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Media Release:

The Tale of Lake Kepwari: From Open-Cut Mine to Water Sports Landmark

Lake Kepwari is far more than a new water sports tourist hub: it is a demonstration of how the mining industry is committed to rehabilitating and relinquishing mined land for the benefit of the environment and the community. Long after its days as a productive coal mine have been left to memory, Lake Kepwari will be a landmark that contributes to Collie and its economy.

From Open-Cut Coal Mine to Lake

Lake Kepwari is part of the Collie River Waugal Aboriginal Heritage Site, which includes all of the Collie River system. Waterways in southwestern Western Australia, including the Collie River, continue to play an important role in the lives of Nyungar people; their connection to the Collie River is reflected in their spiritual beliefs and its role as a source of food, water and recreation. Kepwari is a word in the indigenous Wilman language meaning “playing in water”, and all manner of water sports will be enjoyed at Lake Kepwari for generations to come.

Mining at the site where Lake Kepwari is now located began over 50 years ago in the 1970s – the pit workings were known as “WOSB” – and ended in 1996. Rehabilitation works on Lake Kepwari initially started in the 1980s in parallel with open-cut mining operations.

It was always envisaged that the site of the mine void would become a lake for recreational purposes after mining ended. However, the journey from open-cut mine to lake has taken as many turns as the Collie River itself.

In 1990, the south branch of the Collie River was diverted around the open pit workings to allow access to unmined coal reserves. At that time, eventual mine closure plans kept this Collie River diversion channel in place, which would have resulted in a mine void that would remain disconnected from the river and its surrounding catchment areas.

The 1997 Mine Closure Plan for Lake Kepwari was as a “closed catchment lake”, which would have resulted in poor water quality. Another key challenge of this rehabilitation plan was that the ‘disconnected’ mine void would take 100 years to fill with water naturally. But this time frame would lessen considerably if a source could be tapped that would provide additional water to complement natural run-off. It was decided to divert a limited amount of water from the Collie River into the mine void and Premier Coal successfully applied for a surface water license to set this plan in motion.
The plan was still to keep Lake Kepwari separate from the diverted Collie River, but to extract water from the river into the lake to ensure the lake maintained acceptable water levels.

This plan changed dramatically in 2011. In August 2011, during a substantial rainfall event, the Collie River breached the diversion channel and flowed into and through Lake Kepwari. This prompted reconsideration of the 1997 closure strategy from an isolated water body to a flow-through lake.

Premier Coal commenced a trial of the flow-through system between 2012-2016, in consultation with relevant government agencies, and commissioned associated studies to investigate potential impacts of the revised plan on the environment and downstream water users.

Results from the trial and studies successfully demonstrated that diversion of Collie River into Lake Kepwari improved the water quality in the mine void lake with no significant adverse effects. As a result, Premier Coal applied for approval to permanently divert the Collie River back to its original path through the mine void. This permanent flow-through of the Collie River was approved in November 2018 and civil works enabling the flow-through were completed in June 2019. The mine void formerly known as WO5B is now the body of water known as Lake Kepwari: being fed from and flowing back into the Collie River; holding around 32 gigalitres of water (almost the same volume as Lake Burley Griffin in Canberra); with a perimeter of 5.4 kilometres; and measuring 65 metres at its deepest point.

Temporary Stewards of the Land

Since the 1997 Mine Closure Plan was established, Premier Coal and the State Government have collaborated closely on this project, with Premier Coal rehabilitating and relinquishing the land and the government constructing public facilities and infrastructure.

Yancoal, the operator of Premier Coal, recognises that it is a temporary steward of the land during the mining process, and is committed to rehabilitating mined land and returning it in a state that is beneficial to both the environment and the community.

Land rehabilitation is foremost about returning the land to an agreed environmental condition that is safe, stable and sustainable. The key objectives of Premier Coal’s rehabilitation program at Lake Kepwari were to create a functioning, self-sustaining ecosystem that would integrate into the surrounding bushland, landscape and lake.

This involved extensive earthworks after the mine closed in 1996 to reshape dumps and mine void surrounds for a safe and natural landform. The area was covered with inert material, then spread with topsoil and seeded with more than 60 species of native vegetation which has now developed into an established bushland.

Recent rehabilitation activities to facilitate permanent flow through included: widening the Collie River inlet and outlets to allow full flow through the lake; rehabilitating the breach; and backfilling the diversion channel adjacent to the Lake surrender area. Premier Coal engaged local businesses that employed local people to do this work.

Recent works commissioned by government to develop the Lake into a recreation hub include a swim beach, picnic areas, campground, toilets, dual lane boat ramp and jetty, parking bays for 85 boat trailers and 65 cars. Upgrades to the entrance road, a new bridge over the Collie River and signage throughout the area has turned the area into a watersports landmark.
Asset as a Mine; Now Community Asset as a Lake

Collie is a town that has traditionally been reliant on mining and power generation to employ many in the community and to support local businesses. But tourism is becoming an important driver of a more diversified economy for Collie.

The transformation of Lake Kepwari into a recreation hub for water sports is expected to attract an influx of tourists and visitors, which will provide a boost for businesses around Collie.

This is an outcome on which the State Government is fully focused, identifying Lake Kepwari as a key development project in the South West region and committing $5.7 million to realizing this vision. An initiative that the Premier, Mark McGowan, has fully supported as the state looks to recover from the pandemic, and drive tourism as a boost for the economy:

“Lake Kepwari was an open cut mine for almost 30 years and has now been transformed into a fantastic community facility. I congratulate Premier Coal and Yancoal for all their work in making it happen.”

The enhancement of nature-based tourism will contribute to economic growth and diversification, underpin job creation and a secure a sustainable regional community. Early estimates anticipate that after three years, Lake Kepwari should attract up to 22,000 overnight stays and 37,000 day trip visitors per annum, contributing millions to the local economy.

A Landmark for the Mining Industry, not just for Collie

Lake Kepwari will be an important landmark for the mining industry, not just for the town of Collie. It is a prime example of how rehabilitating a mine site is more than just planting trees. It demonstrates how cooperation between mining companies, the local community and government can ensure mine closure and rehabilitation can have a positive environmental, social and economic impact well into the future.

Land rehabilitation and relinquishment is part of responsible mining – taking the land over which mining companies have had temporary stewardship and handing it back to the community as an asset for future use. Lake Kepwari, having been an open cut mine for nearly 30 years that was an important driver of Collie’s economy, is now a tourist landmark that will contribute to Collie’s economic future for generations to come. Premier Coal’s Operations Manager, Jim Falconer, sums up Lake Kepwari’s journey perfectly:

“Having operated as an open cut coal mine for almost 30 years, it is brilliant to see the transformation that Lake Kepwari has experienced. We are thrilled that locals of Collie and tourists to the area will be able to enjoy the ideal conditions for all water-related activities and immerse themselves in nature at the lake.

“We are proud to be a part of a development that has delivered local jobs throughout the rehabilitation and construction phases of the project. Lake Kepwari is a terrific recreational facility for locals and will be a fantastic tourism attraction in Western Australia’s South-West region.

“It was always the plan to convert the site into a lake and we are blown away by the end result.”

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