

Mount Bold Dam Safety Upgrade

Reference Group Meeting #5

Thursday 8 July 2021



Government of
South Australia



SA Water

Agenda

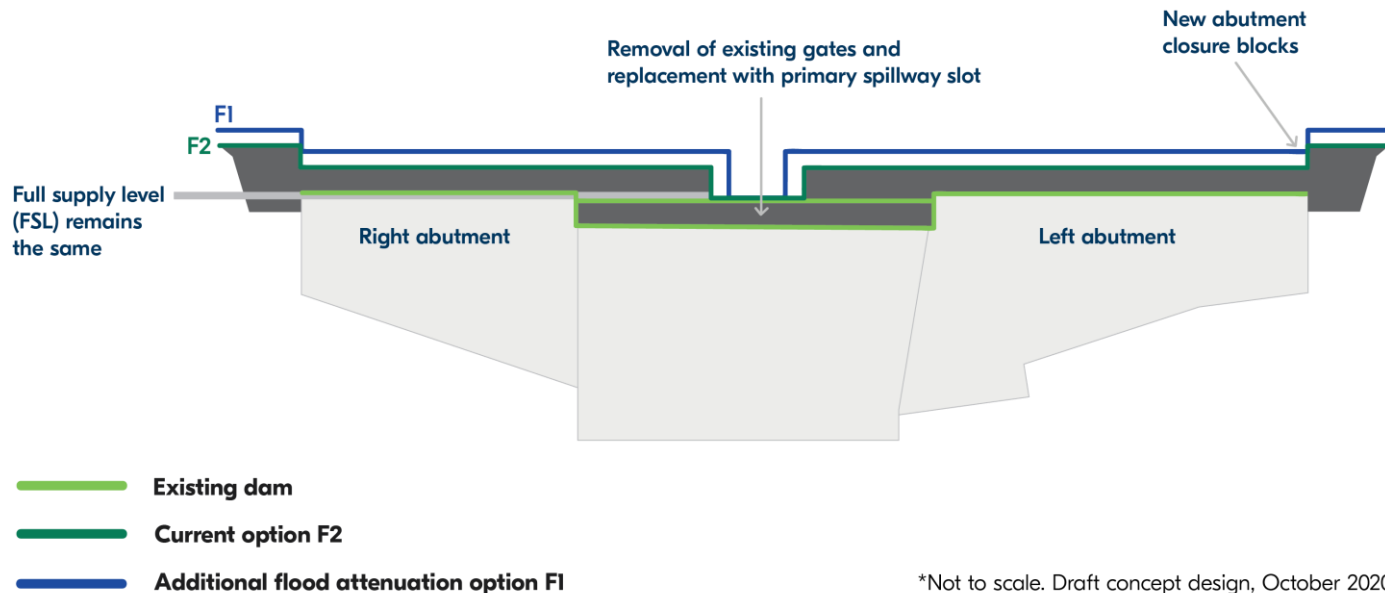
1. Welcome
2. Actions from previous meeting
3. Project update:
 - a. Design and construction
 - b. Environment
 - c. Timeline
4. Reservoir access
 - a. Masterplan
 - b. Stage one
4. Discussion
5. Next meeting

Design overview

- Project aligns Mount Bold with updated ANCOLD guidelines to better withstand flood and earthquake events
- Current option removes existing spillway gates and replaces it with a primary spillway slot to provide flow attenuation
- The upgraded design option will provide an improved level of flood protection up to 1:100 AEP - joint probability or 1:18 AEP - full dam (currently the dam provides 1:10 AEP - full dam)
- We are currently developing two design options through concept including the higher level of flood attenuation

Design

Mount Bold dam safety upgrade - design overview



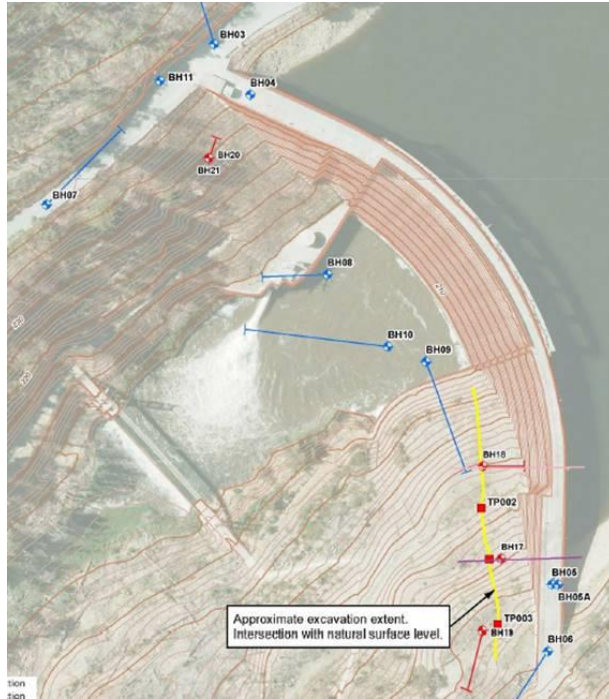
*Not to scale. Draft concept design, October 2020

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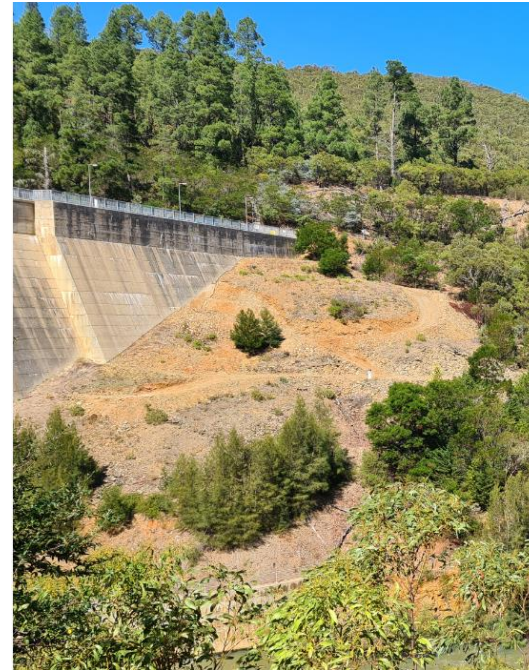
Design and construction

- SMEC has recently been engaged as our engineering designers for the concept phase
- The concept design will lead into detailed design from early 2022
- Site investigations including geotechnical drilling, road and hydrology assessments are progressing
- Contractors for construction services during concept design are expected to be awarded mid-2021
- Construction on-site is planned to start in 2023

January geotechnical investigations



Overview of Boreholes drilled



Drilling access on left abutment

January geotechnical investigations

Drilling on
right
abutment



Drilling
platform
anchored in
the right
abutment



Drill rig in place on right abutment

Environment

- Initial flora and fauna assessments were undertaken
- Further surveys in Spring 2021 including targeting threatened orchids within temporary inundation areas (Spring 2020 not a good season)
- Updates to temporary inundation maps in Flora and Fauna assessment report to reflect revised flood mapping
- Undertaking an aquatic assessment of downstream environment

Environment



Updated
vegetation
mapping,
Spring 2020

Timeline

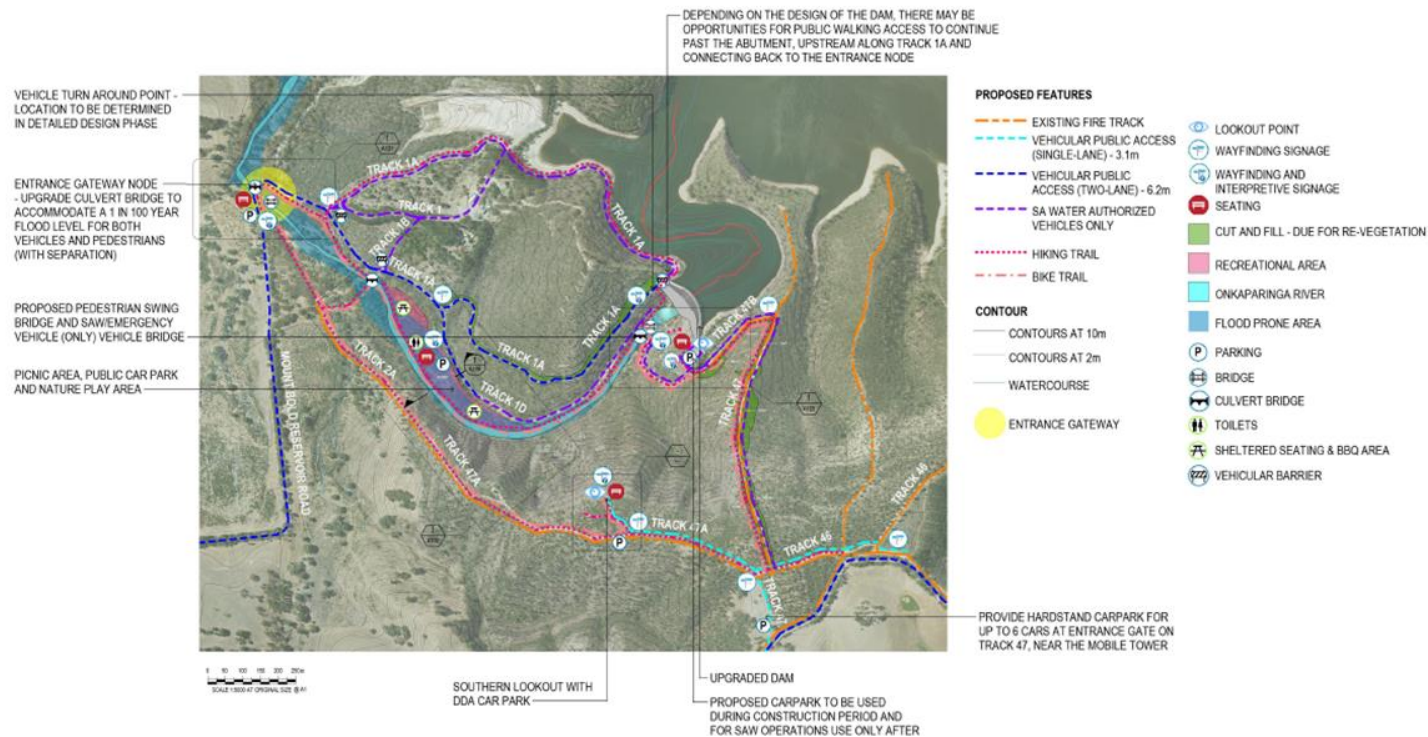
- Concept design completed early 2022
- Detailed design from early 2022 (11 months)
- Construction from 2023 (3.5 – 4 years)

*Subject to approval pathways and applicable legislation e.g. ESCOSA, Cabinet and Public Works Committee, Planning and Infrastructure Act, Native Vegetation Act and EPBC Act, Aboriginal Heritage Act, Native Title Act, EPA Act, National Parks and Wildlife Act.

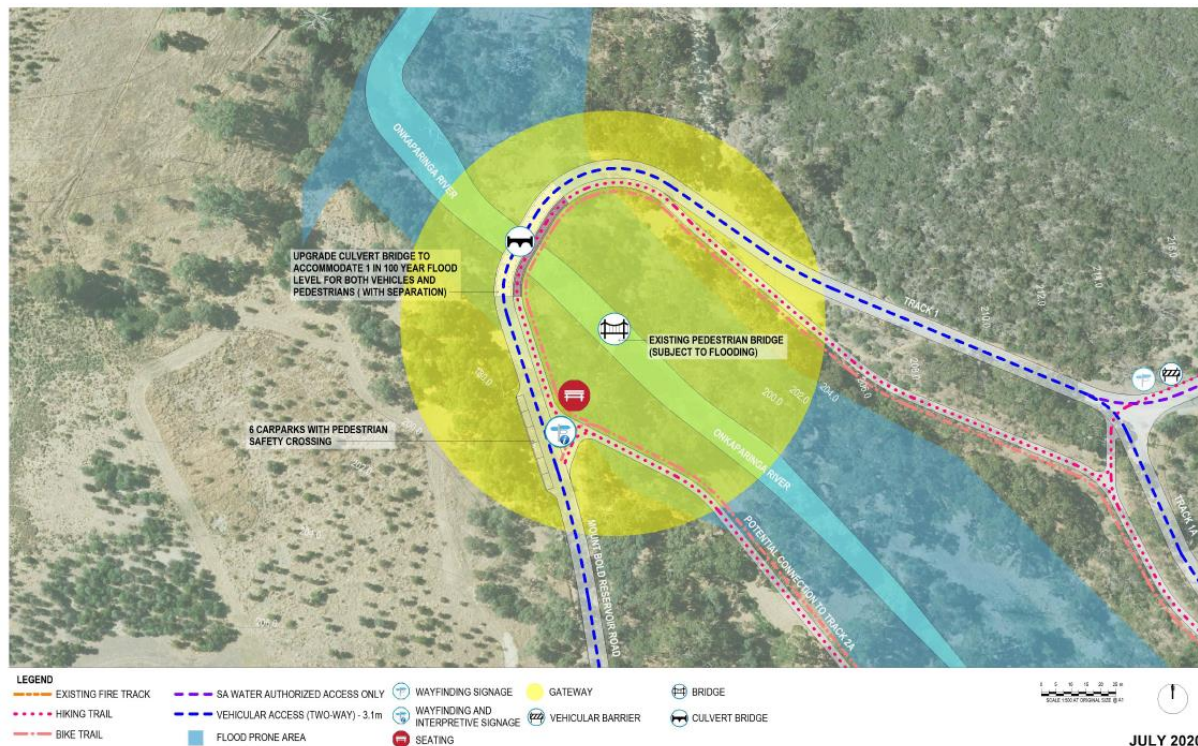
Reservoir access

- Part of our project planning includes looking at options to reinstate access to Mount Bold following construction works
- This will include ways to improve the visitor experience, in line with state government commitment to open up recreational access across our reservoirs
- There is currently only access across the top of the dam wall
- Future access may include: opening up accessibility around the reserve for walking, lookout and connection to wider trails, reinstatement of the swing bridge, Aboriginal art and signage, providing areas for picnicking activities and increasing facilities such as toilets and carparking

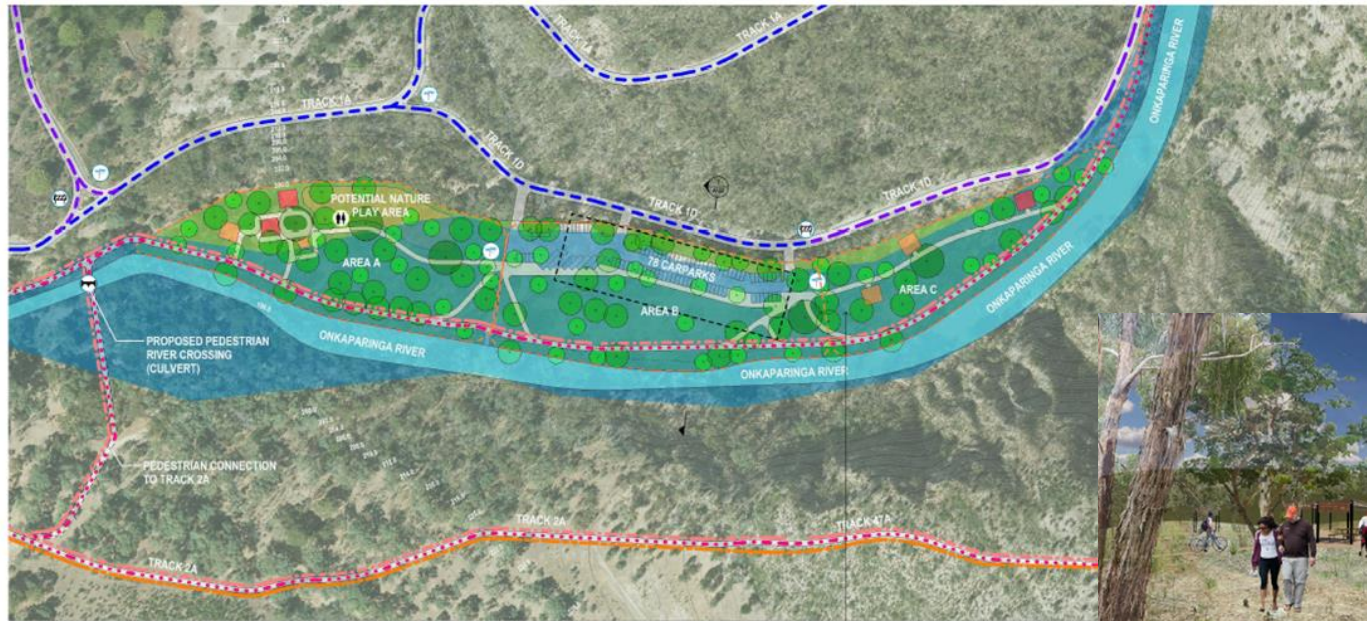
Masterplan overview



Entrance gateway node



Picnic area



	AREA
TOTAL	35,332m ²
AREA A	13,223m ²
AREA B	13,758m ²
AREA C	8,348m ²

LEGEND

- BBQ AREA
- SHELTERED SEATING AREA
- FLOOD PRONE AREA
- TOILET
- SEATING
- WAYFINDING AND INTERPRETIVE SIGNAGE
- WAYFINDING SIGNAGE
- SEATING
- HIKING TRAIL
- BIKE TRAIL
- EXISTING FIRE TRACKS
- VEHICULAR PUBLIC ACCESS (TWO-WAY) - 6.2m
- SA WATER AUTHORIZED VEHICLES ONLY
- VEHICULAR BARRIER
- LAYDOWN AREA FOR PT ANCHORS
- CULVERT BRIDGE

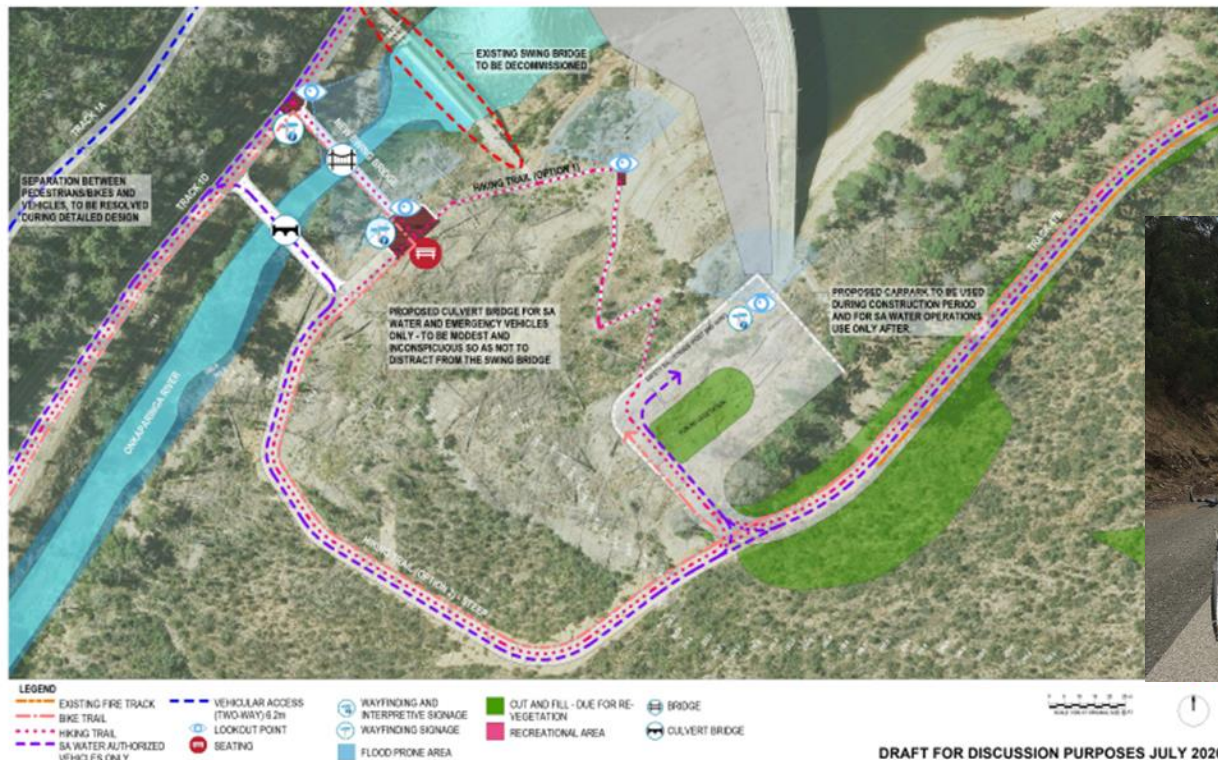
MAINTAINING EXISTING TREES AND VEGETATION WHERE POSSIBLE AND LIMIT CUT AND FILL IN AREA



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Dam area



Recreational access

- The South Australian government has committed to progressively opening up reservoirs across South Australia to provide for a range of recreational activities
- A cross-government Taskforce (DEW, SA Water, PIRSA, DIT, Forestry SA and SATC) has been established to provide advice on each reservoir's recreation potential, infrastructure requirements, tourism opportunities, and maintaining the security of South Australia's drinking water

Stage one

- Mount Bold has been open to the public for many years in a limited capacity (Dam Wall)
- Open for further land based recreational activities by end of year (Stage one)
- New facilities are being planned to facilitate walking and picnicking
- Infrastructure is being planned to account for unique features of the site including native animals, vegetation communities and steep terrain
- Recreation will be able to occur safely during Dam Safety Upgrade construction
- Further stages of recreational access may occur in the future

Stage one access

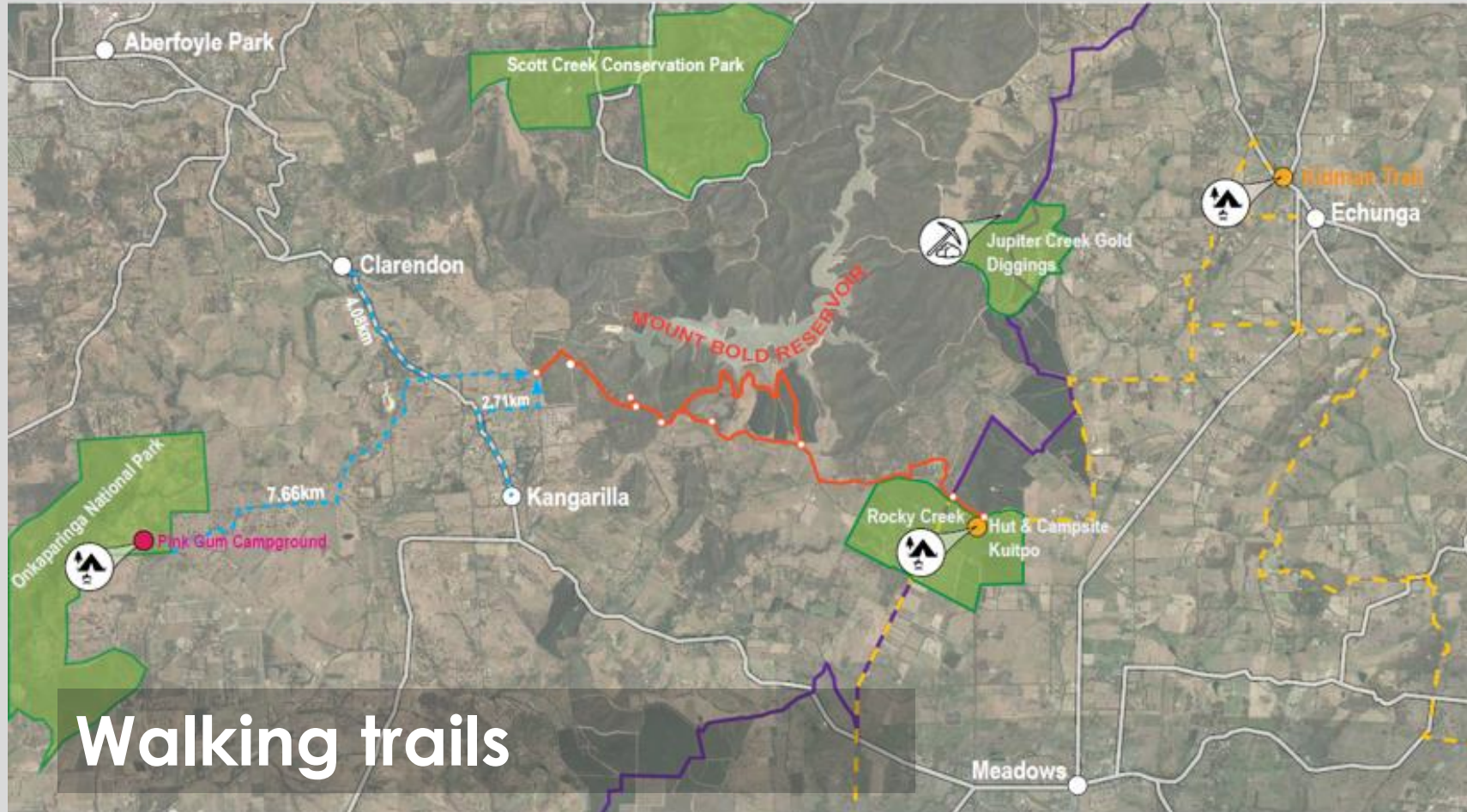
New visitor facilities will include:

- A look out
- Walking trails
- Picnic areas
- Interpretive signage
- Carparking (Razorback Road)
- Toilets



Stage one access







Walking trails

Recreational access

- Water quality will be managed and maintained, in line with requirements of Safe Drinking Water Act 2011
- Closed on Total Fire Ban Days
- Active on-site presence during opening hours
- Land management plans and practices already in place and will be enhanced
- Dogs are not allowed within the reservoir reserve

Recreational access

- Direct communication on Stage One plan to occur with neighbours, surrounding communities and key interest groups
- Development approval will be sought for built form i.e. lookout
- Reference Group will be kept informed as planning and construction progresses

Questions.



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