Lake Cargelligo Embankment Dam Upgrade



Major work underway - May 2023

Work update

Major work on the Lake Cargelligo embankment upgrade project will start on Monday 22 May 2023.

Major work will include vegetation removal, earthworks to remove material and then expand the structure, removal of excess water from the downstream side, bore drilling and trench digging. The project will improve the filtering system, reduce the risk of internal and external erosion and overtopping (water rising over the top) and improve the engineering standards and materials to enable the embankments to meet current and future needs of the local community and WaterNSW customers.

Work will take place during standard construction hours, on Monday to Friday from 7am to 6pm and Saturday 8am to 1pm.

Major work follows the completion of trial embankment and investigation work and a drawdown of the lake to 50% capacity. The drawdown of 50% is required during construction to ensure we meet our environmental requirements, reduce risks to construction, and for the safety of our workers.

Works requiring the drawdown are scheduled between May and September 2023. Depending on progress during this time, further work may also be required between April and September 2024, including an additional temporary drawdown. We are currently assessing options to avoid a second drawdown and will consult closely with our customers and community to minimise impacts during any additional stage of work.

Project background

The embankments were constructed in 1906, and in 1927 were expanded to about 3.5 metres in height and 5 metres in width. Development of the embankment upgrade project began in 2016, following flood damage.

Construction was planned to start in mid-2022, however was delayed due to heavy rain events in the Lachlan catchment. Emergency work was completed in late 2022 to ensure the short-term integrity of the embankments.



2021

Complete design.

2022

Award contract and complete environmental assessments.

2022

Emergency works, following flooding.

Early 2023

Early work including investigation work, trial embankment and building site compound.

April 2023

Reduce lake to 50 per cent storage capacity.

May to September 2023

First stage of upgrade to embankments, pending lake levels and inflow levels.

Late 2023 to Early 2024

Refill Lake Cargelligo using additional flows and flows from connecting waterways.

2024

Some work may be required between April and September 2024 including an additional temporary drawdown, pending progress in 2023.

We are assessing options to avoid a second drawdown in 2024 and will consult closely with our customers and community to minimise impacts during any additional stage of work.



Lake capacity lowered to 50% (drawdown)

The lake's capacity was lowered to 50% between mid-April and mid-May 2023 to reduce risks to construction, meet our environmental requirements and maintain worker safety. The project team will continue to monitor the lake levels and water quality. From September 2023, the lake will be refilled by natural flows from connecting waterways and rain events.

An additional drawdown may be required between April and September 2024, pending progress in 2023. We are assessing options to avoid a second drawdown and will consult closely with our customers and community to minimise impacts during any additional stage of work.

During the drawdown, the community will continue to have full use of the lake, including the public boat ramp next to Lake Cargelligo Boat Club. To minimise water loss, as much water as possible is being safely moved from Lake Cargelligo to nearby Lake Brewster.





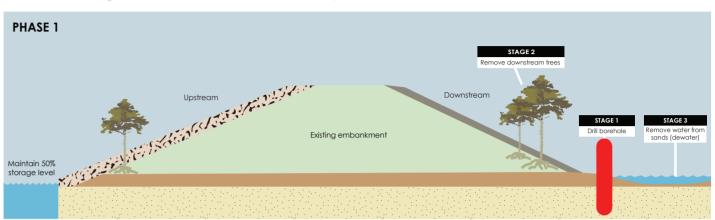
Emergency works recently completed at Nilssons Lane.

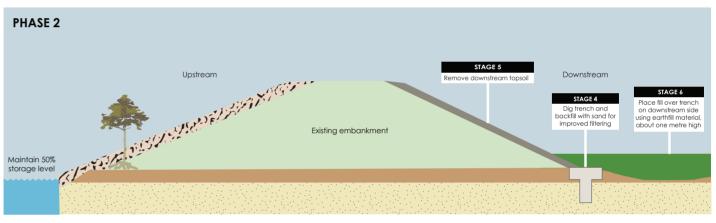


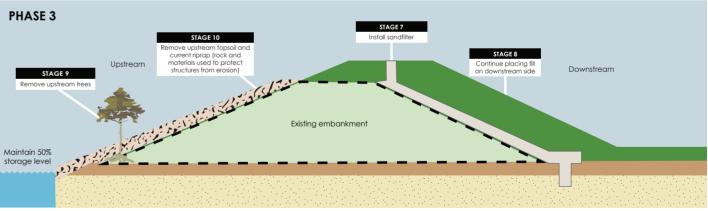
Lake Cargelligo boat ramp will remain open for public use throughout the construction periods.

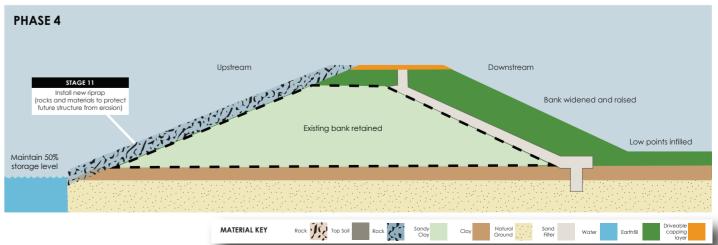
Construction methodology

Embankment upgrade work will be carried out in four phases.











Tried and tested

The project team completed trial embankment work in April and May 2023. This involved testing the construction methodology and materials to ensure we get the best results on the permanent embankment upgrade. The team examined for compaction, core testing to check for lamination (layers binding together), and trialed earth materials and earth moving methods. This work also involved preparing the project area and establishing environmental controls and heritage protection measures.





Loading material and earth compaction works for trial embankment, adjacent to Lake Cargelligo Road.

Employment opportunities

We are committed to leaving a positive economic, employment and training legacy to the community. We encourage local suppliers, job seekers and members of the community to contact the project team in relation to these opportunities.

Diona are also actively looking for the following roles to assist with the delivery of the project:

- Administration support (full time), experience in administration or business preferred.
- Site laborers (full time and part time) construction white card required, however training can be provided.
- Machine operators (casual) excavator, ticket required.
- Truck drivers (causal) HC / MC license required.
- Site engineers (full time) Engineering degree with 1-2 years of experience.
- Cleaner (casual or part time) site offices and residential accommodation.

For more information on construction careers, job vacancies and project information, please email community@diona.com.au.

Contact us

For more information about the Lake Cargelligo Embankment Dam upgrade:





For construction related enquiries, please contact Diona's Community Engagement team by phone on 1300 131 338 or by email community@diona.com.au



For general enquiries and to receive project updates email **Customer.Helpdesk@waternsw.com.au**



Call the WaterNSW Helpdesk on call 1300 662 077



Follow us on Twitter @WaterNSW



Find us online at https://www.waternsw.com.au/projects/lake-cargelligo-embankment-dams