

Bird Lake Project Update

On-ground works completed



Bird Lake in Port Augusta is being rehabilitated with local native plants in selected areas to reduce the potential for odour issues and improve the area.

The project is being delivered by the Port Augusta Council with the cooperation of land owners and funding support from the South Australian Government.

About the Bird Lake Project

Bird Lake is a part of the Augusta Lakes salt-lake system, on the south-eastern approach to Port Augusta. There have been issues with odour coming from decaying algal mat around the lake's edge. The algal mat grew when the lake was being kept unnaturally full with water from the Augusta Power Station. Following the power station's closure, the lake dried up exposing the algal mats and causing them to decay and smell.

The Bird Lake Project aims to reduce the potential for odour from the lake by "capping" the decaying algal mat around the lake fringe with soil and seeding this with low growing local native plants.



Soil being placed around Bird Lake

What's been happening on site?

On-ground works commenced in May 2020 after an agreement was finalised with Port Augusta Council, the South Australian Government and Cu-River Port Australia Pty Ltd to access soil from a "borrow pit" on the former power station land. Cu River Mining Australia purchased the power station site from Flinders Power in May 2019, and Bird Lake Project works could not start until the agreement was finalised.

Initial Bird Lake Project works included constructing an access track around the perimeter of the lake using soil from the borrow pit. This track was constructed on top of where the land was to be rehabilitated, to allow construction vehicles to safely move around the site and manage the impact on surrounding vegetation. Rubbish such as old tyres and mesh along the Augusta Highway edge of the site was also removed.

Soil was transported from the borrow pit to the site along the access track using 40 tonne dump trucks and spread with a dozer and Pisten Bulley. Once the soil was spread, it was direct seeded with a mix of seeds obtained from low growing local native plants. The western perimeter of the lake was completed first and then the eastern. All seeding was complete on site by mid-September 2020.



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How will the plants grow and survive?

The plants species being established at Bird Lake are all low growing local native plants that are tolerant of the lake's highly saline and arid conditions. Trees and large shrubs will not grow in these conditions. Once the plants have established, there will be some bare ground between plants (the plants won't touch).

Knowledge gained from the rehabilitation of the nearby Ash Dam and Cultana Army Base has been used to guide how Bird Lake has been rehabilitated. The Ash Dam area was rehabilitated with a 150mm soil base and direct seeded with a mix of 45 plant species in 2018. Plant growth at the Ash Dam is going well, about 5 plants per square metre have established. The 25 plant species from the Ash Dam with the highest survival were used in the seed mix for Bird Lake. Nearby at Cultana Army Base an area has been seeded with the same 25 species and plant growth has been stronger than at the Ash Dam- about 17 plants per square meter have established.

The timing of when the seeds at Bird Lake germinate and start to grow will depend on rain. There may or may not be growth before summer 2020/21 and some plants may start growing and die if it is very hot/too dry. However, experience from the Ash Dam and Cultana Army Base shows that eventually plant cover will establish and increase.

Excitingly, small birds such as Dotterels and their eggs have been observed at the Ash Dam, indicating that the vegetation established there is providing a suitable habitat that promotes breeding. It is hoped that Bird Lake can experience similar outcomes.

The Bird Lake project area will be monitored three times over 12 months to see how the plants are germinating and growing. More direct seeding may be undertaken in 2021 if required.



Bird Lake before rehabilitation



Bird Lake after rehabilitation (artist's impression)



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Local native seed being scattered at Bird Lake



Completed capping around the perimeter of Bird Lake



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How will dust be managed?

The project has investigated the use of numerous dust suppressants (synthetic polymer emulsions) that could be sprayed onto the soil surface to help prevent dust lifting. It has been decided not to apply dust suppressants at this time as the suppressants may limit the germination and growth of the native plant seeds. Ultimately, it will be plant growth and cover that will limit the spread of dust from the area and as such the seeds need to be given the best chance to germinate and grow.

The project will monitor the site and if dust becomes a major problem, a dust suppressant will be applied.

The soil has also been prepared at the site to leave a “rough” surface. This reduces the amount of dust lifted from the surface by the wind, while also helping to capture rainfall. Signs have also been established around Bird Lake to discourage access to the area restoration area and damage by bikes.

Over time the plants will grow, stabilising the soil. More direct seeding will be undertaken if required in 2021.

Staying in touch with the community

Since the community information night in February 2019, the project has been working to keep the Port Augusta community informed of the project.

Project updates were published on Council’s project webpage and in the Transcontinental in October 2019 and April 2020 and on June 2020 on the project webpage. In early September 2020, a story ran on Southern Cross Austereo.

Once works commenced, a Community Reference Group met at the Port Augusta Library in July and September 2020 to hear an update from the Project Manager, ask questions and provide feedback.

The Community Reference Group includes local residents who had indicated an interest in being a part of the group at the community information night in February 2019 and had responded to a following invitation to join the Group.

The involvement of the Community Reference Group has been highly valued by the project.

Thank you to all members of the Group.

Contact or more information

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