



11.1 ELSTERNWICK PARK NATURE RESERVE MASTERPLAN

EXECUTIVE MEMBER: KYLIE BENNETTS, GENERAL MANAGER, CITY GROWTH AND DEVELOPMENT

PREPARED BY: ZOE O'MAHONEY, COORDINATOR SUSTAINABLE POLICY
BRIAN TEE, EXECUTIVE MANAGER CITY PLANNING AND SUSTAINABILITY

1. PURPOSE

- 1.1 To consider a Council funding contribution towards delivery of the Elsternwick Park Nature Reserve Masterplan.

2. EXECUTIVE SUMMARY

- 2.1 At a [Council Meeting on 21 March 2018](#), Council supported the development of an Urban Forest and Wetland in Elsternwick Park North, subject to confirmation that the Urban Forest would reduce flooding, improve public amenity and water quality, includes water harvesting and distribution and protects and enhances biodiversity.
- 2.2 On 28 March 2020, Bayside City Council adopted the Elsternwick Park Nature Reserve Masterplan that includes the potential to deliver outcomes sought by Council:
- **Water quality** – two large wetland areas would reduce the amount of sediment, nutrients, pathogens, toxicants, litter and other pollutants flowing into Port Phillip Bay.
 - **Storm water harvesting** – an expanded stormwater harvesting scheme could provide non-potable water to irrigate our parks, reduce drinking water use and allow us to maintain high-value green spaces as rainfall decreases and make our green spaces more resilient to climate change.
 - **Public amenity** – improved walking & bike connections, seating, gathering spaces, barbeques.
 - **Biodiversity** – seven areas on land and in the water that provide habitat for important species. Provide opportunities to educate visitors about ecology.
- 2.3 The Masterplan included a potential flood retention basin that would reduce downstream flooding in Elwood. However, after further modelling, Melbourne Water chose to instead pursue an alternative flood mitigation option.
- 2.4 The total cost for delivering the Masterplan (without the flood retention basin) is estimated to be in the region of \$20m, including \$12m for construction of the wetlands and stormwater harvesting components.
- 2.5 In addition to construction of a stormwater harvesting scheme in Elsternwick Park, there are additional costs for Port Phillip to transport water to Point

MEETING OF THE PORT PHILLIP CITY COUNCIL

16 MARCH 2022



- Ormond, MO Moran Reserve (\$300,000-500,000) and, if extended further to St Kilda Botanic Gardens and Peanut Farm Reserve, (\$3-5m).
- 2.6 Bayside City Council has so far allocated \$9m and has secured an Australian Government grant funding commitment of \$6m to deliver the Masterplan.
 - 2.7 Design of the wetlands and integrated stormwater harvesting scheme is planned to commence in the 2022/23 financial year. Port Phillip officers estimate that approximately \$320,000 is required to project manage the design and engage consultants to complete the design.
 - 2.8 Noting that Council can benefit from the wetlands and storm water harvesting, there is an opportunity to financially contribute to the design. This would maximise the benefits to Council including irrigation of Council parks and decontamination of water flowing into the bay.



3. RECOMMENDATION

That Council:

- 3.1 Notes Council's commitment on March 2018 to co-fund an Urban Forest and Wetland in Elsternwick Park North subject to an evidence-based assessment that will deliver:
 - reduced downstream flooding
 - improved water quality
 - improved opportunity and capacity for water harvesting and distribution
 - improved public amenity
 - protected and enhanced biodiversity.
- 3.2 Commends and congratulates Bayside City Council on the development of the Elsternwick Park Nature Reserve Masterplan, which was adopted by Bayside City Council on 24 March 2020.
- 3.3 Thanks Bayside City Council for including the City of Port Phillip Council Officers' and community representatives' input into the development of the Masterplan through membership of the Community Reference Panel and through the Elster Creek Catchment Working Group.
- 3.4 Authorises the CEO or delegate to develop a funding agreement with the City of Bayside to contribute up to \$80,000 funding (or no more than 25% of the total cost) in 2022/23 to the City of Bayside towards developing a business case and designs for the Wetland stages of the Elsternwick Park Nature Reserve Masterplan, to ensure that the design considers:
 - the distribution of water harvesting to the City of Port Phillip
 - quantified water quality benefits that could contribute towards Council's targets
 - improved public amenity for the Port Phillip community
 - protected and enhanced biodiversity.
- 3.5 Authorises that the remaining funds of \$820,000 be held in the Council's forward budget in 23/24 for flood mitigation, water quality and potable water reduction target efforts to retain climate resilient public spaces in Port Phillip. Pending the outcome of the business case referred to in 3.4, these funds could be used to make a further contribution to the City of Bayside for the Elsternwick Park Nature Reserve in addition to funding any infrastructure requirements in Port Phillip to utilise water harvested from Elsternwick Park on public spaces in the City of Port Phillip. This would be subject to Council's consideration of the Business Case and a further decision of Council at that time.
- 3.6 Recognises that the Australian Government has committed \$6m towards the delivery of the Masterplan and commits to partnering with Bayside City Council to advocate to the Victorian Government and Melbourne Water to co-fund the delivery of the Masterplan.



4. KEY POINTS/ISSUES

Elsternwick Park Nature Reserve Masterplan

- 4.1 In 2017, Council signed a Memorandum of Understanding (MoU) with Melbourne Water and the cities of Bayside and Glen Eira to work to reduce flooding across the Elster Creek Catchment and improve water quality, biodiversity, liveability and stormwater harvesting.
- 4.2 Through this partnership, the redevelopment of the former golf course in Elsternwick Park North, in the City of Bayside was identified as a key opportunity to reduce flooding in Elwood and improve environmental outcomes.
- 4.3 At a [Council Meeting on 21 March 2018](#), Council supported the general approach of adopting and co-funding an Urban Forest and Wetland in Elsternwick Park North, subject to an evidence-based assessment that the outcome would:
 - reduce downstream flooding
 - improve water quality and provide water harvesting and distribution
 - improve public amenity
 - protect and enhance biodiversity.
- 4.4 In 2018, Bayside City Council set up a Community Reference Panel to inform the development of a Masterplan. The Panel included Port Phillip officers and community members, who provided feedback and expertise through the development process.
- 4.5 The Masterplan was informed by engineering studies, flood modelling, habitat and fauna surveys, water quality and harvesting investigations, design workshops and wider community engagement.
- 4.6 The [Elsternwick Park Nature Reserve Masterplan](#) which includes large wetland areas, new areas of trees and vegetation, a 'Bayside Gateway' building, new paths, meeting places and park facilities was adopted by Bayside City Council on 28 March 2020.
- 4.7 The Masterplan supports Council priorities:
 - **Water quality** – Two large wetland areas which have the potential to support Council's targets to **improve water quality** by reducing the amount of suspended solids, phosphorus and nitrogen flowing into Port Phillip Bay. Nitrogen is a typical measure of overall water quality and the wetlands are estimated to prevent approximately 1,620kg/yr of nitrogen from entering the Bay. Melbourne Water's Stormwater Offsets Program assigns a dollar value to kilograms of nitrogen (\$6,645/kg) to assess the value of water infrastructure projects. Using this figure, the proposed wetlands would have a value of approximately \$10.8 million in water quality benefits
 - **Stormwater harvesting** – an expanded stormwater harvesting scheme could provide 240ML/y of non-potable water for irrigation, reducing



potable water use and making green spaces more resilient to climate change.

- **Public amenity** – improved walking and bike connections, seating, gathering spaces and barbeques.
- **Biodiversity** – woodlands, grasslands, scrublands and wetlands providing habitat for important species such as the Eastern Great Egret and Nakeen Night-heron and provide opportunities to educate visitors about ecology.

4.8 The Masterplan included a flood retention basin to reduce downstream flooding in Elwood. Delivery of the basin was dependent on Melbourne Water's flood modelling and funding Masterplan and, as noted in the Masterplan, Melbourne Water were exploring alternative flood mitigation measures.

4.9 Since the adoption of the Masterplan, Melbourne Water's flood modelling and feasibility assessments identified that the most cost-effective option to reduce flooding for Elwood was to [increase the capacity of Elwood Diversion Drain](#). Consequently, Melbourne Water are no longer exploring flood mitigation as part of the Elsternwick Park Nature Reserve area.

Potential benefit to Port Phillip community

4.10 Delivery of the Masterplan will provide access to quality open space that can be used by the Port Phillip community, increase biodiversity outcomes and increase walking and bike riding connections.

4.11 Rainfall is decreasing across Victoria and the Victorian Government has forecast that demand for water will exceed supply in metropolitan Melbourne as early as 2033. In contrast, Council is projected to need more water to irrigate parks and sports fields in the future. In response, Council has committed to upgrading our irrigation network, to use water more efficiently and to invest in alternative water sources, such as stormwater harvesting. The wetlands and stormwater harvesting scheme, have the potential to support Council's targets to **reduce potable water use**.

4.12 Using stormwater to irrigate our parks saves drinking water, future-proofs our irrigation network and maintains high-value green spaces for our community as rainfall decreases, even when water restrictions are in place.

4.13 Port Phillip has an existing agreement with Bayside for a share in a stormwater harvesting scheme in Elsternwick Park. We currently use approximately 20ML/y of harvested water to irrigate Elwood Park and Croquet Club.

4.14 Council has the opportunity to expand the current stormwater harvesting scheme to provide a sustainable and reliable supply to other parks in Elwood and St Kilda. Two options recommended for further investigation are:

- Expand use of harvested stormwater to MO Moran Reserve and Point Ormond reserve. Initial estimates indicate that this would require an additional 10ML/y of harvested stormwater.



- Expand use of harvested stormwater further to also include St Kilda Botanic Gardens and Peanut Farm Reserve. Initial estimates indicate that this would require an additional 50-60ML/y of harvested stormwater.
- 4.15 A contribution from Port Phillip to Bayside would count towards Council's responsibility to work towards achieving stormwater quality outcomes under the State Environment Protection Policy (waters).

Cost estimates

- 4.16 The total cost for delivering the Masterplan (without the flood retention basin) is estimated to be in the region of \$20m, including \$12m for construction of the wetlands and stormwater harvesting components.
- 4.17 Bayside City Council has so far allocated \$9m of Council funds and secured a commitment from the Australian Government for grant funding of \$6m to deliver the Masterplan.
- 4.18 In addition to the cost to construct the wetlands and harvesting infrastructure in Elsternwick Park, Council would need to invest in new pipes, pumps and storage to transport water to enable irrigation of our parks.
- 4.19 Initial estimates indicate that Port Phillip would need to invest approximately \$300,000-\$500,000 in new infrastructure to bring water to Point Ormond and MO Moran Reserve. This would increase to \$3-5m to bring water as far as St Kilda Botanic Gardens and Peanut Farm Reserve.
- 4.20 The design of the wetlands and integrated stormwater harvesting scheme is planned to commence in 22/23 financial year. Port Phillip officers estimate that the cost to engage a consultant to complete this design, and to project manage the design process, is likely to be in the region of \$320,000.
- 4.21 It is recommended that Port Phillip officers commence discussions with City of Bayside officers to enter into a funding agreement to co-fund the development of a business case and design for the wetlands and stormwater harvesting scheme, including seeking the following commitments:
- Port Phillip Council providing:
 - A contribution of up to \$80,000 funding (or no more than 25% of the total cost) for design and business case development.
 - In-kind officer support through the design and community engagement process, and for joint advocacy for State or Commonwealth funding.
 - Supporting background information and reports regarding the potential use of harvested stormwater in Port Phillip and any relevant Port Phillip assets.
 - Bayside City Council leading the project, including the following scope:



- a stormwater harvesting scheme where Port Phillip would have access to a minimum of 60ML per year of treated stormwater to use for irrigation.
- Quantification of water quality benefits, with the potential for a Port Phillip contribution to count towards Port Phillip's water quality goals.
- Communication and engagement with the Port Phillip community throughout the project.

4.22 It is recommended that any future funding (beyond the \$80,000) for construction of the wetlands and stormwater harvesting scheme would be subject to a favourable business case and future council decision.

5. CONSULTATION AND STAKEHOLDERS

- 5.1 Bayside City Council convened a Community Reference Panel to inform the development of the Masterplan. Port Phillip Council officers and community members were included on this panel throughout the project.
- 5.2 Bayside officers conducted wider community engagement activities through a Have Your Say page, on-site drop-in sessions, community surveys, social media, newsletters and meetings with stakeholder groups.
- 5.3 Letter box drops inviting the community to provide feedback on the project were completed in March and April 2019. This included residents of Elwood.
- 5.4 Port Phillip Council officers and Councillors attended community drop-in sessions at Elsternwick Park, organised by Bayside City Council, during March and April 2019.

6. LEGAL AND RISK IMPLICATIONS

- 6.1 There are no legal implications associated with this report.

7. FINANCIAL IMPACT

- 7.1 The Council Plan 2021 includes \$1.07m over four years to fund the Elster Creek Catchment Partnership and Elsternwick Park Nature Reserve Project. This is provisionally allocated to fund:
 - A part-time resource to manage the Elster Creek Partnership and key projects in the Catchment.
 - \$900,000 in the 23/24 financial year as a potential funding contribution to a major infrastructure project, outside Port Phillip that would achieve flooding and water management outcomes.
- 7.2 It is proposed to allocate \$80,000 of this funding to the development of this business case and designs. Any further allocation would be subject to business case outcomes and further Council decision.



8. ENVIRONMENTAL IMPACT

- 8.1 Using stormwater to irrigate our parks means we can save drinking water, future-proof our irrigation network and maintain high-value green spaces for our community as rainfall decreases, even when water restrictions are in place.
- 8.2 Under the State Environment Protection Policy (SEPP), Council has a responsibility to manage stormwater to reduce the impacts of flow, sediment, nutrients, pathogens, toxicants, litter and other pollutants on waterways. Councils are required to work towards reducing levels of contamination below the typical urban load.
- 8.3 Construction of the wetlands would provide habitat for important species such as the Eastern Great Egret and Nakeen Night-heron.

9. COMMUNITY IMPACT

- 9.1 The Port Phillip community will have access to a large new quality open space that can be used by the Port Phillip community, increase biodiversity outcomes and increase walking and bike riding connections.
- 9.2 Improving water quality in the Bay will lead to cleaner beaches and water.
- 9.3 A reliable source of water to irrigate our parks and sports fields will mean that Council can continue to maintain high-value green spaces for our community.

10. ALIGNMENT TO COUNCIL PLAN AND COUNCIL POLICY

- 10.1 The Council Plan includes a commitment to Continue Elster Creek Catchment & Elsterwick Park Nature Reserve Partnership.
- 10.2 Construction of the wetlands would support Council's targets to reduce total suspended solids, phosphorus and nitrogen from water that would otherwise impact the health of Port Phillip Bay.

11. IMPLEMENTATION STRATEGY

11.1 TIMELINE

- 11.1.1 March-May 2022: Council officers engage with Bayside officers to develop a funding agreement. This will outline further timelines in more detail.
- 11.1.2 July 2023-June 2024: Engage consultant and develop a business case and designs for the wetlands and stormwater harvesting scheme.
- 11.1.3 Late 2024: Present a recommendation to Council regarding any future funding to deliver the Masterplan, based on information in the business case.

11.2 COMMUNICATION

- 11.2.1 Officers will advise Bayside council officers in writing of Council's decision and request a discussion to develop a funding agreement.



11.2.2 Any funding agreement will outline how the Port Phillip community will be engaged through the business case and design development.

12. OFFICER DIRECT OR INDIRECT INTEREST

12.1 No officers involved in the preparation of this report have any material or general interest in the matter.

ATTACHMENTS Nil