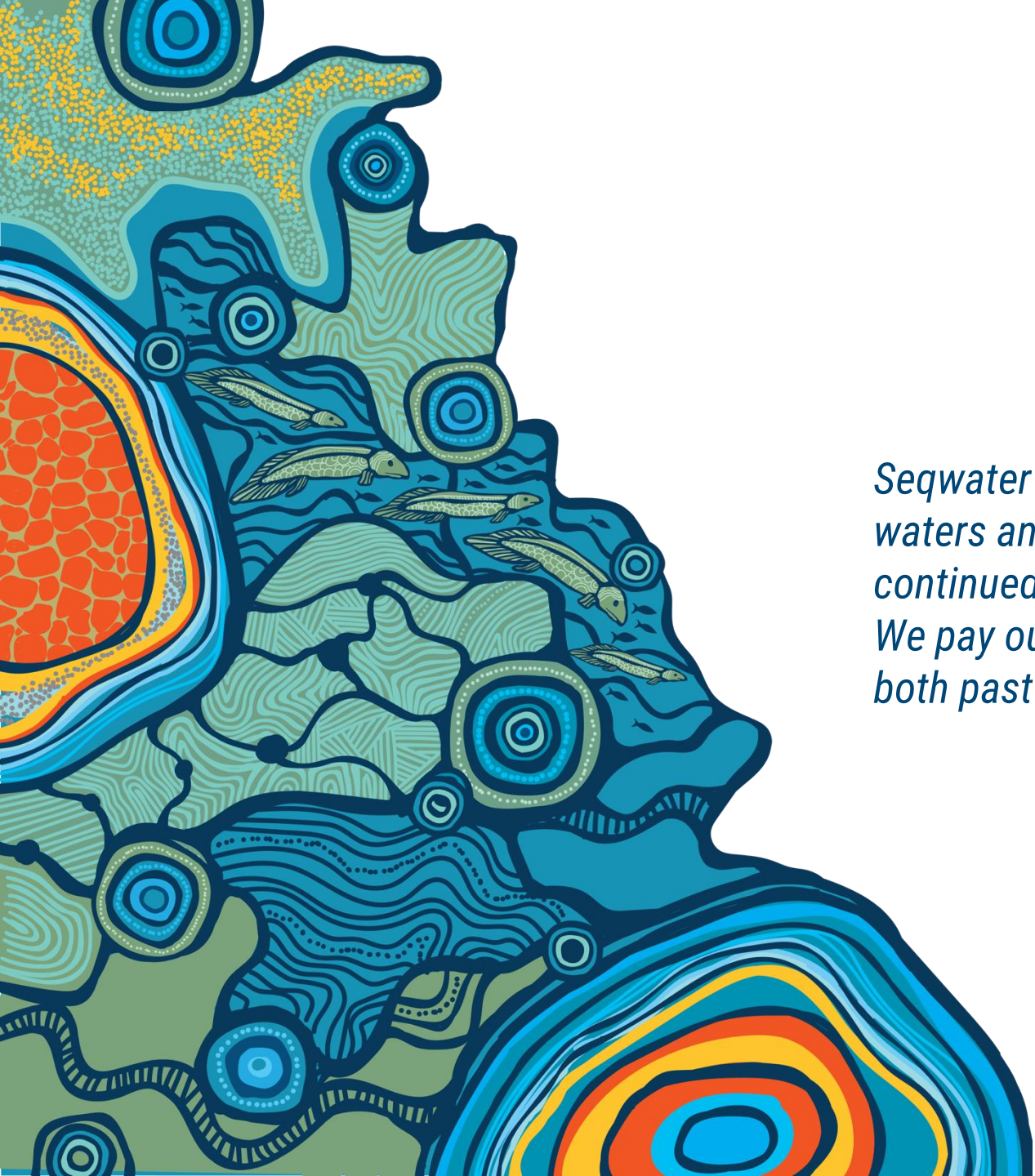


Lake Macdonald Dam Improvement Project

Community Reference Group
Meeting 1

3 December 2024





Seqwater acknowledges the Traditional Owners of these waters and surrounding lands and recognises their continued connection to the land, waters and community. We pay our respects to them and their cultures and to elders both past and present.

Introductions

Getting to know you

Name

Where you live

What you do

What community groups you represent

What value you are hoping to bring & take

Terms of Reference



Purpose

Role

Scope

Meeting objectives

Key objectives of the Lake Macdonald Dam Improvement Project CRG will be to:

- build community understanding of the Lake Macdonald Dam Improvement Project by encouraging members to share information with their local networks.
- provide a forum for members to discuss and share issues of community interest related to the project.
- draw on local knowledge about Lake Macdonald Dam and surrounding areas used by the community and visitors.
- identify the positive and negative impacts of the project on community interests.
- provide Seqwater with relevant and timely community feedback to assist in addressing issues and opportunities resulting from the project.
- provide Seqwater with a sense of community perceptions and understanding about the project.

Lake Macdonald Dam Improvement Project

Program and project overview

Dam Improvement Program

- Dams are long-life assets which require continual assessment, monitoring and maintenance.
- Methodologies and data used to estimate extreme rainfall events have significantly improved and industry engineering standards and risks have progressed since dams were originally built.
- Seqwater's Dam Improvement Program will improve dam safety and water security for years to come. Upgrades are required to be completed by 1 October 2035 and planning is well underway.
- 13 dam upgrades already delivered. Four major upgrades are underway:
 - Lake Macdonald Dam – early works underway, with construction to commence in 2025
 - North Pine Dam – staged strengthening works to commence in 2025, with the main upgrade in options analysis phase
 - Wivenhoe Dam – in options analysis phase
 - Somerset Dam – early and enabling works to commence 2025, with main upgrade in business case phase



About Lake Macdonald Dam



- An un-gated dam in the Noosa hinterland
- Originally built in 1965
- Later raised in 1980 to increase its storage capacity to 8,018 megalitres
- Lake Macdonald, also known as Six Mile Creek Dam provides potable water to the Sunshine Coast region
- The full supply level is RL95.32 metres
- 90 metre long spillway
- There are approximately 90 concrete slabs overlaid on the spillway, each 200mm thick, anchored into compacted earth below.

Lake Macdonald DIP

The project includes the removal of the existing spillway and embankments and the construction of a new spillway and embankments. This requires the lowering of water stored in Lake Macdonald to facilitate construction of a temporary cofferdam, demolition of the existing spillway and construction of the new spillway.



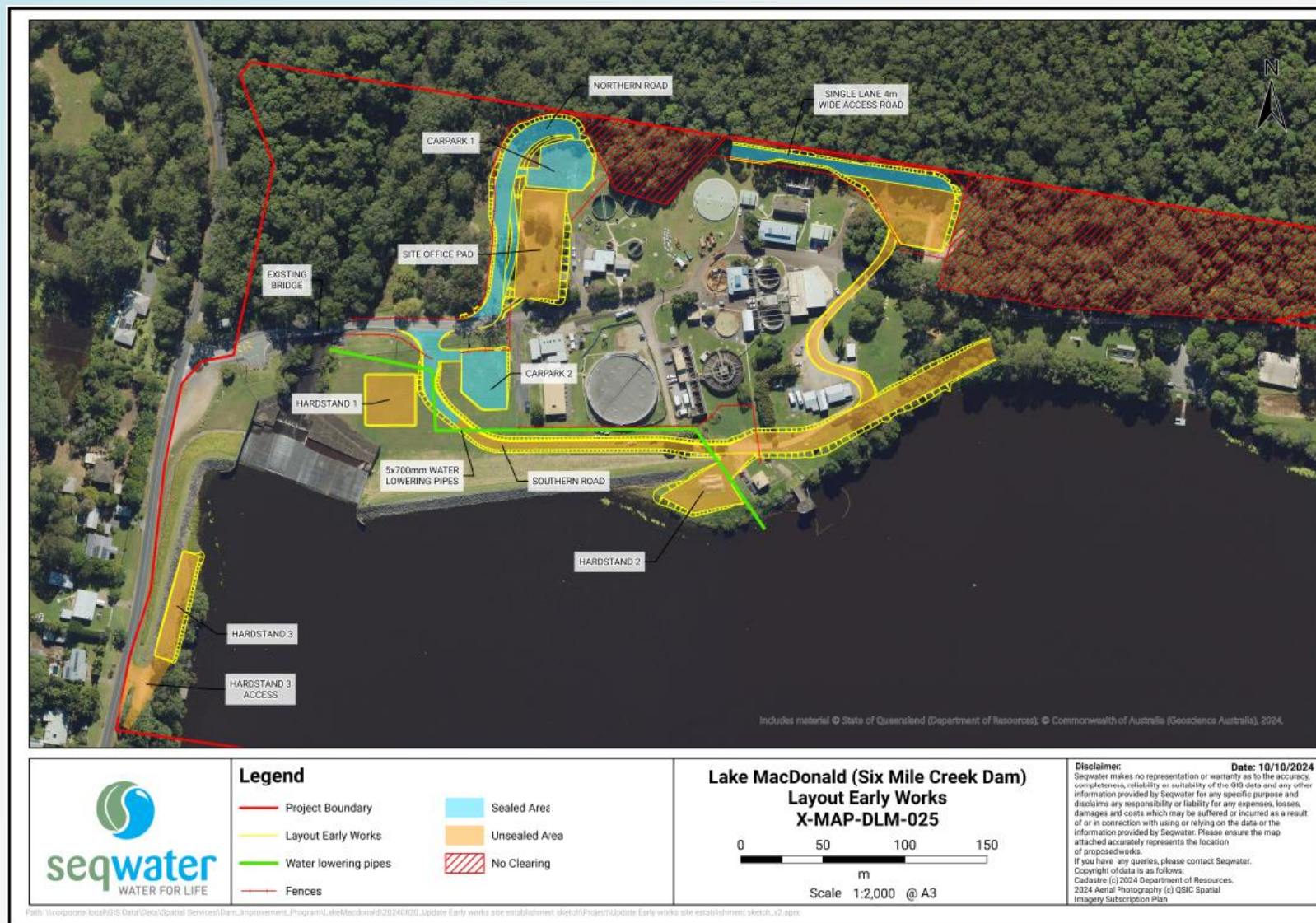
Additional works include fish protection measures (including proposed construction of a fishway at Gympie Weir), land management activities and rehabilitation.

LAKE MACDONALD DAM IMPROVEMENT PROJECT



Early works

- Construction contractor, John Holland, have site possession.
- Commenced early November. Works include:
 - Deliveries of equipment and materials to site.
 - Construction of pipe work and laydown area, haul roads and site facilities.
 - Vegetation removal and mulching.
 - Aquatic fauna survey and habitat assessment.
- Early works management plan published on Seqwater website.



Early works

- Early works are taking place between 6:30am and 6:30pm Monday to Friday, weather and construction conditions permitting. Working hours on Saturday are between 6:30am and 4:00pm, as needed.
- There will be truck movements during this time. Heavy vehicles will access site via Elm Street and Lake Macdonald Drive.



Lake lowering

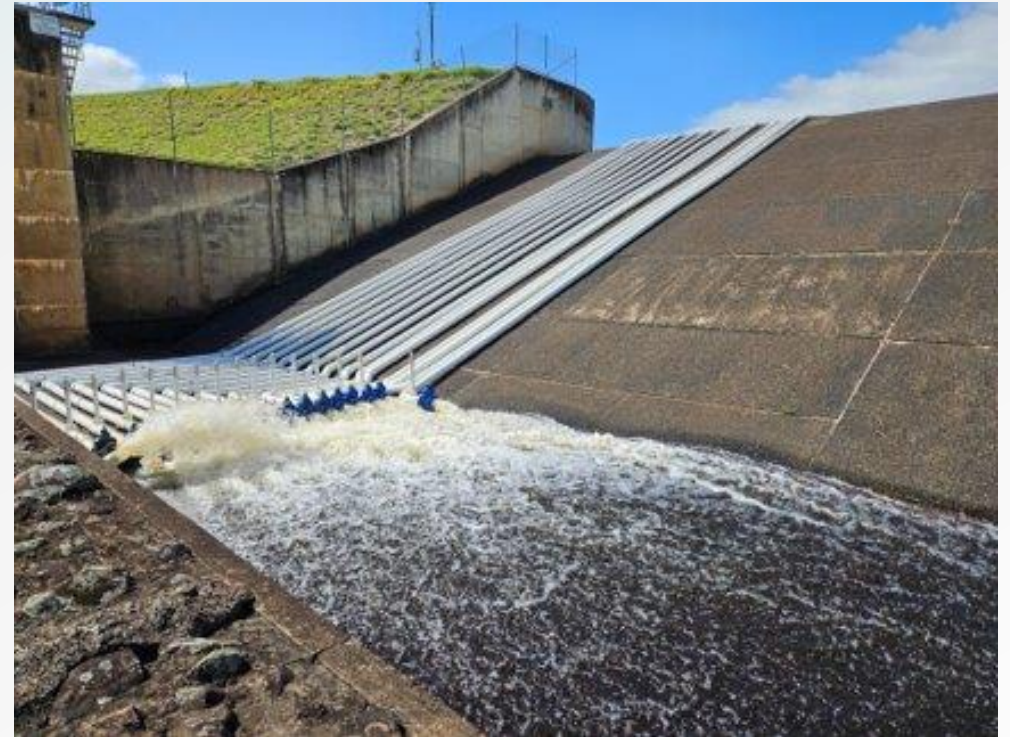
- While the dam continues to operate safely under normal conditions, as a precautionary measure to reduce the likely frequency of spilling events during the wet season, Seqwater is taking measures to enhance the safety of Lake Macdonald by lowering the lake.
- Lake lowering is being undertaken outside of the Dam Improvement Project to reduce dam safety risk prior to the commencement of the project major works.
- In mid-October 2024, Seqwater commenced gradual lowering to 42% of its total capacity, or by approximately 2.3 metres.
- Initially, aimed to achieve desired lake level by the end of 2024, noting recent weather has made this highly unlikely.
- Seqwater will continue to lower the lake to 42% and maintain this level where possible, until the project is completed.
- Will not impact water supply for Noosa and Sunshine Coast communities.



Modelling image showing Lake Macdonald lowered to RL93m, or around 42%

Lake lowering

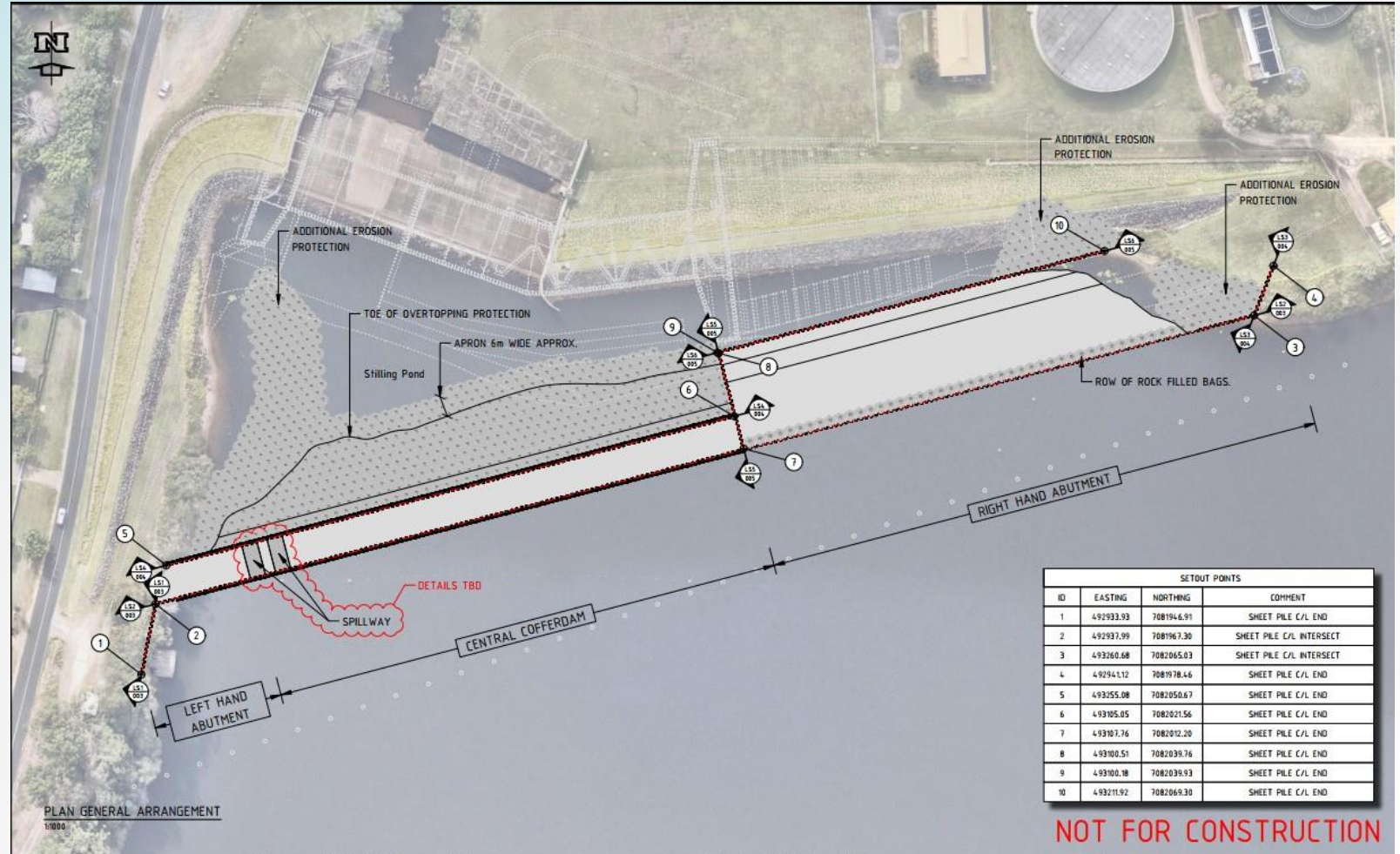
- Gravity siphons continue to operate over the spillway until the desired lake level is reached.
- Prior to recent rainfall the lake reached a low of 65.7% - 1.2m below full supply level. Now spilling with recent wet weather.
- The flow of water out of the dam into the creek has been noted to be similar to those levels which would be experienced during very small spill events during a typical wet season.
- Lake Macdonald remains open for on water recreational activities, including parks and facility use.
- Recreation areas and water access are continuing to be monitored to ensure safety of recreation users of the lake and its surroundings.



Gravity siphons over the spillway

Proposed upcoming works – from 2025

- Main construction works will include:
 - Installing and commissioning the project siphon system to maintain lake level.
 - Fish relocation.
 - Building a 300 metre long, 10 metre wide temporary upstream cofferdam.
 - Demolish existing spillway and embankments.



SETOUT POINTS			
ID	EASTING	NORTHING	COMMENT
1	492933.93	708194.91	SHEET PILE C/L END
2	492937.99	708196.730	SHEET PILE C/L INTERSECT
3	493260.68	7082065.63	SHEET PILE C/L INTERSECT
4	492941.12	7081978.46	SHEET PILE C/L END
5	493255.08	7082050.67	SHEET PILE C/L END
6	493105.05	7082021.56	SHEET PILE C/L END
7	493107.76	7082012.20	SHEET PILE C/L END
8	493100.51	7082039.76	SHEET PILE C/L END
9	493100.18	7082039.93	SHEET PILE C/L END
10	493211.92	7082069.30	SHEET PILE C/L END

NOT FOR CONSTRUCTION

<p>LMCH-2024-03-REP-00001 Rev. C 15/02/2024</p>	<p>SCALE: 1:1000</p>	<p>AS CONSTRUCTED REV. 1</p>			<p>TITLE LAKE MACDONALD (SIX MILE CREEK DAM) TEMPORARY COFFERDAM LAKE MACDONALD, QLD PLAN GENERAL ARRANGEMENT</p>										
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<p>DRWG. NO. B01179-03-DWG-002</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION	BY	CHKD.						<p>REVISION</p>	
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Quarry procurement

- John Holland have procured four quarries, and these will be used as required, based on their material availability and requirements on site.
- Quarries approved for use:
 - Boral (Moy Pocket)
 - Cordwell's (Kin Kin)
 - Corbett's (Traveston)
 - Holcim (Bli Bli)
- Control measures for quarry trucks:
 - Trucks to be fitted with GPS tracking to monitor truck speeds and haulage route.
 - Signage and UHF for school buses to communicate and coordinate movements on the road.
 - Sign in and sign out system, including QR code registration, to track and monitor trucks.
 - Boom gate system to stagger truck movements travelling between the quarry and project site.
 - Heavy vehicle movements will be minimised during school pick-up/drop-off times. Early works are approved for one quarry truck into and out of site per hour during peak school zone times (7:20-8:45am and 2.30-3:45pm).

Community engagement

2017-2020

- Project launch
- Obtained project approvals
- Former CRG
- Stakeholder and resident meetings
- Public consultation period

2024

- Project relaunch
- John Holland awarded contract
- Newsletters and community updates
- Six community information sessions
- Doorknocks
- Meetings with residents
- Reformation and first meeting of CRG
- Project change request submitted to OCG

2025 plans

- Continue CRG meetings
- Engagement on main construction works
- Main construction starts
- Ongoing community updates and events
- Community and legacy benefits framework to be drafted

Agency and stakeholder engagement

- Office of the Coordinator-General
- Queensland Government departments (DAF, DETSI, TMR)
- Ongoing engagement with:
 - Member for Noosa
 - Noosa Shire Council
 - Kabi Kabi
 - Environmental and community groups
 - Adjacent landowners
 - Cooroy State School
 - Milestones Early Learning

Community engagement

- Lake Macdonald Rowing Club – relocation (DA submitted).
- Local residents – engaging closely and working towards implementing a construction impact mitigation strategy.
- Recreation users – ensuring recreation areas are signed appropriately and public spaces remain open where safe to do so.
- Noosa Botanic Gardens – engagement to ensure plants at risk with lower lake level are managed during construction.
- Save Noosa Hinterland – heavy vehicle traffic and quarry use.
- Community sentiment/awareness survey.
- Public notification period mid-December to end January.



Key takeaways

CRG

Meeting
approximately
quarterly

Six objectives

Lake Macdonald Dam Improvement Project

Early works
underway

Main
construction
from 2025

Lake Macdonald Dam Improvement Project

Planning the future of our
Community Reference Group

CRG role



Defining our Purpose and Expectations

By the end of our time together...

- How would we be *performing*? What value is the group creating?
- How would we be *perceived*? What value does the community see in us?
- Why? What value are you getting from being part of the group?

Delivering on our Purpose and Expectations

Principles of Engagement for maximising our time together...

- What behaviours will help us be successful?
- What requests would you like to make of other CRG members to ensure that our time spent together is valuable and productive?

Future meetings

Meeting dates

- Wednesday, 12 February 2025
- Wednesday, 21 May 2025
- Wednesday, 13 August 2025
- Wednesday, 19 November 2025

Nominate draft meeting topics, based on...

1. **Early impacts of the project** (what will happen first)
2. **Meaty topics that are of concern to the community** (what will be noticed the most)
3. **Largest risks to the project** (what will impact progress the most)
4. **Areas you can help influence / advocate** (where you can play an active role the most)

THANK YOU

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