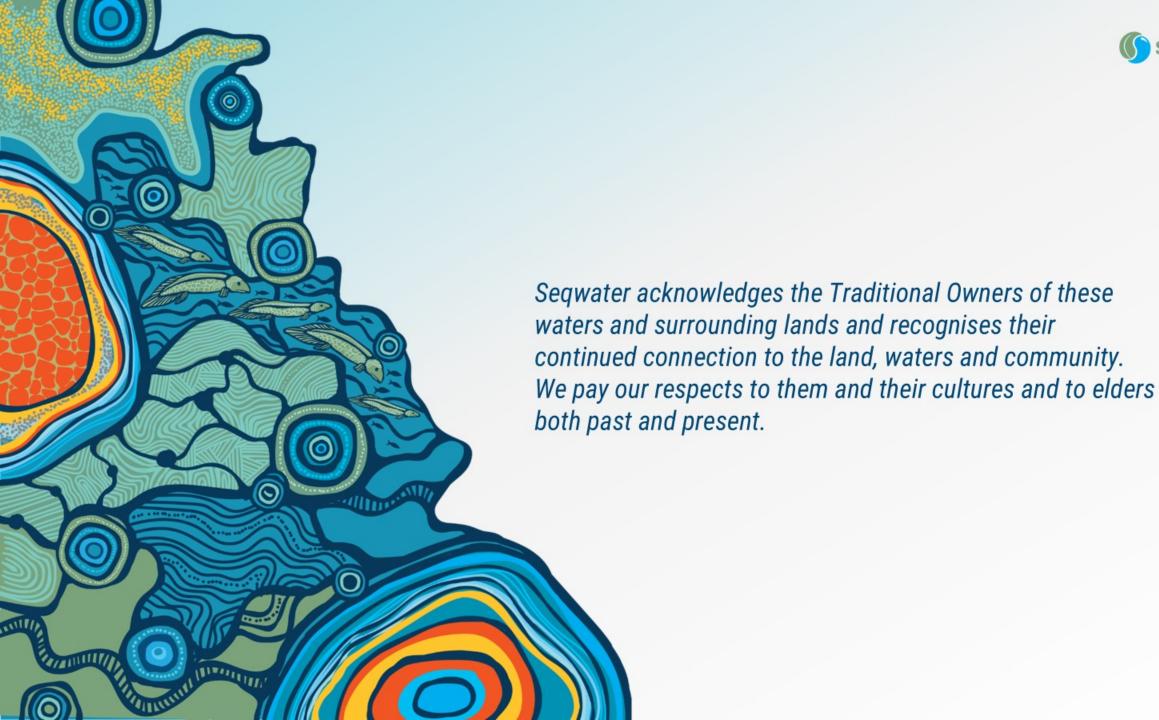
Lake Macdonald Dam Improvement Project

Community Reference Group Meeting 3

Wednesday 21 May 2025





Admin and updates





Agenda

- Welcome, Apologies, Actions
- 2. Communication and stakeholder engagement
- 3. Approvals
- 4. Project update and cofferdam construction
- 5. Construction impacts
- 6. Environment
- 7. Rowing Club Development Application
- 8. General business
- Next meeting



Administration

Outstanding actions from last meeting

Signed consent forms

 Most returned. Confirm outstanding.

Park overgrowth

 Raised with Noosa Shire Council

Speed Limits Lake Macdonald Drive

- Raised with Noosa Shire Council
- Liaising with QPS for police presence

TMR: Pomona Kin Kin Road

- Raised with TMR
- https://www.tmr. qld.gov.au/projec ts/kin-kin-roadwideningupgrade-at-kinkin-range

Design and construction to rehabilitate and widen priority sections of Kin Kin Road (locally known as Pomona Kin Kin Road) is underway. This will improve safety, reduce maintenance costs and improve ride quality on Kin Kin Road.

The Kin Kin Road widening project is being delivered in 3 stages:

Stage 1 - between Turnbull Road and Williams Road was completed in July 2023

Stage 2 - between Williams Road and Western Branch Road, design is underway

Stage 3 - between Sallwood Court and Turnbull Road. design is underway

These improvements will complement a section of Kin Kin Road upgraded in 2012.

Contact us Email: northcoast@tmr.qld.gov.au Phone: 07 5451 7055 Post: Department of Transport and Main Roads

MAROOCHYDORE QLD 4558

Communication updates





Works notices

Main construction notice:

- Sent Wednesday 16 April
- Delivered to approx. 6000 letterboxes
- Approx 700 emails on distribution list

Traffic impacts notice for early works:

- Sent Wednesday 16 April
- Distributed to approximately 700 letterboxes



Figure: Artist's impression of new dam



Upcoming engagement

- Resident meetings
- Media opportunity
- CRG meetings
- Environment study presentation offered to community groups and CSS P&C
- Coffee in the park at Lake Macdonald Park – date TBC



Approvals





Approvals and agreements

- Coordinator-General's Change Report (Construction) – approved on 1 May 2025.
- State Assessment Referral Agency (SARA)
 waterway barrier works approved on 8 May
 2025.
- Site Environmental Management Plan (SEMP) inclusive of all sub plans – approved by OCG on 12 May 2025.
- Adaptive Management Plan (AMP) approval received from the Department of Climate Change, Energy, the Environment and Water (DCCEEW) on 8 May 2025.
- Cultural Heritage Management Agreement (CHMA) – Friday 16 May 2025.
- Main construction has commenced.



Project update and temporary cofferdam





Program overview

Phase 0
Early works

2024-2025

Phase 1

Construction of temporary cofferdam

2025

Phase 2

Demolition of existing dam wall

2025-2026

Phase 3

Construction of new spillway & infrastructure

2026-2028

Phase 4

Remove cofferdam and site rehabilitation

2028-2029

Completion

2029

Phase 0 staging:

- Vegetation removal
- Site establishment
- Haul roads
- · Deliveries.

Phase 1 staging:

- Hardstand and siphon system completion
- Maintain water level at 42% (RL 93)
- Rock placement and sheet pile installation.

Phase 2 staging:

- Demolition of existing spillway
- Removal of unsuitable material
- Excavation to rock, then backfill with mass concrete.

Phase 3 staging:

- Construction of a splitlevel concrete spillway
- Removal and reconstruction of the left and right embankments
- Ground improvement works.

Phase 4 staging:

- Commission all installed structures and systems
- Remove cofferdam allowing the dam to refill
- Rehabilitation to disturbed areas.



Construction update











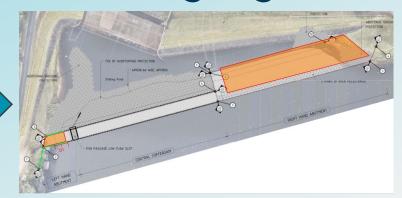


Cofferdam staging

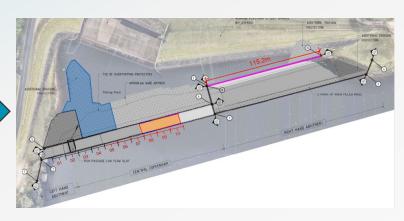


Month 1

Rock push, mobilise 250t crane, land and lake sheet piles on LHA

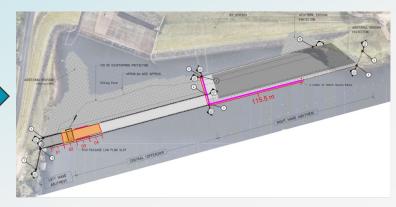


Month 4
Cont. central cofferdam, RHA
and rock bags



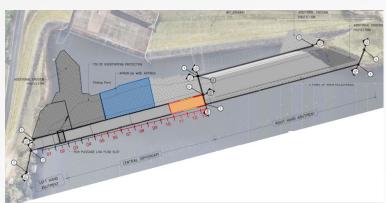
Month 2

Sheet piling central cofferdam and RHA



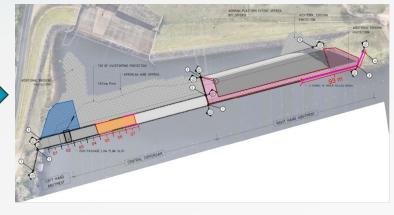
Month 5

Cont. central cofferdam, RHA and rock bags



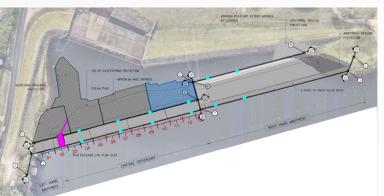
Month 3

Cont. central cofferdam, RHA and begin rock bag installation



Month 6

Finalise rock bags, instrumentation drilling, low flow and fish passage





Rock fill placement







Sheet piling installation

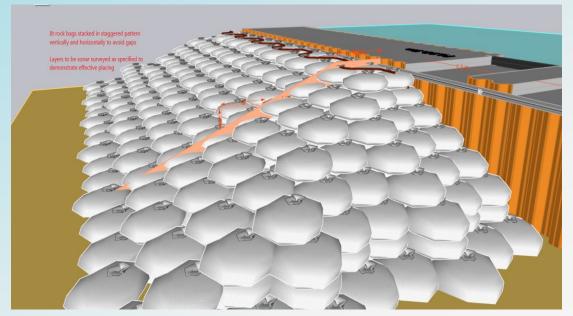


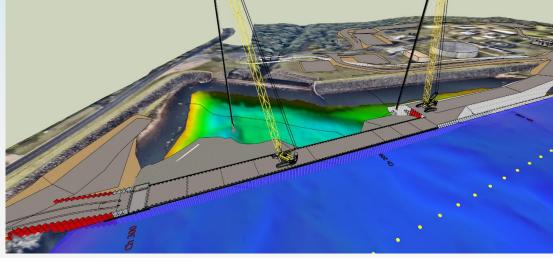






Rock bags











Cofferdam stats & facts

Why do we need the cofferdam	The cofferdam is designed to hold back 3387 ML of water to create a dry working platform for construction of the new spillway. Catchment area is 49 square KMs.	
Rockfill	80,000 tonnes of rockfill going into the cofferdam.	
Steel	There will be 1,530 tonnes of steel in the form of sheet piles, walers and tie rods.	
Rock bags	A total of 3,000 rock bags will be used to construct the downstream berm. Rock bags will be filled with approximately 5m³ of rock and weigh 8 tonne each. Rock bags will be placed in a gradient to help with dissipation in spill events and support the cofferdam structure.	
Sheet piles	The sheet piles range from 6m to 17m long and will be driven to various depths depending on the geological profile of the lakebed.	
Local suppliers	Using local quarries and rock bag supplier to provide the required materials for the cofferdam.	
Innovation	Constructing the downstream berm out of rock bags will be a first. The application of rock bags is an innovative solution compared to the standard RIP RAP scour protection that is usually specified.	
May: Machinery mobilisation to site, siphons commissioned and commencement of sheet piling		

Construction impacts



Key topics



- Heavy vehicle movements and haulage routes
- Noise, dust and vibration
- Recreation

Haulage routes

Corbets, Traveston

Anticipated use throughout project:

Rockfill supply

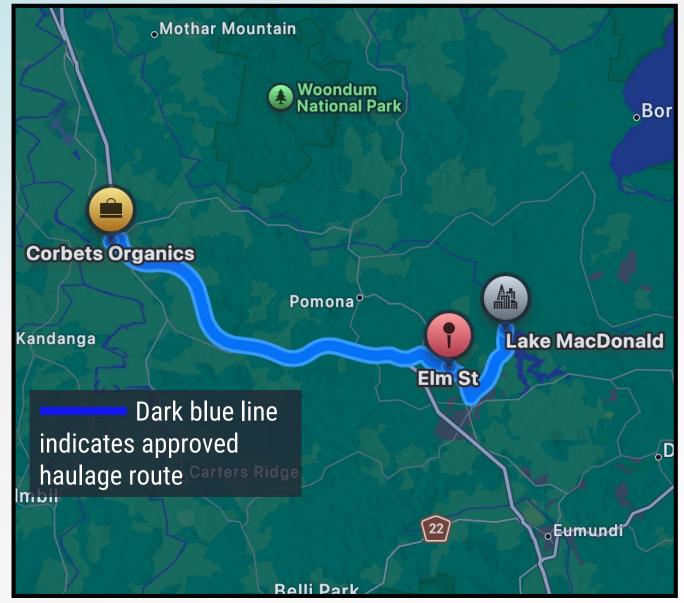
Project requirement:

 Rockfill required for cofferdam construction and temporary working platforms

Date/year estimate:

May 2025 – Dec 2025







Boral, Moy Pocket

Anticipated use throughout project:

- Rockfill and gravel import for haul roads
- Possible aggregate supply for the batch plant

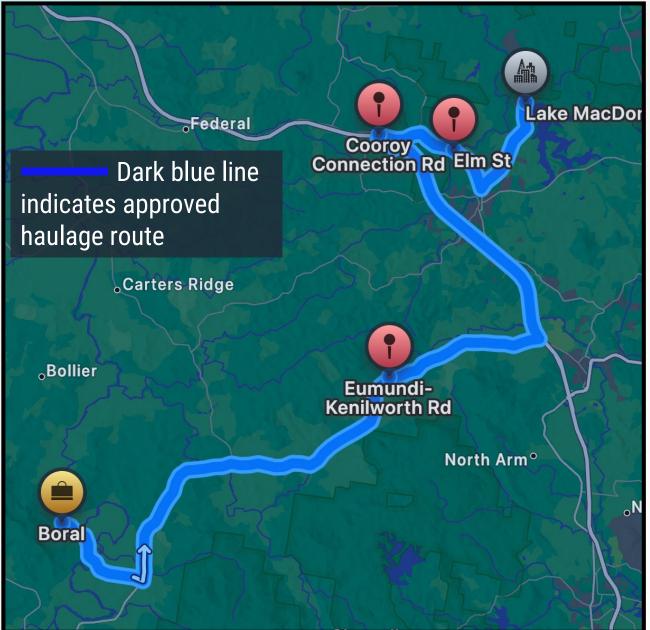
Project requirement:

- Site establishment and haul roads.
- If required: Rockfill for cofferdam activities
- Aggregate supply for concrete production
 Pending contract award

Date/year estimate:

May 2025 – Nov 2027





Haulage routes

Cordwells, Kin Kin

Anticipated use throughout project:

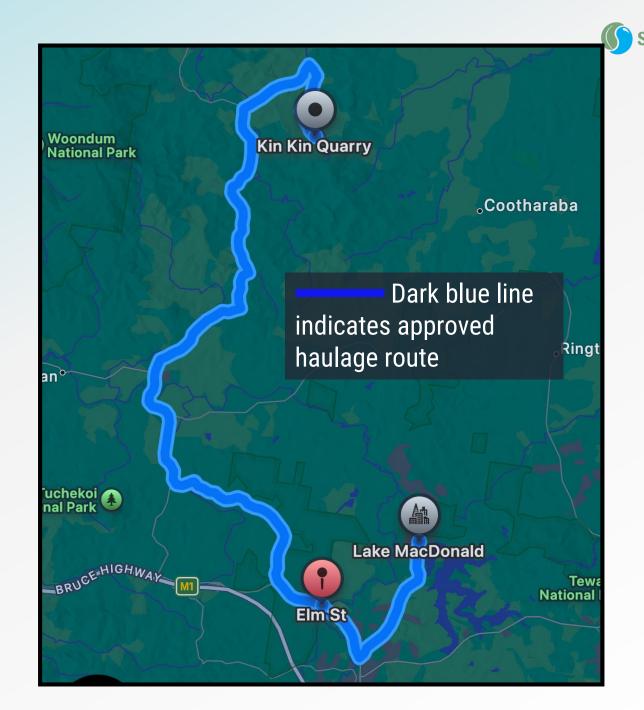
- Anticipated that import of specialised fill will come from Cordwell's Chevallum Quarry
- Supplement rock from other quarries as needed

Project requirement:

Embankment fill material

Date/year estimate:

- Q2 2025 supplement rock as needed
- Q1 2027 specialised fill



Haulage routes

Cordwells, Chevallum

Anticipated use throughout project:

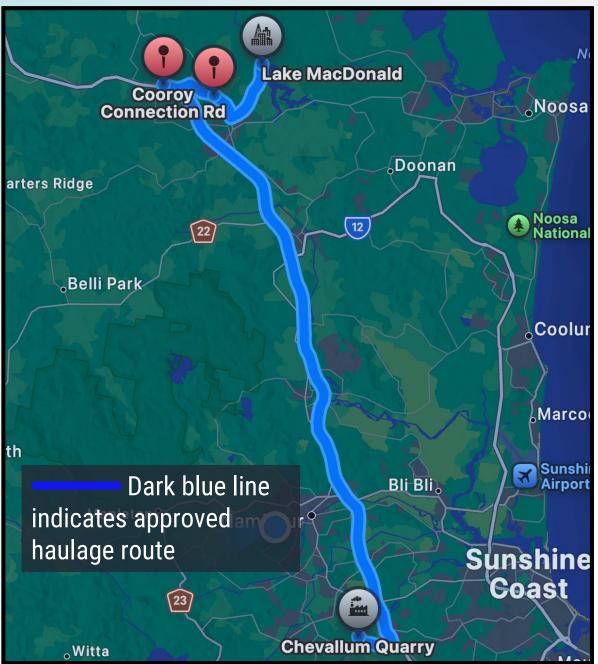
 Import of specialised fill will come from Cordwell's Chevallum Quarry

Project requirement:

Embankment fill material

Date/year estimate:

Q1 2027







Noise, dust and vibration

- Mitigations first implemented at the source then reassessed
- Monitoring undertaken to collect baseline data before main construction
 - Completed for dust and noise
- Monitoring and locations







Resident mitigation

- The project team is planning to implement mitigation measures for adjacent residents affected by construction.
- The team has commenced engagement with directly affected residents to deliver tailored mitigation measures aimed at reducing construction impacts.
- Mitigation measures are being guided by noise and vibration assessments for nearby properties and customised to the needs of affected residents, on a case-by-case basis.
- The project team remains committed to minimising disruptions for affected residents where possible.



Noosa Trails Network

Wayfinding signage has been developed and installed

Noosa Biosphere Trails

ATTENTION

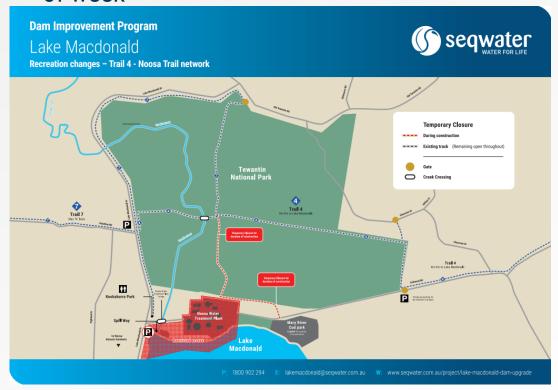
During the Lake Macdonald Dam Improvement Project construction:

- · Parking for Noosa Trails will no longer be available from Kookaburra Park.
- Parking for access to the Noosa Trail network will be available from Lake Macdonald Park.
- Pedestrian access to the Noosa Trail Network will be available from Lake Macdonald Park to Kookaburra Park instead.





- Recreation change signage has been updated to ensure clear messaging
- Trail signs have been updated
- Web and social posts for this will go live end of week

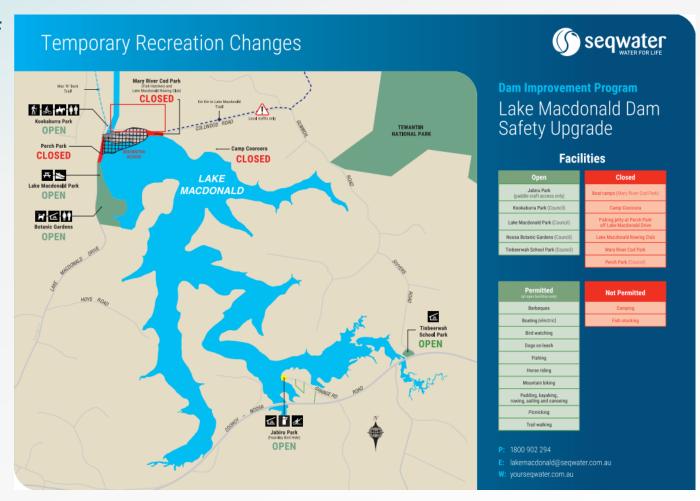




Mary River Cod Park and boat ramp closure

- Park is now closed for the duration of the project.
- Recreation information has been updated.





Environment





Enviro Study Findings

Platypus

- eDNA samples from 22 sites (66 samples)
- Bank searches for burrows at dawn and dusk
- Continuous monitoring and camera trapping
- 3 low level detections orange (refer to map)
- 2 significant detections red (refer to map)
- 1 possible visual observation
- Camera traps set in 10 sites
- Four burrow sites in upper lake not active
- Burrow site in upper Six Mile Creek looks active
- Quarterly monitoring during construction with eDNA and ongoing camera trapping



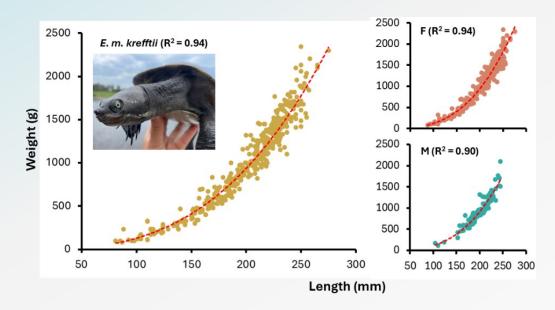




Enviro Study Findings

Turtles

- Large mesh fykes and cathedral traps in 15 sites
- 490 turtles captured kreft, broad shell and saw shell turtles
- Low diversity
- No threatened turtles
- On-going monitoring using a body condition index
- Quarterly monitoring during construction







Enviro Study Findings

Fish

- 12,339 fish captured across 14 species
- 6 small bodied species
- 6 large bodied species
- 2 pest species
- No tilapia and no threatened species recorded
- Fish salvage requirements being reviewed in light of fish survey results

Small bodied fish	Large bodied fish
High abundances of small bodied fish (6,431)	Six species – 5,042 large bodied fish Bony bream (81.6%) (21% mature fish)
Mostly olive perchlet, hardyhead and carp gudgeon	
Mean of 433 fish per overnight fyke net	Low numbers of stocked species Australian bass (0.7%) (300mm- 460mm) Saratoga (0.3%) (500mm -725mm) No golden or silver perch. No cod or lungfish
Highest in lake arms (Six Mile Creek main arm, high in Cooroy Creek and main dam east)	Populations of self-sustaining native fish Banded grunter (8.5%) Freshwater catfish (5.2%) Long finned eels (3.7%)
Low in Upper Six Mile Creek, main basin, and mid lake.	



Rain event - 29-30 March 2025

Sediment loss and siphons

- Downstream of spillway flooded resulting in temporary siphons 'floating' and impacting existing access road barrier
- Sediment run off into existing lagoon from construction gravel hardstand





Rain event - 29-30 March 2025

Timelapse





Rain event - 29-30 March 2025

Sediment loss and siphons – clean up





Rowing Club Development Application





Rowing Club

- DA approved for relocation to Hoy Road on 17 April 2025.
- Submitted a notice to Noosa Shire Council (NSC) suspending the appeal period for the DA. This is a suspension of the appeal period, not a stop. The purpose of that suspension is to now allow the change representations to be made.
- Ongoing period by which the change representation can be lodged with NSC, period now ending 5 June 2025.
- Initial changes requested by the Lake Macdonald Rowing Club have been provided to NSC. The change request is drafted and is being distributed.

Future meeting discussions





Future meetings

Meeting 4 11 August

- Demolition
- Fish passage and salvage

Meeting 5 19 November

- Wet season
- Gympie Weir upgrade

Other future meeting discussions

- Legacy projects
- Future construction phase breakdowns

Questions



Conclusion

Next meeting Monday 11 August 2025



Thank you

