



**NARROMINE TO NARRABRI
COMMUNITY CONSULTATIVE COMMITTEE**

7-9 December 2020



Engagement and Project overview



NARROMINE TO NARRABRI PROJECT OVERVIEW



306km new single track within greenfield rail corridor



new rail connections and possible future connections with existing Australian Rail Track Corporation (ARTC) and Country Regional Network (CRN) rail lines



7 crossing loops so trains can pass each other



58 new bridges and 15 new viaducts over rivers, floodplains, roads and rail lines (total length: around 16km)



initially to accommodate 1,800m long double-stacked freight trains



51 new public level crossings to maintain access to public roads that cross the rail corridor



ancillary works including road re-alignments, utility relocations, signalling and communications, drainage, signage and fencing



Narromine to Narrabri project links to the Parkes to Narromine and Narrabri to North Star projects

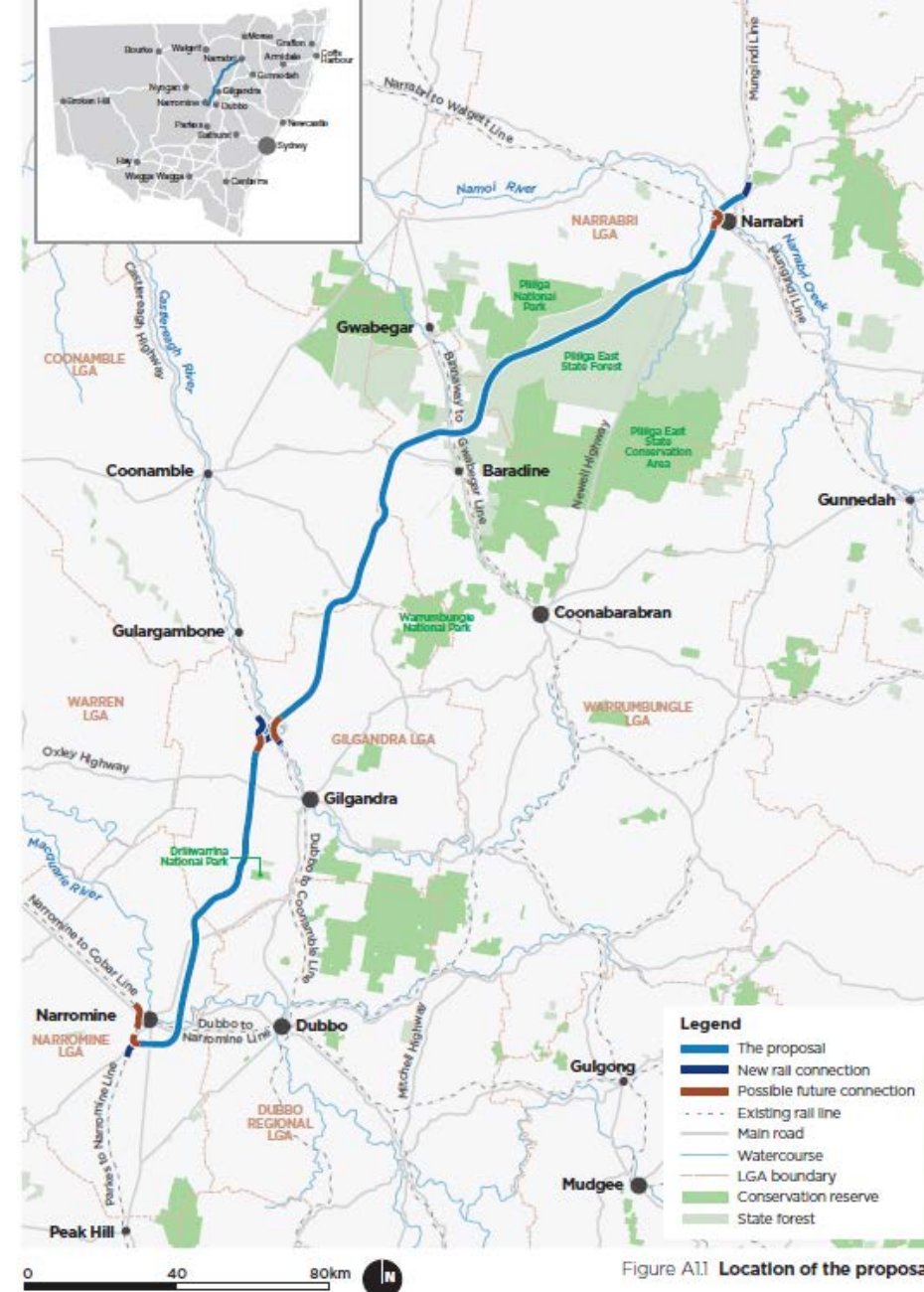


Figure A11 Location of the proposal

COMMUNITY ENGAGEMENT

Narromine to Narrabri stakeholders

5



Local governments

15



Federal and State Government agencies

6



Emergency services

20



e-newsletter updates

16



CCC meetings

9



Local Aboriginal Land Councils

1000+



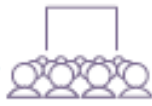
Meetings with landowners

20



About 20 meetings with government agencies

25+



Community information sessions and pop ups

12



Stalls at local town shows

22



Community organisations sponsored

25+



Meetings and site visits with Indigenous stakeholders

UPCOMING EIS ENGAGEMENT

EIS information sessions

You are invited to find out more about the **Narromine to Narrabri Environmental Impact Statement (EIS)** at one of our drop-in or online information sessions.

Having your say will help the NSW Department of Planning, Industry and Environment (DPIE) to better understand community views and inform their assessment of the project.

You can view the EIS and make a submission via the DPIE major projects portal at bit.ly/2HLJAvi from Tuesday 8 December 2020 until Sunday 7 February 2021, inclusive.

Please join us soon at one of our December drop-in sessions or register for one of our 2021 online sessions.

Narrabri

Date: Tuesday 15 December
Time: 10:00am to 2:00pm
and 4:00pm to 7:00pm
Venue: The Crossing Theatre,
117 Tibbereena Street

Baradine

Date: Wednesday 16 December
Time: 10:00am to 1:00pm
Venue: Baradine Memorial Hall,
Narren Street

Coonamble

Date: Wednesday 16 December
Time: 4:00pm to 7:00pm
Venue: Coonamble Bowling Club,
Aberford Street

Curban

Date: Thursday 17 December
Time: 10:00am to 2:00pm
Venue: Curban Community Hall,
National Park Road

Gilgandra

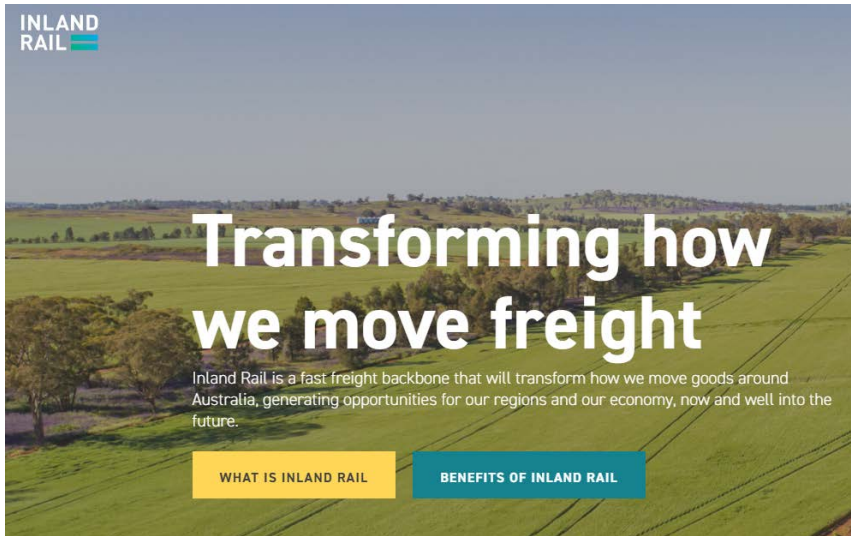
Date: Thursday 17 December
Time: 4:00pm to 7:00pm
Venue: Gilgandra Shire Hall,
Warren Road

Narromine

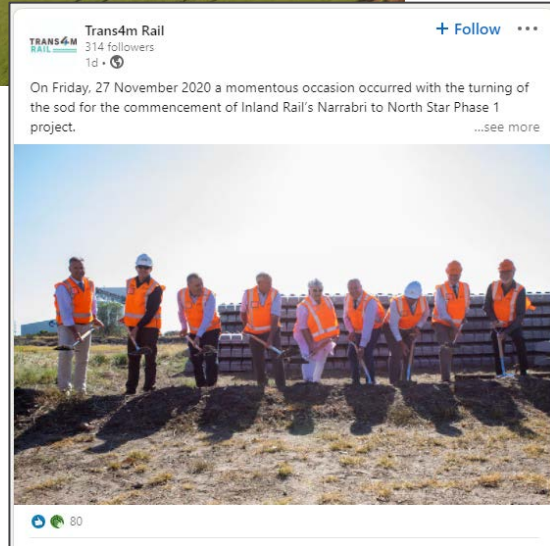
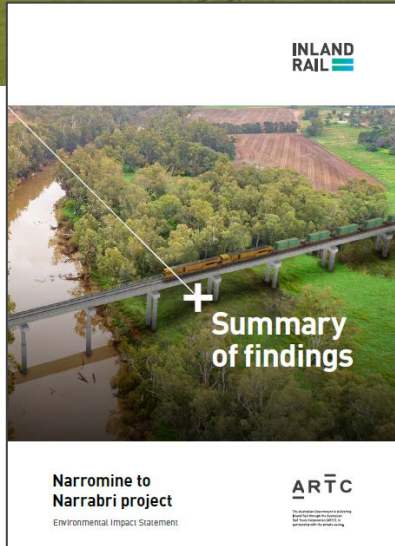
Time: Friday 18 December
Date: 10:00am to 2:00pm
Venue: Soul Food Design Depot and
Gallery, 1 Dandaloo Street



LOOKING AROUND



- New project website: visualisations and Social PinPoint.
- Official kick-off of Narrabri to North Star project.
- Inland Rail new procurement approach: (<https://inlandrail.artc.com.au/inland-rail-procurement-strategy-to-enhance-industry-and-regional-australia/>)
- Gilgandra water bores initiative.

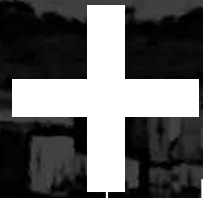


Inland Rail procurement strategy to enhance industry and regional Australia

Australia's most significant freight infrastructure project, Inland Rail, has launched a new procurement and packaging plan to industry – promising to accelerate benefits to business and regional communities sooner.

Inland Rail water bores set to provide long-term benefits to Gilgandra Shire communities

The Australian Rail Track Corporation has entered into a partnership with the Gilgandra Shire Council to explore the drilling of four bores across the Gilgandra Shire over the next two years, as part of the Inland Rail project in the region.



Property discussion



PROPERTY

Inland Rail is committed to treating all landowners with respect and sensitivity. We will communicate openly and honestly, ensuring timely access to information. Our approach will be fair, consistent and transparent, with a focus on support and privacy.

- ARTC is building Inland Rail from Brisbane to Melbourne and will need land to deliver the project. This may include property which is owned by private individuals or businesses.
- We have now finalised the location of the proposed rail line and have been engaging directly with landowners, local councils and other stakeholders to understand the potential impacts.
- This presentation provides an overview of Inland Rail's property acquisition process, including questions gathered during face-to-face meetings.



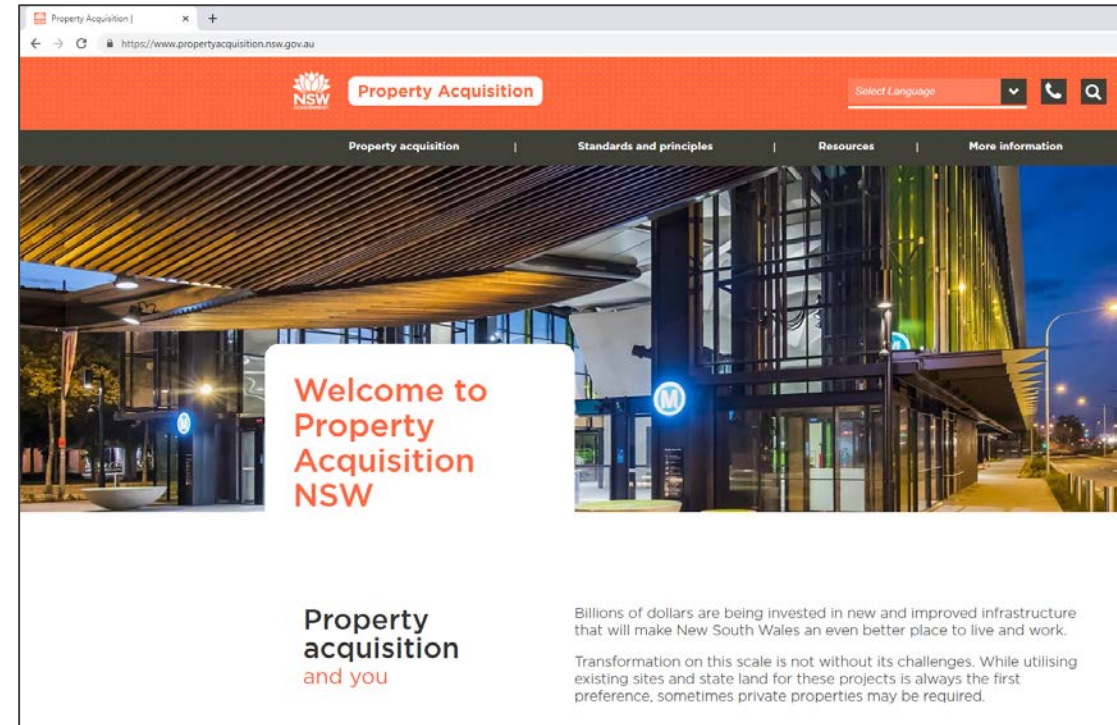


➤ **Steve Arnold, Property Specialist:**

- Engaged on the Inland Program since 2018 – including Parkes to Narromine and Narrabri to North Star.
- Land access negotiation; permanent and temporary acquisition of land, easements and interests; stakeholder engagement (including face-to-face meetings on Inland Rail); commercial negotiations and mediation; rural portfolio management; and compensation and valuation.
- Experienced in delivering major infrastructure projects in line with NSW Government requirements.

OVERVIEW AND REFERENCE GUIDES

- Understanding the project scope:
 - Approximately 300kms of 'greenfield' track.
 - Temporary land use: Approximately 1,612 hectares will be required during construction (approx. 1,158 hectares of privately-owned land and 454 hectares of publicly-owned land).
 - Permanent land use: Requirements are expected to include use of land within about 274 properties (approx. 1,222 hectares of privately-owned land and 501 hectares of publicly-owned land).
 - Property discussions with landowners are expected to commence in March 2021.
- Centre for Property Acquisition:
 - <https://www.propertyacquisition.nsw.gov.au/>.



ACQUISITIONS REQUESTED BY ARTC

- ARTC will notify landowners in writing once it confirms that either part or all of a property has been identified for acquisition. You will first receive an **introductory letter**, followed by an **opening letter**.
- To help you through the process, ARTC will provide an acquisition support team. Your **Personal Manager** will:
 - Act as your primary point of contact and provide a personalised service to meet your needs.
 - Meet with you to explain the process and better understand your requirements.
 - Ensure your personal information is kept confidential.
- Where landowners agree to sell their land to ARTC, a landowner's entitlement to compensation will be determined in accordance with the ***Land Acquisition (Just Terms Compensation) Act 1991***.

For information on how you will be contacted and supported throughout the process, see **pages 4 and 6**.

For more information on the Act, see **page 27**.

ACQUISITIONS REQUESTED BY ARTC

- The **types of compensation** available under the Act include:
 - Market value
 - Special value
 - Loss attributable to severance
 - Loss attributable to disturbance (e.g. legal, valuation, relocation and financial costs in connection with the acquisition)
 - Disadvantage resulting from relocation
 - Any increase or decrease in the value of any other property.
- Landowners and ARTC will have a **minimum six months** to reach an agreement on an acquisition.

For information on compensation, see **pages 10 and 11**.

Your 'Opening Letter' will recommend that you engage your own independent valuer. It will also inform you that all reasonable fees for this service will be paid by ARTC on settlement – see **page 6**.

ACQUISITIONS REQUESTED BY ARTC

- The **value of partial property acquisitions** are commonly assessed using a ‘before and after’ method where:
 - the value of the total property, as unaffected by the project proposal, known as the ‘before valuation’ is determined;
 - the value of the remaining property, assuming the acquisition has occurred, known as the ‘after valuation’, is also determined; and
 - the difference between the ‘before’ and ‘after’ valuations is the compensation payable.

- On occasion, ARTC will purchase the total property, even though only part of it is required. This is usually when the effect of the proposed project on the remaining land is considered so significant that it warrants total purchase.

To learn more about the partial acquisition of properties, including property adjustments, see **page 19**.

COMPULSORY ACQUISITIONS

- If an agreement between ARTC and a landowner can't be reached – following a minimum of six months from the date of the Opening Letter – a **compulsory acquisition process** will be required.
- This is a statutory process under the ***Land Acquisition (Just Terms Compensation) Act 1991***.
- The process also provides the means for resolving disputes about the amount of compensation payable.
- Landowners will first receive a **Proposed Acquisition Notice** in relation to the proposed compulsory acquisition of the property, stating the intention to acquire the property after a certain time period, usually 90 days.
- Discussions with ARTC about compensation can continue after a Proposed Acquisition Notice is issued.

*“If you and the acquiring agency can't reach an agreement on your compensation, the property may be acquired compulsorily under the Act. This process involves working with the Valuer General” – for more information, see **page 15**.*

COMPULSORY ACQUISITIONS

- If contracts for purchase have not been exchanged within the notice period, usually 120 days, an Acquisition Notice is published – or ‘gazetted’ – in the NSW Government Gazette.
- A landowner’s legal and equitable interests in the property are then converted to an entitlement to compensation.
- The Valuer General independently determines the amount of compensation offered to a landowner. This amount may be higher, lower or the same as ARTC’s original offer.
- If landowners disagree with the amount of compensation determined by the Valuer General, they are entitled to lodge an objection with the NSW Land and Environment Court.

For more information on the compulsory acquisition process – including the role of the Valuer General and what to expect – see **page 24**.

PROPERTY QUESTIONS

- I've been told that I'm entitled to have reasonable costs covered as part of the property acquisition and compensation process.
 - Can you please explain what is meant by 'reasonable costs' and what type of costs will be covered by Inland Rail?
 - Can you also please advise what the process will be for having costs covered – will the landowner have to pay the bill and be reimbursed, or will Inland Rail pay the bills?

- How will compensation be assessed and what factors will be considered?
 - For example, reduction in the value of the property and the operation, impacts to business operations, additional travel distance and time, paddock re-arrangement, replacement of private utilities and assets, construction of access tracks, noise impacts and flooding impacts.

- I own multiple properties and run an overall operation across my properties. Will I be entitled to compensation for overall impacts to my business operations or only impacts to the property impacted by the rail corridor?

PROPERTY QUESTIONS

- What amounts of compensation can I expect to receive – are there specific amounts for particular things?

- If I'm compensated for impacts on my business, for example increased travel time, for how many years am I compensated for this impact?

- I understand that this process has been used a lot in an urban environment, however this project is a greenfield project in a rural environment. Can you please explain how the process will be adapted to ensure it is applicable in a rural context?

- I have concerns about being able to find a valuer that isn't already involved with Inland Rail in some capacity and therefore doesn't have a conflict of interest. Can you please advise if Inland Rail has any plans to help manage this?

PROPERTY QUESTIONS

- I have been told that the property acquisition and compensation process will be completed within six (6) months. I do not believe this is enough time for these conversations to take place. Is there any opportunity for this timeframe to be extended or for landowners to begin to receive advice (paid for by Inland Rail) prior to the commencement of the six (6) month process?
-
- If I receive compensation for private infrastructure that has been impacted by the rail corridor, for example, a dam or road:
 - Will you do these works, or do I have to do them myself or find someone to do them?
 - If I have to find someone to do the works will I be compensated for the time it will take to organise and manage these works?
 - Do I have to replace the infrastructure that I have been compensated for?

PROPERTY QUESTIONS

- How will I be compensated if I now need to access a public road to move my stock and machinery?

For example, you have removed my access directly across the road or from one (1) paddock to another – I will now need to have all my vehicles and machinery registered, I won't be able to carry any chemicals in them while on the public road and there will be increased risks and time for moving my stock.

-
- I live close to the rail corridor but the rail corridor is not on my property. Am I entitled to be compensated for the loss of value of my property as well as noise, visual, vibration, flooding and other impacts?



We are always available to discuss any questions or concerns you may have.

If you would like to speak to an engagement team member or property specialist please contact:

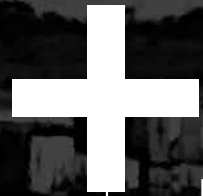
Patricio Munoz

Stakeholder Engagement Manager

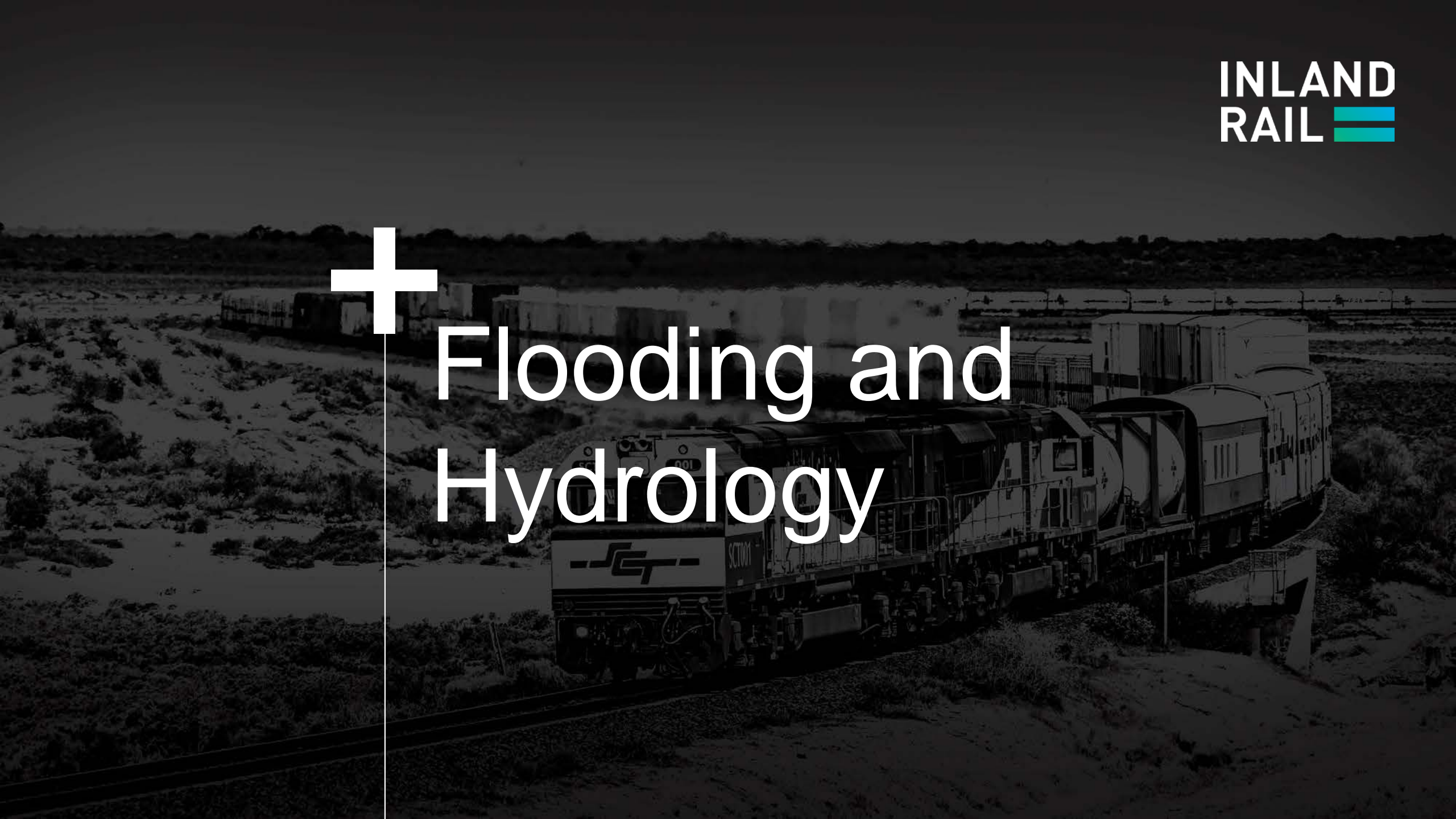
NSW (North)

M: 0447 816 140

E: pmunoz@artc.com.au.



Flooding and Hydrology



FLOODING ASSESSMENT – OVERALL APPROACH

PURPOSE

The proposal crosses Macquarie-Castlereagh River basin, and Namoi River basin. The total catchment area crossed by the proposal is approximately 65,000 square kilometres.

→ Cannot avoid flood affected land

Need some means of estimating:

- Formation height
- Flood impacts

→ Hydrology and hydraulic modelling



Source: MDBA

INPUT DATA

Terrain

- *LiDAR – ARTC (1m DEM)*
- *ELVIS – 1m and 5m DEM*
- *Shuttle Radar Mission – 30m DEM*

Topographic survey

Aerial photography

Previously developed Council models

- *Narrabri*
- *Narromine*

Land use

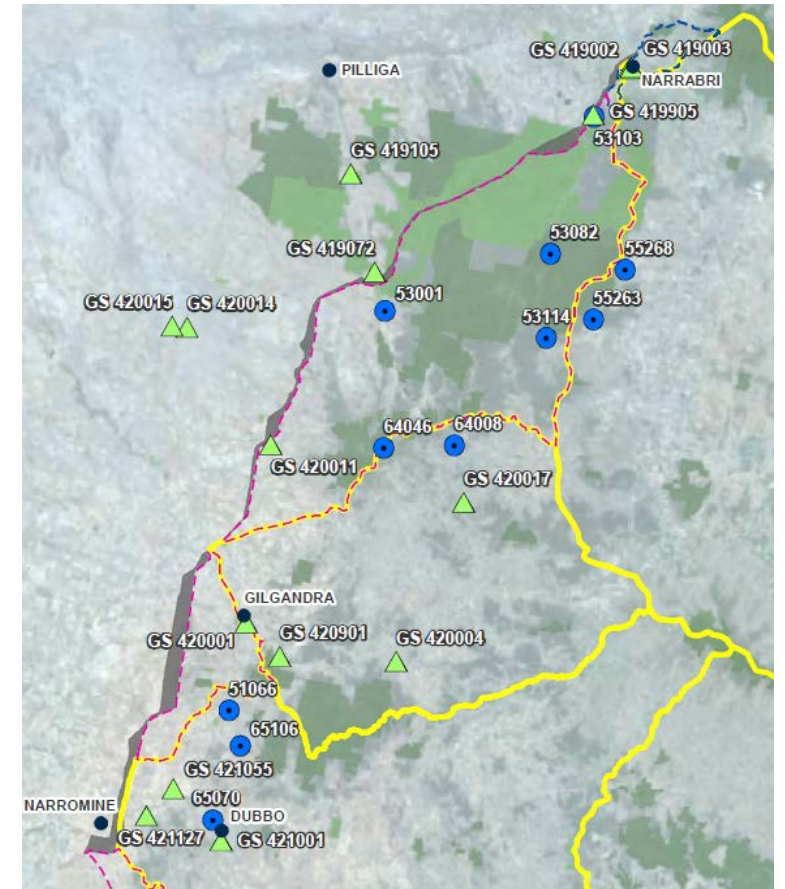
Rainfall data

- *Historical daily and sub-daily*
- *Design rainfall data – ARR Data Hub*

Stream data

- *Channel cross section*
- *Rating curves*
- *Flow gauging*
- *Recorded water levels*
- *Estimated discharge*

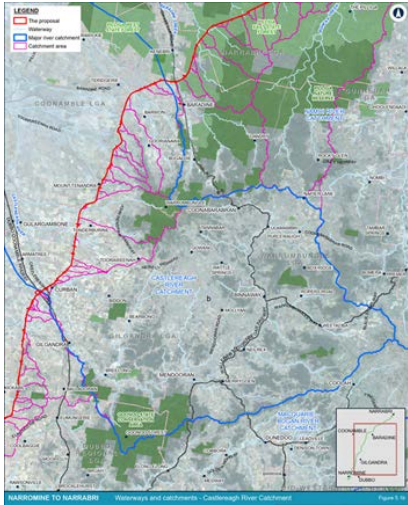
Infrastructure



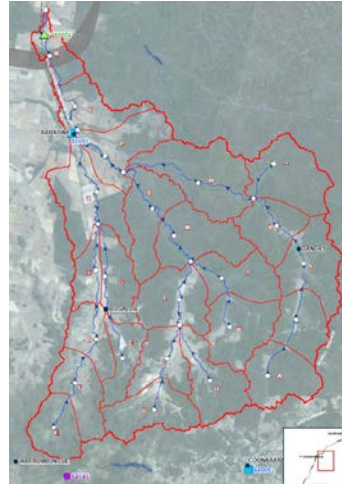
ARTC LiDAR covers previous and current project areas
ELVIS data - <http://elevation.fsd.org.au/#/>

HYDROLOGY MODELLING

1. Catchment Delineation



2. Model Development

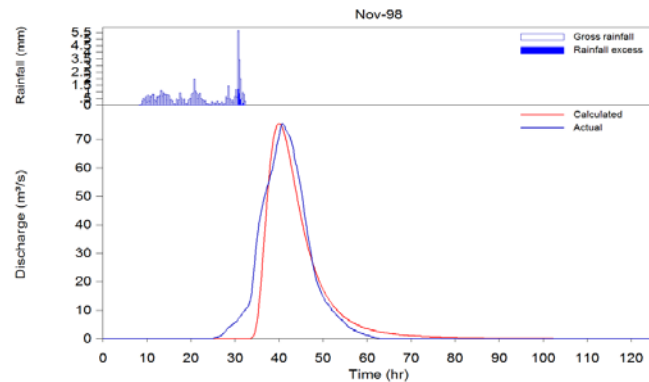


4. Modelling of Design Flood Events

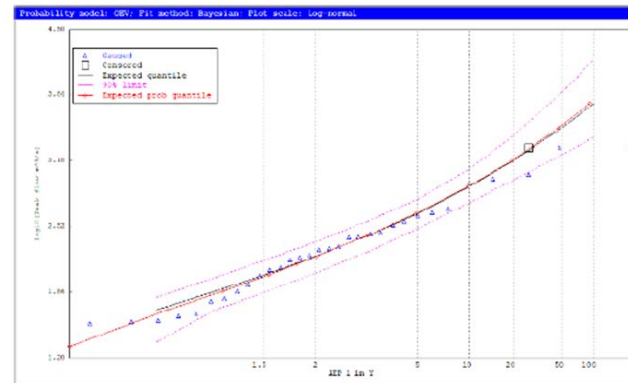
- Selection of model parameter values
- Rainfall data from Data Hub
- Simulation of runoff hydrographs

7. Independent Review

3. Calibration

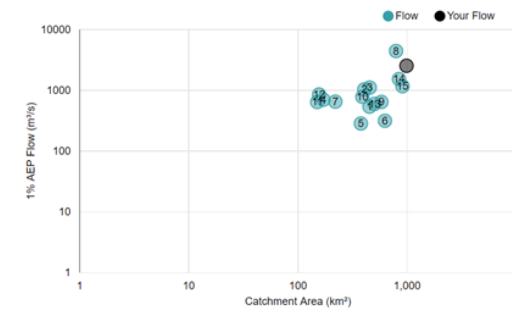


5. Verification of Peak Flows (FFA)



6. Validation of Peak Flows (RFFE)

1% AEP Flow vs Catchment Area

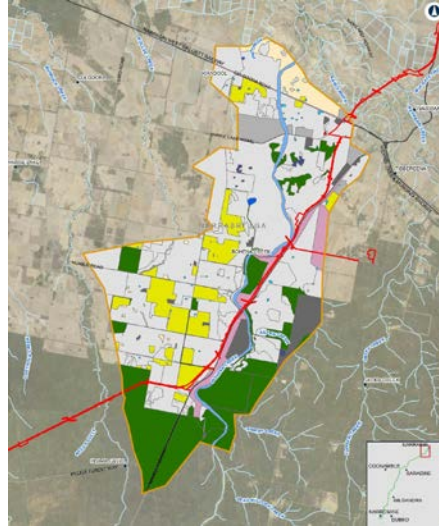


HYDRAULIC MODELLING

1. Model Domain



2. Model Development

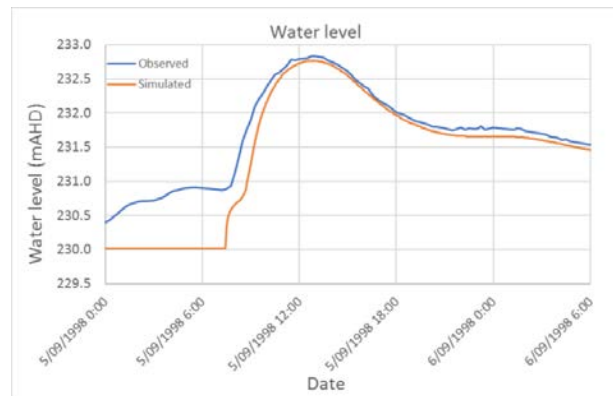


4. Modelling of Design Flood Events

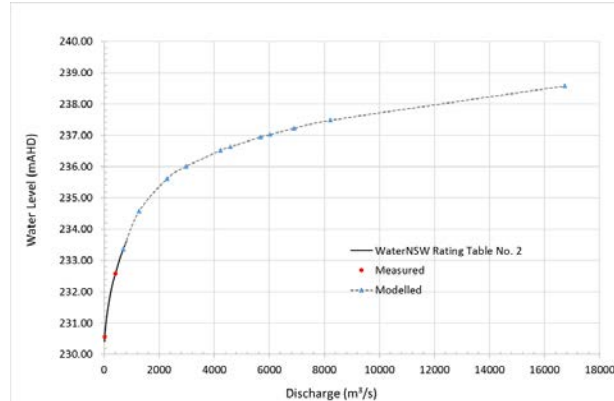
- Selection of model parameter values
- Simulation of design flood events

7. Independent Review

3. Calibration



5. Verification of Flood Behaviour



6. Validation of Flood Behaviour



2012 Flood



2016 Flood

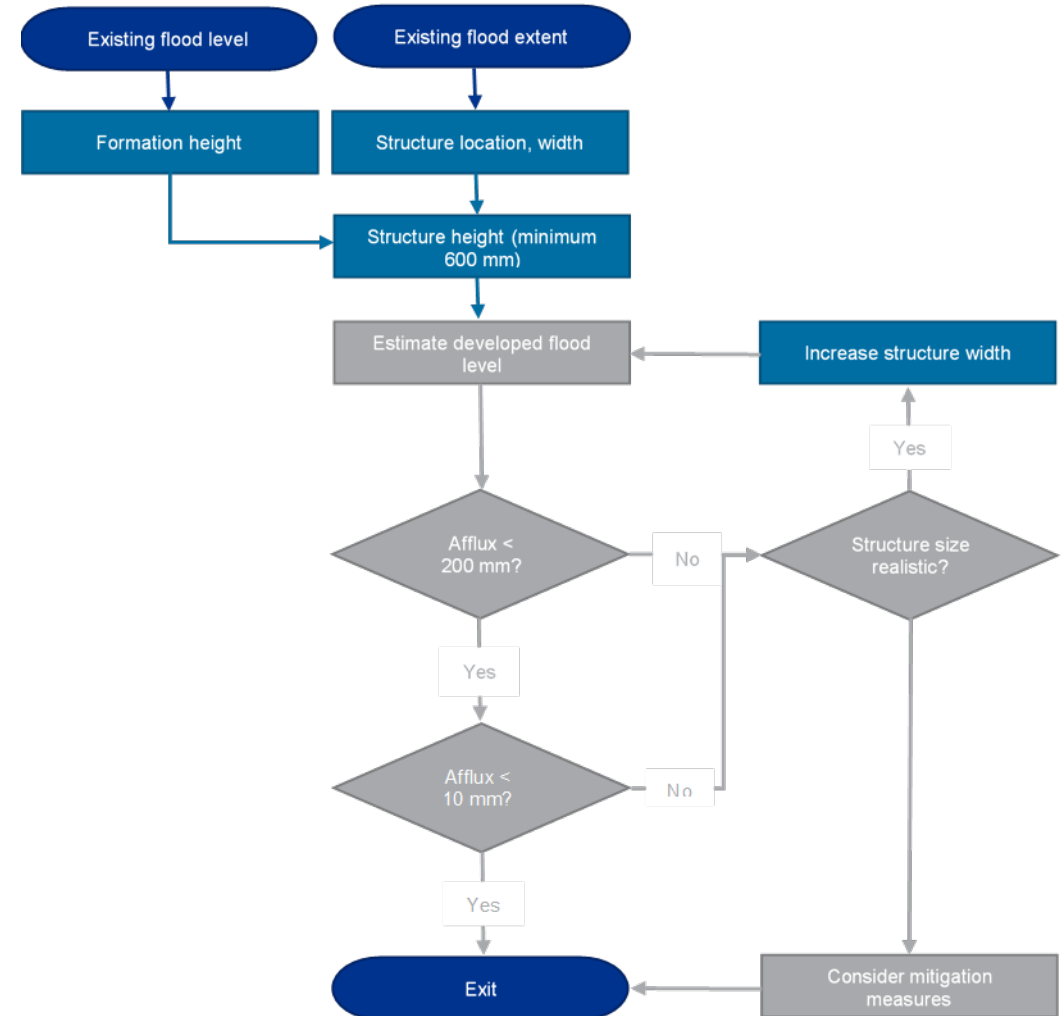


QUANTITATIVE DESIGN OBJECTIVES AND DESIGN PROCESS

Quantitative Design Objectives

Afflux (up to and including one per cent annual exceedance probability event)

- *10 mm for habitable buildings and sensitive infrastructures (emergency services, flood evacuation routes, electricity substations, water treatment plants)*
- *200 mm for other urban and recreational areas, agriculture*
- *400 mm for forest and unimproved grazing land*



FLOOD EVENTS AND SCENARIOS ASSESSED

- Modelling was undertaken for a range of events for:
 - Existing conditions
 - Operational (with proposal)
 - Construction (with proposal partially constructed)

AEP FLOOD EVENT	EXISTING CONDITIONS	OPERATIONAL	CONSTRUCTION
20%	✓	✓	✓
5%	✓	✓	✓
2%	✓	✓	
1%	✓	✓	✓
1% with climate change	✓	✓	
0.5%	✓	✓	
0.2%	✓	✓	
Probable maximum flood (PMF)	✓	✓	

FLOOD IMPACT ASSESSMENT

- **Afflux : buildings, roads, railways and major land uses**
- **Change in velocities : buildings, roads, railways and major land uses**
- **Change in flood hazard : buildings, roads, railways and major land uses**
- **Change in duration of inundation : buildings, roads, railways and major land uses**

ARTC

APPROACH TO MITIGATION

EIS recommended management measures

- **Detailed design**
 - Design refinement
 - Further flood modelling
 - Floor level surveys
 - Further consultation
- **Construction**
 - Planning and work site layouts
 - Flood and emergency response plan
 - Monitoring of changes to creek stability

Project approval

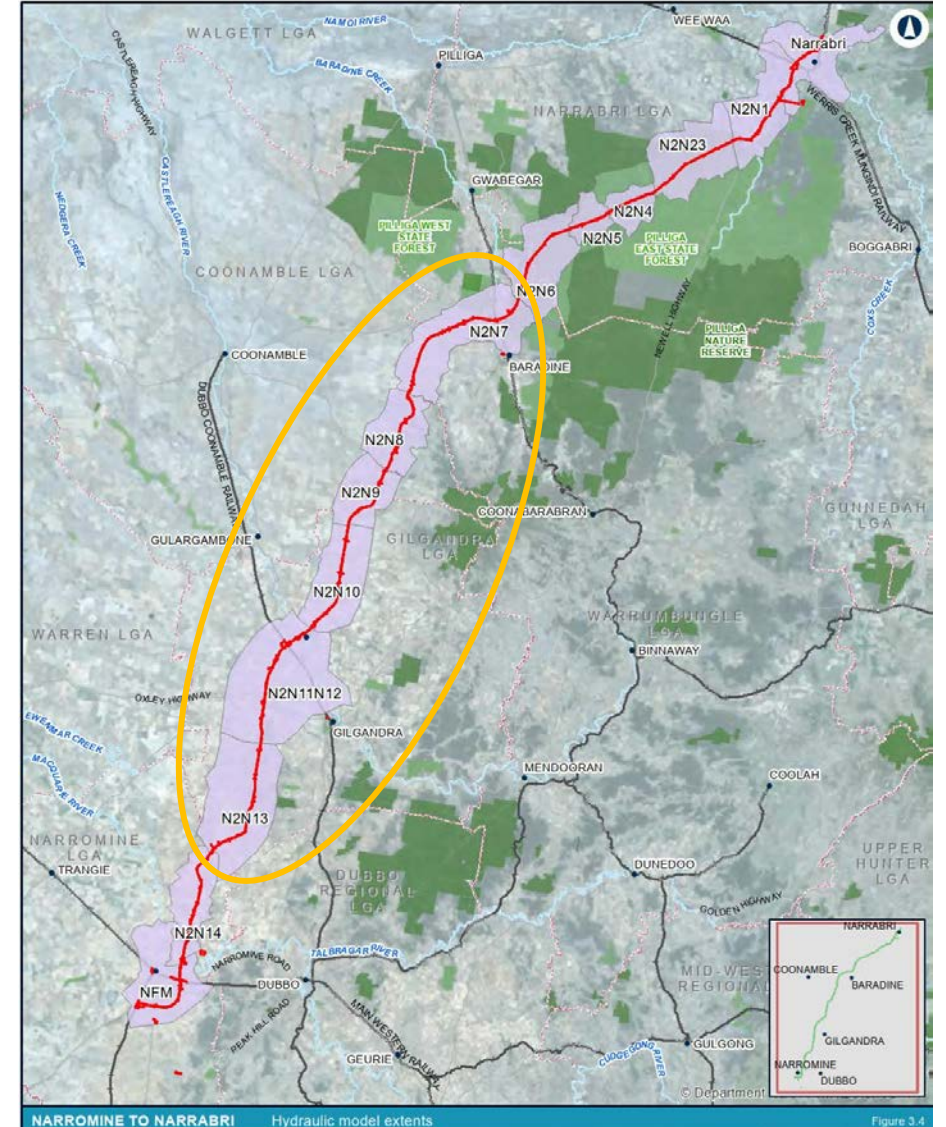
- Detailed design and construction would be undertaken in accordance with the DPIE conditions of approval.

FLOODING ASSESSMENT FOR COONAMBLE, WARRUMBUNGLA AND GILGANDRA LOCAL GOVERNMENT AREAS

STUDY AREA – GILGANDRA REGION

The region is represented in six TUFLOW hydraulic models

- N2N7 (Baradine Creek)
- N2N8 (Calga Creek, Quanda Quanda Creek and Caleriwi Creek)
- N2N9 (Baronne Creek)
- N2N10 (Gulargambone Creek)
- N2N11N12 (Castlereagh River, Marthaguy Creek)
- N2N13 (Ewenmar Creek, Kickabil Creek and Milpulling Creek)



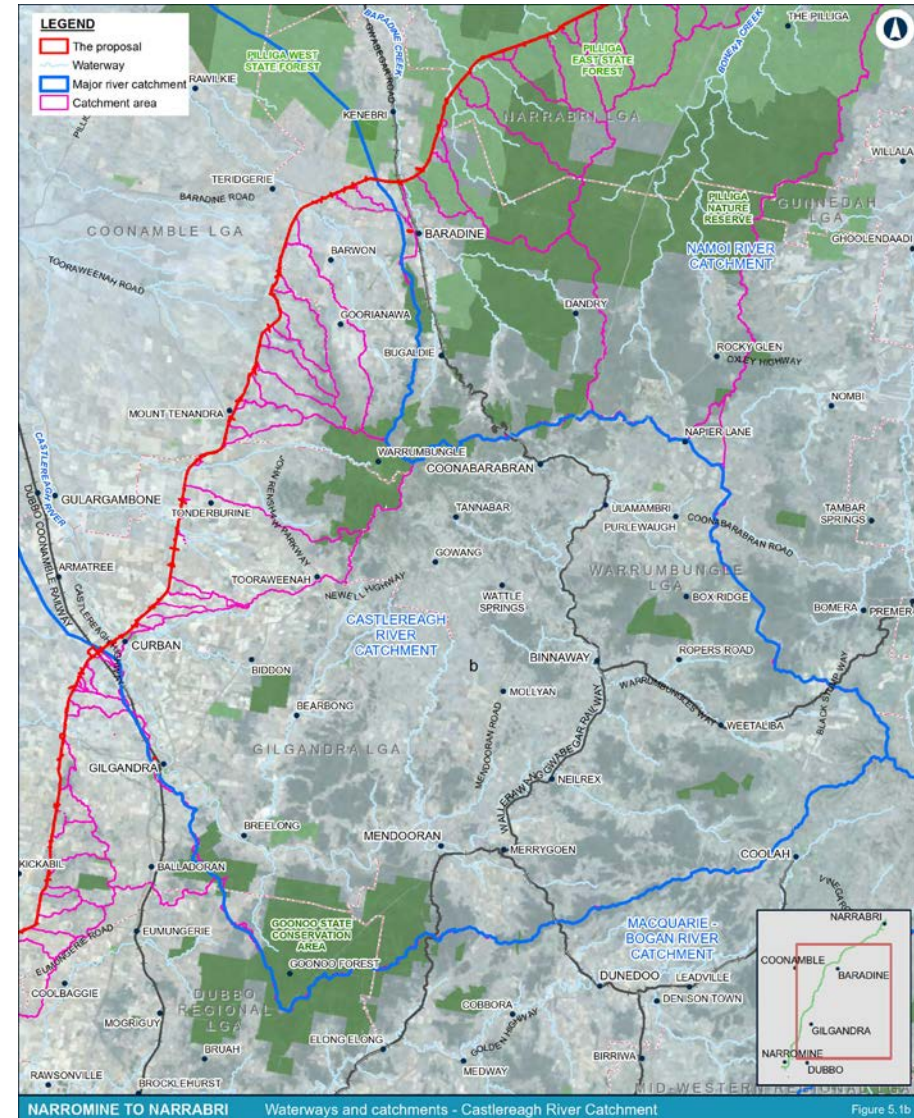
HYDROLOGY MODELLING

N2N7 (Baradine Creek)

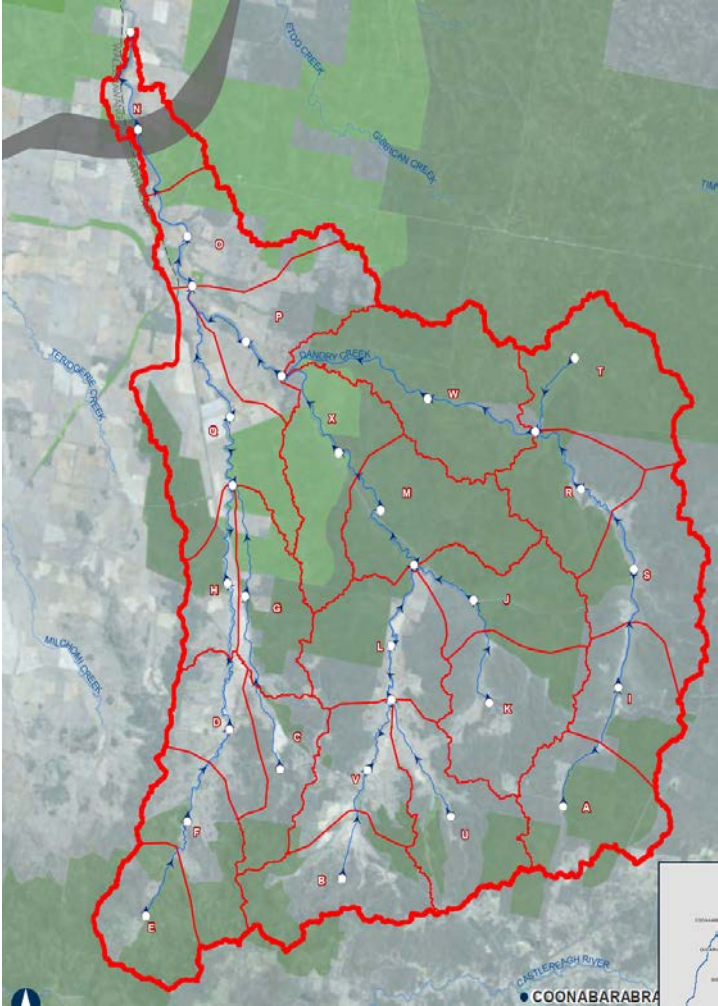
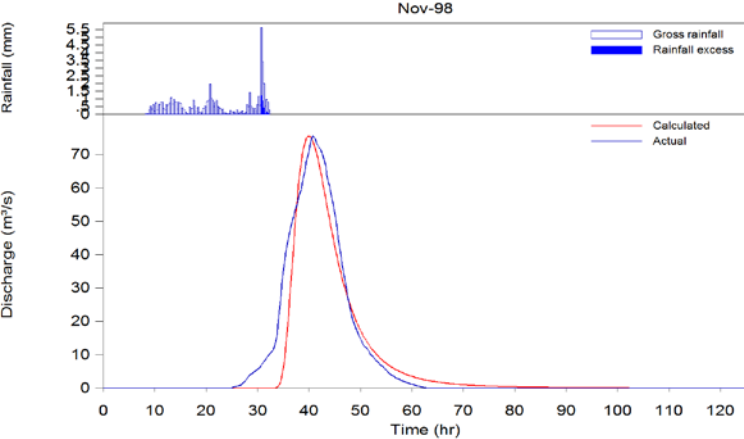
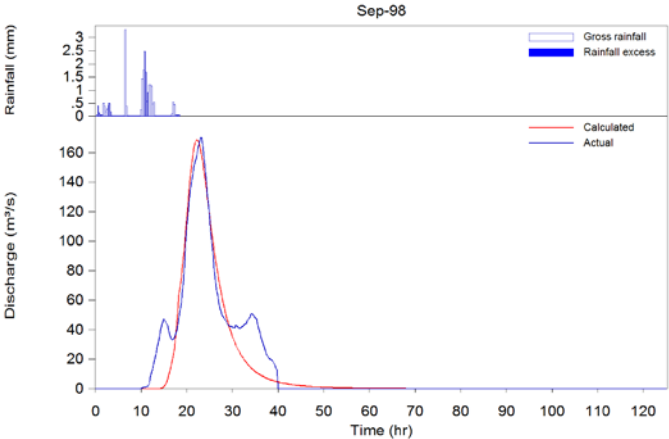
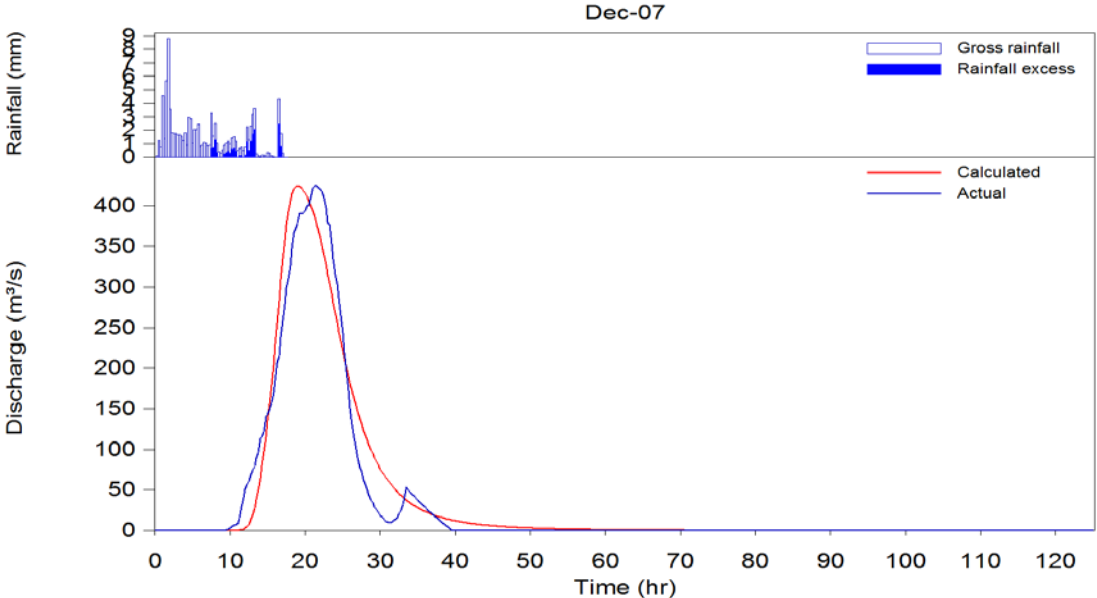
- Developed and calibrated a RORB hydrology model against observed streamflow data

N2N8, N2N9, N2N10, N2N11N12 and N2N13

- Developed several RORB hydrology models

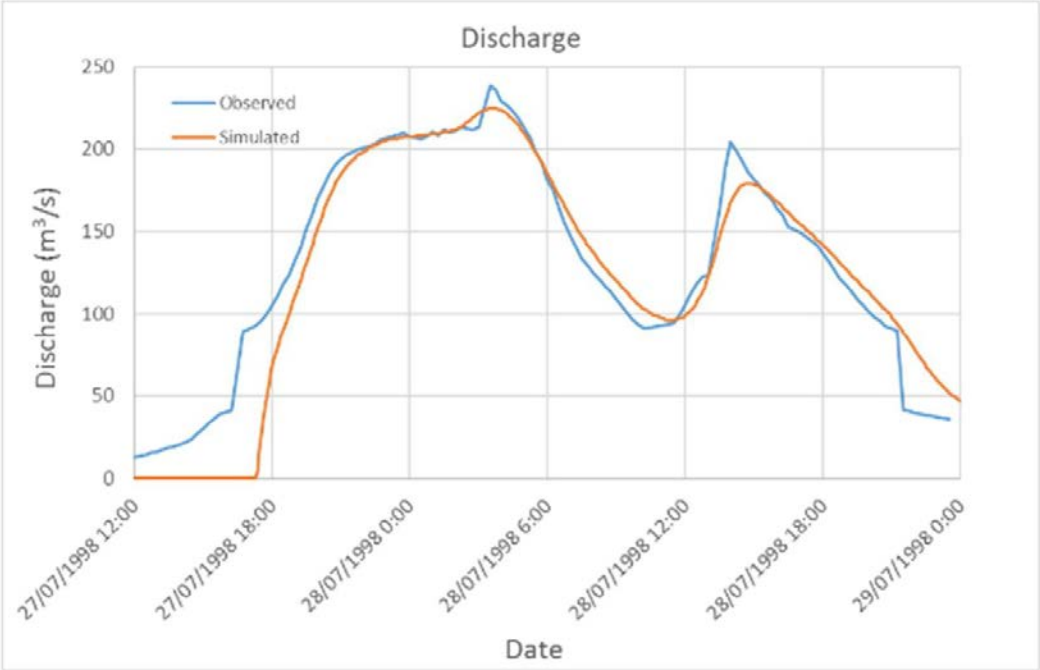
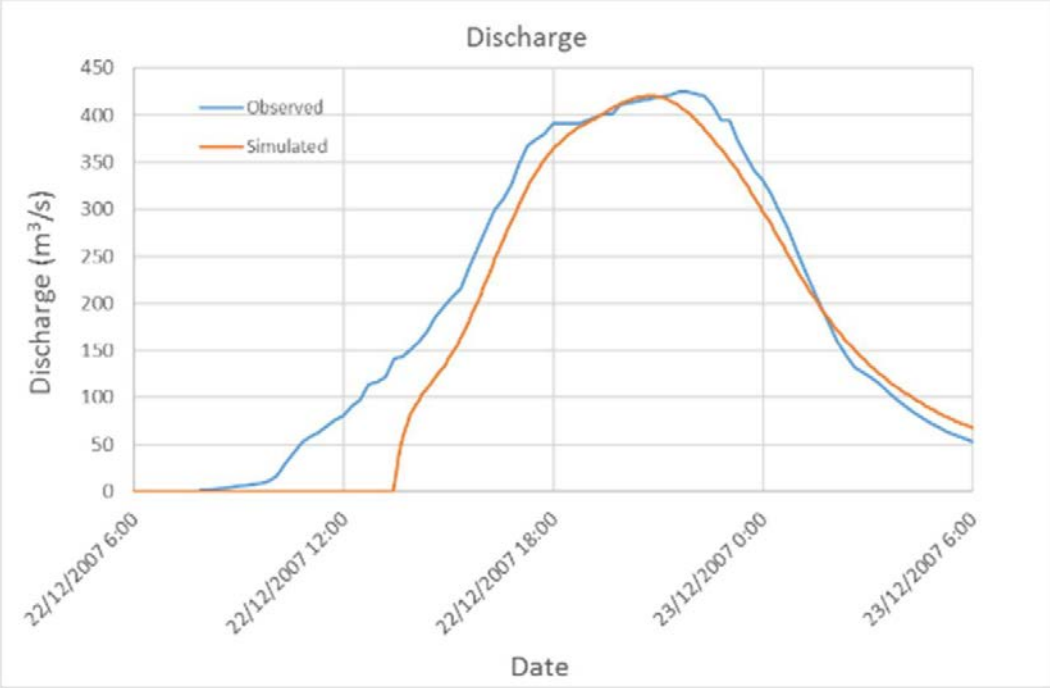


HYDROLOGY MODEL CALIBRATION (BARADINE CREEK)

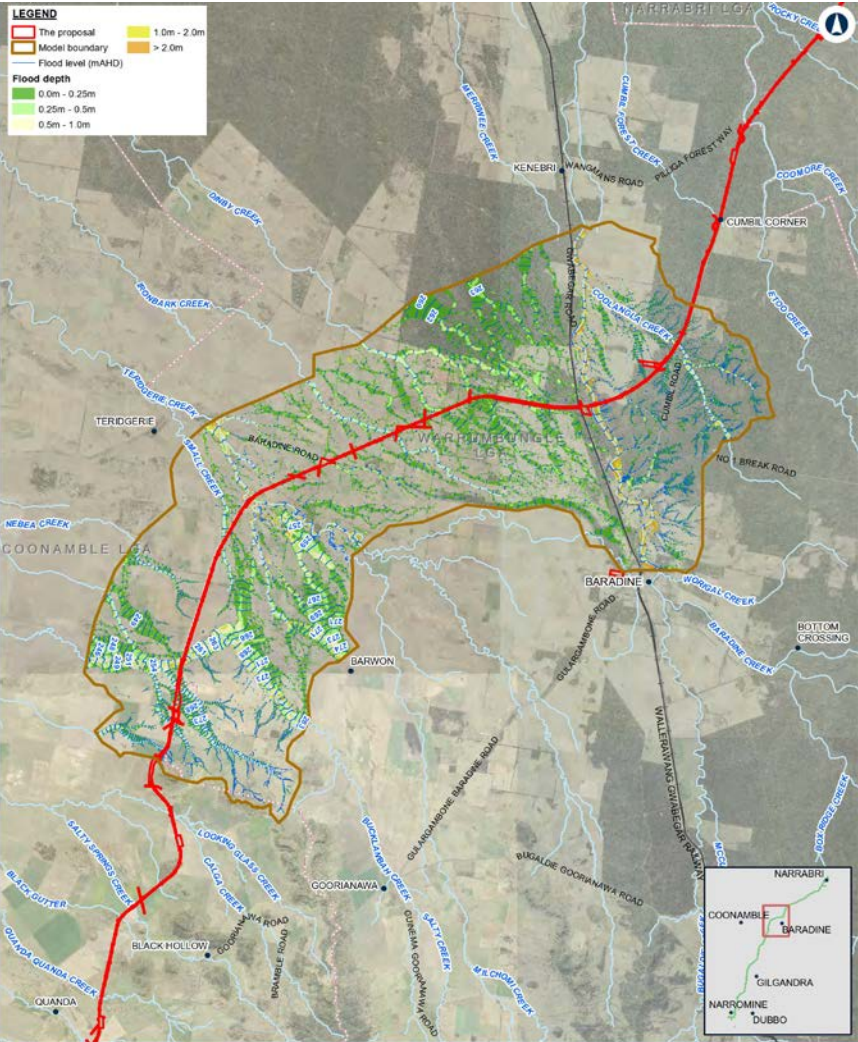


CALIBRATION OF N2N7 TUFLOW MODEL

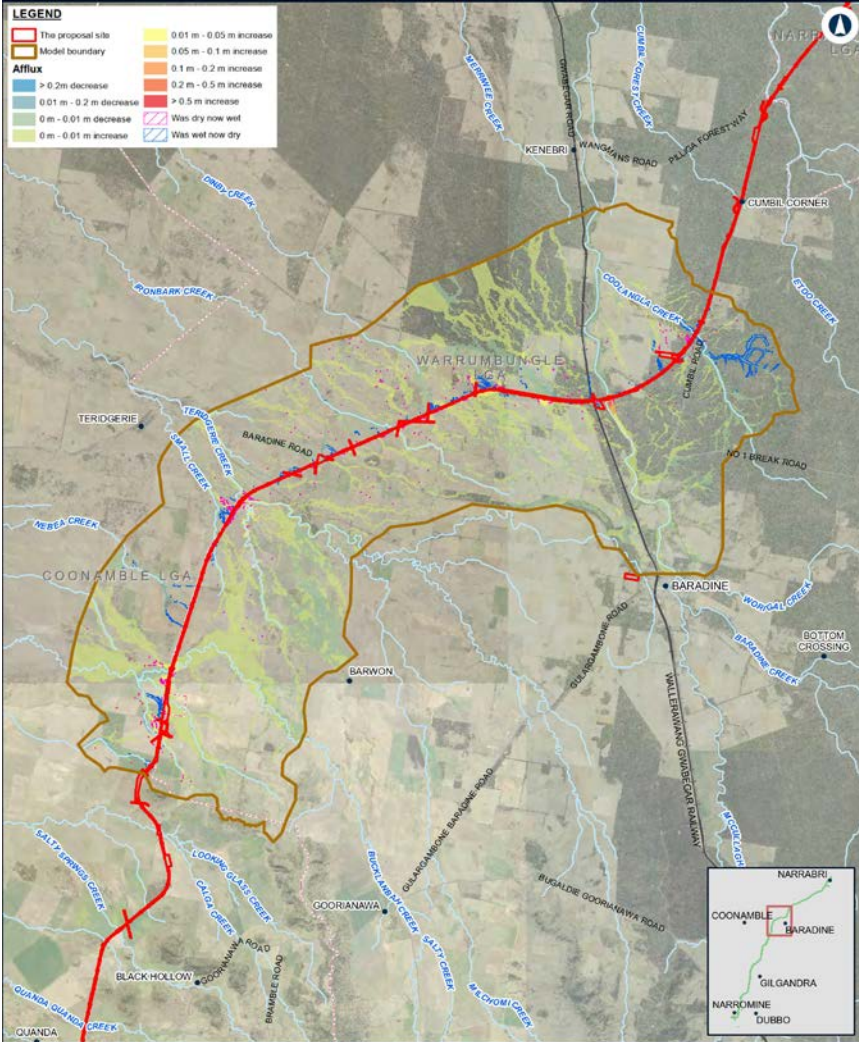
Baradine Creek at Kienbri No.2 Gauge



EXISTING FLOOD DEPTHS AND AFFLUX -1% AEP EVENT : N2N7 MODEL

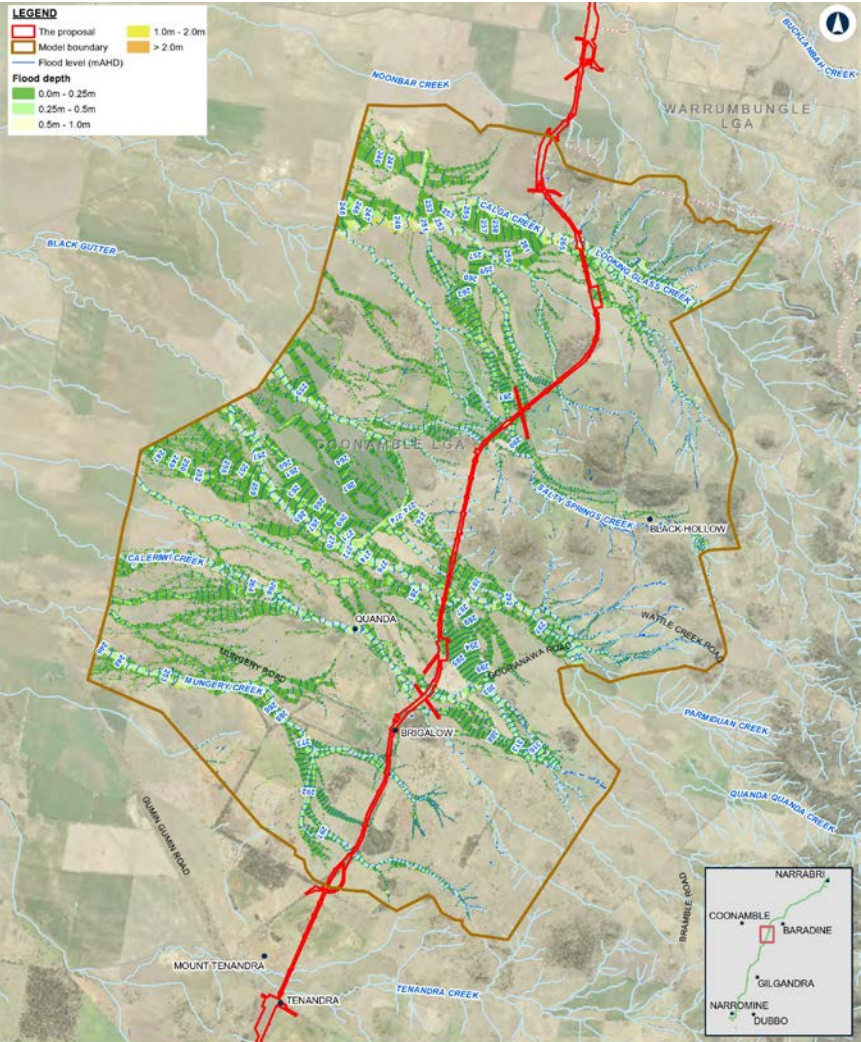


NARROMINE TO NARRABRI Existing peak depth / level (contour) - 1% AEP - N2N7 Appendix D - Figure 1.4h

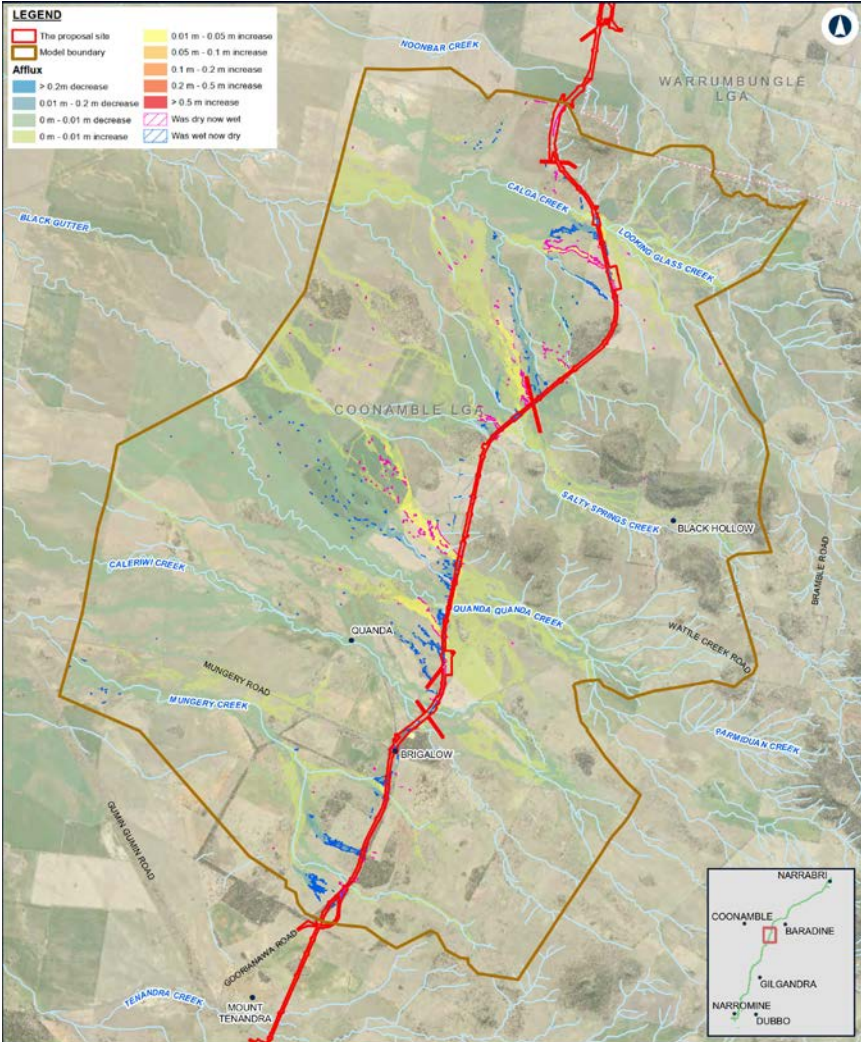


NARROMINE TO NARRABRI Change in peak flood level (afflux) - 1% AEP - N2N7 Appendix G - Figure 1.4h

EXISTING FLOOD DEPTHS AND AFFLUX -1% AEP EVENT : N2N8 MODEL

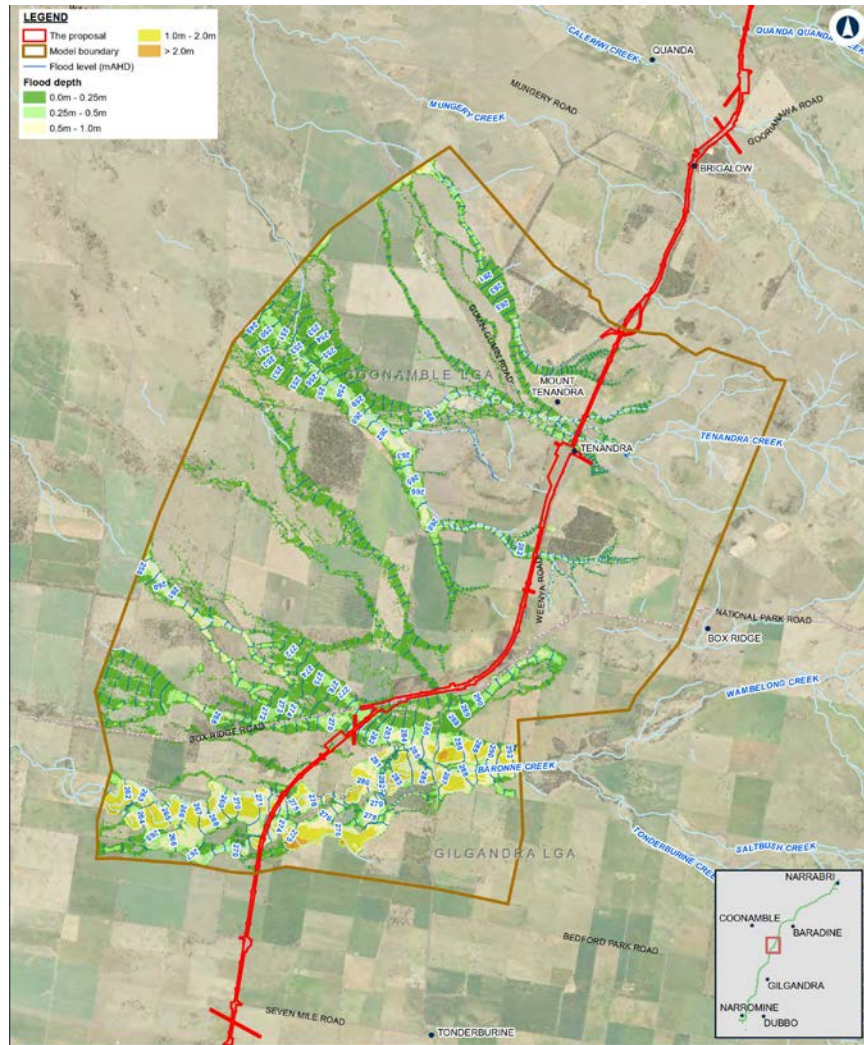


NARROMINE TO NARRABRI Existing peak depth / level (contour) - 1% AEP -N2N8 Appendix D - Figure 1.4g

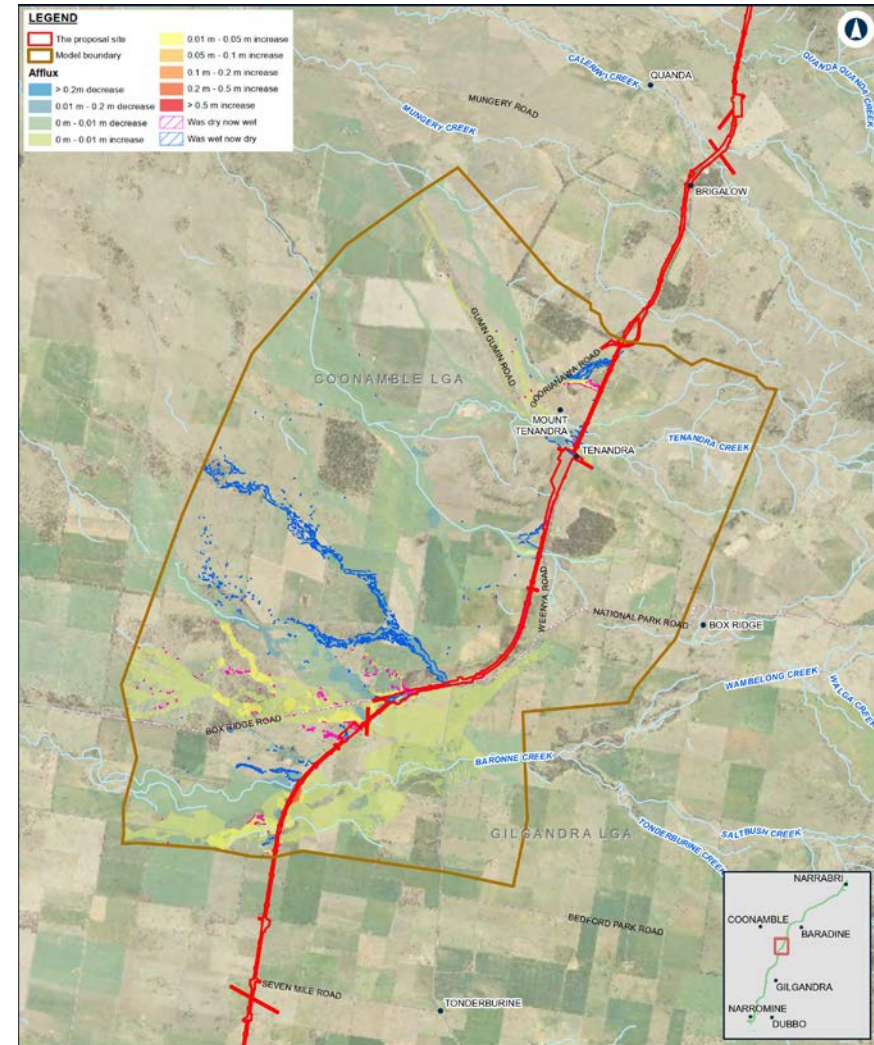


NARROMINE TO NARRABRI Change in peak flood level (afflux) - 1% AEP - N2N8 Appendix G - Figure 1.4g

EXISTING FLOOD DEPTHS AND AFFLUX -1% AEP EVENT : N2N9 MODEL

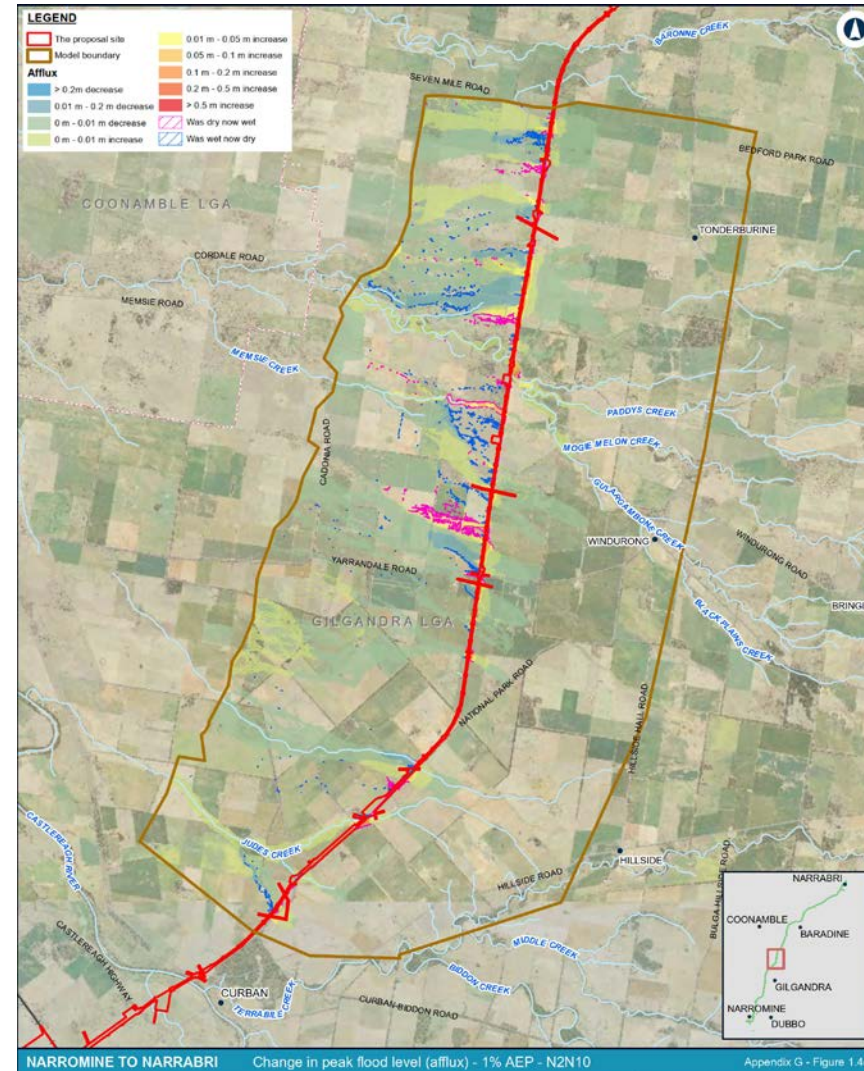
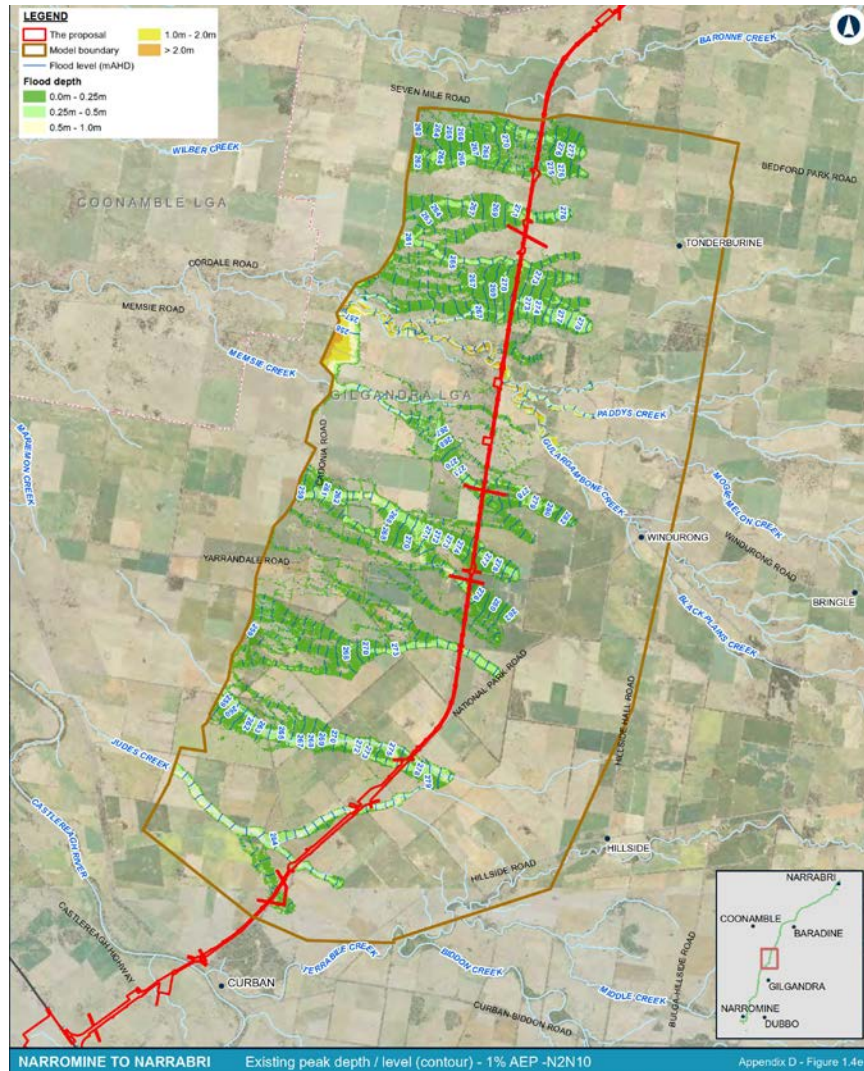


NARROMINE TO NARRABRI Existing peak depth / level (contour) - 1% AEP - N2N9 Appendix D - Figure 1.4f

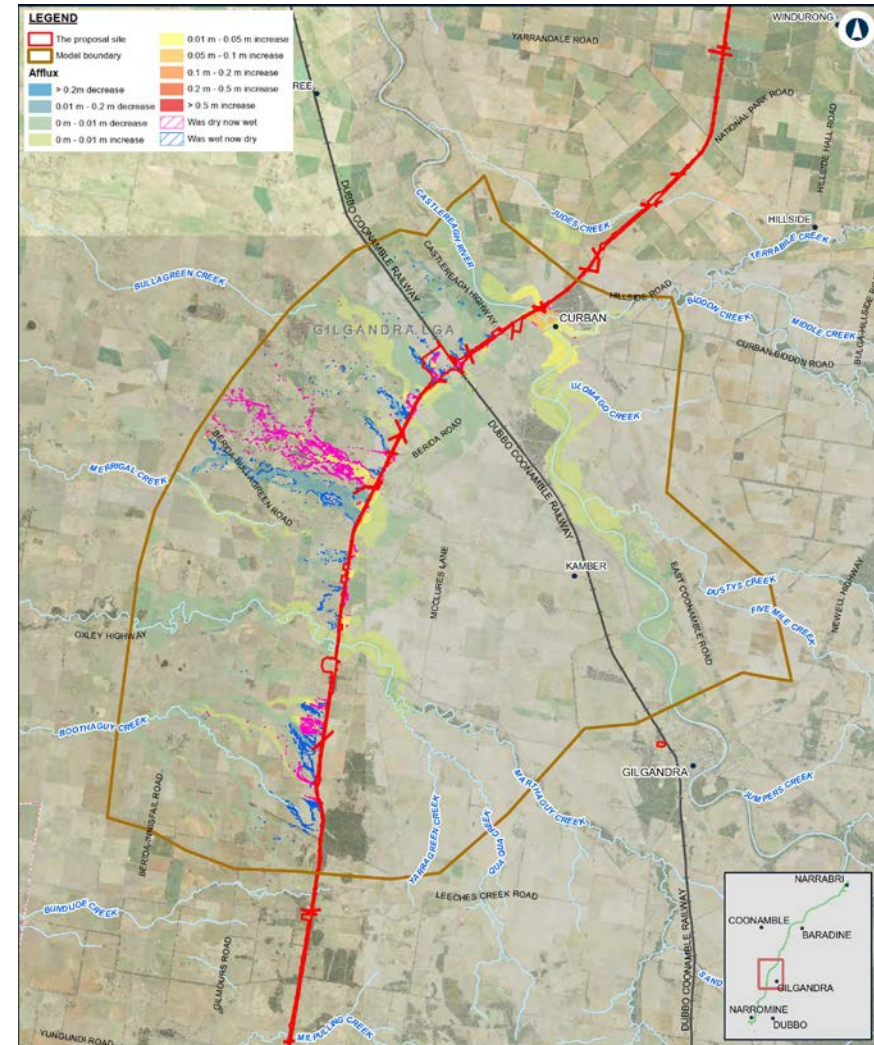
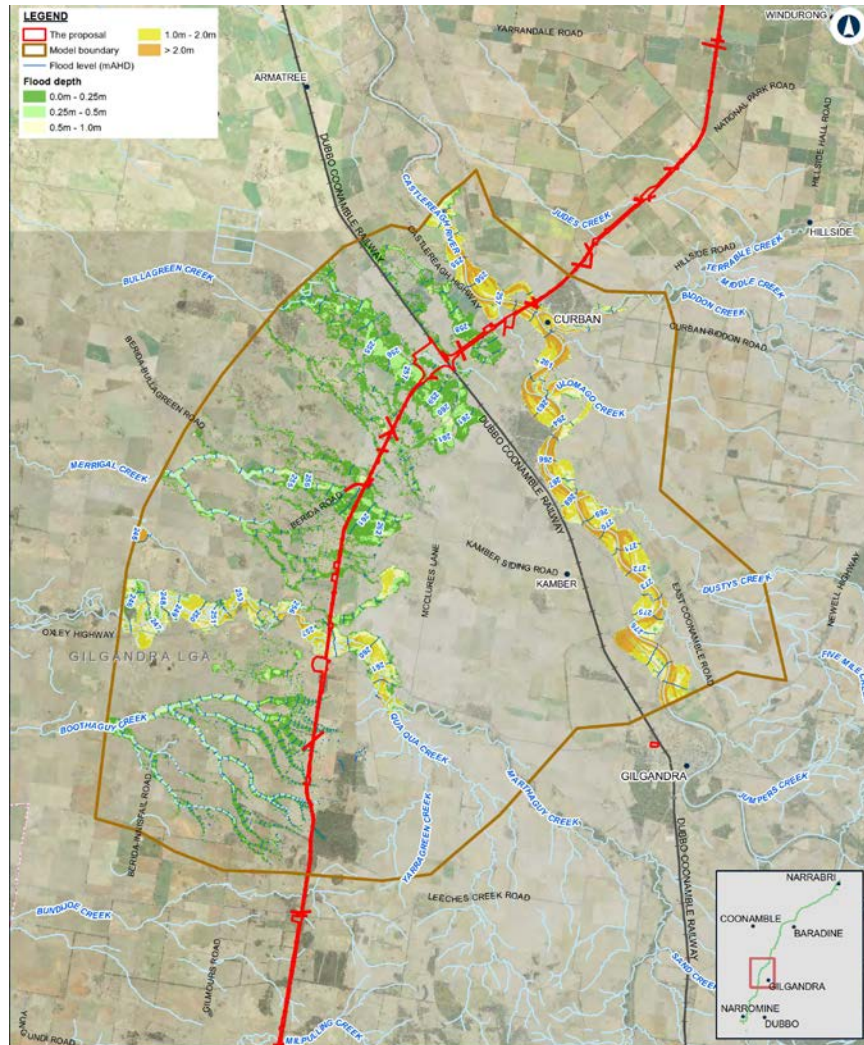


NARROMINE TO NARRABRI Change in peak flood level (afflux) - 1% AEP - N2N9 Appendix G - Figure 1.4f

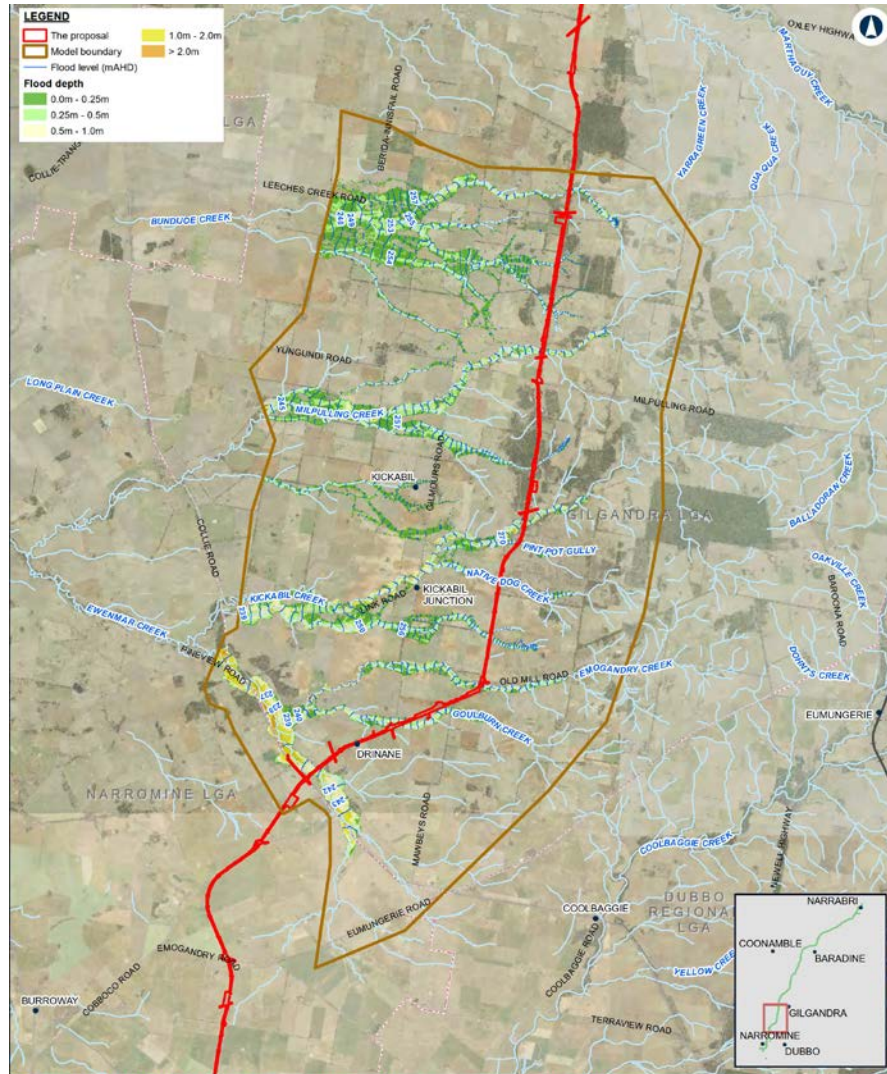
EXISTING FLOOD DEPTHS AND AFFLUX -1% AEP EVENT : N2N10 MODEL



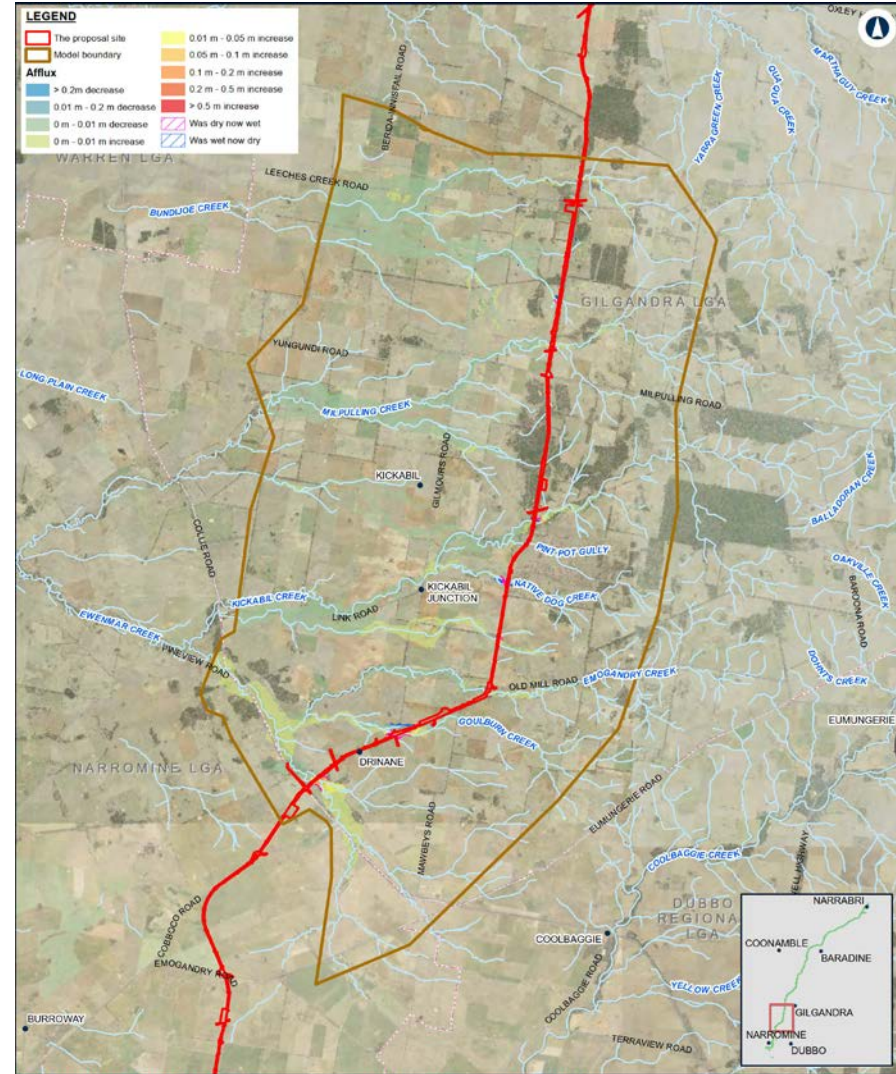
EXISTING FLOOD DEPTHS AND AFFLUX -1% AEP EVENT : N2N11N12 MODEL



EXISTING FLOOD DEPTHS AND AFFLUX -1% AEP EVENT : N2N13 MODEL



NARROMINE TO NARRABRI Existing peak depth / level (contour) - 1% AEP -N2N13 Appendix D - Figure 1.4c



NARROMINE TO NARRABRI Change in peak flood level (afflux) - 1% AEP - N2N13 Appendix G - Figure 1.4c

RESULTS – ALL BUILDINGS

Existing conditions - above floor flooding

TUFLOW model	20% AEP	5% AEP	1% AEP	PMF
N2N13	3	5	14	142
N2N11N12	6	10	44	372
N2N10	1	1	6	166
N2N9	0	0	5	76
N2N8	2	2	2	62
N2N7	1	6	14	395

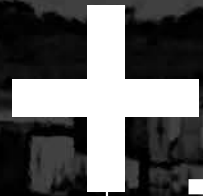
Buildings subject to > 10 mm afflux : Operational phase

TUFLOW model	20% AEP	5% AEP	1% AEP	PMF
N2N13	0	0	0	25
N2N11N12	0	0	6	170
N2N10	0	0	0	66
N2N9	0	0	0	25
N2N8	0	0	0	7
N2N7	0	0	0	52

WAY FORWARD

Project approval

- Detailed design and construction would be undertaken in accordance with the DPIE conditions of approval
- **Detailed Design**
 - Refinement of the feasibility design
 - Additional LiDAR survey
 - Further flood modelling to refine size of culverts and bridges
 - Floor level survey of impacted buildings
 - Further consultation with the community and stakeholders



Thank you





Inland Rail – Narromine to Narrabri

Community Consultative Committee

12 June 2020

Planning Assessment Process

- **ARTC** lodged an application for the Narromine to Narrabri project in July 2018
- **DPIE** issued SEARs in September 2018 and reissued to include four borrow pits, refinements at Black Hollow and provision of rail connections in September 2020
- **DPIE** has undertaken a consistency review of draft EIS and provided comments to **ARTC**
- **Exhibition – 8 December 2020 to 7 February 2021**

Exhibition

- Exhibited on DPIE's Major Projects website
- Physical copies and newspaper advertising affected by Covid-19 restrictions
- Anyone may make a written submission
- These need to be made online on DPIE's Major Projects website: <https://www.planningportal.nsw.gov.au/major-projects/project/10211>

Consultation

- DPIE will consult with Councils and Government departments
- Consultation on key assessment issues and impacts
- DPIE will also consult with community stakeholders

Assessment and Determination

- DPIE publishes submissions on website and provides to ARTC
- ARTC prepares Response to Submissions (RtS) and (if applicable) Amendment Report
- These are published on Major Projects website
- DPIE considers submissions and RtS and finalises assessment
- Application determined by Minister for Planning and Public Spaces



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PACKAGING STRATEGY: OVERALL IR PROGRAM

