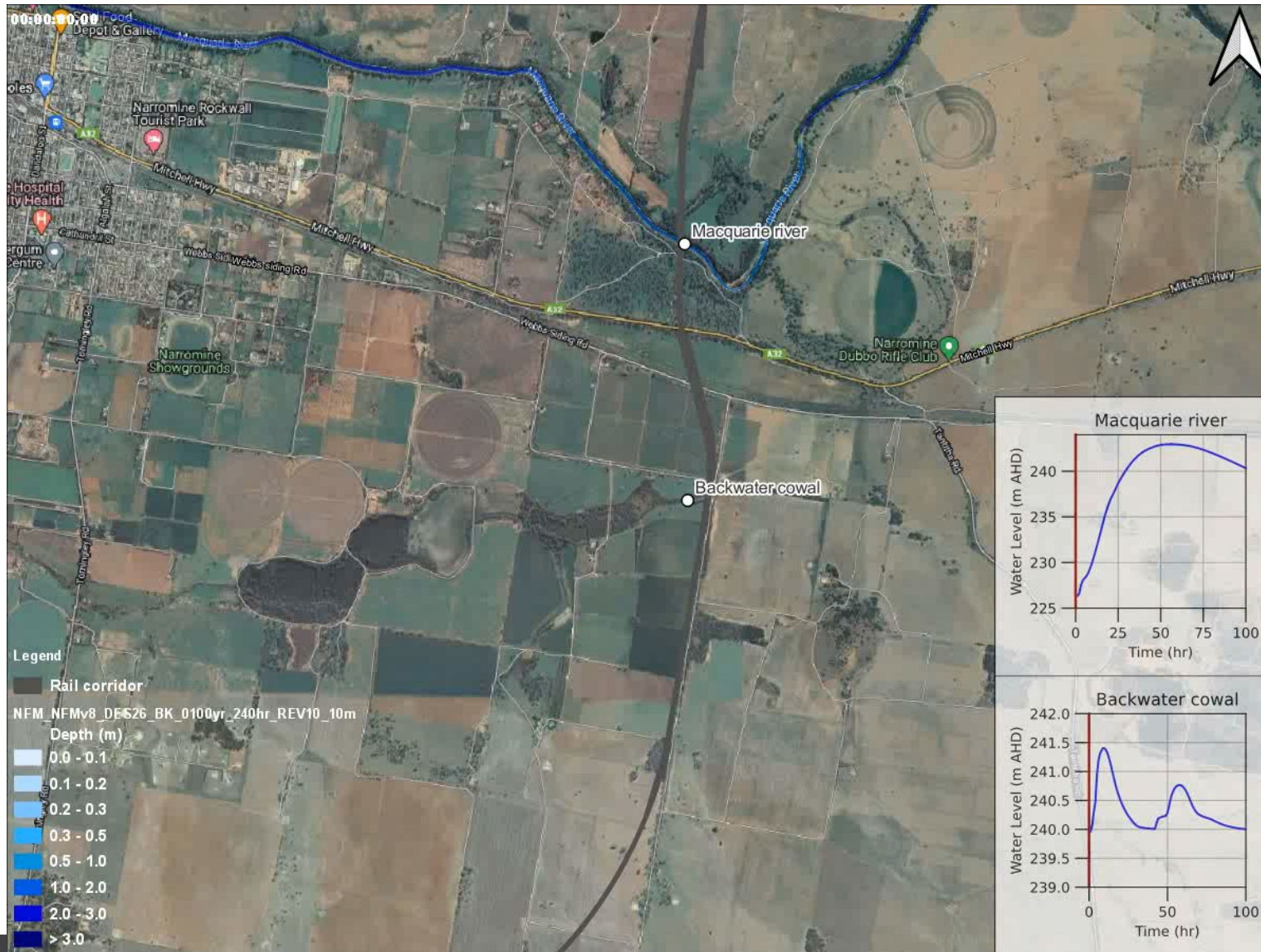
- Culvert blockage factors
 - Included in updated modelling
 - Determined in accordance with Australian Rainfall and Runoff (ARR)
- Additional flood relief structures
- Drainage control areas



Narromine flood simulation - existing



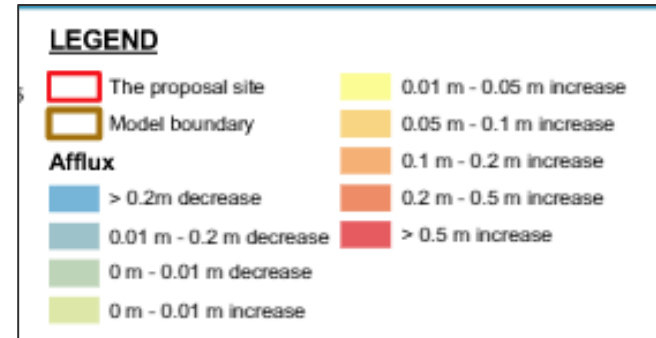
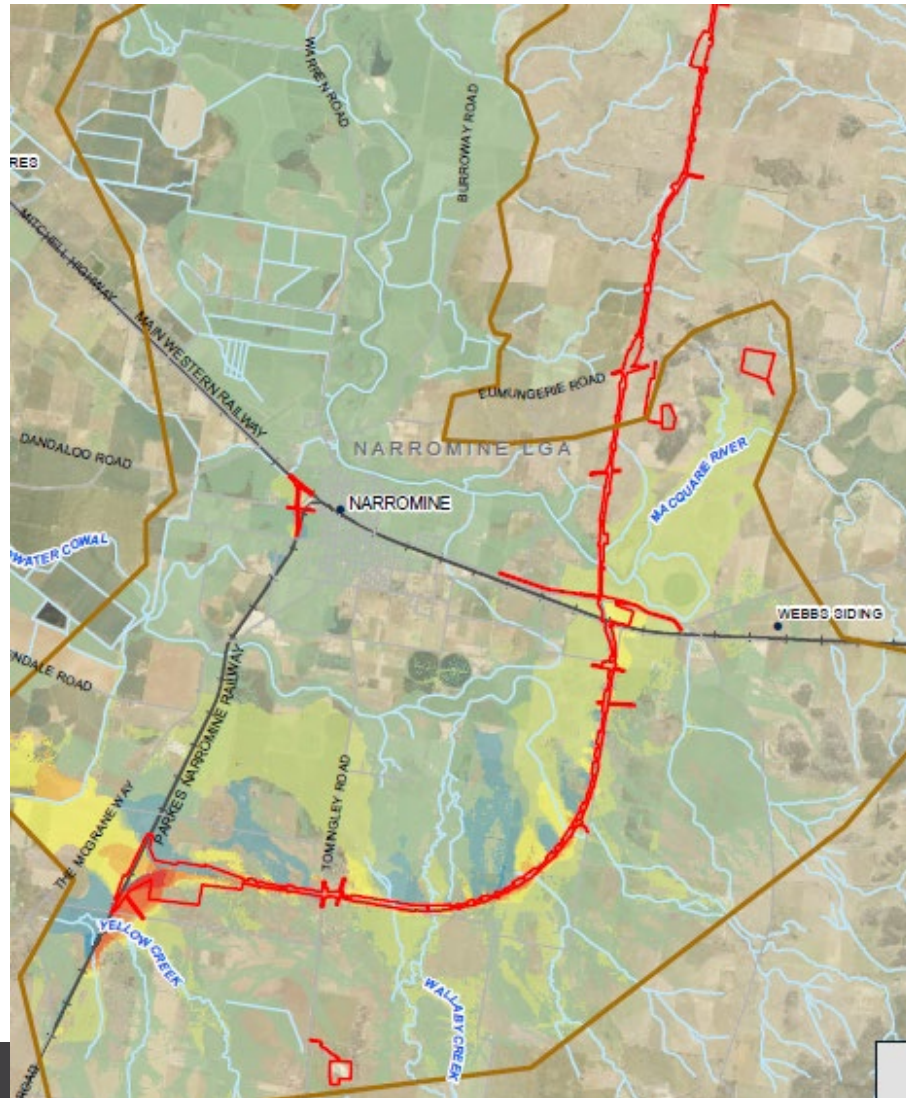
Narrmone flood simulation – with proposal



Impact assessment - Quantitative Design Limits (QDLs)

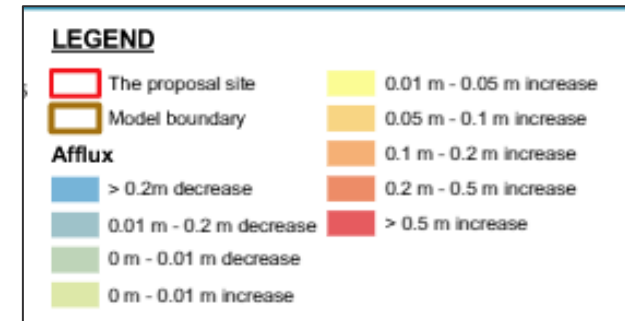
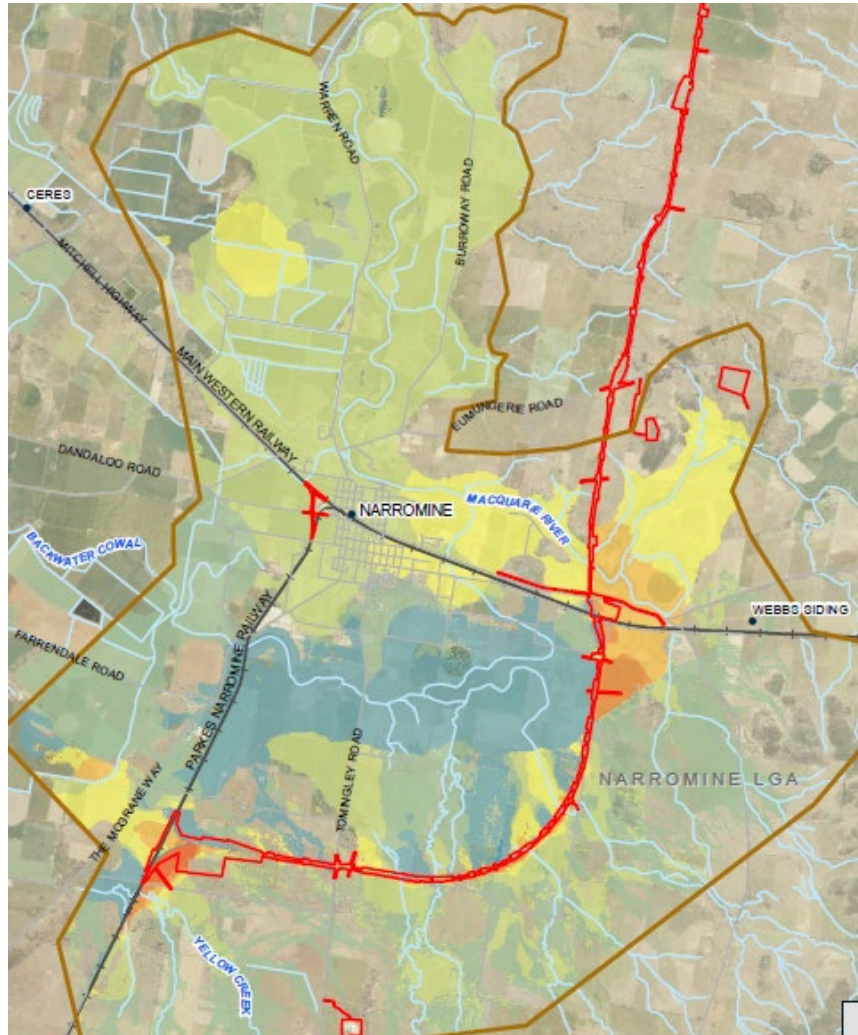
- QDLs established by DPE and require assessment of changes in:
 - Flood level (afflux)
 - Velocity
 - Hazard
 - Duration
- QDLs are for events up to and including 1% AEP

Impact assessment – Narromine (1% AEP)



1% AEP change in flood levels

Impact assessment – Narromine (0.2% AEP)



0.2% AEP change in flood levels

Impact assessment - Narromine

- Design is compliant with QDLs except:

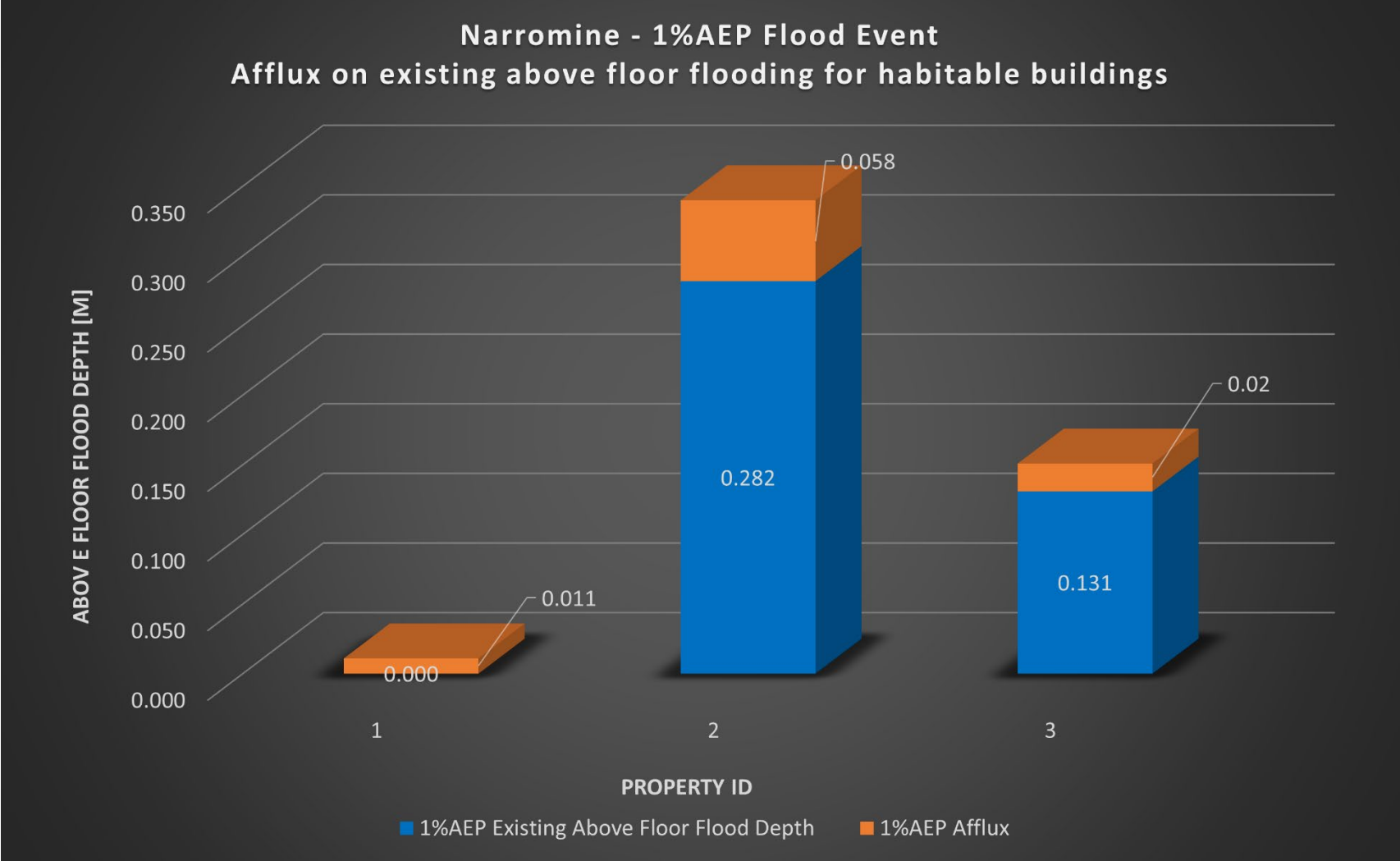
Isolated buildings, most already flooded but afflux limit is exceeded in 1% AEP

- 3 habitable
- 11 non-habitable

No significant non-compliances for other QDLs (velocity, duration, hazard)

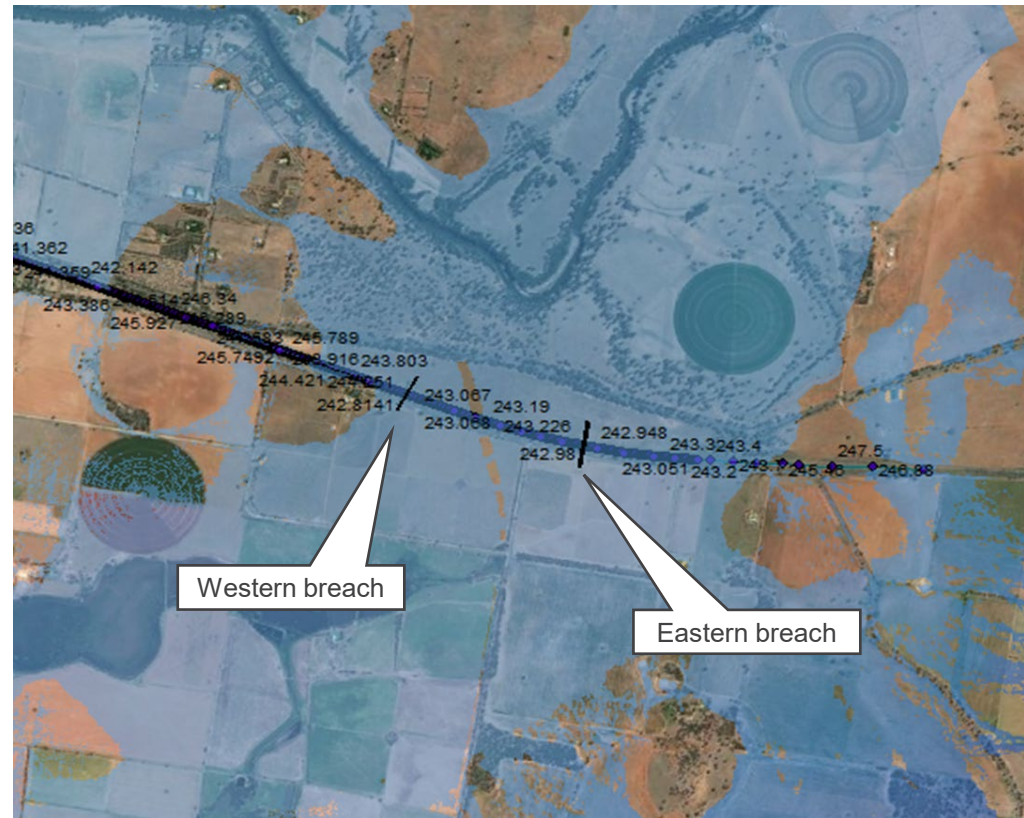


Impact assessment



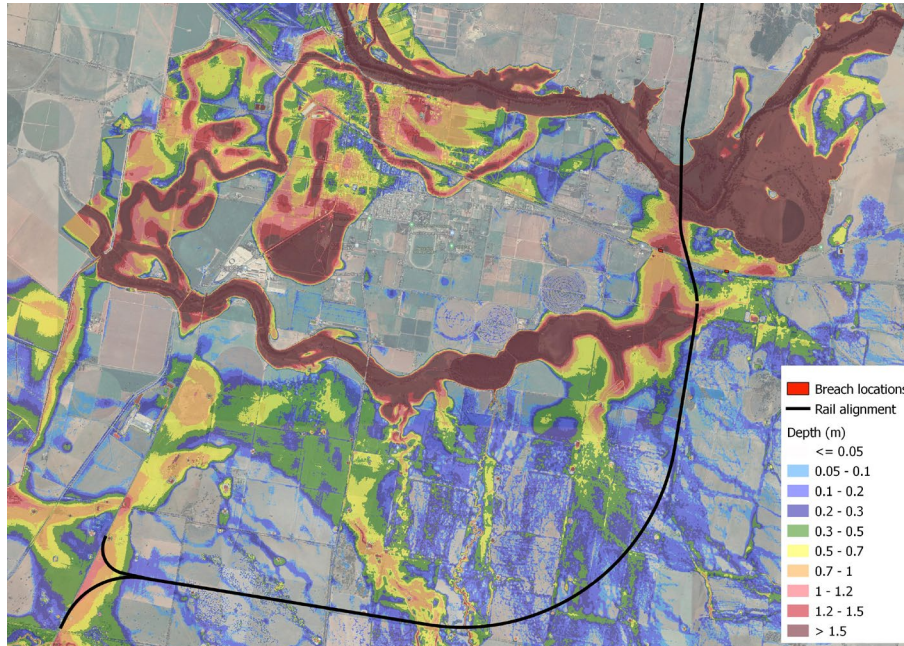
Assessment of potential failure at Webbs Siding

- Identification of potential breach location
 - Reviewed LiDAR data and profile of the embankment
 - Identified two potential breach locations

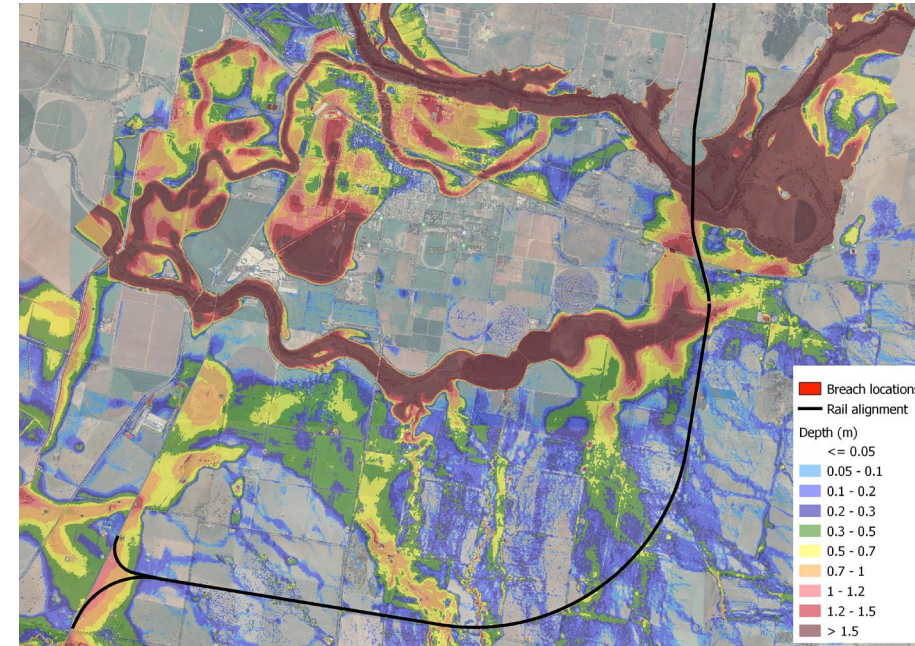


PEAK FLOOD DEPTHS – POTENTIAL FAILURE OF WEBBS SIDING, 1% AEP EVENT WITH COINCIDENT FLOODING

Existing condition

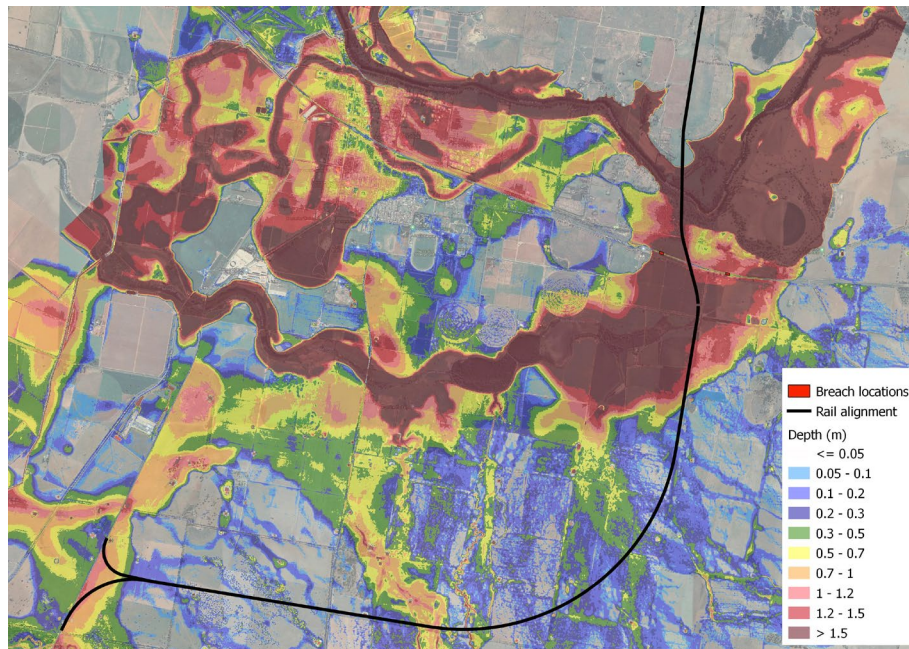


Operational phase of N2N

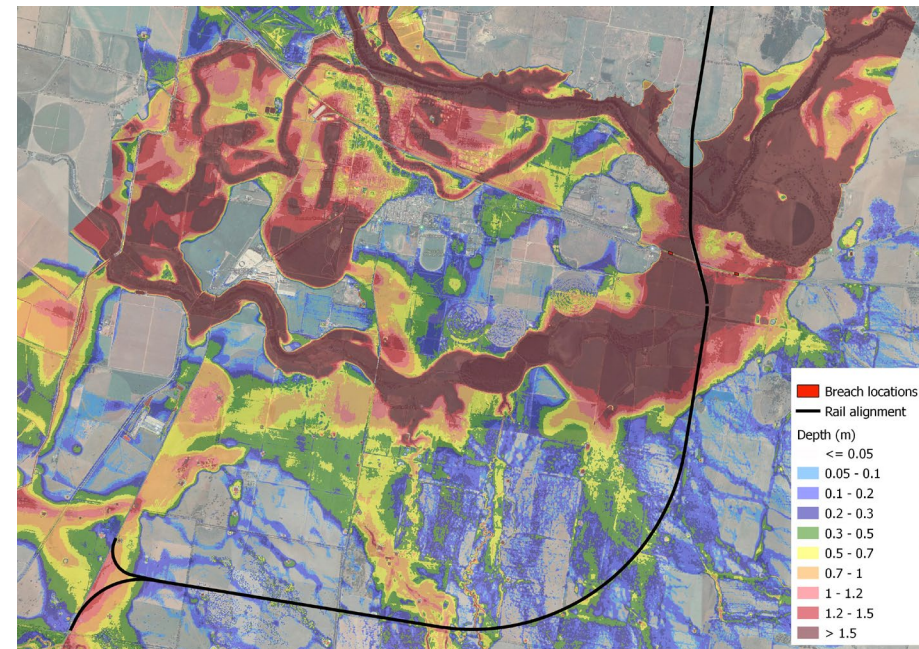


PEAK FLOOD DEPTHS – POTENTIAL FAILURE OF WEBBS SIDING, 0.5% AEP EVENT WITH COINCIDENT FLOODING

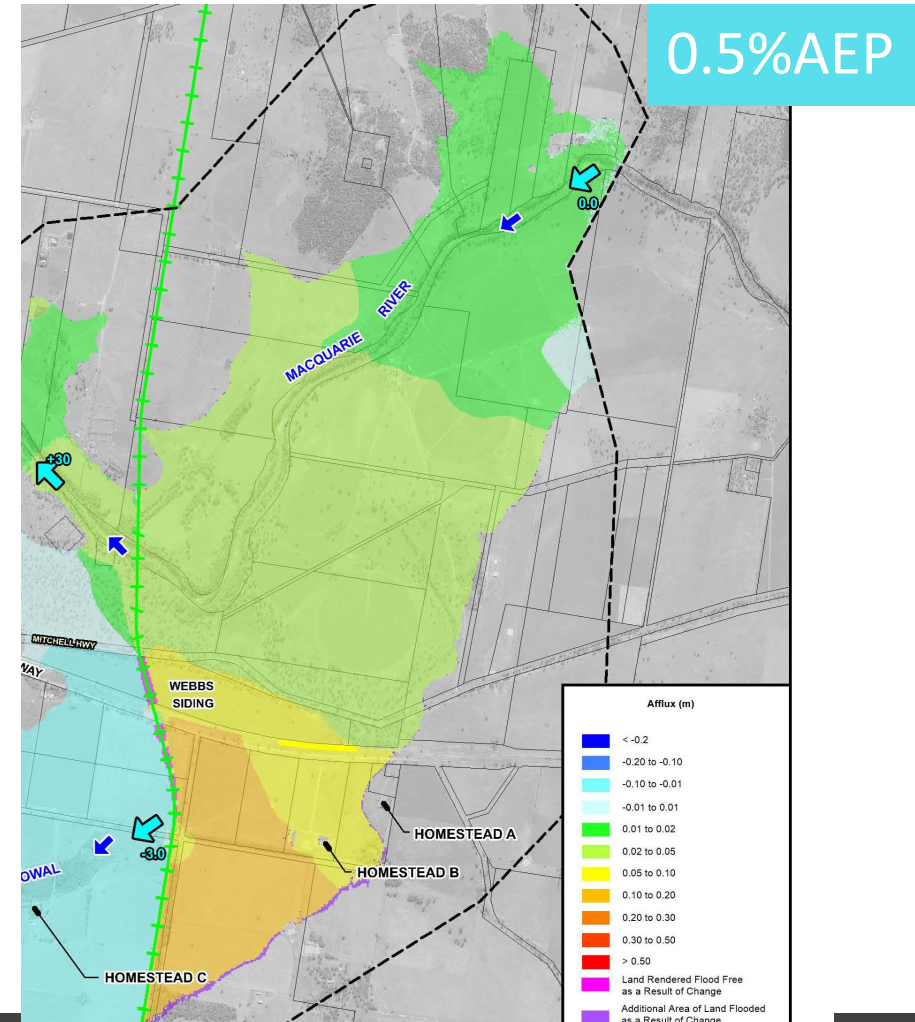
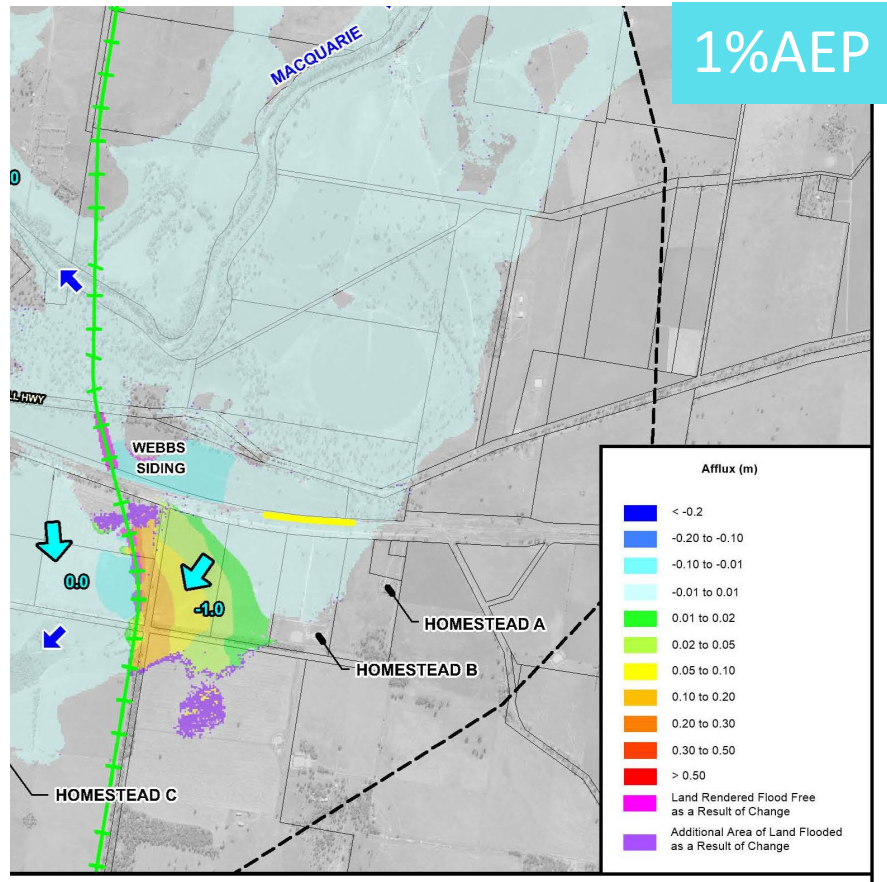
Existing condition



Operational phase of N2N



IMPACT ON PREFERRED RISK MANAGEMENT MEASURES FOR NARROMINE POST-DEVELOPMENT OF N2N



Summary

- Assessment has been updated to address regulator and stakeholder feedback
- Overall, no widespread flooding impacts
- The proposal has no adverse impacts on flood behaviour due to potential failure of the existing Narromine to Dubbo rail embankment at Webbs Siding in a 1% AEP and a 0.5% AEP flood events
- No impacts to the preferred flood mitigation measures for Narromine. Further consultation during detailed design.
- Management of QDL departures in accordance with conditions of approval

ROUTE SELECTION UPDATE

ARTC INLAND RAIL



OVERVIEW

Longest greenfield section and offers best opportunity to save time and distance

Current alignment refined over many years

- Using a best 'on balance' approach
- All route selection reports and key decisions available on IR website
- PIR and Route Selection Summary Report respond to DPE's PIR request on route selection

Stakeholder consultation commenced in 2015

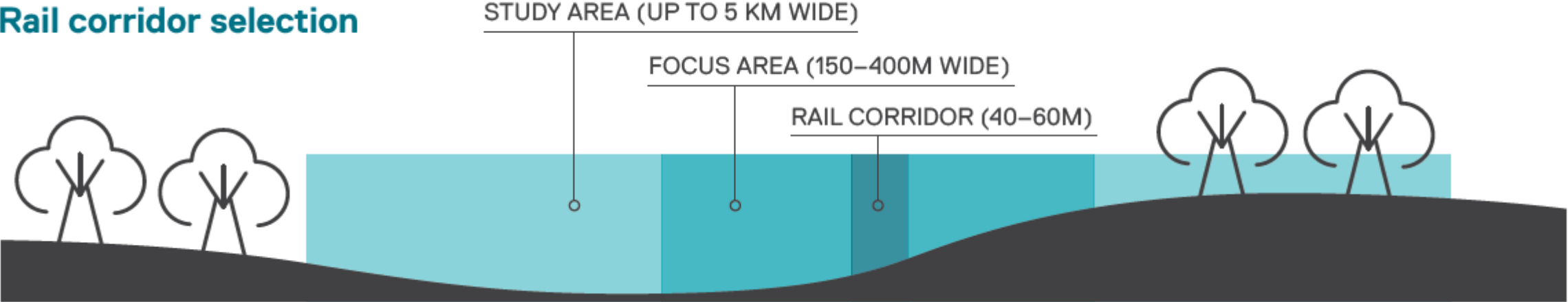
Impacts of the project are minor and can be mitigated

- PIR confirms no significant residual flooding impact



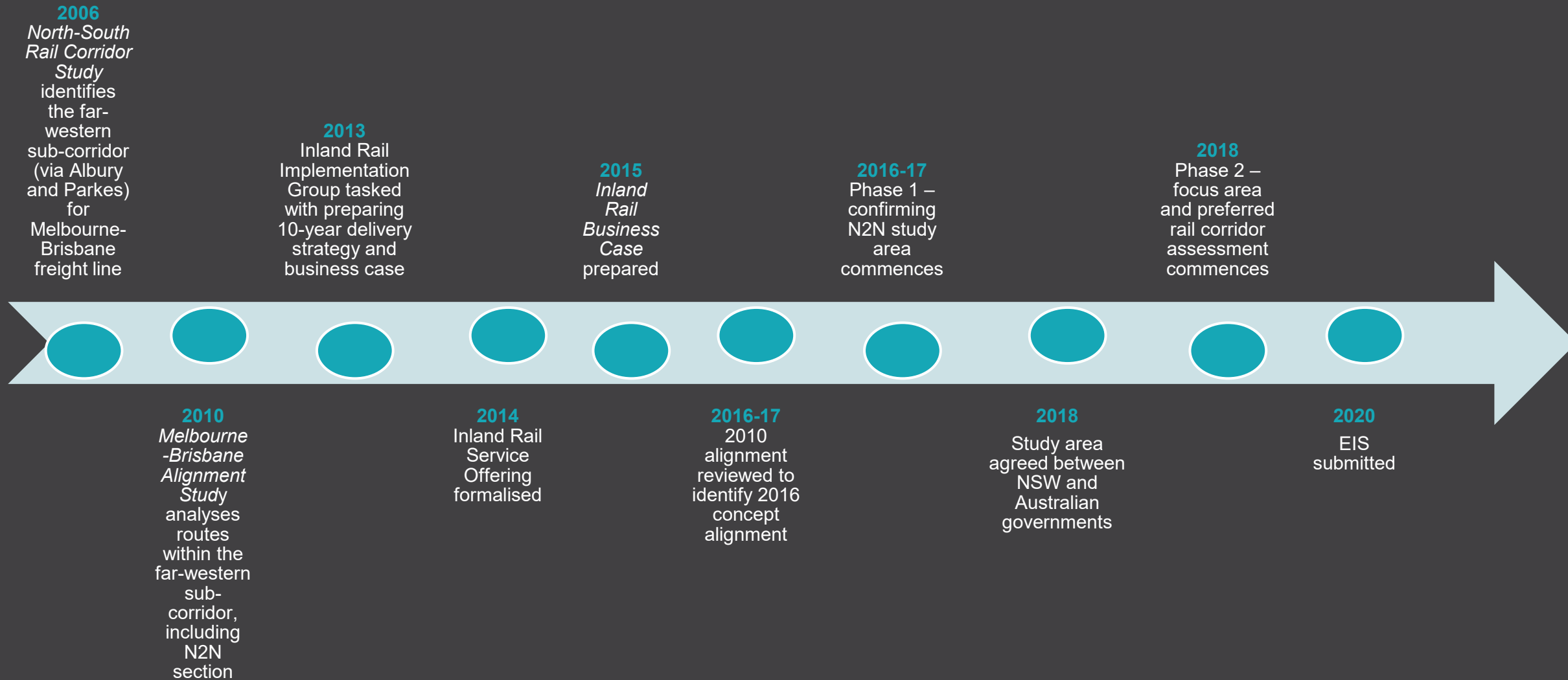
ROUTE SELECTION PROCESS

Rail corridor selection

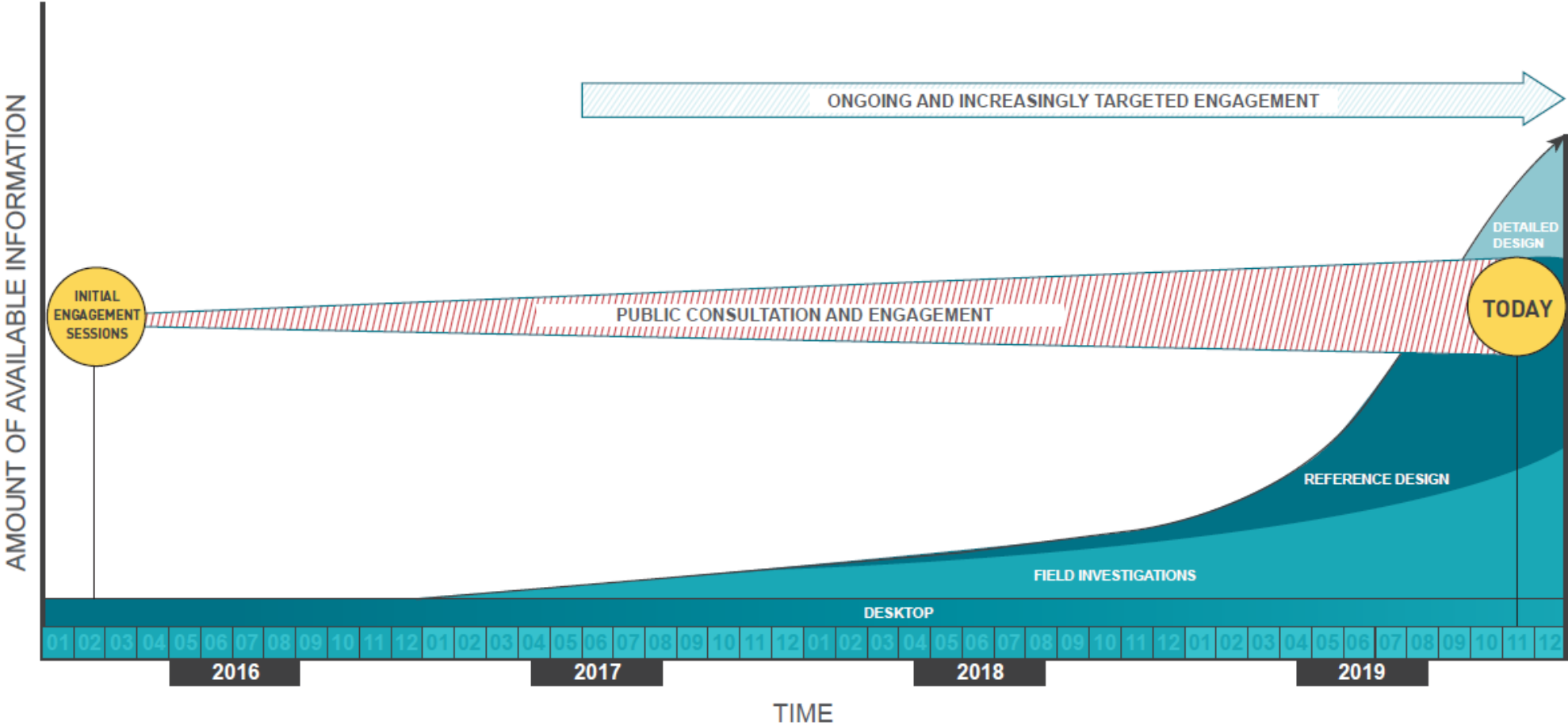


The N2N route was refined between 2016 and 2020

ALIGNMENT DESIGN



CONSULTATION AND TECHNICAL STUDIES



REFINING THE ROUTE

Is a route viable?

MULTI-CRITERIA* ANALYSIS



Technical viability (17%)

considers the alignment, impact on public utilities, geotechnical conditions, impacts on existing road and rail networks, flood immunity and hydrology and future proofing.



Safety assessment (16.5%)

considers construction safety, operational safety, public safety, road safety interfaces and emergency response.



Constructability and schedule (12.5%)

considers construction duration, access and complexity, resources, interface with operational railway and staging opportunities.



Environmental impacts (12.5%)

considers ecological impacts (flora, fauna and habitats), visual impacts, noise and vibration impacts, flooding and waterway impacts and effects on air quality and greenhouse gas emissions.



Community and property impacts (12.5%)

considers property impacts, Indigenous and non-Indigenous heritage, impact on community, community response and current and future land use and links to economic impacts.



Operational approach (16.5%)

considers impacts on travel time, reliability and availability, and network interoperability and connectivity including interfaces with rail terminals and network.



Approvals and stakeholder engagement (12.5%)

considers planning and approval requirements, consultation with Federal and State agencies and local governments, other statutory and regulatory approvals and service authority interfaces, such as utilities etc.

A broad range of qualitative and quantitative criteria is considered as part of the Multi-Criteria Analysis (MCA). The MCA process is recognised as an industry standard and is widely used in Australia and internationally.

Does it enhance the service offering?

ALTERNATIVES ARE BASED ON THEIR ABILITY TO MEET THE SERVICE OFFERING



Transit time

Requires a transit time from Melbourne to Brisbane of less than 24 hours.



Reliability

Requires 98% reliability for freight customers.



Competitive pricing

Requires competitive pricing for freight customers.



Availability

Requires train paths at the times suitable to market needs.

Is it value for money?

ALTERNATIVES ARE COMPARED ON THE BASIS OF COST

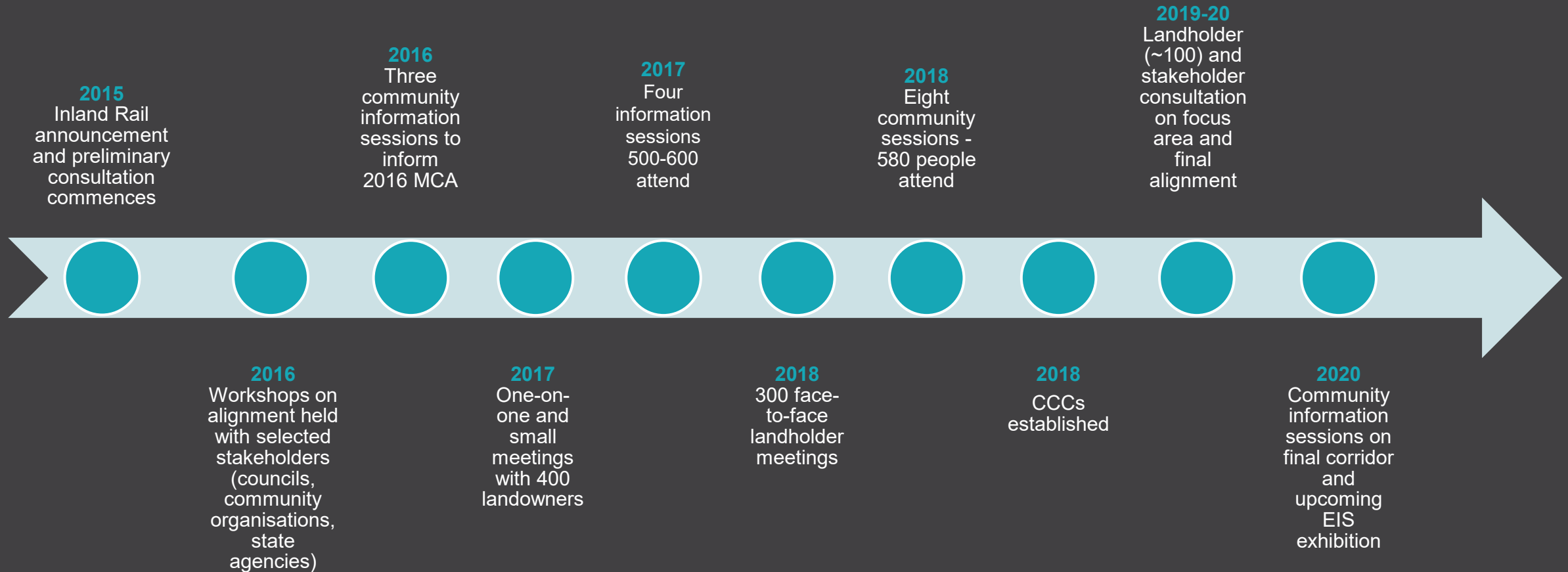


Construction estimate



Operating costs

ENGAGEMENT



CONCLUSION

Route has been refined over many years using the iterative, transparent MCA process to:

- Achieve the Inland Rail Service Offering
- Consider environmental and social impacts

Landholders, community and stakeholders have been informed and engaged since 2015

No significant residual flooding impacts

Improved landholder sentiment over time

Study area was agreed by NSW and Australian governments



ENGAGEMENT UPDATE



COMMUNITY ENGAGEMENT UPDATE

- Engagement Team
- Engagement – Environmental Impact Statement
- Landowner consultation and engagement
- Stakeholder consultation and engagement
- Local Government consultation and engagement
- General consultation and engagement
- Specific consultation and engagement
- Other projects and activities
- Current focus & what's next



ENGAGEMENT TEAM

- Erica Tudor, Stakeholder Engagement Manager (Narromine)
- Louise Johnson, Stakeholder Engagement Lead (Coonabarabran)
- Lachlan Beveridge, Stakeholder Engagement Advisor (Sydney)
- Anna Howard, Stakeholder Engagement Advisor (Dubbo)
- Ben Madgwick, Stakeholder Engagement Advisor (Dubbo)
- Grace Farrer, Stakeholder Engagement Advisor (Narrabri)
- Kate Schwager, Stakeholder Engagement Officer (Narrabri)
- Hannah Binge, Stakeholder Engagement Administration Officer (Narrabri)

COMMUNICATION & ENGAGEMENT – EIS

- Community Consultative Committees
- Direct communication – impacted stakeholders
- Summary of Findings
- Briefing Sessions – Key Stakeholders
- Pop-Up Sessions
- Community Drop-In Sessions
- EIS Support Sessions
- Static displays
- General communication



LANDOWNER CONSULTATION & ENGAGEMENT

- Environmental Impact Statement (EIS)
- Property acquisition – voluntary ARTC IR process (April 2021)
- Property acquisition – TfNSW process (December 2021)
- Individual matters, in particular regarding access
- Field investigations



PROPERTY ACQUISITION BY AGREEMENT

Key stages



You can talk to your acquisition support team at any time, including while your lawyer is representing you.

What you can do



STAKEHOLDER CONSULTATION & ENGAGEMENT

- Local Land Services
- Local Land Services – Weeds Committees
- Transport for NSW
- Local Aboriginal Land Councils
- Regional Development Australia – Orana and Northern Inland



LOCAL GOVERNMENT CONSULTATION & ENGAGEMENT

- Third Party Agreements
- Floodplain Committees
- Introduction of project to new Councillors
- Introduction of Delivery Team to Councillors and key Council staff
- Flooding and hydrology
- Road / rail interfaces
- Specific Council matters & proposals



GENERAL CONSULTATION & ENGAGEMENT

- Local Members
- Agricultural Shows
- Community groups – presentations
- Community events and activities
- Conference presentations
- Department of Regional NSW
- State & Federal Government Departments
- Neighbouring Councils



SPECIFIC CONSULTATION & ENGAGEMENT

- Emergency Services
- Regional Emergency Management Committees
- Chambers of Commerce
- Rail Corridor Program
- Materials Distribution Centre, Narromine
- Regional connectivity



OTHER PROJECTS & ACTIVITIES

- Health Checks – agricultural shows
- Narrabri shopfront and office
- Narromine office
- Property acquisition – public land
- Alignment familiarisation – Delivery Team
- Narrabri Special Activation Precinct
- TfNSW Grade Separation project
- Community Sponsorships & Donations Program



CURRENT FOCUS & WHAT'S NEXT

- Property acquisition process
- Updates with the general community
- Field investigations
- Finalisation of Third Party Agreements
- Development of other proposals – key stakeholders
- Helping businesses and communities to become Inland Rail ready
- Detailed design phase



MOVING FORWARD WITH INLAND RAIL

ARTC INLAND
RAIL



QUESTIONS



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THANK YOU

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