

6.1.5 Report in Response to the Beaconsfield Reservoir Petition

Responsible GM: Peter Benazic
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Recommendation(s)

That Council:

1. Support Melbourne Water to take action to ensure that community safety is not compromised and the community are further consulted regarding preferred safety options.
2. Indicate support for the improved recreational facilities and greater access to the Reserve for the general public.
3. Advocate for the State Government to assign the Park Manager role to a State Government Agency for a significant reserve of regional importance.
4. Request that Melbourne Water provide and Environmental Impact Statements or documentation that considers the environmental and conservation impacts of the proposal to assist the community in any future advocacy plans.
5. Highly commends the work that the Cardinia Environment Coalition has undertaken in managing the reserve.

Attachments

Nil

Community Correspondence

Council acknowledges and notes that community correspondence has been received and considered as part of this report including.

- Email & attachments from Harry Jensen on behalf of Save the Beaconsfield Reservoir Action Group dated 26 November 2020
- Email & Rebuttal Paper from Harry Jensen & Andre Bokos from Save the Beaconsfield Reservoir Action Group dated 4 January 2021
- Email & Letter from Caroline Spencer, Upper Beaconsfield Associated dated 16 February 2021 (received 22 Feb)
- Email from Lindsay McNaught at Cardinia Environment Coalition dated 18 February 2021
- Letter from Officer and District Community Association dated 1 March 2021
- Email from Carol and Robert Porter dated 14 March 2021
- Letter & attachment (newspaper article) from Graeme J Taylor President Beaconsfield Progress Association Inc. dated 22 March 2021 and further email dated 12 April 2021
- Email & Letter from Ian Chisholm from Cardinia Environment Coalition dated 28 March 2021
- Email and copy of petition (unsigned) from Michael Petrovich & Robert Porter of Officer & District Community Association Inc. dated 8 April 2021
- Email from Paul Higgott dated 10 April 2021
- Email & Letter from Andre Bokos dated 16 April 2021
- Email from Harry Jensen (Member of the UBA) dated 28 April 2021
- Email from Jenny Pritchard dated 3 May 2021

Executive Summary

This report considers Melbourne Water's proposal to undertake works at the Department of Environment, Land, Water and Planning managed Beaconsfield Nature Conservation Reserve. Within the reserve is the Beaconsfield Reservoir. Melbourne Water is responsible for the reservoir and proposes to decommission the existing reservoir dam wall as it allegedly fails to comply with the Australian National Committee on Large Dams (ANCOLD) guidelines. Coupled with the proposed dam wall reduction is the proposed installation of recreational assets and associated landscaping. The new assets necessitate a Park Manager for maintenance according to Department of Environment, Land, Water and Planning.

The current land manager for the reserve is The Cardinia Environment Coalition funded by the State Government. The Cardinia Environment Coalition have an intimate knowledge of the reserve and are skilled in the provision of environmental services.

There is wide recognition of the environmental value of the reserve. There also appears to be broad support for increased public access to Beaconsfield Nature Conservation Reserve and for improved recreational assets such as, a perimeter walking circuit, BBQs, and picnic facilities. There are however divergent views on the proposal to reduce the dam wall and the current water level.

Background

The Beaconsfield Nature Conservation Reserve (BNCR) is an approximately 171 Hectare reserve under the control of the Department of Environment, Land, Water and Planning see figure 1.1. The reserve is fully fenced and is not freely accessible to the general public. Within the reserve is the Beaconsfield Reservoir and associated water retention infrastructure which is managed by Melbourne Water (MW).



Figure 1.1

Information provided by Melbourne Water indicates that the Beaconsfield Reservoir was constructed in 1918 by the State Rivers and Water Supply Commission to principally supply potable water to the local Naval base. Prior to 1991, the reservoir had been managed by the Mornington

Peninsula & District Water Board (MP&DWB) and became the responsibility of MWC when the Board of Works was combined with MP&DWB and others to form Melbourne Water. The reservoir was decommissioned in 1991 due to water quality not meeting improving standards and Cardinia Reservoir coming online.

Melbourne Water retains responsibility for the integrity and safety of the dam embankment and associated infrastructure under their Statement of Obligations.

The reserve is crown land and administered by the Department of Environment, Land, Water and Planning (DELWP). The Cardinia Environment Coalition CEC have been appointed as the committee of management (direct appointment via DELWP) for the Beaconsfield Nature Conservation Reserve (BNCR). The BNCR is not open to the public however, on select days throughout the year, limited access is managed the CEC.

A Historical account provided by the President of the Beaconsfield Progress Association posits that

"When Flinders Naval Base (now HMAS Cerberus) on the Mornington Peninsula required a reliable water source, Haunted Gully was chosen as a suitable site for a Reservoir. Land was compulsorily acquired and the State Rivers and Water Supply Commission began construction of the Bunyip Main Race and the Beaconsfield Reservoir. The earthen Dam Wall and the work shaping the Reservoir was completed in 1918 using sustenance labour.

Initially water was channelled from the Toomuc Creek by an Aqueduct requiring some tunnels through hilly areas to the Beaconsfield Reservoir. In the 1940's Bunyip River joined to the Toomuc Creek supply using open channels. In 1957 Tarago River and in 1969 the Tarago Reservoir were connected to the supply. When the Beaconsfield Reservoir reached its peak, there were pipelines to Berwick and Harkaway, other local areas, some outer metropolitan areas as well as the Mornington Peninsula. The completion of the Cardinia Reservoir replaced the water supply issues for these areas and the Beaconsfield Reservoir was decommissioned in 1988. In 1997, Melbourne Water decommissioned the Race between Beaconsfield Reservoir and Cannibal Creek in Tynong due to deterioration of water quality."

In February 2021, Melbourne Water Project Officers provided Council officers with a presentation of the proposed works and the rationale for the works. Principally, Melbourne Water proposed works that included a preferred project option. The option presented identified a significant reduction to the existing dam wall and the opportunity for the creation of passive recreation facilities. The Melbourne Water Officers indicated that the main driver for the works was to address risk issues associated with the integrity of the existing dam wall structure. They contended that the dam wall:

- Does not meet current safety requirements and risk guidelines in terms of stability, internal erosion (piping) protection and general design deficiencies.
- Was built over 100 years ago and does not meet current Australian National Committee on Large Dams (ANCOLD) guidelines.
- Dam managers are required to achieve a level of dam safety which is tolerable and where this is not the case, undertake further measures to reduce the risk.
- Retaining the dam in its current state would not comply with national dam safety regulations.
- The driver of the Beaconsfield Reservoir Dam Safety project is to reduce the risk of Beaconsfield Reservoir failing, protecting properties and community located downstream of the dam.
- While the likelihood of dam failure is low, the consequence is significant.

To address the safety concerns identified, four options were considered by Melbourne Water:

- Option 0: Do nothing, not considered as a feasible option, because the risk was too High.
- Option 1: Partial decommission, embankment and reservoir reduction.
- Option 2: Full decommission, removal of all dam infrastructure and a return to previous state before dam was built.
- Option 3: Full dam safety upgrade, this would involve buttressing the dam wall but maintaining the water level.

These were assessed against four criteria:

- Improve dam safety.
- Cost.
- Community impacts.
- Environmental and conservation impacts.

Melbourne Water Officers considered that option 1 to be the most appropriate. The following concept drawings were provided that depict the proposed works see figure 1.2 and 1.3.

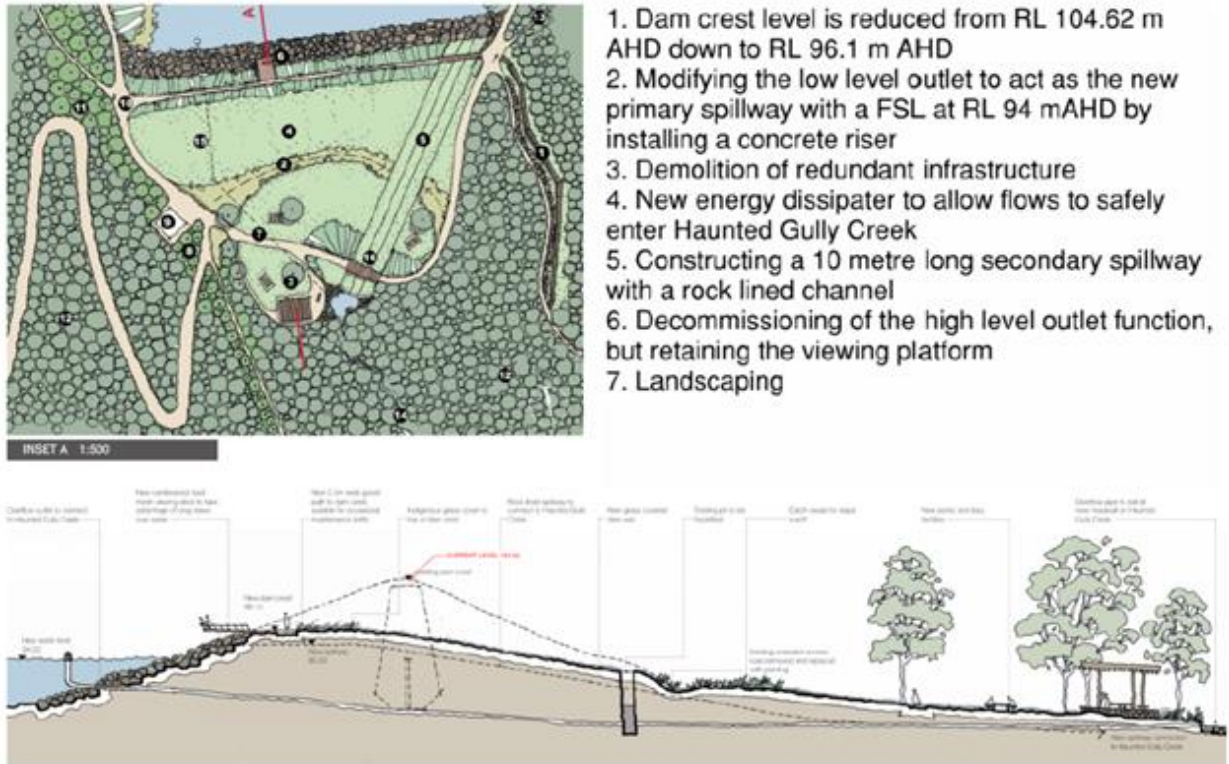


Figure 1.2

The following concept drawing provides further details of the proposed landscape improvements see figure 1.3. Works include installation boardwalks, planted swale, open lawn area, picnic tables BBQ's and shelter, toilet, viewing platforms, new rock lined spillway to Haunted Gully Creek, path connections and maintenance vehicle access. No parking facilities are proposed.

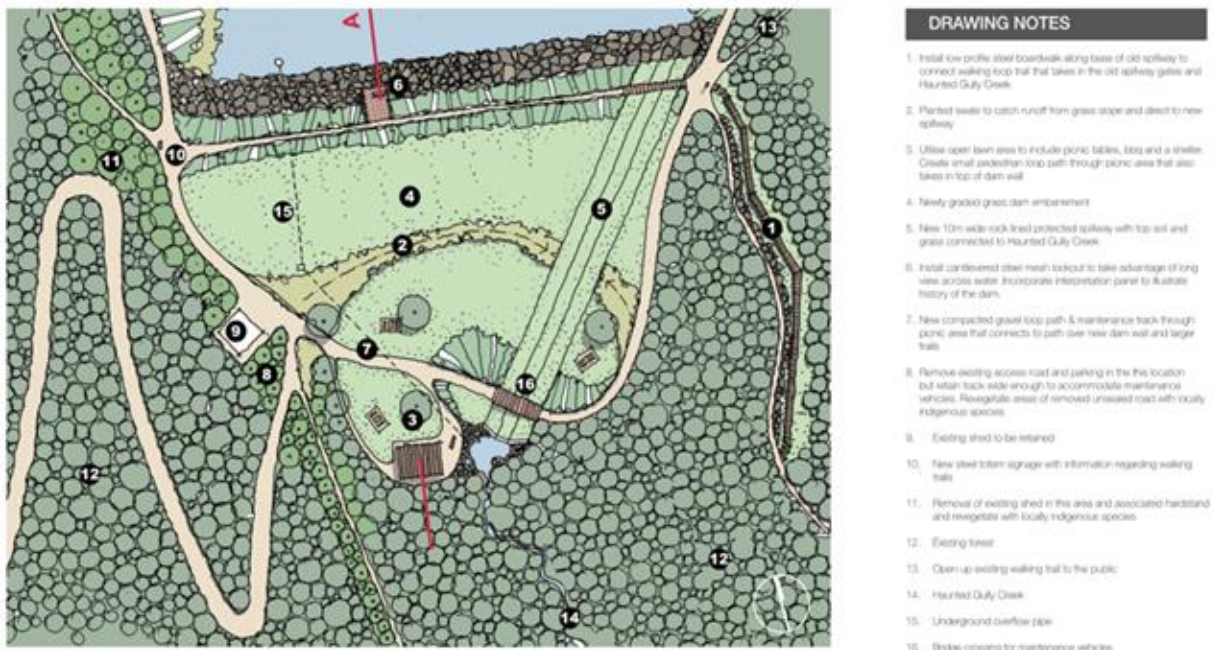


Figure 1.3

Melbourne Water also identified a number of challenges with the implementation of the project.

- Process to make decision on opening the site up to the public.
- Ongoing maintenance responsibility of recreation infrastructure, role of a Parks Manager.
- Balancing nature conservation with public access.
- Management of community expectations.
- Impact on site during the works.
- Weed management when water levels are drawn down.

The challenges were not resolved in the meeting with Council Officers.

As part of the Melbourne Water's ongoing consultation process, the Melbourne Water Project Officers offered to meet with the Mayor and Councillors on site. The offer was accepted, and the meeting occurred on the 23rd of March 2021. The meeting was attended by the Councillors that did not have prior engagements. The participants at the meeting included DELWP representatives, Melbourne Water Project and Technical staff, Melbourne Water community consultation officers and Council maintenance and engineering officers. The current land managers, the CEC, were unintentionally omitted from the meeting invite but in hindsight would have provided valuable input into the discussion.

The purpose of the meeting was to enable Councillors to visit the dam wall and gain a deeper understanding of the physical extent of the proposed works. Melbourne Water's technical team provided an overview of their cost and risks concerns for the reservoir wall. They spoke to the liveability opportunity with the potential to expand recreational assets and ultimately provide public access. Melbourne Water officers emphasised that the installation of recreational assets was contingent on identifying a responsible agency to assume the Park Manager role to take on ongoing maintenance and renewal responsibility for the recreational assets.

The meeting enabled a forum for Councillors to ask clarifying questions. The topics discussed included construction methodology, land management agreements, consultation processes, other government agency support, strategic trail connections to mention a few. Councillors were also able to flag concerns raised by various community interest groups relating to funding, heritage, fire risk, catchment and environmental impacts.

Councillors also attended community organised meetings and events to listen to the varied perspectives espoused from community members. It was evident that divergent views exist in the community as to how Melbourne Water and DELWP should approach the management of the Dam wall and access to the reserve.

Discussion

As previously highlighted the Beaconsfield Nature Conservation Reserve is not currently open for public access or use. Whilst Officers acknowledge the high ecological and environmental value of the BNCR and recognize that the proposed additional recreation facilities would benefit the Cardinia Shire community, it is the officers' view that there are adequate existing recreational opportunities within this vicinity and the Shire more broadly. However, there appears to be broad community support for access and improved recreational facilities in the reserve.

In terms of the dam wall, officers appreciate that segments of the community have attached an historical value to the wall and have a preference for the retention of both the wall and the current water level. On face value, from the information presented by Melbourne Water's technical officers, the dam wall needs attention due to its' age and condition and based on the requirement to meet the current Australian National Committee on Large Dams (ANCOLD) guidelines. Melbourne Water advised that risk was being actively managed through regular

assessments and presents no immediate risk to the community. They also emphasised that the consequence of failure of the wall could result in significant impact to the community.

Council officers are supportive of works that protects the community from unnecessary risks. Council officers are reliant on the technical expertise of the Melbourne Water asset managers to assess the appropriate solution and risk appetite for their assets. Officers were advised that if the existing wall was to be retained, that it would require significant engineering work and would necessitate the importation of large volumes of material to buttress the wall. The option according to MW staff was considered cost prohibitive and could result in unnecessary damage to the reserve due to the need to install heavy duty civil works access tracks. The relative cost estimate information of the options was not provided to Council officers.

The Officer and District Association and the Save the Beaconsfield Reservoir Action group are seeking Council's support for a full safety upgrade of the dam wall and have a preference to retain water levels at the current datum point, retain the current dam wall height and linking of existing walking tracks into the reservoir reserve. Following the Officer Community Association public meeting on Wednesday March 24th and the Reservoir Open Day on Sunday March 28th, a petition was signed by two hundred and sixty-two people. The petition is to be presented to the Legislative Assembly of Victoria. Conversely the Upper Beaconsfield Association (UBA) have indicated that they unanimously support the development and would like the State Government, including Melbourne Water and DELWP, Cardinia Shire and the community to work collaboratively to develop the BNCR.

Council officers have no significant concerns relating to the proposed works (based on our limited involvement). The Melbourne Water project managers have built features into the plan that are considerate of the site's environmental constraints. The proposed lowering of the water level and creation of 'steppingstone ponds' will provide aquatic habitat suitable for many native species. These will dry out over summer and will result in a greater variety of environmental habitats when compared to the single lake water body. It is possible that by reducing the dam capacity, water levels may reduce in a severe long-term drought. This could result in water reducing to a new low level which could, in such instances, reduce biodiversity for this period of time.

The reserve is currently managed by the CEC in a direct relationship with DELWP. The environmental services provided by the CEC are funded through the provision of State Government grants. It is the officers' understanding that no recurrent funding budgets exist in the State Departments and the CEC ongoing relationship is contingent on grants being made available annually and successful applications. Council officers would prefer that DELWP consider the establishment of recurrent budget allocation and consider a longer-term service agreement with the CEC for this important regional reserve.

In relation to the installation of the recreational infrastructure, as depicted in figure 1.3, DELWP and MW indicated the requirement to assign a "Park Manager" to assume the ongoing service provision and asset management responsibility. The Park Manager would assume the cost of providing services to the community users and for surveillance, maintenance and repair of assets. The initial capital installation cost for the creation of the recreational assets and associated landscaping would be borne by MW as part of the dam wall reduction project. The Park Manager would be required to enter into an ongoing agreement with DELWP and accept the legal committee of the management status.

Through the consultation process undertaken in 2018 by MW the community raised concerns regarding the use of the dam for firefighting purposes. MW indicated that their advice provided by the DELWP Chief Fire officer stated that *"while the Dam could potentially be used for firefighting purposes, it was more likely that nearby Lysterfield Lake, Aura Vale Lake and Cardinia Reservoir - all designated with pre-approval as water pickup locations in the cockpit*

handbook issued to pilots of aerial firefighting aircraft would be considered more appropriate water sources". Further, the dam was not precluded from use but required the aviation operators to undertake a risk assessment on a case by case basis.

Council officers are generally supportive of the proposal to create additional recreational assets and access for the general public. Officers are of the view that the Cardinia Shire rate revenue should not be used to fund the ongoing asset and service cost for the reserve. The State agencies such as Parks Victoria would be better equipped to assume the Park Manager role for the State-owned reserve. Officers are however fully supportive of an ongoing and longer-term relationship for CEC at the BNCR. The CEC are competent and efficient service providers for matters and projects pertaining to fauna and flora. It is the view of the officers that they are not currently resourced to manage and service the proposed new recreational assets. This view is consistent with the correspondence received from the CEC.

There are two areas that need further exploration with Melbourne Water and DELWP. Given the prominence of the BNCR as a potential regional destination and the strategic linkage to the Aqua Duct Trail, the impacts of potential visitation need to be understood. The operating hours / days will have an impact on the repair and servicing cost and there are differing views on what would constitute manageable and sustainable visitation. The access points have been identified as O'Neil Road and Dickie Road and no parking is currently proposed in the reserve. Further work is required to determine how parking and traffic matters will be attended to which has a correlation to operating hours. Council Officers will continue discussion to understand the impacts.

Heritage Considerations

There is some discussion amongst the community, questioning the heritage value of the dam wall.

Council officers have been in contact with Heritage Victoria to understand the status of the dam wall. Heritage Victoria have advised, the site was previously listed on the Victorian Heritage Inventory. The Victorian Heritage Inventory (VHI) contains places which have the potential to contain artefacts of archaeological significance related to the former use of the site and are protected by State legislation in the Heritage Act 2017.

In the late 90's and early 2000's many places that have some form of heritage value were listed on the Heritage Inventory. Subsequently Heritage Victoria undertook a review of the Heritage Inventory and it was determined that sites that do not demonstrate archaeological potential should be removed or de-listed from the Heritage Inventory. It was determined the Beaconsfield Reservoir did not contain strong enough archaeological potential to justify a listing on the Heritage Inventory and hence, was delisted. This does not necessarily mean that there are no other heritage values at the site. This only relates to the sites potential to contain archaeological features, deposits or artefacts. There is currently no local heritage overlay on the site.

Policy Implications

Open Space Asset Management Plan:

If council was to assume the Park Manager responsibility the assets would need to be included on council's asset register for the provision of funds for future maintenance renewal.

Relevance to Council Plan

3.3 Our Environment - Enhanced natural environment

3.3.8 Preserve and improve our bushland and natural environment by implementing weed management programs and continuing work on high conservation bushland reserves and roadsides.

Consultation/Communication

Melbourne Water are the lead agency for the project. MW advised that they commenced a consultation process in 2016 and have undertaken a number of communication and engagement activities. This has included conducting workshops with local friends groups, council officers and the CEC, door knocking residents who live down and adjacent to the dam to discuss the project, attending public meeting, responding to articles in the Village Bell. In October 2018 a meeting between MW and GHD with a number of “technical experts’ from the community occurred to go through the proposals and technical aspects of the proposals explaining the water levels and height of the dam wall. Community sessions were held and advertised in Pakenham Gazette where Digital engagement with survey and feedback was undertaken following the sessions. MW have consulted with Council officers, predominately for recreation and environment technical expertise.

Financial and Resource Implications

Should Council consider the entering into an agreement to assume the Park Manager role, the Council would need to consider a financial budget allocation for the required management resources. As the project scope has not be fully ratified it is difficult to provide accurate costings. A very preliminary budget estimate for maintenance activities would require an estimated allocation of \$90,000.00 per annum as a minimum for the maintenance of proposed asset. The budget estimate would need to be reviewed on the confirmation of the project scope and may result in additional cost. The estimate does not account for the works provided by the CEC. It would be preferable if MW, DELWP or another State Government agency fully funded the required resources. It should be noted that currently there is no budget allocation in Councils 10 year draft budget for the BNCR. Allocation of a budget will place further pressure on the existing rate capped revenue base. It is the view of Officers that the appropriate State Government Agency should fund on maintenance and renewal costs for this significant regional public reserve.

Conclusion

In conclusion Melbourne Water's proposal to install additional recreation assets in the BNCR and enable public access appears to have broad community and Council Officer support. Council Officers also support action to address the risk issues concerning the dam wall. The issue where there is no clear consensus includes the safety treatment of the dam wall and the identification of the Park Manager for the ongoing maintenance and servicing for the reserve. The dam wall technical solution needs to minimise the impact to the reserve and to the amenity of the residents during the civil works process. It is envisaged that discussions are required by Melbourne Water's Project team to resolve the outstanding matters.