



**INLAND RAIL
ILLABO TO STOCKINBINGAL (I2S)
COMMUNITY CONSULTATIVE COMMITTEE (CCC)**

November 2020

PRESENTATION OVERVIEW

- Project update

Melvyn Maylin (Project Director)

- Stakeholder and engagement update

Heath Martin (Stakeholder Engagement Manager)

Grant Johnson (I2S Stakeholder Engagement Lead)

- Hydrology update

Karen Brakell

(Principal Water Resources Engineer, WSP Australia Pty Limited)



**I2S PROJECT UPDATE
MELVYN MAYLIN**

November 2020

I2S PROJECT UPDATE

Activity since August CCC meeting:

1. Updated alignment map provided to all impacted landowners
2. Hydrology – Flood Model ground truthing with stakeholders
3. Private access requirements reviewed with landowners
4. Commenced the next series of field investigations
5. Continuing design development

CURRENT STATUS

- Progressing the refined alignment design to a reference design standard
- Stockinbingal connection – design review in progress

WHAT NEXT

ACTIVITY	DATE
Field investigations (Aboriginal cultural heritage, aquatic ecology, biodiversity, landscape character and visual impact, geotechnical, terrestrial, services investigations and ground water monitoring)	Dec 2020 – Feb 2021
Stakeholder consultation on Interim Reference Design	Feb 2021 – May 2021
Stakeholder consultation on Final Reference Design	Jun 2021 – Aug 2021
Land acquisition processes	Second half 2021
Environmental Impact Statement (EIS) lodgement	Second half 2021

HYDROLOGY ENGAGEMENT

PURPOSE

- ▶ To understand flood behaviour and ground truth the flood model
 - ▶ *Test the theoretical model against the practical experience before the design is incorporated into the model*

WHO IS BEING CONSULTED?

- ▶ Affected landowners
- ▶ Councils (Junee and Cootamundra-Gundagai Councils and Goldenfields Water)
- ▶ Local Emergency Management Officer (LEMO)
- ▶ Hydrology Fact Sheet developed

PRIVATE ACCESS

PURPOSE

- ▶ To understand suitable locations for private stock underpasses and level crossings along the alignment

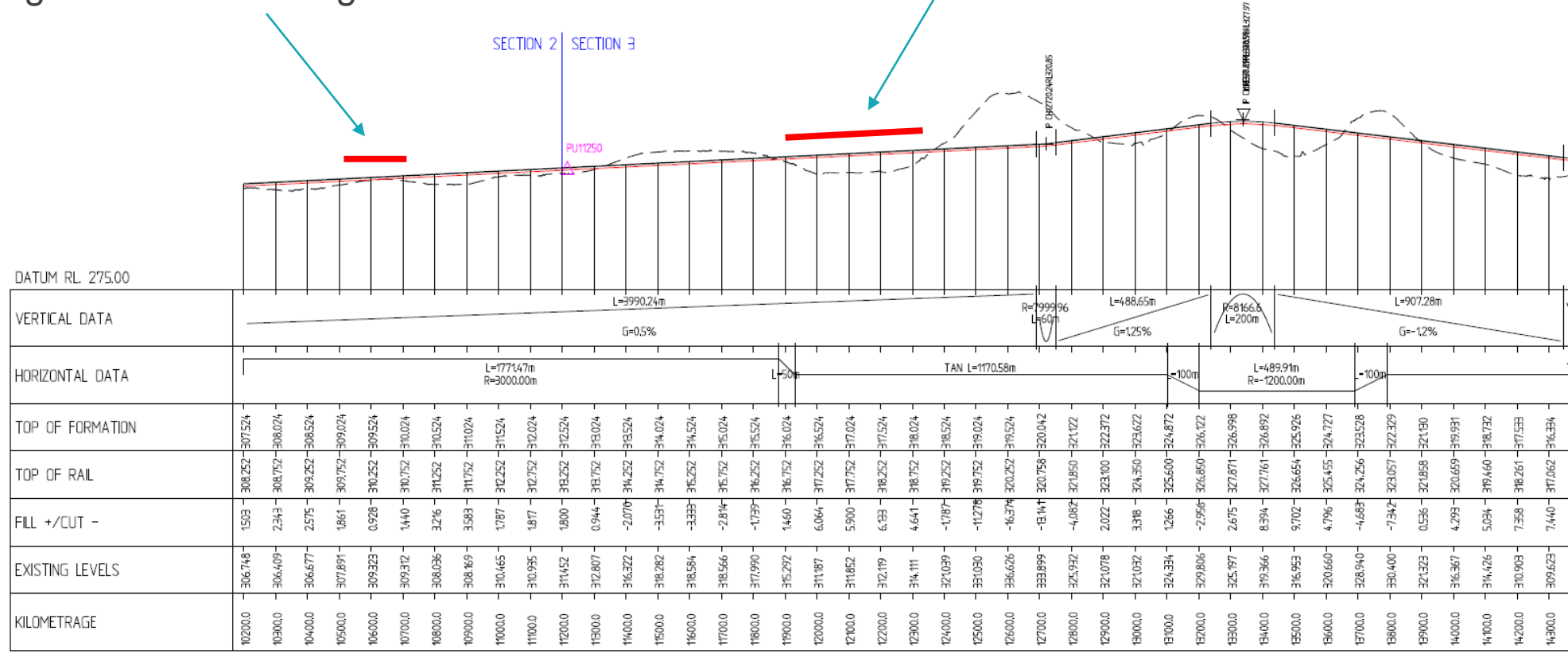
WHO IS BEING CONSULTED?

- ▶ Engaging with landowners as part of design development and considering where severance occurs how access issues across the alignment is achieved
- ▶ Capturing their inputs including alternate ideas to design where possible

ACCESS EXAMPLE (HYPOTHETICAL EXAMPLE)

Area of very minimal cut/fill required therefore possible location for level crossing somewhere along this section

Area of fill required therefore possible location for stock underpass somewhere along this section



LONGITUDINAL SECTION S3A2V
 HORZ 1:10000 VERT 1:1000

ENVIRONMENTAL IMPACT STATEMENT (EIS) UPDATE

- ▶ Draft EIS lodgement to Department of Planning, Infrastructure and Environment (DPIE) for review is expected late 2021
- ▶ Public exhibition is planned for early 2022 – minimum 28 days public exhibition period where the public will be invited to view the plans and make formal submissions online to DPIE



**I2S STAKEHOLDER ENGAGEMENT UPDATE
HEATH MARTIN**

November 2020

STAKEHOLDER ENGAGEMENT UPDATE

Consulting on refined design

- ▶ In September, all impacted landowners were provided an updated alignment map and individual landowner maps. They were also offered meetings to discuss the refined design.
- ▶ Five online community information sessions – 14 attendees across all
- ▶ Over 150 landowners in and around Stockinbingal were provided a copy of the refined design map and invited to online community information sessions
- ▶ The broader community (over 300 emails) were invited to online community sessions to discuss the preferred refined design
- ▶ Main feedback has been severance; access: acquisition and compensation. Other concerns raised were related to noise mainly during operation.



Existing rail infrastructure in Stockinbingal

STAKEHOLDER ENGAGEMENT UPDATE

Consulting on access and local flood behaviour

- ▶ In late October, all impacted landowners were offered face-to-face meetings to discuss private access requirements and local flood behaviour
- ▶ All impacted landowners were provided individual hydrology maps and marks showing suitable areas for underpasses and level crossings
- ▶ Excellent feedback to the hydrological model was received
- ▶ Again the main feedback was about severance; all-year access; and acquisition/compensation.
- ▶ Discussion points included stock yards either side of rail, stock underpass design and location suitability



Existing rail infrastructure in Stockinbingal

ENGAGEMENT AND CONSULTATION NEXT STEPS

Indicative timing:

- ▶ Nov / Dec 2010: Ongoing field investigations (e.g. survey, biodiversity, heritage, aquatic ecology)
- ▶ Early 2021: will consult on the updated reference design and continue flood consultation with maps of the updated design incorporated into the ground truthed flood model
- ▶ Option of face-to-face or teleconference meeting will be offered
- ▶ Ongoing consultation with wider community throughout, including community information drop-in sessions
- ▶ Ongoing scheduled Community Consultative Committee (CCC) meetings



Inland Rail at the Cootamundra Show, 2019

REGULATOR CONSULTATION

- ▶ ARTC regularly consults with DPIE and other government regulators. Workshops aim to provide an overview of the field studies to date, detail the broader findings, risks, opportunities and allows a mechanism for feedback from the relevant regulators.
- ▶ Once the early draft EIS is submitted by the service provider, ARTC will facilitate workshops focussed on assessments within the EIS. Workshops are planned for first half-year 2021.

I2S SPONS AND DONS

- ▶ BREED Taskforce, Temora
 - ▶ Funding was for the purchase of furniture for 4 offices and a common area
 - ▶ The common area will now be equipped to support eight hotspot desks
 - ▶ The aim of the initiative is to provide space and assistance for new businesses in a commercial space
- ▶ BREED Australia's Temora business manager Rob Heinrich said Temora Shire Council recommended the Inland Rail sponsorship and donations program to seek support



The entry to Temora's new BREED Business Centre

SUPPORT SERVICES

- ▶ Uncertainty for landowners and communities during planning for Inland Rail may mean a little bit of extra support is needed
- ▶ Services are independent of Inland Rail and privacy and confidentiality is assured
- ▶ A number of support services are available including those through the Murrumbidgee Primary Health Network
- ▶ Murrumbidgee Central Access and Navigation (CAN) Team
 - ▶ Free service
 - ▶ 1800 931 603
 - ▶ can@mphn.org.au



+
**Addressing
life pressures**


Certain life pressures can sometimes make us feel stressed, anxious or overwhelmed.

Uncertainty for landowners and communities during planning for Inland Rail may mean you need a little bit of extra support. That's where connecting with mental health and wellbeing supports can help you manage through difficult periods:

- ▶ Support is available in a stepped care model with flexible access
- ▶ Delivered locally via face to face, telehealth and phone

To access supports, please phone Murrumbidgee Central Access and Navigation (CAN) Team ☎ **1800 931 603** or make contact via the following email: ✉ can@mphn.org.au

This service is supported by funding from Murrumbidgee Primary Health Network.

ARTC 
inlandrail.com.au

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

INL 019



**HYDROLOGY UPDATE
KAREN BRAKELL**

November 2020

HYDROLOGY AND FLOODING

Presentation outline

- ▶ Basics and terminology for Hydrology and flooding
- ▶ Background guidelines, policies
- ▶ Sources of information
- ▶ Flood behaviour across the project

UNDERSTANDING FLOODING

- ▶ Hydrology – the study of rainfall over land and how it generates flood flows and volumes
- ▶ Hydraulics – converts flows and volumes to flood heights
- ▶ Flood models – simply performs calculations using equations that have been developed to simulate (model) rainfall, flows and heights
- ▶ Flood prone land – all land subject to inundation from a probable maximum flood event.

UNDERSTANDING FLOODING - HISTORY

- ▶ Largest Rainfall events
 - ▶ March 1956,
 - ▶ April 1969,
 - ▶ November 1974,
 - ▶ January 1984 (Australian Day),
 - ▶ February 1994,
 - ▶ December 2010,
 - ▶ February-March 2012,
 - ▶ September 2016 (wettest month rainfall on record at Stockinbingal General Store from 104 years of data),
 - ▶ August 2020

POLICIES AND GUIDELINES

National

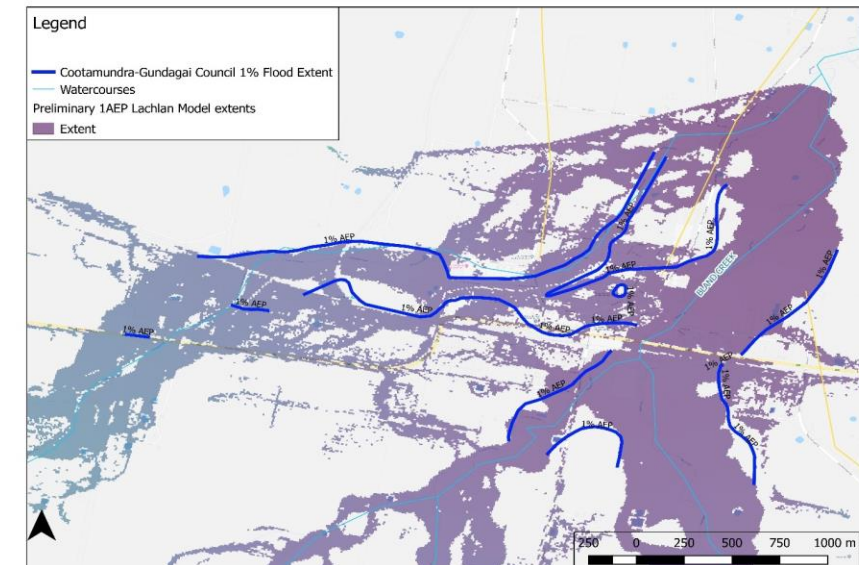
- ▶ Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia, Handbook 7, Australian Institute of Disaster Resilience, 2017
- ▶ Australian Rainfall and Runoff: A guide to flood estimation, Engineers Australia, 2019

State

- ▶ NSW Floodplain Development Manual, The Management of Flood liable Land, NSW Government, 2005

Local

- ▶ Cootamundra – Gundagai Regional Council, Development Control Plan 2013 Section 6.2 Flood Prone Land
- ▶ Junee Shire Council, Local Environment Plan 2012, Section 6.2 Flood Planning



PROJECT FLOODING REQUIREMENTS

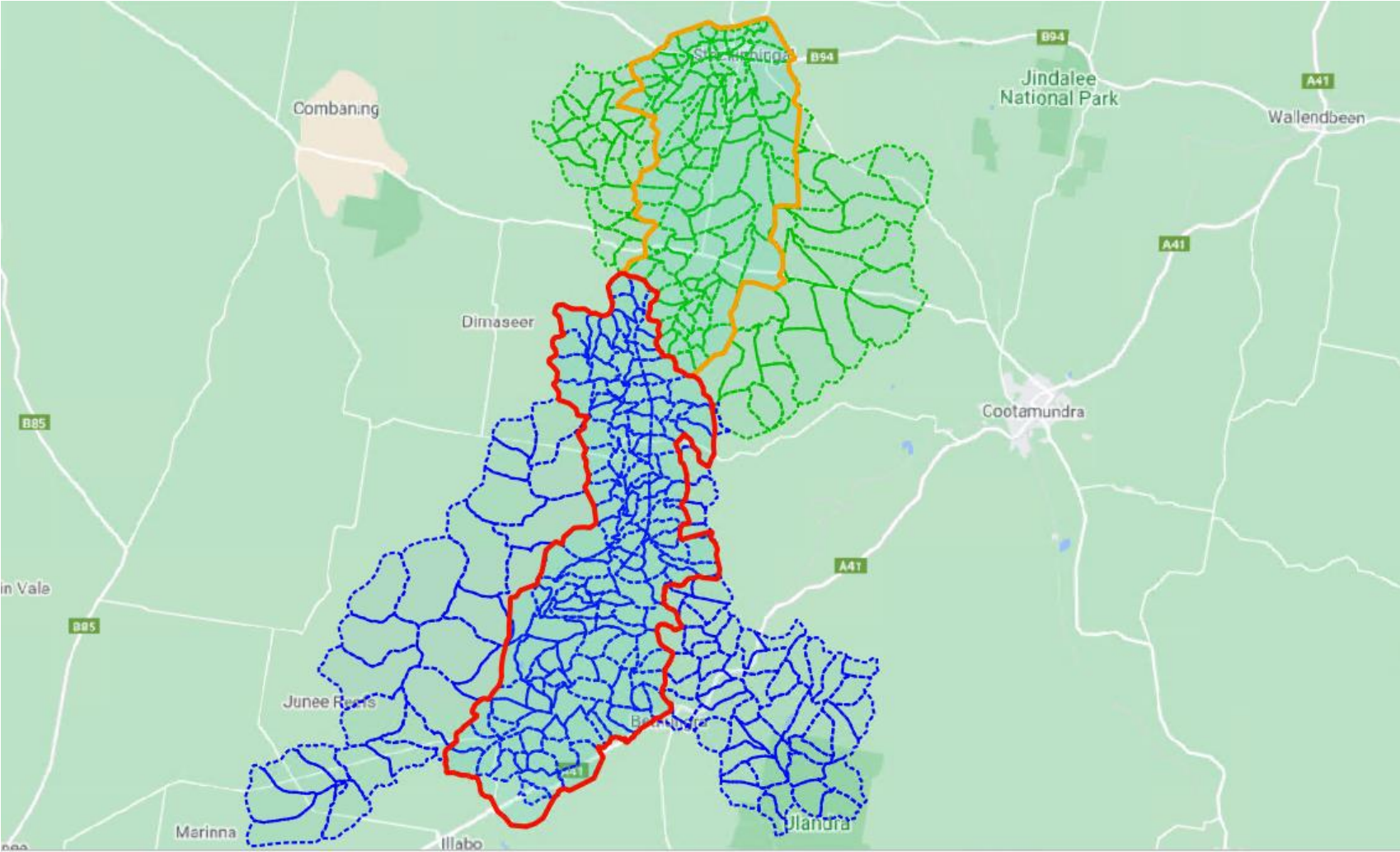
- ▶ Flood immunity
- ▶ Damage to infrastructure
- ▶ Afflux
- ▶ Scour
- ▶ Environmental

FLOOD MODEL INPUTS

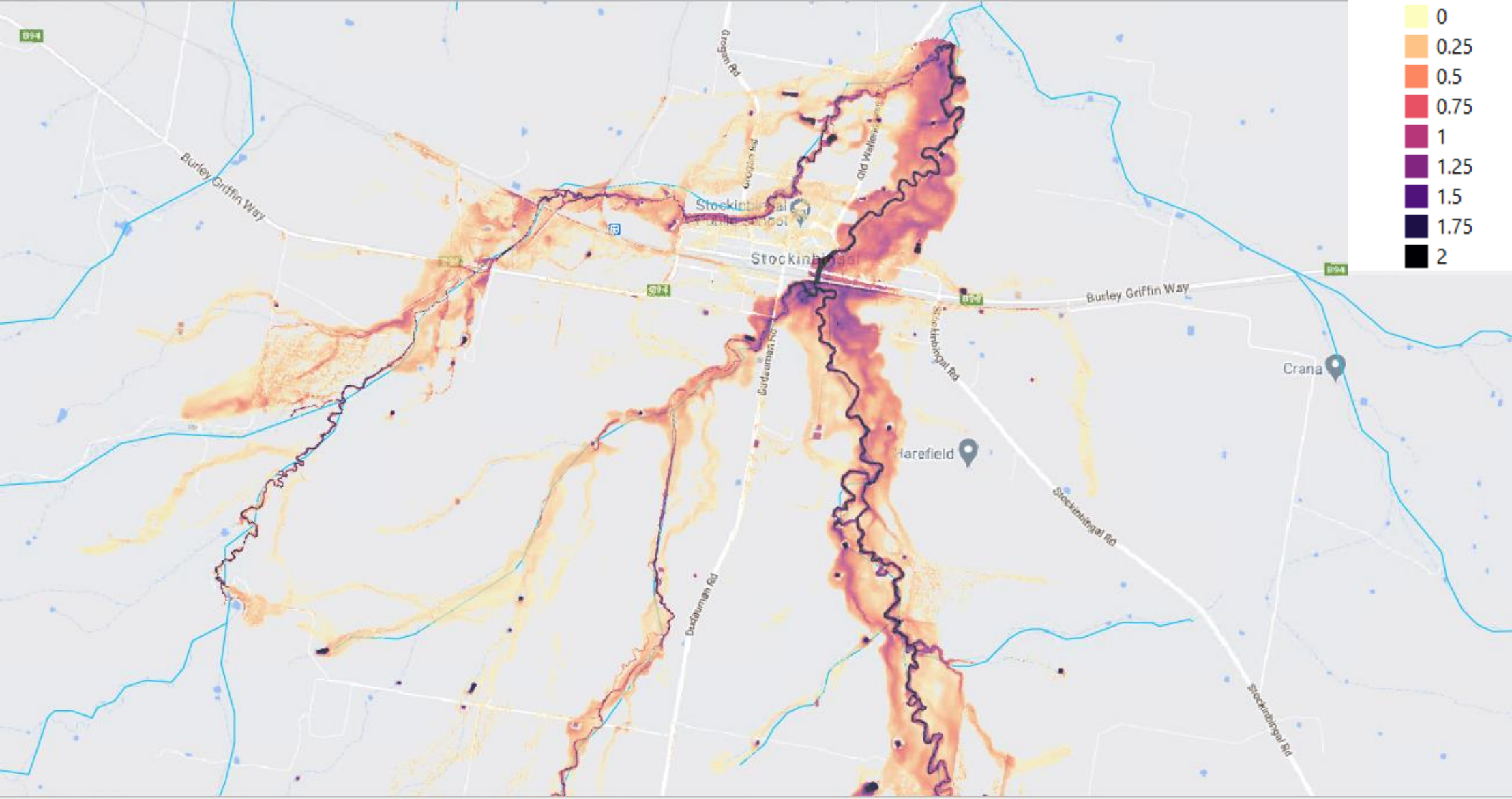
- ▶ Elevation data – topographic data of the project area and the catchment areas
- ▶ Detailed survey – spot heights and dimensions of key structures including – Burley Griffin Way, Ironbong Road at Ulandra Creek, existing rail lines at Stockinbingal and between Bethungra and Illabo
- ▶ Aerial photographs – used to identify land use types to understand where rainfall may be interrupted by vegetation or where there are roads where rainfall does not infiltrate into the ground and where farm dams are across the catchment.
- ▶ Historic rainfall depths
- ▶ Historic stream flow data
- ▶ Design rainfall depths

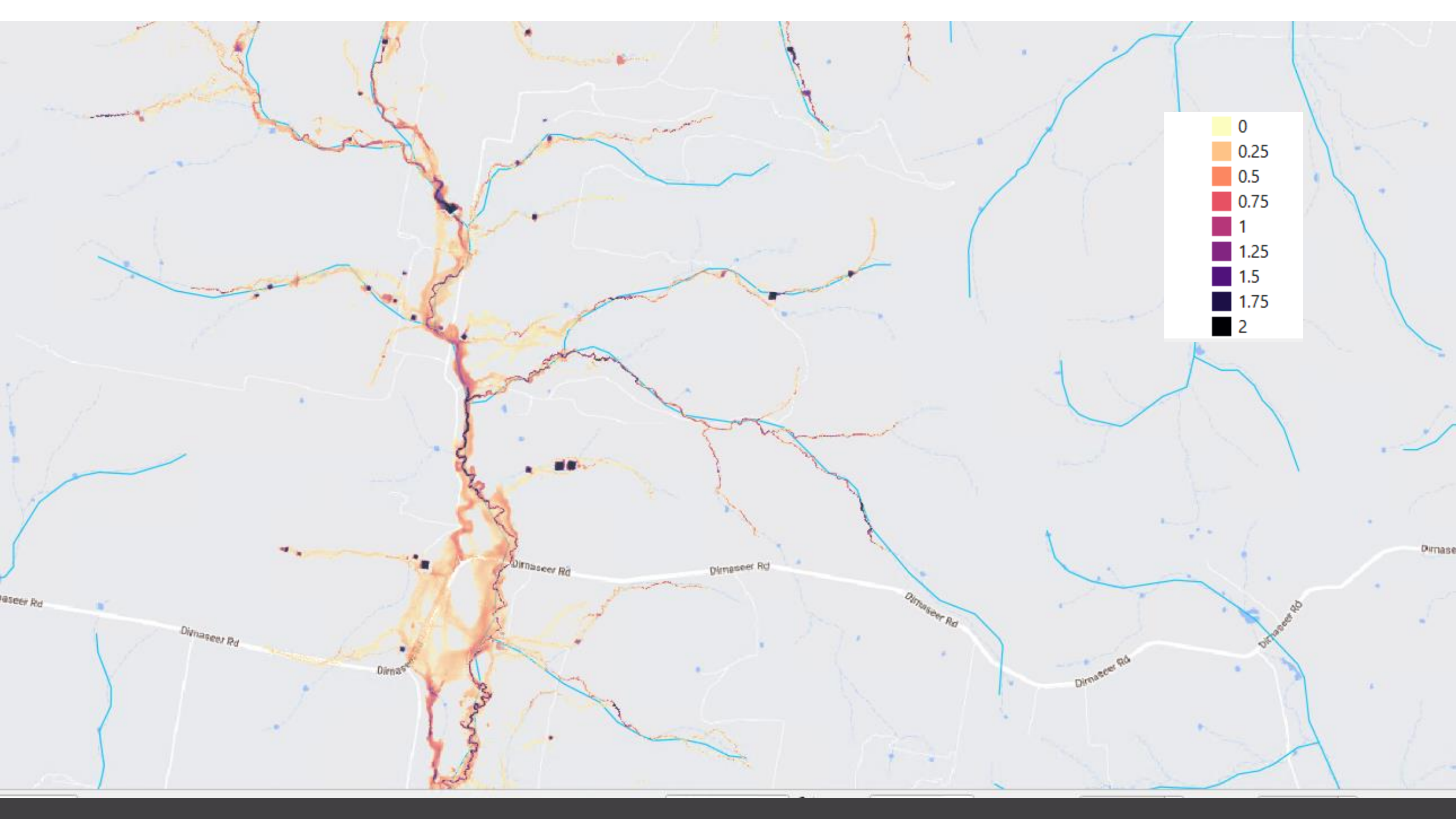


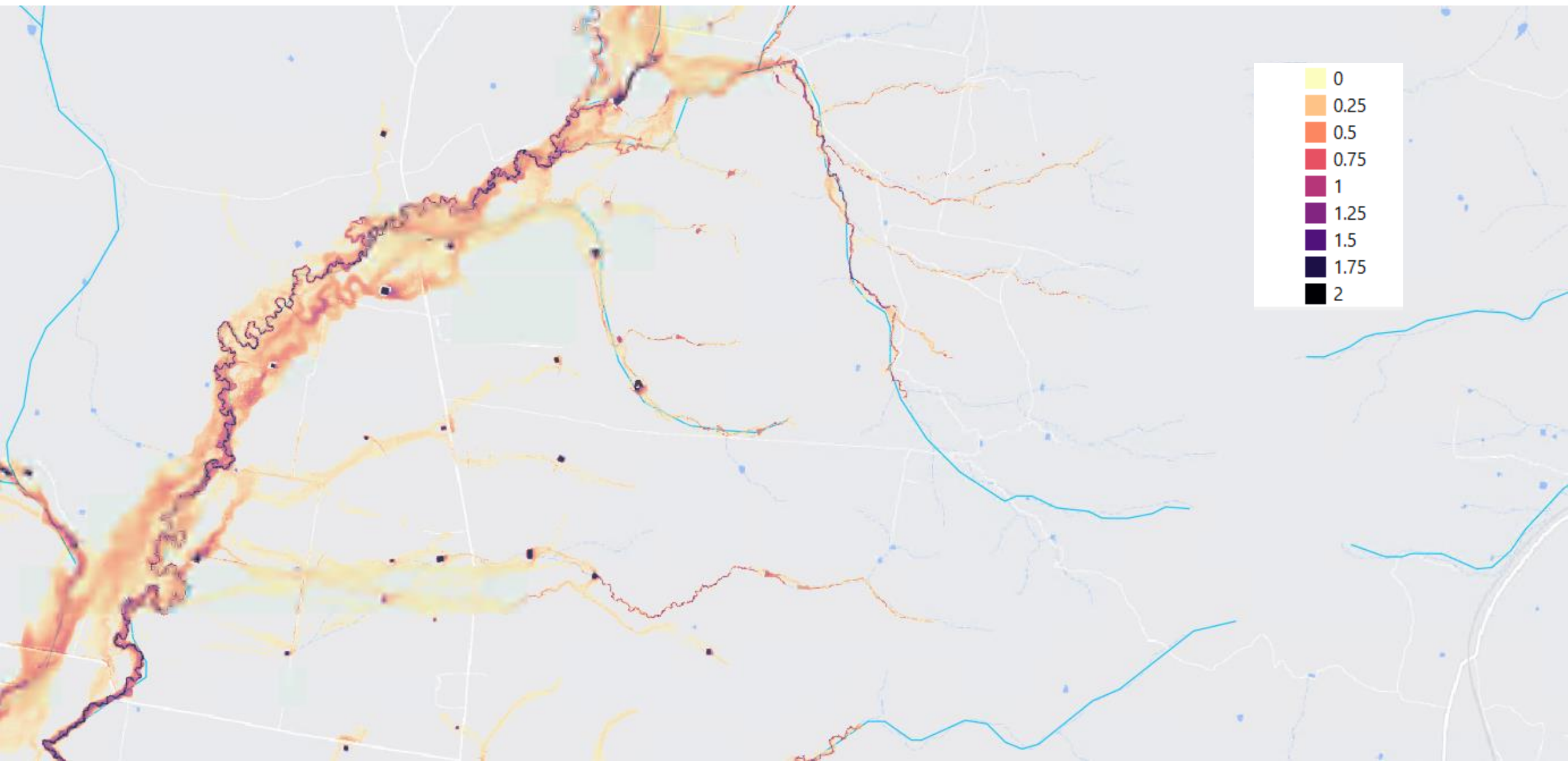
FLOOD MODEL LAYOUT

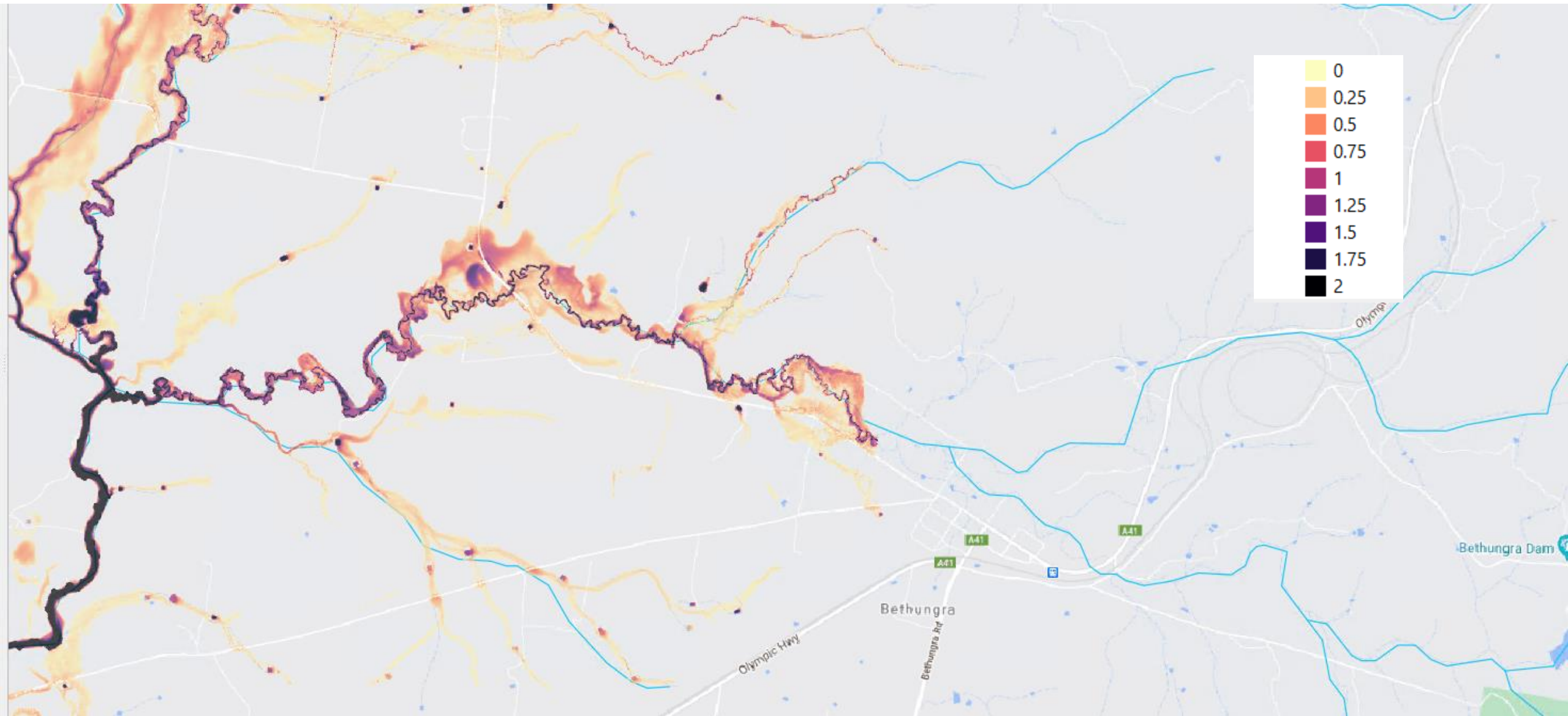


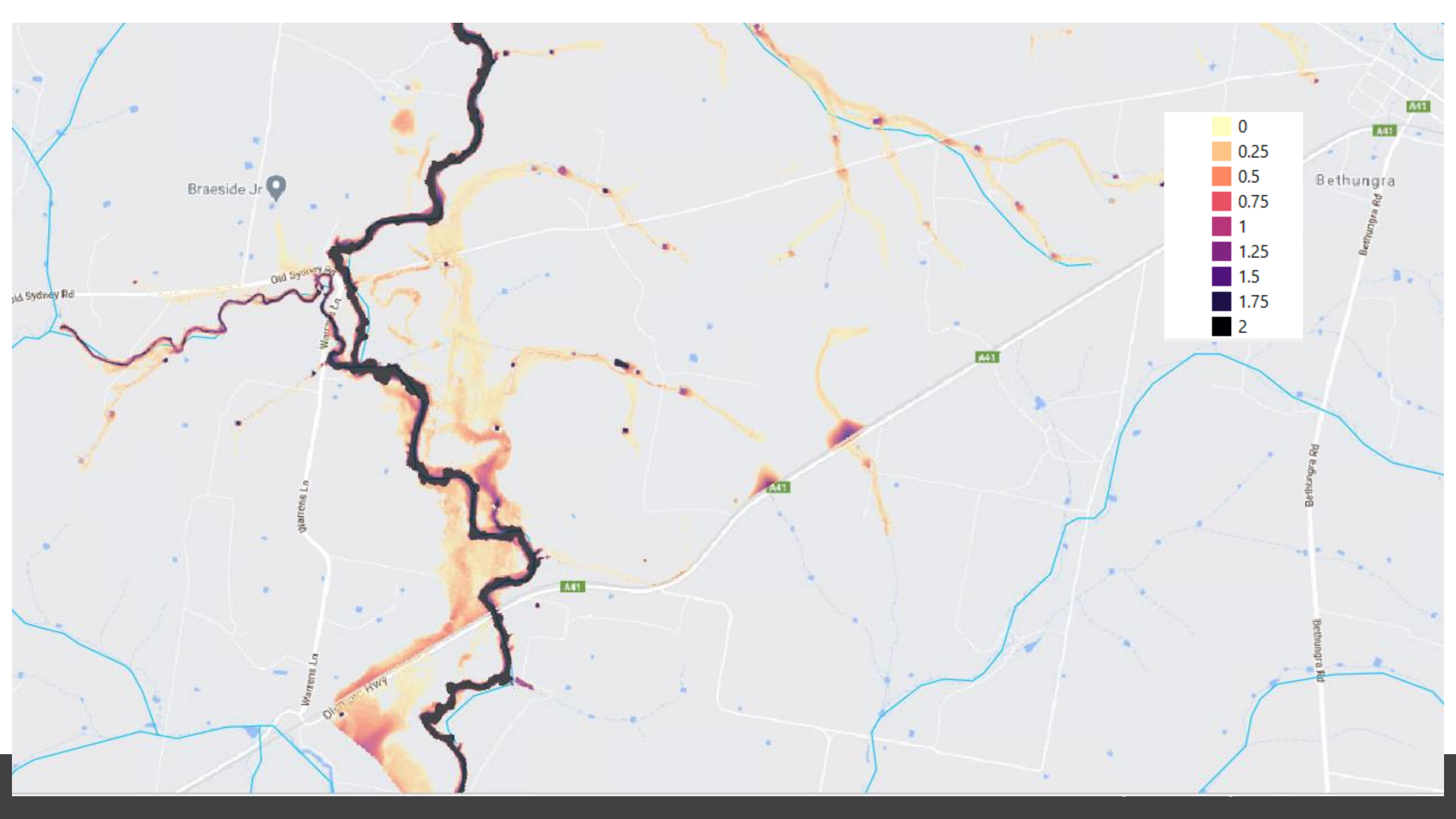
FLOOD MODEL RESULTS











HYDROLOGY MODELLING CONSULTATION

- ▶ Two-stage consultation process with council and impacted landowners will be undertaken. Stage one consultation feedback will ground truth the base model.
- ▶ Landowner meetings
- ▶ Meetings with Junee and Cootamundra-Gundagai Councils
- ▶ Transport for NSW
- ▶ State Emergency Services
- ▶ Local Emergency Management Committee

HYDROLOGY MODELLING CONSULTATION



NEXT STEPS

- ▶ Update the flood models to include comments from landowners – contour banks, dams, flow paths.
- ▶ The draft reference design will be incorporated into the flood models to understand the hydrological impacts of the new rail alignment.
- ▶ Stage two consultation will discuss impacts with council and landowners.

Questions?

**INLAND
RAIL** 

THANK YOU

ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.