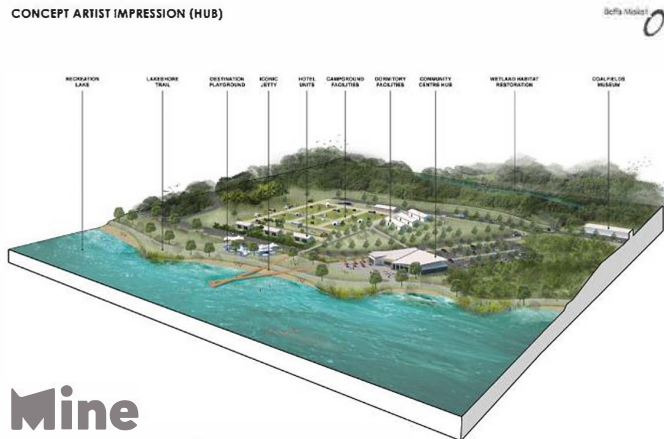


CONCEPT ARTIST IMPRESSION (HUB)



Mine rehabilitation in the Northern Waikato

From a landscape assessment in the late 1970s to a large-scale rehabilitation today, Boffa Miskell has a long history of involvement with the former open-cast Kimihia Mine and its rehabilitation into a multi-purpose recreation, education, conference and natural park facility. By **Kathleen Kinney, Boffa Miskell.**

Kimihia Lake is around five kilometres northeast of Huntly, in the Waikato. It's one of the region's riverine lakes: an extensive wetland system that includes Lakes Whangape, Waahi, Waikare and the internationally significant Whangamarino Wetland.

The lakes are linked to the Waikato River, and the wetland system is one of the most important freshwater habitats in the country.

Kimihia Lake was approximately 280 hectares in size before mining of the site began. During the 1950s, the lake was partly drained and drastically reduced in size to allow strip mining of coal in the lakebed.

In 1978, then Boffa Jackman and Associates prepared

a landscape assessment of the open-cast mine area, and landscape design proposals for the end-of-use of the mine. The report included planting studies, and the preparation of planting guidelines for the rehabilitation works.

What remains of the original Kimihia Lake is located on the eastern side of the Waikato Expressway. The former Huntly East Mine site is contained within what was once an area of the lakebed. Since the mining operation ceased in 2017, this area is refilling naturally.

The 100 hectare former Huntly East Mine site was purchased in 2017 by the owners who have owned the adjoining pastoral farmland on Kimihia Road since the 1980s. The site was purchased with the vision of developing it into a

destination multi-purpose recreation, education and natural park facility based around a future freshwater lake formed by the filling coal mine pit.

This vision, referred to as the Kimihia Lakes Development Project, is intended to provide a social, environmental and economic legacy for the benefit of the Huntly community and wider region.

Boffa Miskell was brought into the on going project in late 2018 by the client – the Allen Fabrics/Kimihia Lakes Community Charitable Trust – to provide assistance in the long-term planning and delivery of the project, involving landscape concept design and masterplan development.

planning services for site re-zoning, and ecological baseline assessments to inform the site rehabilitation programme.

This has been centred around the development of a site Masterplan – a landscape design-based document which collated the relevant site information and defined the range, scale and potential spatial arrangement of the project's proposed activities.

This Masterplan reflects the historical, cultural and environmental context of the site and has embedded a range of design principles that reflect the values of the client and the project team. In effectively capturing the vision for the project and providing a framework for this future development, the Masterplan has been an invaluable tool in assisting with stakeholder engagement and providing a platform for project funding applications.

In a separate workstream, Boffa Miskell's ecology team has been critical in the on-going preparation of the extensive site rehabilitation programme, through the baseline assessments and the recommended environmental restoration activities to be programmed to align with the progressive filling of the lake.

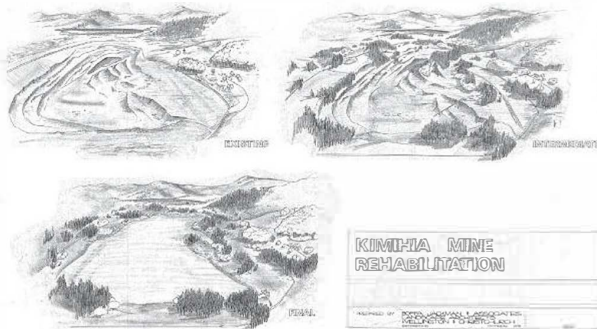
With the site having an existing Rural zoning and Coal Mine Policy overlay, an efficient and effective planning framework was considered vital to provide certainty to support the long-term project vision.

Boffa Miskell's planning team led the process to create the new Kimihia Lakes Zone (Special Purpose Zone within the National Planning Standards) with a comprehensive suite of bespoke provisions proposed to specifically provide for the project's proposed activities, reflect the scale and characteristics of the site, and respond to concerns raised by submitters. A hearing for the new Kimihia Lakes Zone was held in early June 2021, with decisions on the Proposed Waikato District Plan expected later this year.

The rehabilitation of the site will be programmed to align with the progressive filling of the lake which is estimated to take up to 30 years. The rehabilitation will recreate some of the former ecological values of Kimihia Lake and recognise the cultural values that remain in this area. Rehabilitation work will comprise riparian planting alongside the future lake edge, with amenity and ecological restoration of the streams, wetlands and bush clad gullies on the lake surrounds and wider catchment.

Bryan Sanson is the lead on this project. "I didn't know Boffa Miskell's involvement with Kimihia Lake extended back to 1978," he says. "It's pretty amazing to see the hand-drawings from that original report side-by-side with what we're creating today using modern drafting and graphics software packages."

"The similarities in the vision for what the site can become – even though there's over 40 years between the two projects – really illustrates that the way Boffa Miskell approaches the landscape has been around since the beginning and what we view as a successful outcome still endures." **Q&M**



Above: Kimihia Mine (1978) and Kimihia Lakes (2021).