#### **Frequently Asked Questions**

# What is Melbourne Water's rationale for undertaking the proposed Dam Safety Works?

- The design of the dam does not meet current safety requirements and risk guidelines in terms of stability, internal erosion (piping) protection and general design deficiencies.
- The dam was built over 100 years ago and does not meet current Australian National Committee on Large Dams (ANCOLD) guidelines.
- Australia has a strong emphasis on dam safety management principles set out by these guidelines
- As a minimum, 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.
- A significant rain event could cause the reservoir to fill, spill and overtop. Without the works occurring at Beaconsfield, these storms could have significant consequences.
- 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.

### What plans are in place to open the Beaconsfield Reservoir to the public for tourism and public visits?

- The reserve is Crown Land administered by DELWP. The committee of management (COM) is the Cardinia Environmental Coalition (CEC) and currently closed to the public.
- Melbourne Water would like to ensure the Dam Safety project compliments any future land use of the site however the decision around public access is not a decision for Melbourne Water.





 DEWLP are open to the idea of public access if an ongoing parks manager is identified for the public recreational use area of the site and changes to the COM made. If this occurs MW can include liveability and recreation assets as part of the Dam Safety project.

## What is the data and/or evidence to support that the reservoir's wall is unstable.

 Beaconsfield Dam has known deficiencies associated with the stability of the embankment and the performance of the spillway and embankment during flood events. In light of our knowledge of the shortcomings in the design, construction and performance of the dam, as well as the consequences of the dam failing, Melbourne Water has a duty of care to reduce the risk of the structure. We understand that the reservoir water body offers amenity value to the community and this has been carefully considered throughout the decision-making and engagement process.

### Why is the reservoir not suitable for use as a potable water reservoir?

- Beaconsfield Dam has not been connected to the water distribution network since 1988, following the connection of Cardinia Reservoir and upgrades to the water transfer network allowing water supply to the Mornington Peninsula.
- The dam has a very small catchment, and the reservoir water level stays relatively constant, which indicates that losses due to evaporation match inflows in most years and so the dam would not provide any yield. Historically the reservoir was filled via an aqueduct from Tarago Reservoir.
- This site is not required as part of Melbourne Water's plans for water supply.

#### Will lowering of the water level limit firefighting capability?

Melbourne Water received the following advice from DELWP's Chief Fire Officer in November 2018:

- Beaconsfield Reservoir is not a pre-approved location for water pickup by firefighting aircraft.
- Pilots look for 70m clearance from nearest trees to reduce risk of aircraft getting snagged.
- Cardinia Reservoir is a pre-approved site, 6km to the north which is much larger and safer to fill from. Firefighting helicopters travel at 1.5 to 2km per minute and save 3 minutes filling from Beaconsfield. Beaconsfield would be considered in preference to Cardinia is if both the fire and the helicopter were located to the south of Beaconsfield.

 Whilst the site 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.

#### What community consultation has occurred to date?

- September 2016: Melbourne Water (MW) initiated consultation with those with an active interest and responsibility at the site, primarily the Cardinia Environment Coalition (CEC) and DELWP
- August 2017: Concept design of reducing dam height was shared at workshop with community (CEC, DELWP and Council), proposed concept had water level reduced to 90m AHD.
- February 2018: Follow up workshop with community (CEC and Friends of BNCR) to present increased water level at 92m AHD.
- June 2018: MW present increasing water level to 92m AHD (increase of 2m from initial design) at public meeting with Upper Beaconsfield Association.
- July 2018: MW host open day within the site for the community.
- October 2018: MW met with concerned community members to share technical details of the project.
- March 2019: MW present to community (CEC and Friends of BNCR) with a revised concept with water level increased to 94m AHD (increase of 4m from initial design).
- April 2019: six small community sessions held in Upper Beaconsfield and Officer to discuss project and the concept. Digital engagement occurred simultaneously with 30 responses received.

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