

QUESTION TIME BRIEF

Portfolio: Water, Energy and Emissions Reduction

HEALTHY WATERWAYS (BASIN PROJECT)

Talking points:

- ACT Healthy Waterways aims to reduce sediment and nutrient pollution of ACT lakes and waterways, and the problems the pollution causes like algal blooms.
- The original Healthy Waterways investment with the Australian Government (\$93.5M) was used to design and construct large water quality assets according to 'water sensitive urban design' principles. A major riparian restoration was also undertaken.
- Twenty water quality assets have been built. Water plants within them are well established and on-track for handover by June 2021.
- Together, these assets are intercepting on average 1900 tons of sediment and nutrient pollution every year from across Canberra, and up to 20% of the pollution load that was entering Lake Tuggeranong.
- The first element of an additional ACT Government investment—to fix a malfunctioning gross pollutant trap at the bottom of Village Ck (where it enters Lake Tuggeranong)—was delivered in March 2021 when the Minister 'launched' a new floating wetland.
- This is the ACT's first trial of a floating wetland to absorb nutrient pollution and curb blue-green algae. The trial will last for two years, after which the wetland will either be left in place or transferred to another waterbody in the ACT.
- The remaining works to the Village Ck gross pollutant trap—minor modifications to improve its drainage—will be completed in April.
- Findings from research and monitoring programs are underpinning plans for ongoing programs to protect natural values in urban waterways and improve degraded parts of the system.
- A multifaceted trial of a public education/behavioral change program, known as *H2OK: Keeping our Waterways Healthy*, was completed. This work is being continued by ACT NRM who are now conducting a new trial that focusses on preventing autumn leaves from entering drains.
- A budget bid (\$30M over 4 years) was prepared to expand Healthy Waterways, as per a commitment in the Parliamentary & Governing Agreement for the 10th Legislative Assembly.
- In the February budget update, the ACT Government committed \$1.5M in this financial year to begin work on *Expanding Healthy Waterways*. The focus of this work will be on preventing stormwater pollution from occurring in the first place, using street-scale water sensitive urban design infrastructure and new approaches to managing green space within suburbs.

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- Research, modelling and behavioural change programs are also being extended using this funding, with an initial focus on modelling the water quality in the Lake Burley Griffin catchment and the response of blue-green algae in the lake.
- The modelling work has underpinned EPSDD's response to the draft EIS for the proposed upgrade to the Queanbeyan sewage treatment plant.

Key Information:

WATER QUALITY ASSETT INVESTMENTS

- ACT Healthy Waterways began in 2014 as a \$93.5 million joint initiative of the Australian and ACT Governments to protect and improve long-term water quality in the ACT and the Murrumbidgee River system by reducing the level of sediment and nutrients entering ACT lakes and waterways.
- The project was extended in the 2019-20 mid-year budget, when \$1 million was committed to continue research into ways to combat outbreaks of algal blooms in the lake, fix a malfunctioning gross pollutant trap, and trial new infrastructure to prevent nutrient pollution from entering stormwater during large storms.
- A \$30m budget bid—'Clean Catchments, Clean Waterways'—has been prepared to continue the Healthy Waterways program, as per a commitment in the Parliamentary & Governing Agreement for the 10th Legislative Assembly. In the February budget update, the ACT Government committed \$1.5M in this financial year to begin work on *Expanding Healthy Waterways*.

DELIVERY

- The design and construction of 20 water quality assets (retention ponds, wetlands and rain gardens) according to 'water sensitive urban design' principles, and a riparian restoration project, served as the centrepiece for the original Healthy Waterways investment.
- Water plants growing within the assets, which serve as pollutant filters, are in a two-year 'Establishment Phase' to maximise their resilience. These plantings are being handed over between December 2020 and June 2021.
- Soft landscaping around the assets—incorporating 160,000 trees, shrubs and herbs as well as areas of lawn—provides locals with amenity and opportunities for recreation, and has been well received by the community.
- Members of the public are already taking some responsibility for the upkeep of soft landscaping around the assets, working with TCCS, and a number of additional trees and shrubs have been planted by them.
- A Healthy Waterways riparian restoration project has been affected by drought and floods but is now going well and will be handed over in June 2021.
- A gross pollutant trap is being modified and a floating wetland being placed within the Village Ck embayment of Lake Tuggeranong to prevent algal blooms from forming in this area. This is the 21st hard asset created by Healthy Waterways.

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- Healthy Waterways research and monitoring programs have greatly improved our understanding of the problems of sediment and nutrient pollution, the impacts that this has on algal blooms in our urban lakes, and the performance of water quality assets. The research findings have influenced plans for the next phase of Healthy Waterways.
- The *H2OK: Keeping our Waterways Healthy* behavioral change program is continuing through contracts with the ACT's three Catchment Groups, while ACT NRM staff are formulating new strategies for behavioral change based on the findings of the H2OK program and other research. Planning for future programs is underway as a part of the \$30m budget bid.

FACTS AND FIGURES

- Wetland plants serve as pollutant filters in 18 of the 20 water quality assets, and >465,000 seedlings were planted for this purpose across the sites.
- Landscaping of dryland plants, paths and benches has been added to enhance the amenity of assets and to promote their use by the community, thus contributing to community wellbeing. Over 70,000 dryland shrubs and 600 trees have been planted within the 20 water quality assets, and grass seed broadcast across extensive areas. Over 90,000 grasses, shrubs and trees were planted as a part of the riparian restoration, with large numbers being re-planted following the drought and a flood.
- Once wetland plants are fully established, they will intercept on average 1900 tons of sediment and nutrient pollution every year from across Canberra, and 20% of the pollution that is currently entering Lake Tuggeranong.