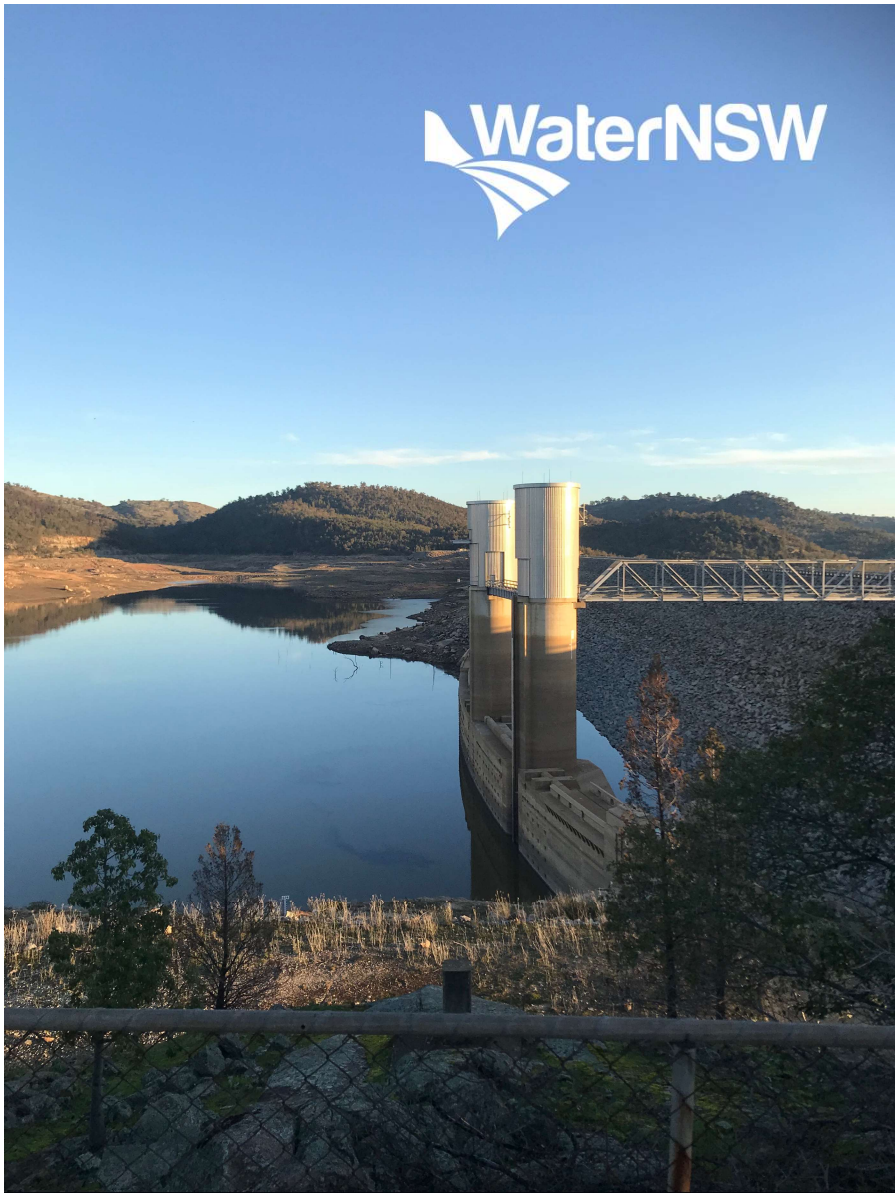
WYANGALA DAM WALL RAISING PROJECT

Project update

Reids Flat
May 2021

Agenda

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




WaterNSW
Acknowledgement of Country

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
- Shortlisting of main construction proponents
- Preparation of inputs for final business case
- Engaging with stakeholders, communities and Aboriginal parties
- Establishing a project office

2014
- NSW Government funds a feasibility study into Cranky Rock Dam
- Federal Government identifies new dam on Belubula River (Needles Gap) for feasibility investigations
- Lachlan identified as priority catchment under NSW State Infrastructure Strategy

2015
- Feasibility study phase 1 recommends a further study into build and non-build options

2016
- Feasibility study – phase 2 investigations continue

2017
- Feasibility study – phase 2 investigations continue

2018
- Feasibility study (phase 2) completed

June
- Wyangala Dam Wall Raising project identified in 20-year Infrastructure Options Study
- NSW Government provides funding for project's final business case

2019
- NSW Government lists project in Critical Needs (Water Supply) Act 2019
- NSW and Commonwealth Governments announce funding for project

2020
- Concept design started
- Environment Impact Statement preparation and assessments started
- Site investigations and environmental field studies started
- Landholder engagement started
- Community information sessions and webinars started

Background

Key benefits

- Increase storage capacity of the dam by 53%
- Significantly improves:
  - **drought resilience**
  - **Water reliability**
  - **flood attenuation**
- Increases capability to manage high inflow/flood events

Confirmed FSL

Confirmed 10m Full Supply Level

- 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

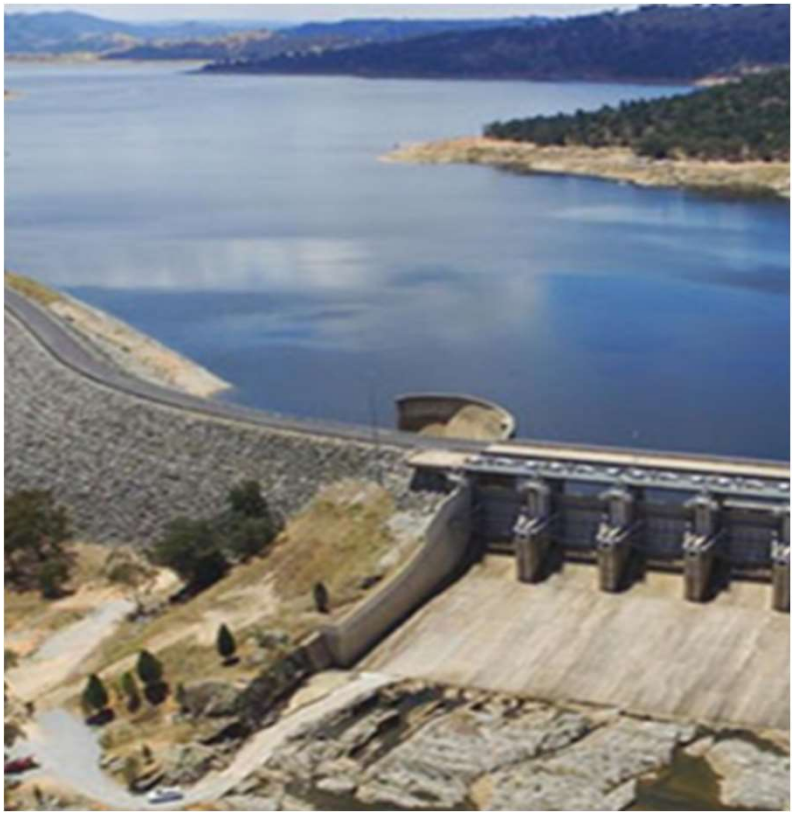
Project progress

- Benefits
- ‘No regrets’ project
- Planning pathway
- Procurement – Enviropacific Services
- Construction and commissioning

Procurement process

Alliance partnership development

- Shortlisted two separate contractors, **Acciona** and **Seymour Whyte** for main construction work
- Appoint successful main construction work contractor
- Start main construction delivery



Construction

Construction staging program

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

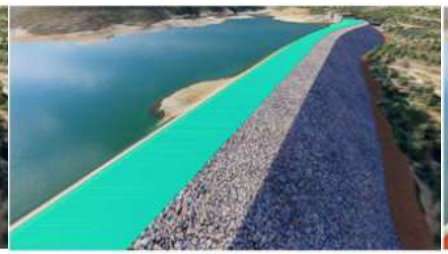
Clay and rock required

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

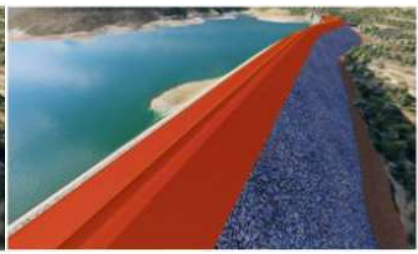
Stage 1 - Preparing downstream foundation

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

Workforce accommodation

- Dedicated local construction workforce accommodation
- Investigating former dam construction workforce accommodation site
- Dedicated workforce between 100 and 300 – additional indirect workforce

Previous construction workforce accommodation

Safety and our approach

- Risk management
- Contractor selection
- Safety expectations
- Behaviours in community
- Working together

Dam Safety Management

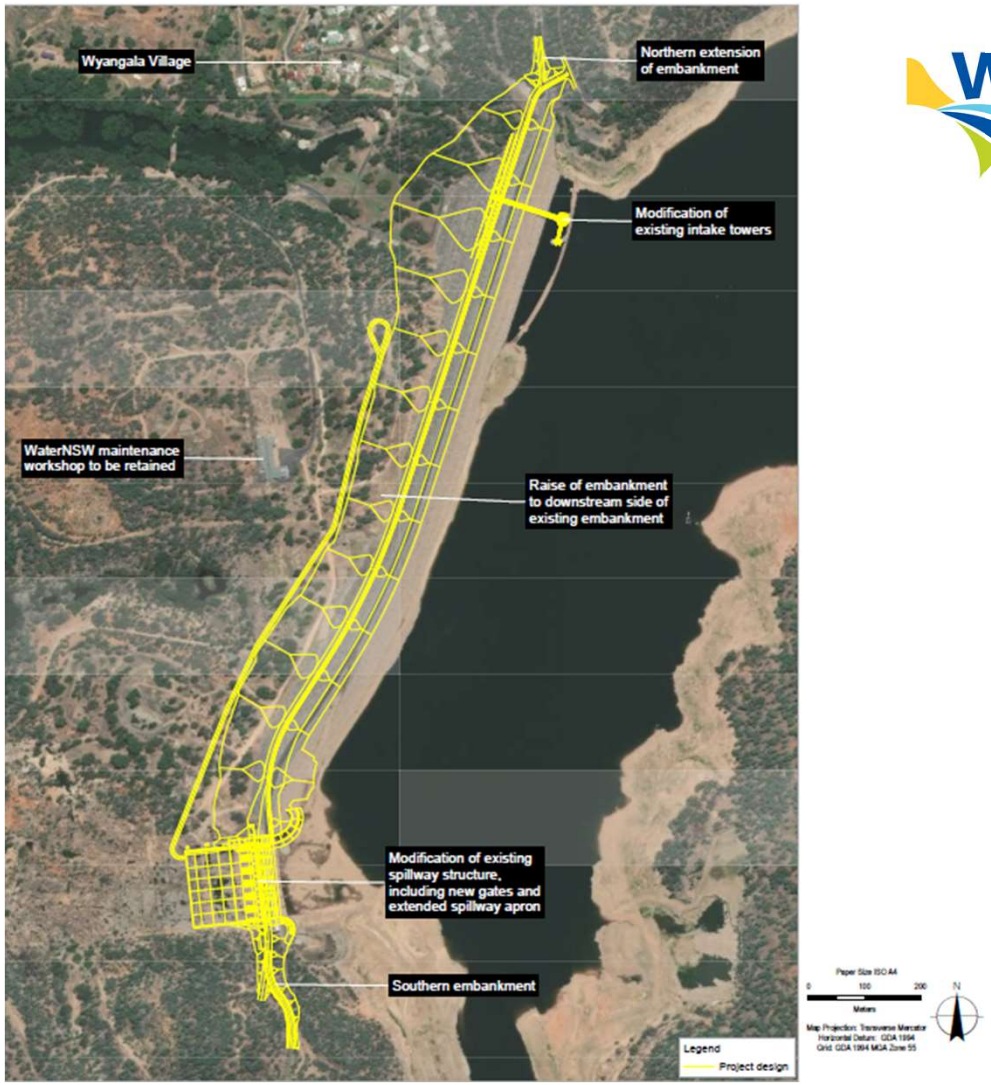
- Dam safety risk profile to be maintained throughout
- Dam safety emergency management plans updated to be reflective of the operations and management at each stage of construction
- This will include any modification to the operational (and air space) rules
- Emergency management plans and protocols will be shared with the Local Emergency Management Committee at each stage throughout the project

Environmental assessment

Key features

- 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



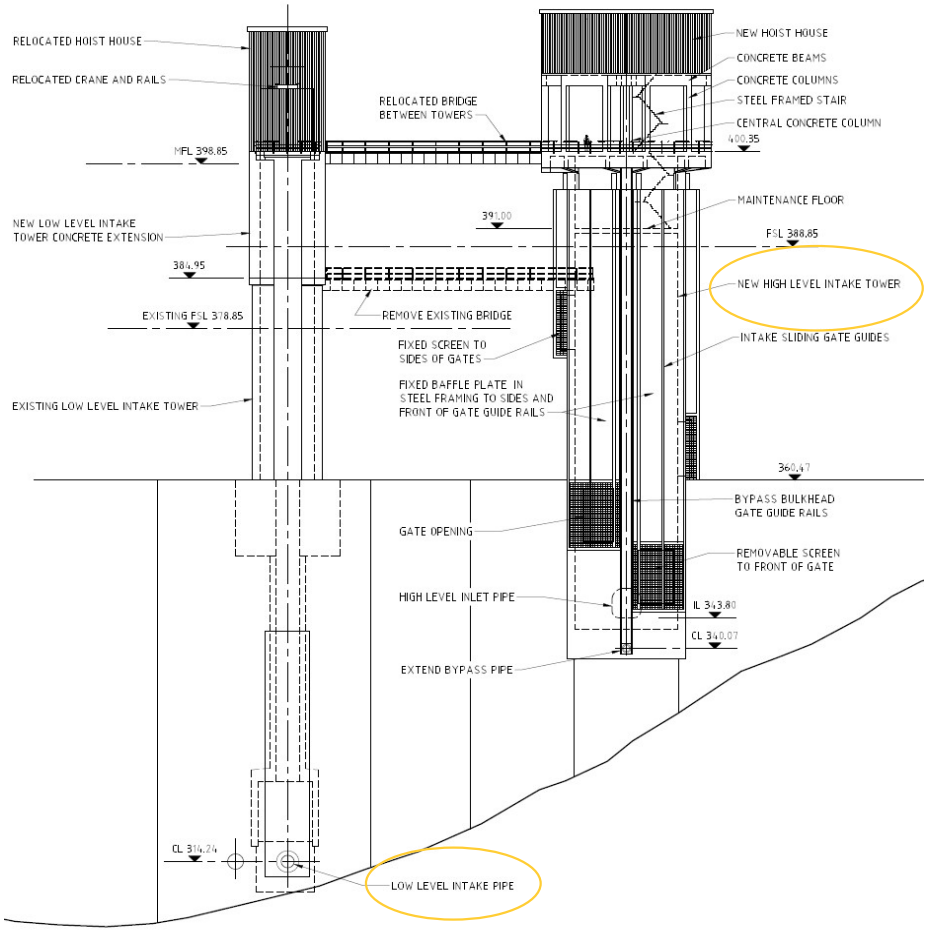
Operation

Flood

- Downstream flood model assess conditions under design storm events under existing and proposed dam operations.
- 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

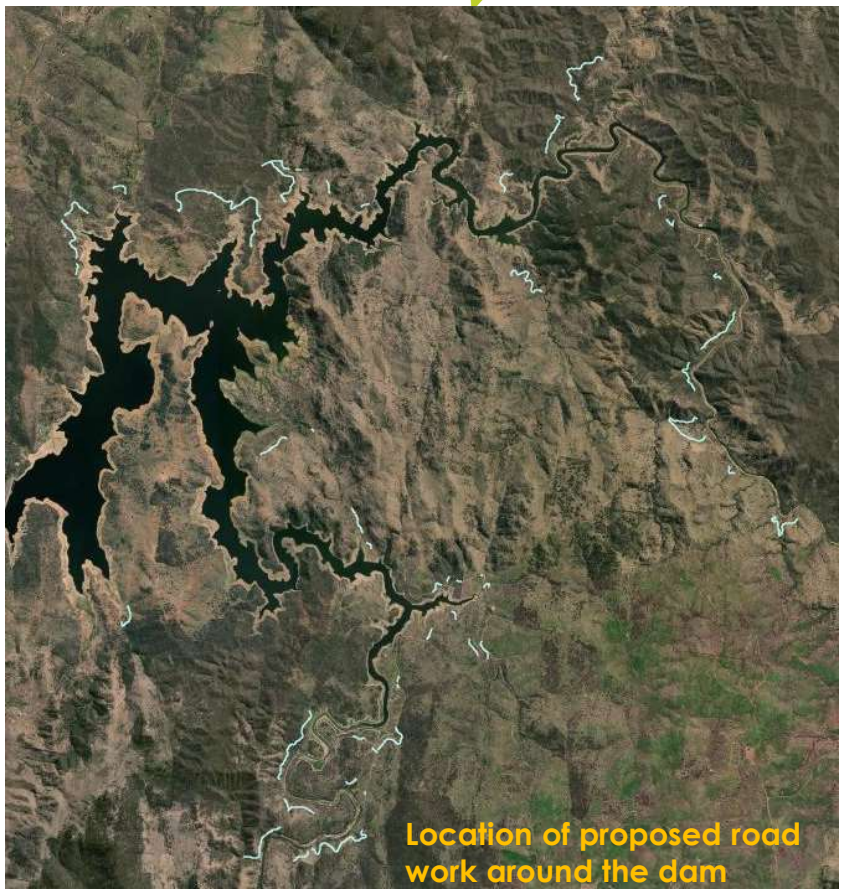


Ancillary work

Future activities

- Relocating existing public and private roads and infrastructure **(blue)**
- Building new Reids Flat bridge to be above 1 in 10 flood level
- Relocating facilities within both Wyangala Waters and Grabine Lakeside Holiday Parks


Grabine Lakeside Holiday Park


Location of proposed road work around the dam

Environmental update

Specialist studies update

Terrestrial biodiversity
field work complete, assessment underway

Aquatic ecology
field work complete, assessment underway

Aboriginal Cultural heritage
upstream field work complete, assessment underway, downstream Cultural Values field work underway

Non-Aboriginal heritage
field work complete, draft assessment complete

Traffic and transport
assessment underway

Noise and vibration
field work complete, draft assessment complete

Air quality
field work complete, draft assessment complete

Health impacts
assessment underway

Contamination and soils
draft assessment complete

Hydrology
modelling and assessment underway

Flood
modelling and assessment underway

Environmental Sustainable Development (ISCA)
draft assessment complete

Landscape and visual impact
draft assessment complete

Social impacts
assessment underway

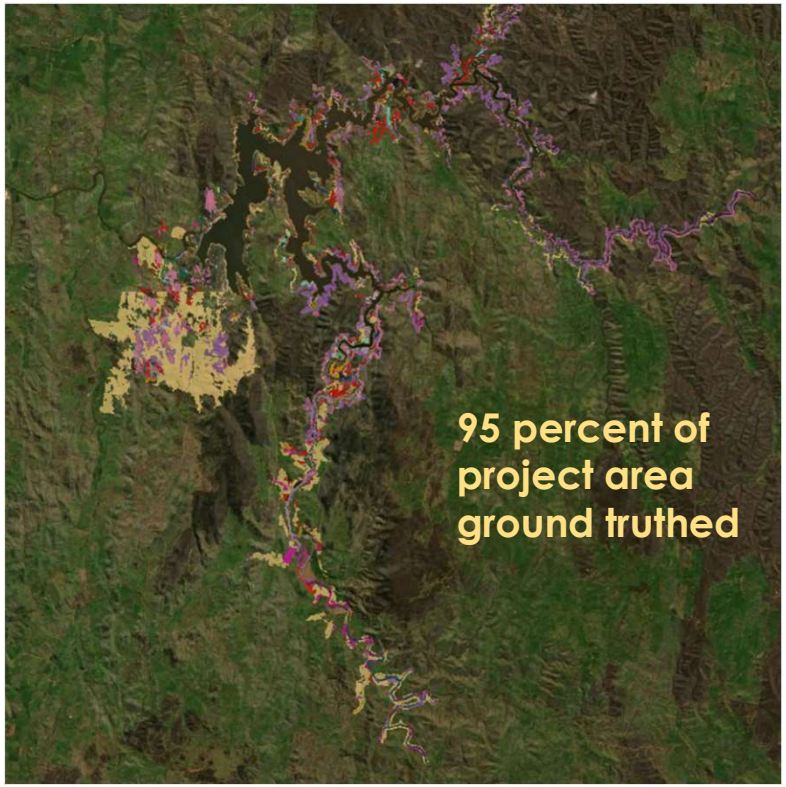
Waste
draft assessment complete

Climate change risk and greenhouse gas
draft assessment complete

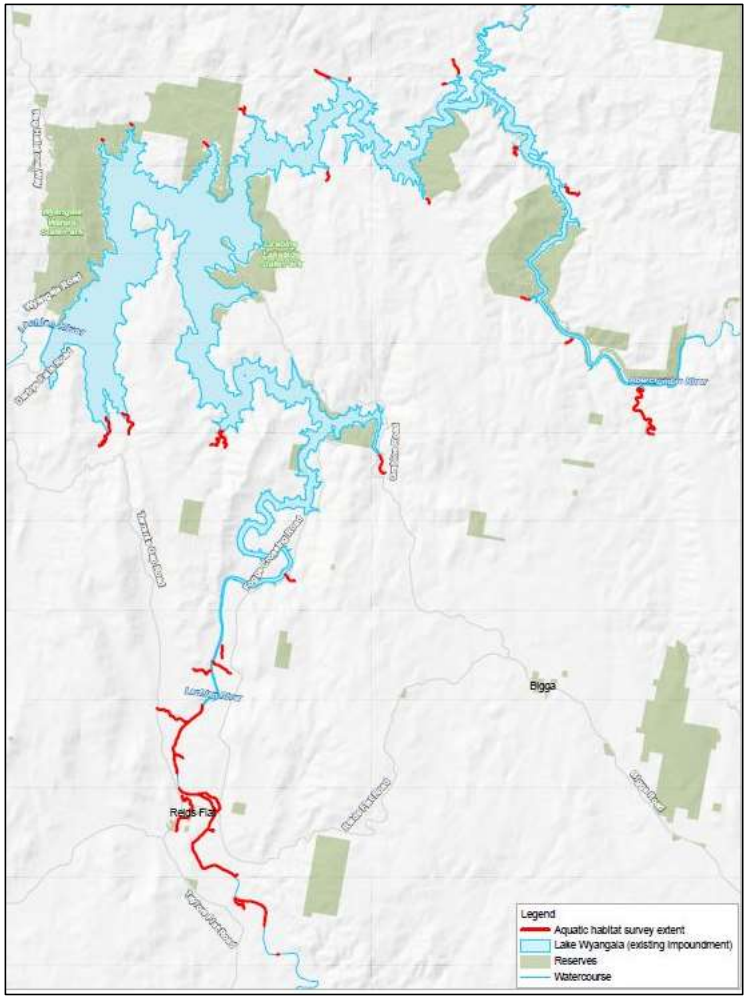
Biodiversity

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

- Used DPI Fisheries data
- Then carried out targeted fish habitat surveys
- Identify habitat potentially impacted
- Consider options to minimise or mitigate impacts to aquatic fauna
- Prepare a detailed assessment
- Develop an offset strategy based on residual impacts
- Ongoing engagement with DPI Fisheries

Heritage and Cultural Values

Our work so far

- Cultural heritage in accordance with DECCW 2010
- 15 Registered Aboriginal Parties (RAPs)
- Update on Aboriginal Cultural Heritage Assessment Report (ACHAR) progress is:
  - Project methodology consultation with RAPs – complete
  - Subsurface test excavations upstream with RAPs – complete
  - Field surveys with RAPs – to be complete 2021
  - Analysis of materials – underway
  - Preparation of an ACHAR – underway
  - Consultation with RAPs and Aboriginal Stakeholders - ongoing
- Cultural heritage survey focuses on values upstream and downstream of the dam – ongoing
- Cultural values interviews with Aboriginal elders, Local Aboriginal Land Councils and RAPs – to be complete 2021

Social impact

What is covers

- 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

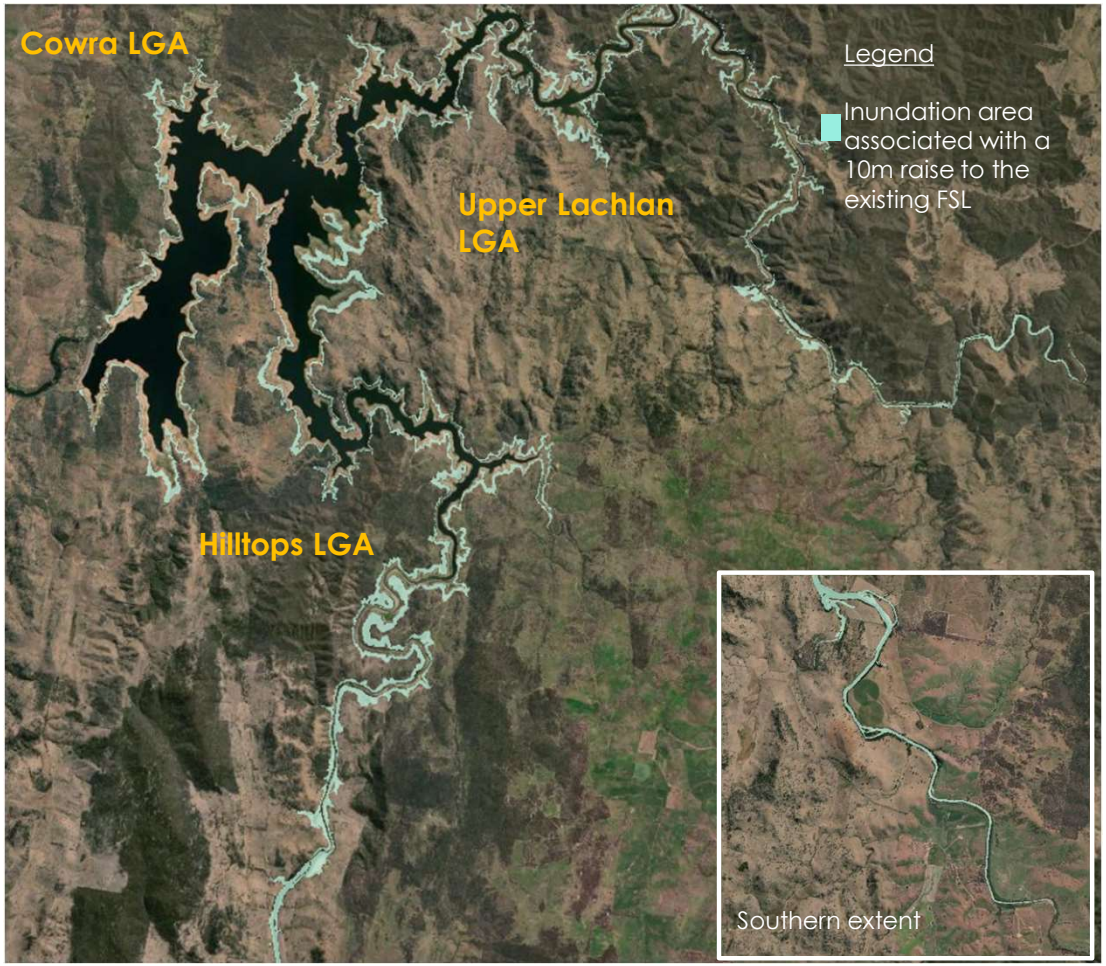
River System Modelling

- What is the day to day behaviour of the river basin system - both existing and proposed
- Numerous inputs
- Outputs relevant to the project

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

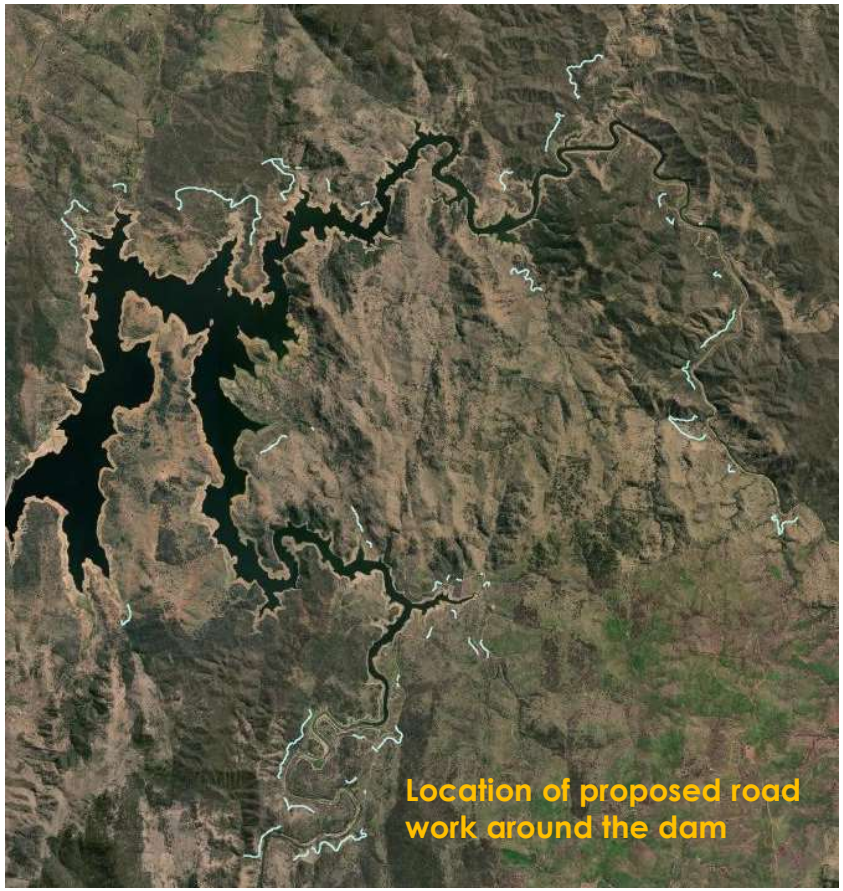
Inundation levels to date



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



Reids Flat

Localised impacts and potential mitigations

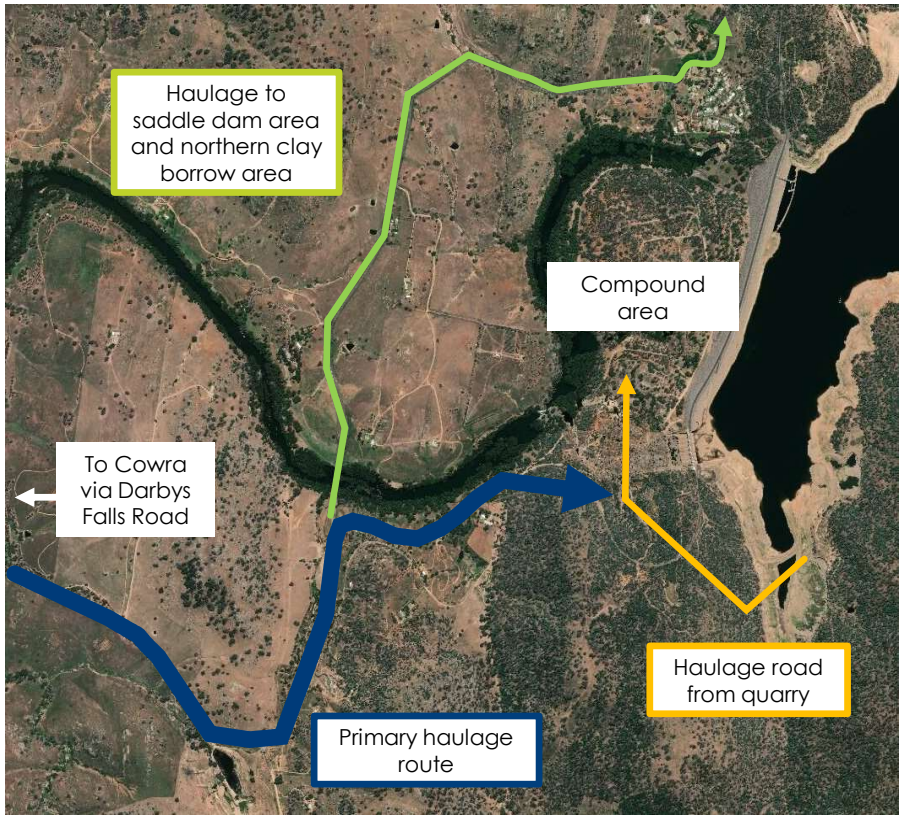
Early key impacts identified for Reids Flat during construction, if the project is approved include:

- Traffic
- Noise and vibration
- Flooding
- Social

Construction traffic – routes

Proposed route to construction area

- Primary route (blue) to the construction area via Darby Falls Road from Cowra and then via a new haulage road across spillway into compound area
- Vehicle movements required along green route for proposed saddle dam and possible clay borrow sites
- Heavy vehicle movements for rock materials to use a dedicated project route orange to avoid them being on public roads
- Use of Reg Hailstone Way has been identified to be limited to light vehicles only



Construction traffic - volumes

Traffic volumes (still being confirmed)

- Vehicle movements would be for:
  - Deliveries of equipment
  - Deliveries of materials
  - Workforce arrivals and departures
  - Workforce, equipment and materials moving between construction areas

Traffic – potential mitigation

Mitigation design and construction planning

- Diverting movements off public roads and away from villages
- Completing road safety audit to identify issues along routes

Mitigation curing construction

- Construction Traffic Management Plan including traffic control plans
- Examples of mitigation measures used on major projects include:
  - Tracking of vehicles for location and speed
  - Restricting movements at school start and finishing times
  - Moving oversized equipment and plant at night where possible including NSW Police supervision
  - Restricting movements during peak holiday periods

Noise and vibration - methodology

We have

- Undertaken noise and vibration assessment in accordance with relevant guidelines
- Undertaken monitoring for background noise levels at:
  - Wyangala Waters Holiday Park
  - 58 Waugoola Road (in village)
  - 185 Trout Farm Road (west of dam)
  - 3542 Darby Falls Roads (south-west)
- Undertaken a quantitative assessment for construction including modelling potential noise levels
- Undertaken a qualitative assessment for operation – unlikely to be a change in noise level for dam operations

Construction noise impacts

Summary of preliminary modelling in areas

- **Road work** – Construction work for realignments and improvements may cause exceedances; Impacts about 53 receivers within 800 metres
- **Reids Flat** – Construction work for bridge may cause exceedances; Impacts about 15 receivers within 700 metres
- **Vegetation** – Removal work may cause exceedances; Impacts properties at Wyangala, Wyangala Waters and Grabine Lakeside holiday parks and Oaky Creek Road in close proximity
- **Road traffic –** Not predicted to exceed criteria
- **Blasting** – Proximity and size of charge may cause some exceedances; Impacts to be considered in Blast Management Plan

Noise – potential mitigation

Mitigation design and construction planning

- Adjusting work areas to increase distance to nearest properties, where possible
- Timing noisy work outside particularly periods (avoid holiday periods)

Mitigation during construction

- Noise and Vibration Management and Blast Management plans
- Examples of mitigation measures used on major projects include:
  - Ongoing consultation
  - Notify community of noisy activities
  - Out of hours works procedure
  - Respite periods
  - Reduce noise at source (equipment and plant)
  - Structure condition surveys (vibration impact areas)

Social

Project-specific plans

- Industry participation plan
- Workforce management plan
- Communication management plan
- Temporary workforce accommodation plan
- Aboriginal engagement plan

Strategies for wellbeing including participation in sporting and community groups and access to mental health services

Cowra Police will also be consulted in developing a worker Code of Conduct and workforce policies associated with use of the club.

Wyangala Dam Wall Raising

WaterNSW

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

May 2021

ENGAGEMENT TO DATE

- Local community sentiment **84%** support
- **43** Community events — attendees **419**
- Registered Aboriginal Parties **15**
- **89** Stakeholder briefings
- **108** Landowner meetings

LOCAL OPPORTUNITIES

- **315** Local businesses registered
- **10** Local businesses engaged

CONNECTING WITH YOU

- **333** Emails in / **6,950** Emails out
- **784** group members — **8** posts, **9** comments, **49** reactions
- **304** Calls in / **352** Calls out
- **24,689** Webpage views
- **368** Media stories
- **22** Complaints received to date

WHAT'S HAPPENING IN MAY?

- Our quarterly project newsletter will be published for the community, stakeholders and businesses.
- Preliminary Environmental Impact Statement - we are holding early localised input sessions in person 17, 18, 19 and 20 May at Wyangala, Woodstock, Darbys Falls, Reids Flat and Bigga. For event details and to RSVP, click here.
- Our next round of Community Information Sessions will be held in person at Crookwell and online 11, 12, 13 and 21 May . For event details and to RSVP, click here.

Connect with us

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Thank you

Questions