

What to expect during construction

We will do everything possible to minimise disruption during construction, however it is likely that nearby residents will notice:

- large trucks and machinery working around the retarding basin
- worker amenities set up within the construction area
- some noise, dust and vibration from construction works
- removal of trees and vegetation from the retarding basin embankment – trees and vegetation in other parts of the reserve will be retained
- there will be no impact to the sporting fields during construction
- construction traffic and equipment will enter and exit the site via Lushcombe Avenue.

Tree removal

To ensure the retarding basin continues to operate safely and complies with the ANCOLD guidelines, trees and vegetation on the embankment will need to be removed as part of the works.

Having trees on the embankment increases the chance that the embankment may fail in the event of a large rain event. They do this by increasing the risk of:

- internal erosion and displacement of soil– tree roots create erosion pathways through the embankment which are worsened when the tree dies and its decaying roots leave voids through the embankment
- trees uprooting and taking part of the embankment with them
- water speeding up around tree trunks and causing faster erosion.

We understand the importance of trees to the local community and are committed to working closely with council, residents and community groups to develop an appropriate plan for reinstatement of trees elsewhere in the area.

Have questions? Visit our Community Pop Up sessions

The project team will be at the Banyan Reserve Retarding Basin to answer your questions on Thursday 18/1/18 2pm – 3pm, Saturday 20/1/18 10.30am – 11.30am and Monday 22/1/18 from 1pm to 2pm.

Keep up to date with what's happening

For more information about this project or if you have any questions or feedback, please visit us at our Community Pop Up sessions or call 1800 096 546 (Option:5 Banyan Reserve retarding basin) or email rbupgrades@melbournewater.com.au or visit www.melbournewater.com.au



For an interpreter, please call the Translating and Interpreting Service (TIS National) on 13 14 50



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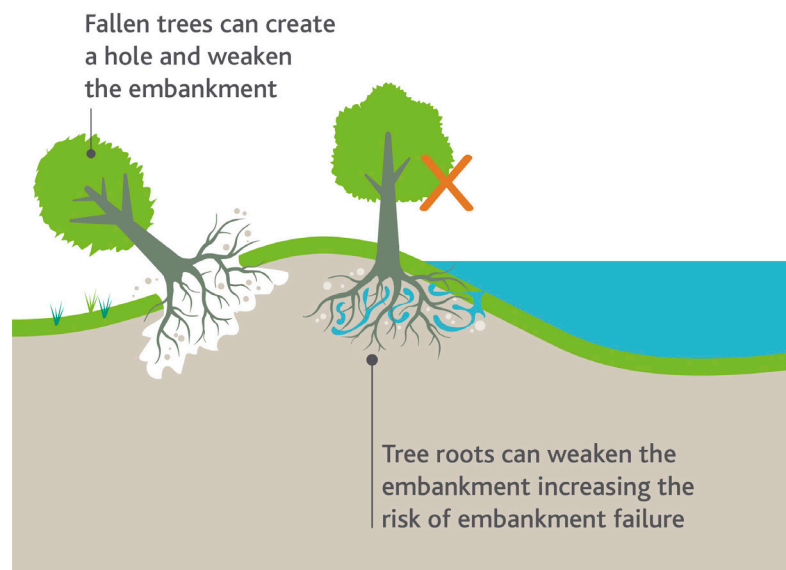


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Tree Removal



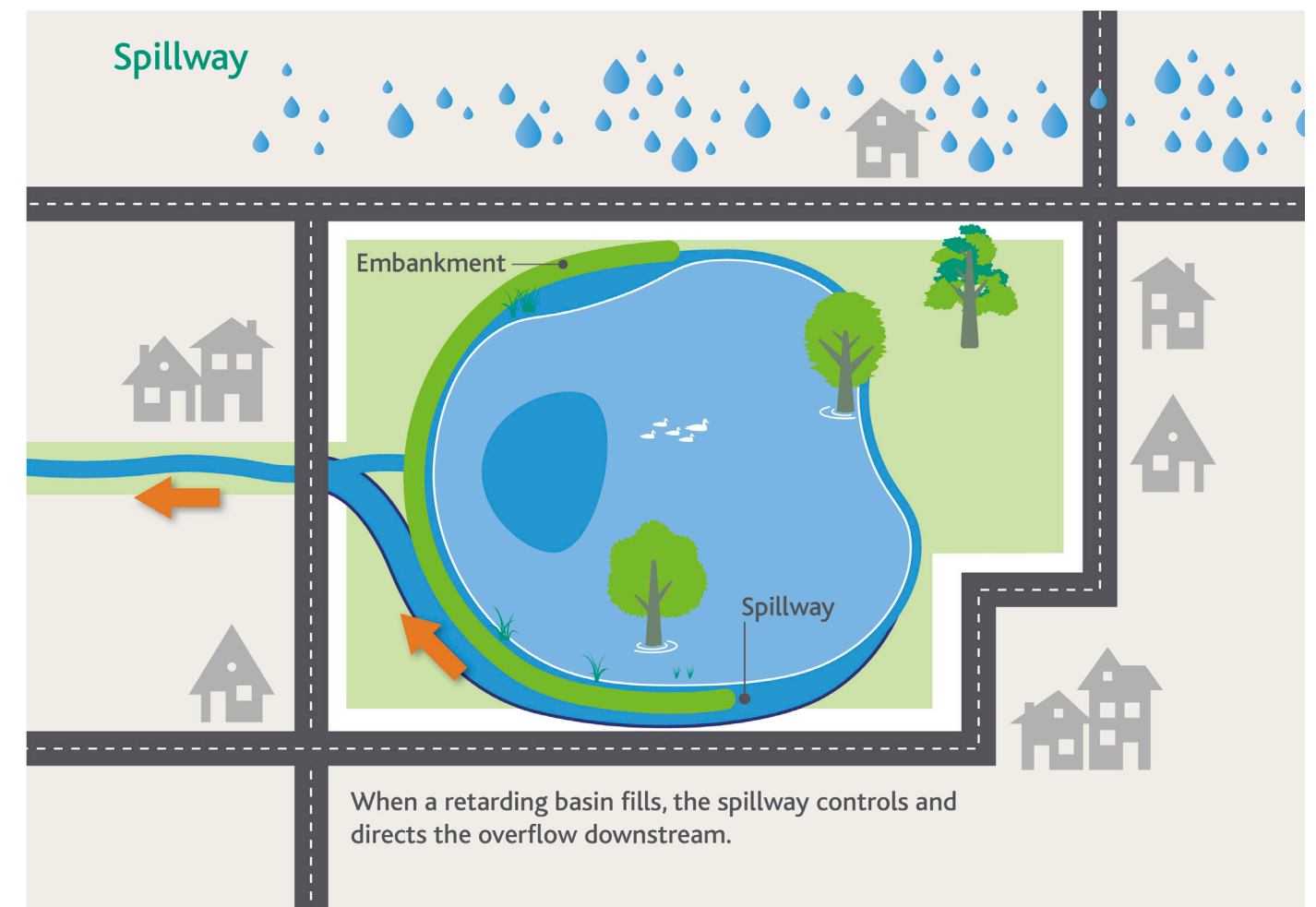
Banyan Reserve Retarding Basin Upgrade

Start of works – January 2018.

From late January 2018, John Holland-KBR Joint Venture (JH-KBR JV) will deliver upgrade works to the Banyan Reserve Retarding Basin at Carrum Downs, on behalf of Melbourne Water. The upgrade works will ensure the retarding basin continues to reduce the risk of flooding to the community.

What is a retarding basin?

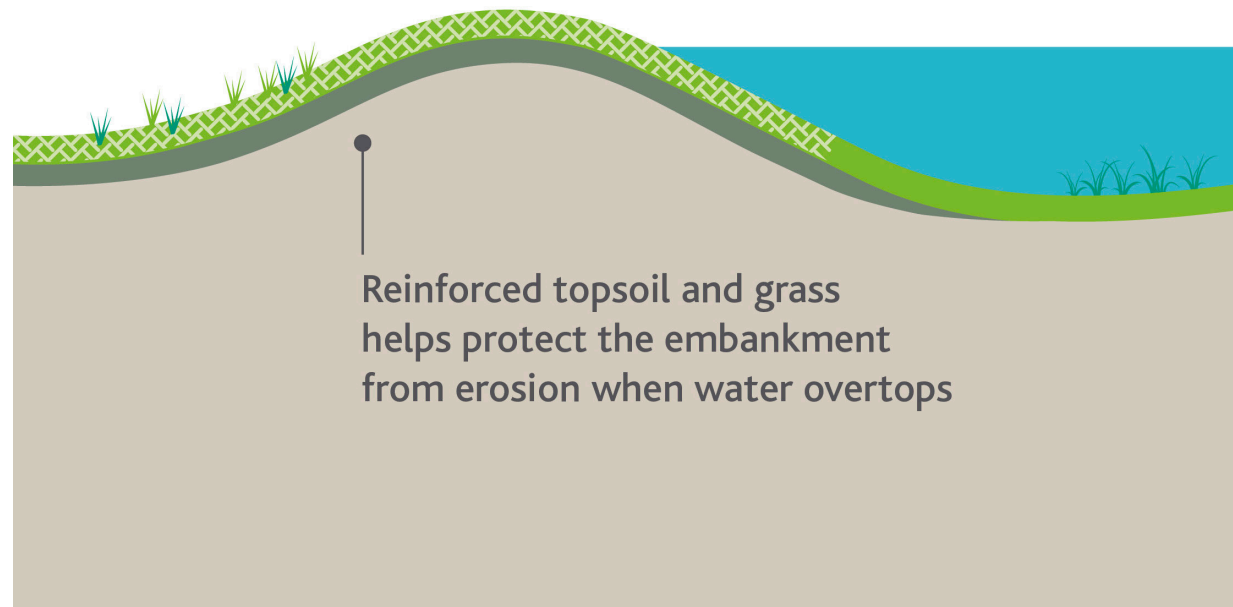
A retarding basin is an area of land used for stormwater to drain into during high rainfall events. When a retarding basin fills, the embankment acts like a dam holding back stormwater. The stored water is then released slowly into the downstream drain or waterway helping to protect homes and businesses from flooding. Retarding basins can often be used by the public as parks or sporting ovals when not full of stormwater.



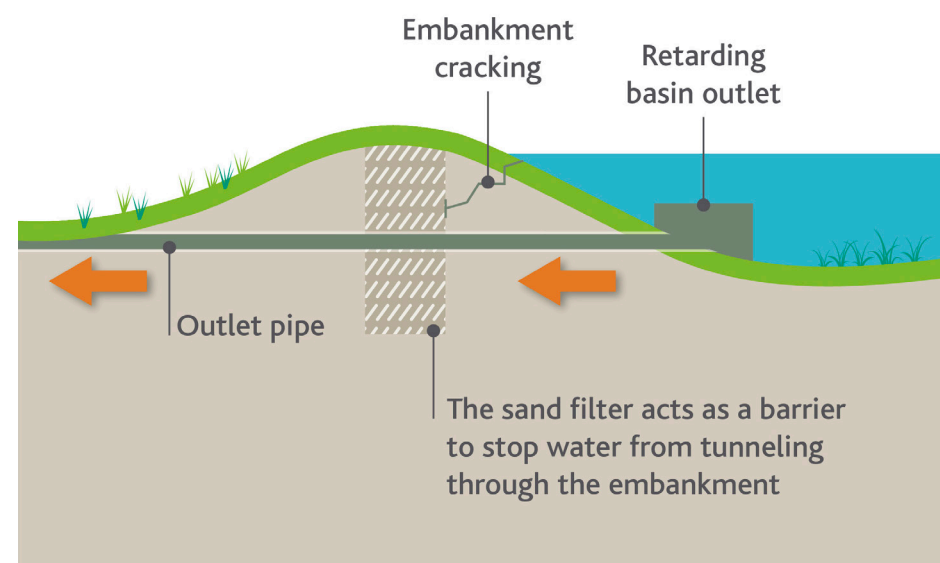
How we upgrade retarding basins

Upgrade works to the retarding basins can include embankment hardening and installing filter trenches. Hardening the embankment protects it from erosion when the water overtops. Embankments can be hardened through reinforcing the top soil, laying concrete or installing geoweb or other structures.

Embankment hardening



Sand Filter



Installing a sand filter or filter trench can prevent water destabilising the embankment by flowing through it.

Why are we doing these works?

Melbourne Water has over 200 retarding basins that we regularly assess for risks, conduct maintenance on, and upgrade as necessary. The Australian National Committee on Large Dams (ANCOLD) guidelines represents the best Australian and international engineering practice in the safe design, management and operation of dams. We use these guidelines to manage our retarding basins. The Banyan Reserve retarding basin has recently been assessed against the ANCOLD guidelines. This assessment has shown that upgrade works are necessary to ensure the retarding basin continues to reduce flood risk and operate safely for the community.

Construction works at Banyan Reserve Retarding Basin

John Holland-KBR Joint Venture will be undertaking these works on behalf of Melbourne Water.

Works will include:

- removal of trees, root ball excavation and backfill of embankment
- embankment crest raising
- filter trench excavation and backfill
- filter drain outlet installation
- filter diaphragm installation around existing outlet conduit
- embankment hardening
- embankment crest capping.



Works will commence in late January 2018 and take approximately five months to complete (weather permitting).

Construction hours will be Monday to Friday 7am – 6pm and Saturdays from 7am to 1pm in accordance with the EPA regulations.