



WYANGALA DAM WALL RAISING PROJECT

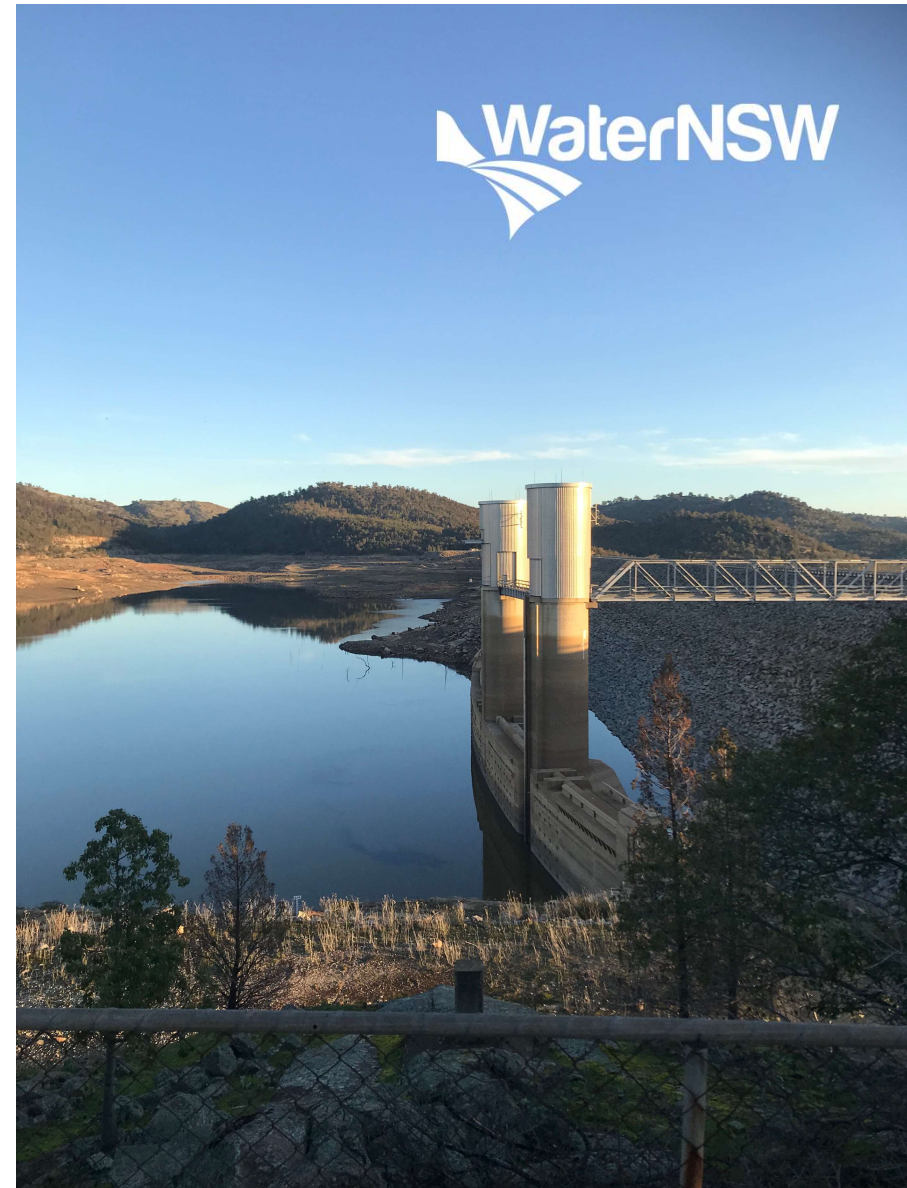
Project update
December 2020



Agenda

- Acknowledgement of Country
- Introductions
- Project update
- Environmental assessment update
- Engagement
- Connect with us
- Questions

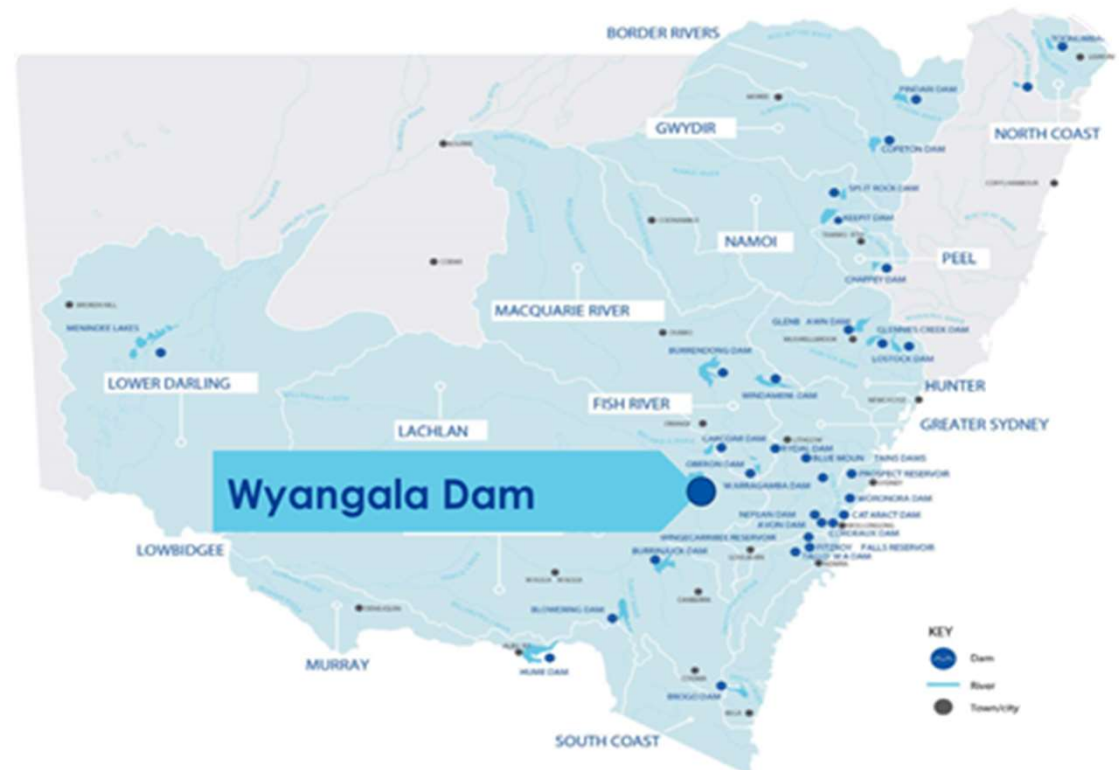
WaterNSW



Purpose of webinar



- Today's webinar
- Held regularly to share project updates
- Opportunity to ask questions



Background

Since late 2019 we have been developing the project:

- Finalising the concept design
- Field work almost complete
- Procurement for a new Wyangala Water Treatment Plant
- Preparation of inputs for final business case
- Engaging with stakeholders, communities and Aboriginal parties
- Establishing a project office



Confirmed FSL



Confirmed 10m Full Supply Level will inform:

- Environmental Impact Statement
- Final business case
- Concept design
- Holiday Park planning work



2021 activities



Environmental field surveys and investigations continue



Landholder engagement continues



Community information sessions and webinars continue



Environmental Impact Statement public display for consultation



Final business case developed



Construction partner procurement



Detailed design starts



Construction of Water Treatment Plant at Wyangala starts



Construction planning for Holiday Parks finalised

New Water Treatment Plant



- 'No regrets' project
- Planning pathway
- Procurement
- Construction & commissioning
- Benefits



Environmental assessment

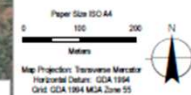


Key features include:

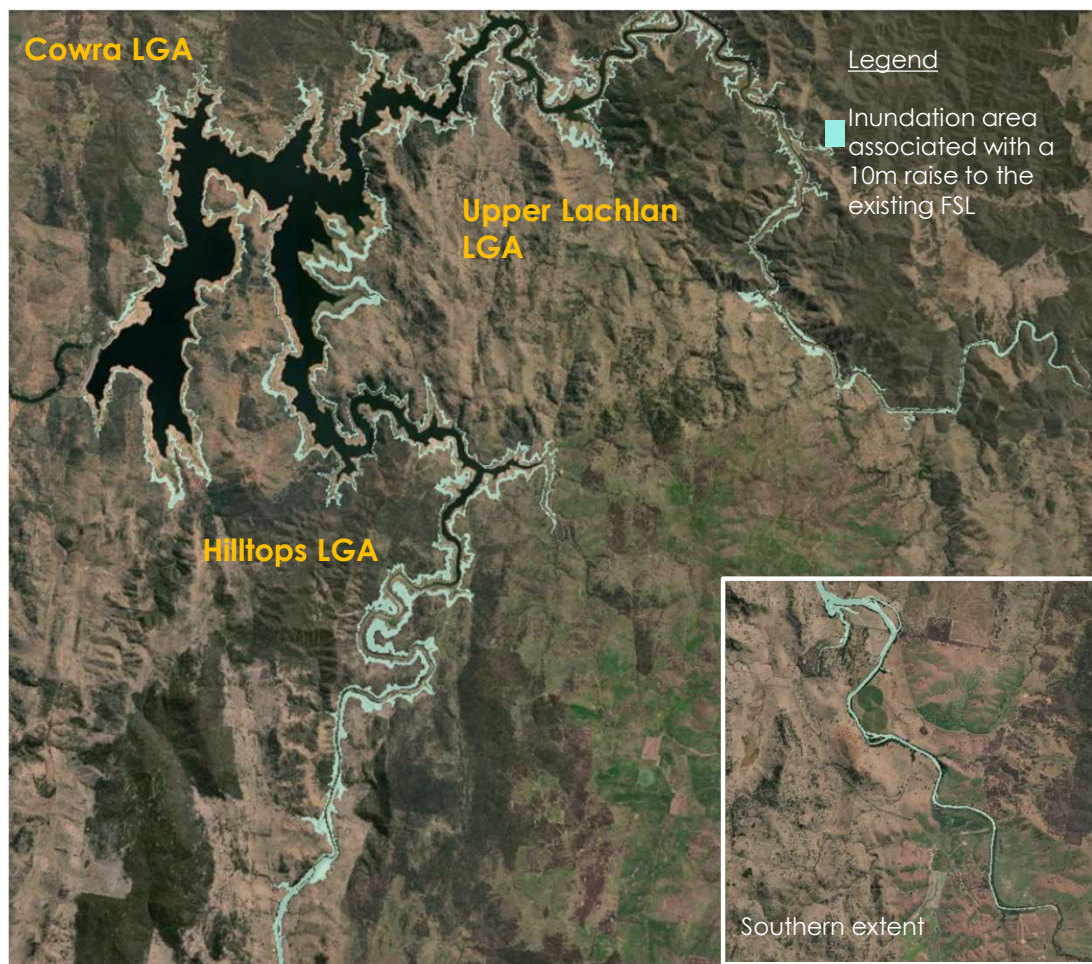
- 10m increase in Full Supply Level
- Modify spillway to suit new FSL and embankment
- Modify intake towers to suit new FSL
- New saddle dam near the entrance of Wyangala Waters Holiday Park



Further detail



Inundation levels to date

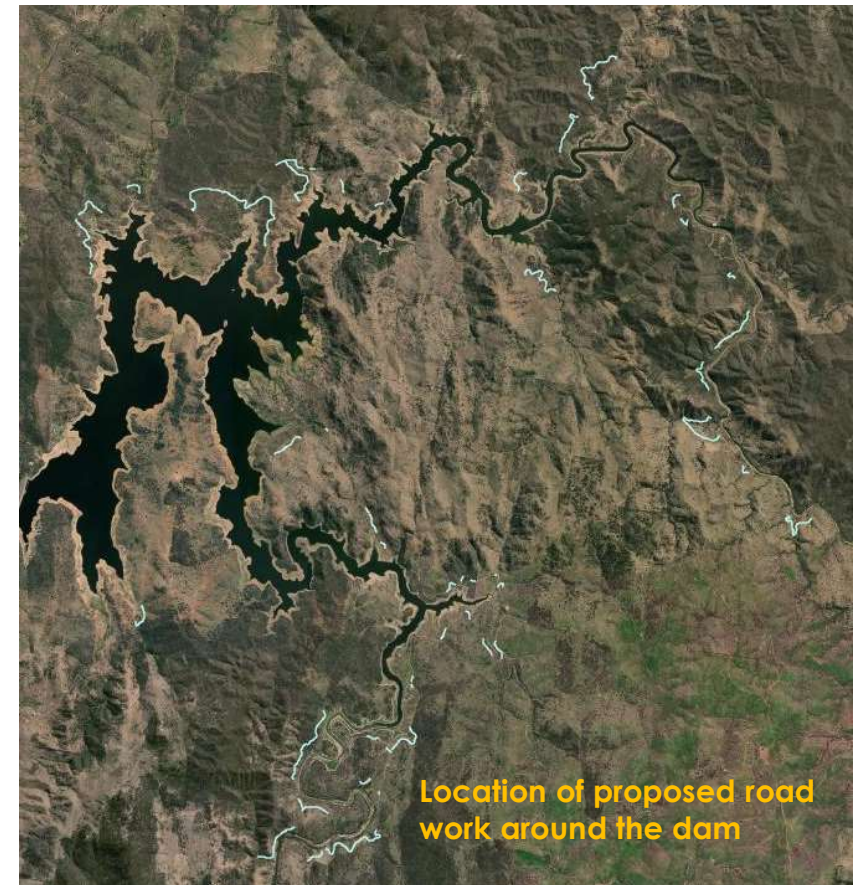


Ancillary work



Ancillary work impact areas and activities include:

- Relocating existing public and private roads and infrastructure (**blue**)
- Relocating facilities within both Wyangala Waters and Grabine Lakeside Holiday Parks



Construction



Construction staging program:

- Dam must remain operational
- Manage operation and construction safety
- Construction is expected to take up to four years

Clay and rock required:

- Materials to be sourced locally and as close to project site as possible
- Considering expanding rock quarry used for previous dam construction



Stage 1 - Preparing downstream foundation

Stage 2 – Placing downstream rock fill

Stage 3 – Removing existing dam crest

Stage 4 – Start raising dam wall

Stage 5 – Finish raising dam wall

Construction

Due to the large workforce and isolation of the site, we are considering:

- Dedicated local construction workforce accommodation
- Investigating former dam construction workforce accommodation site



Previous construction workforce accommodation

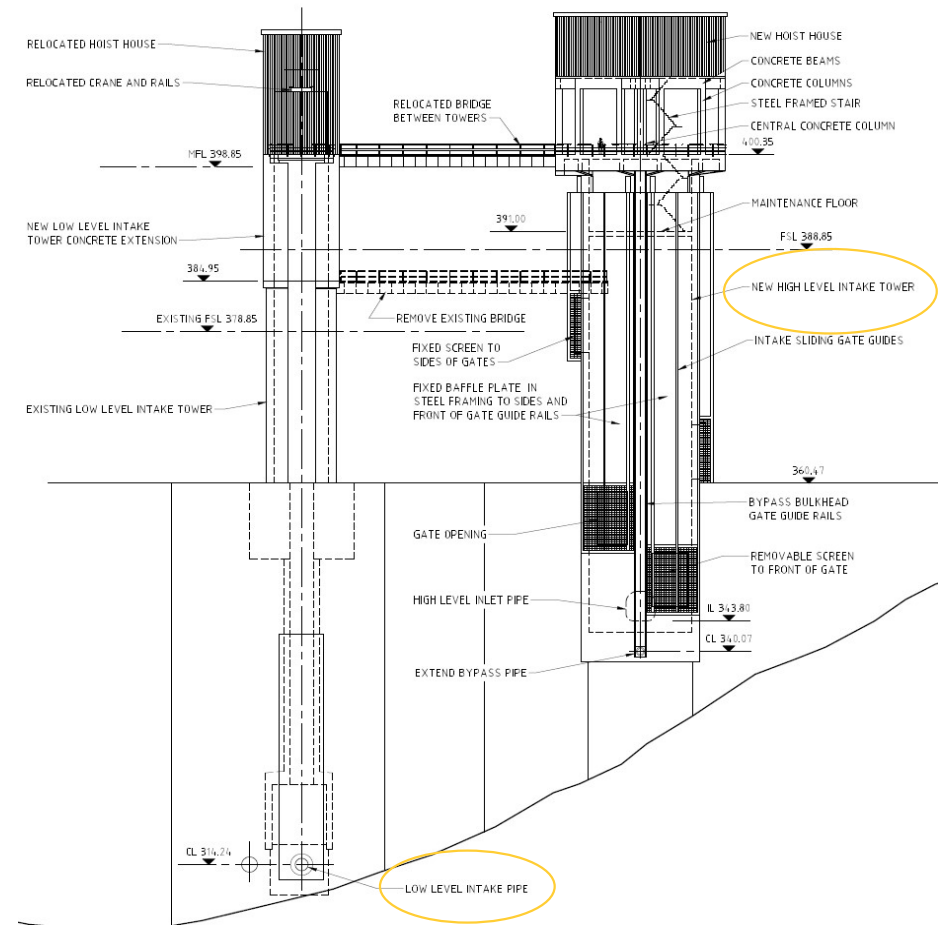
Operation

Flood:

- Enhanced operational flexibility to manage flood events

Water quality, cold pollution and algae:

- Modify existing towers to provide multiple intake points
- This reduces impacts from cold water pollution



Environmental update



Specialist studies update



Terrestrial biodiversity
fieldwork to finish early 2021,
assessment underway



Aquatic ecology
fieldwork ongoing,
assessment underway



Aboriginal Cultural heritage
fieldwork continuing



Non-Aboriginal heritage
fieldwork is complete



Traffic and transport
assessment underway



Noise and vibration
modelling finished,
assessment underway



Air quality
modelling finished,
assessment underway



Health impacts
assessment underway



Contamination and soils
fieldwork finished,
assessment underway



Hydrology
fieldwork is complete,
modelling underway



Flood
fieldwork is complete,
modelling underway



Environmental Sustainable Development (ISCA)
assessment underway



Landscape and visual impact
assessment underway



Social impacts
fieldwork underway



Waste
assessment underway



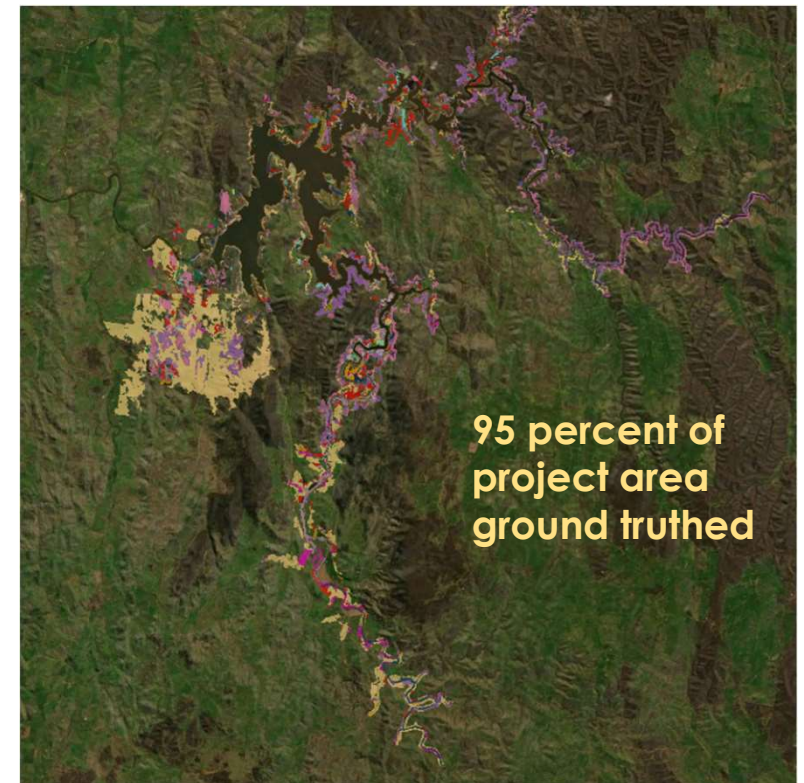
Climate change risk and greenhouse gas
assessment underway

Biodiversity



Our approach:

- NSW Biodiversity Assessment Method (BAM)
- Producing a Biodiversity Development Assessment Report (BDAR)
- Assessing impacts to listed threatened species and ecological communities, migratory species, and wetlands of international importance
- Targeted flora and fauna seasonal surveys (between April 2020 – January 2021)
- Biodiversity offset strategy – investigations underway
- Department of Agriculture, Water and Environment (DAWE) has determined controlled action (EPBC Act) and assessed under the Bilateral Agreement

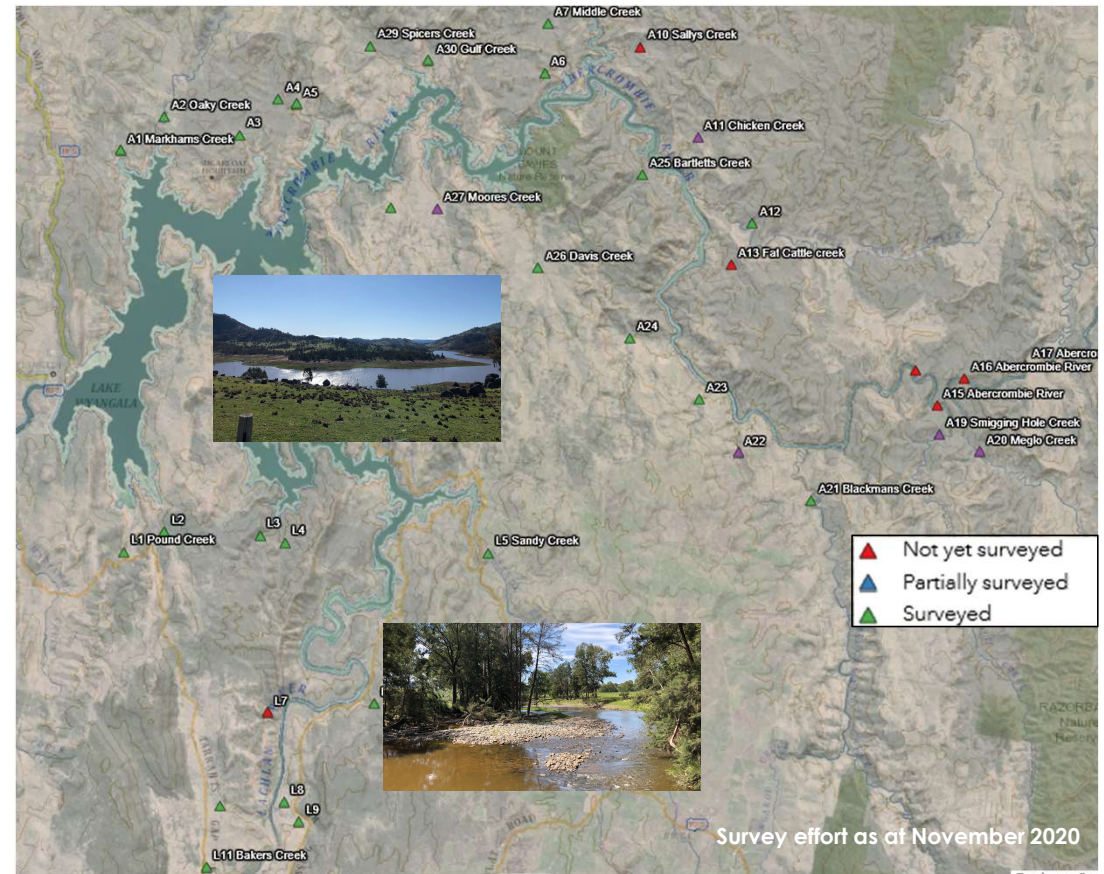


Aquatic Ecology



We have:

- Carried out targeted fish habitat surveys
- Identified the importance of habitat likely to be impacted
- Considered design options to minimise or mitigate impacts to aquatic fauna
- Prepared a detailed assessment
- Developed an offset strategy based on residual impacts
- Ongoing engagement with DPI Fisheries



Noise and Air Quality



Indicative construction staging used to develop scenarios:

- Site establishment
 - Quarry activities
 - Clay borrow area work
 - Embankment
 - Spillway work
 - Intake work
 - Road work
 - Construction compound
 - Workforce construction camp
 - Vegetation removal work
 - Demolition work
- The construction noise study area has been defined as approximately 2 kilometres from the construction footprint
 - Noise logging conducted in August and September 2020
 - Quantitative assessments of potential noise and vibration impacts and air quality, dust and odour impacts



Heritage and Cultural Values

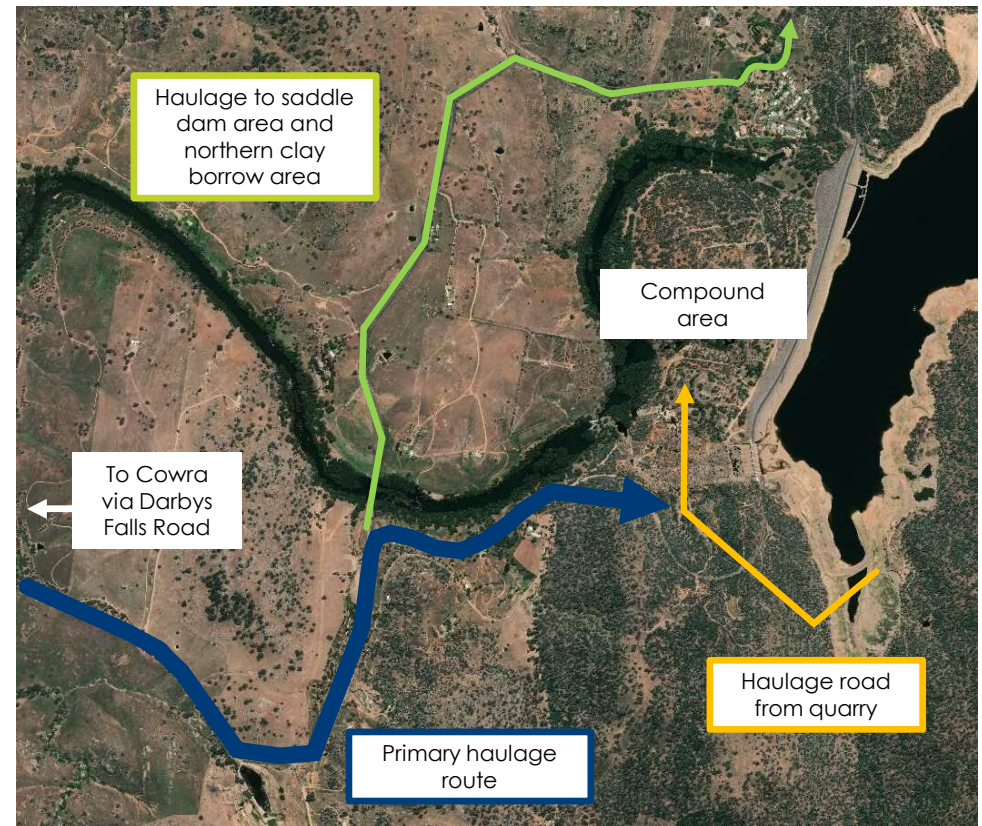


- Cultural heritage in accordance with DECCW 2010 process
- 10 Registered Aboriginal Parties (RAPs)
- Update on Aboriginal Cultural Heritage Assessment Report (ACHAR) progress is:
 - Project methodology consultation with RAPs – completed
 - Subsurface test excavations with RAPs – completed
 - Field surveys with RAPs – to be completed in January 2021
 - Analysis of materials – November - underway
 - Preparation of an ACHAR – November - underway
 - Ongoing consultation with RAPs and Aboriginal Stakeholders
- Cultural heritage questionnaire prepared. Survey focuses are cultural values associated with:
 - Landform immediately surrounding the existing reservoir
 - Areas downstream of the dam
- Interviews with downstream Local Aboriginal Land Councils (LALC), reservoir LALCs and 10 RAPs (underway)

Traffic and transport



- Site set up, materials (clay and rock) haulage, delivery of equipment and materials
- Majority of construction traffic between Cowra and site via Darby Falls Road (**blue**) with access to compound area via new haulage route (**orange**) with some movements along local roads (**green**)
- Several unsealed public and private roads and access tracks need to be realigned
- Public access to be maintained to:
 - Wyangala Dam Public School
 - Wyangala Country Club
 - Wyangala Waters Holiday Park
- Traffic Control Plans (TCPs) and Construction Traffic Management Plan (CTMP) prepared before construction starts



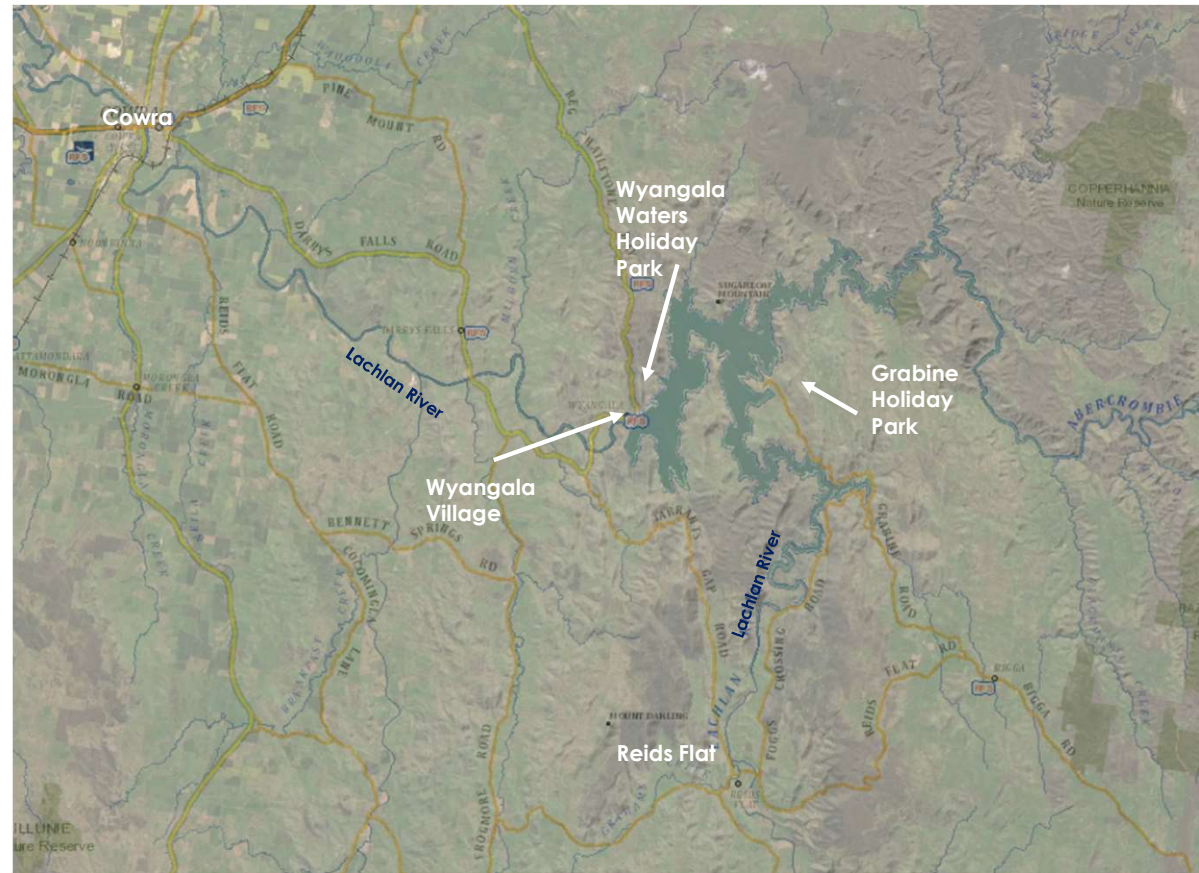
Social impact



Social Impact Assessment will:

- Describe existing social environment
- Involve targeted interviews
- Assesses impacts and benefits during construction and operation
- Recommend measures to mitigate and manage identified impacts
- Be prepared in line with leading practice

Note: Cumulative impacts being considered (two construction workforces - the dam and Cowra Hospital)



Hydrology and Flooding



River System Modelling

- Daily time step continuous simulation – ‘what is the day to day behaviour of the river basin system, including the dam, under both existing and proposed
- Numerous inputs: irrigator behaviour, rainfall:runoff, evaporation, groundwater interaction, translucency releases, environmental water holders
- Outputs relevant to the project: Yield, environmental flows, dam water levels, regulatory compliance

Flood Modelling

- Design storm event based
- Focuses on flood events
- Quantifies downstream hydraulics in more detail
- Represents up to extreme flood events
- Uses field survey
- Includes downstream and upstream



Wyangala Dam Wall Raising

WaterNSW

 Improving long term water security and drought resilience in the Lachlan Valley

November 2020

ENGAGEMENT TO DATE

 Local community sentiment
84% support

16 Community events
attendees **152**

 Registered Aboriginal Parties **10**

 **70** Stakeholder briefings

86  Landowner meetings

LOCAL OPPORTUNITIES

276  Local businesses registered

 **10** local businesses engaged

CONNECTING WITH YOU

302 Emails in  **511** Emails out

200 Calls in  **250** Calls out

 **222** media stories

facebook group members  **566**

21,146 webpage views 

 **16** complaints received to date

WHAT'S HAPPENING NEXT MONTH?

- Webinar events will be held for the community on December 10 and 11. To RSVP, click here https://swipengage.com/#/wyangala_community_CIW
- Face to face meetings continue with landholders
- Environmental investigations into fauna will take place in early December
- There is no planned work between 19 December and 10 January 2021. We look forward to seeing you in the new year

Connect with us



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Wyngala dam wall raising
project community group



WaterNSW.com.au

Questions





Thank you