

## Resolution of Council

**9 March 2020**

### Item 12.5

#### Water Sensitive Urban Design

Moved by Councillor Thalys, seconded by the Chair (the Deputy Lord Mayor) –

It is resolved that:

(A) Council note:

- (i) recent extreme weather events including very heavy rainfall which has caused localised flooding, damage to property, roads and trees, risk to life and have further strained our emergency services, recovery staff and waterways;
- (ii) the City of Sydney area gets the bulk of its annual 33.7 billion litres of drinking water from Warragamba Dam, 70km west of the city, and some from the desalination plant in Kurnell, 40km south of the city;
- (iii) only half of the City's 'drinking-standard water' supply is used for drinking, bathing and cooking. The remainder is used for non-drinking purposes – flushing toilets, irrigating parks and running large-scale air-conditioning – all of which could be serviced by recycled water;
- (iv) planting more trees to combat the urban heat island effect, and engaging in innovative urban greening projects will further increase the City's water consumption;
- (v) potential sources of recycled water include stormwater, ground water, laundry water and waste water;
- (vi) the City's Sustainable Design Technical Guidelines provide guidance on how to apply sustainability in the design of the City's assets;
- (vii) the City's Environmental Action Plan 2016-2021 outlines the City's environmental targets and actions;

- (viii) the City's Decentralised Water Master Plan aims to reduce water demand by 10 per cent by 2030;
- (ix) the Resilient Sydney Strategy 2018 includes technical studies and is a collaboration between more than 1000 people from business, government and communities across Metropolitan Sydney;
- (x) the City of Sydney hosted the Water Sensitive Sydney Summit on 21 February 2018 which brought together representatives from state and local government, businesses, developers, research institutions and peak industry associations to discuss the immense challenges of water management in the context of a growing population, aging infrastructure and a warming climate, while maintaining affordability and equity for Sydney's diverse communities;
- (xi) the City of Sydney is a member of the Cooperative Research Centre for Water Sensitive Cities Limited which in collaboration with over 80 research, industry and government partners, delivers the socio-technical urban water management solutions, education and training programs, and industry engagement required to make towns and cities water sensitive;
- (xii) the Lord Mayoral Minute on water security on 28 October 2019; and
- (xiii) the City of Sydney has taken action locally incorporating water sensitive urban design in public projects by:
  - (a) building major stormwater recycling projects at Sydney Park and Green Square to save up to one billion litres of water per year and reduce pollution of the Cooks River;
  - (b) building rain gardens within streetscapes to filter stormwater and reduce pollution discharged into waterways;
  - (c) installing rainwater tanks at child care, kindergartens and community centres;
  - (d) stormwater harvesting and reuse projects to irrigate the City's parks and sporting field; and
  - (e) ensuring that a recycled water pipe has been laid down George Street from Circular Quay to beyond Central Station (as part of the CBD and South East Light Rail project). This has the capacity to connect to recycled water facilities at Barangaroo and Central Park; and

(B) the Chief Executive Officer be requested to:

- (i) review relevant Development Control Plans and Policies and Development Application conditions to see where additional stormwater retention, water tanks, dual plumbing and slotted pipes could be promoted as best practice and required in consents;
- (ii) investigate initiatives, grants and/or pilot projects for existing residential, commercial and industrial buildings to upgrade their water retention capabilities through strategies such as decreasing impervious areas (e.g. surface car parks), additional landscape, adding water tanks, water recycling and infiltration trenches;

- (iii) audit other smaller community assets such as pocket parks and community gardens to harness any available run off; and
  - (iv) investigate street improvement projects targeted at low traffic local streets. Where there are possibilities, decrease hardstand areas, introduce permeable surfaces and raingardens / planting, re-engineer for improved water infiltration, particularly in areas that feed the Botany Aquifer.
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Note – the motion above was not carried. The resolution as below was carried –

It is resolved that:

(A) Council note:

- (i) recent extreme weather events including very heavy rainfall which has caused localised flooding, damage to property, roads and trees, risk to life and have further strained our emergency services, recovery staff and waterways;
- (ii) the City of Sydney area gets the bulk of its annual 33.7 billion litres of drinking water from Warragamba Dam, 70km west of the city, and some from the desalination plant in Kurnell, 40km south of the city;
- (iii) only half of the City's 'drinking-standard water' supply is used for drinking, bathing and cooking. The remainder is used for non-drinking purposes – flushing toilets, irrigating parks and running large-scale air-conditioning – all of which could be serviced by recycled water;
- (iv) planting more trees to combat the urban heat island effect, and engaging in innovative urban greening projects will further increase the City's water consumption;
- (v) potential sources of recycled water include stormwater, ground water, laundry water and waste water;
- (vi) the City's Sustainable Design Technical Guidelines provide guidance on how to apply sustainability in the design of the City's assets;
- (vii) the City's Environmental Action Plan 2016-2021 outlines the City's environmental targets and actions;
- (viii) the City's Decentralised Water Master Plan aims to reduce water demand by 10 per cent by 2030;
- (ix) the Resilient Sydney Strategy 2018 includes technical studies and is a collaboration between more than 1000 people from business, government and communities across Metropolitan Sydney;
- (x) the City of Sydney hosted the Water Sensitive Sydney Summit on 21 February 2018 which brought together representatives from state and local government, businesses, developers, research institutions and peak industry associations to discuss the immense challenges of water management in the context of a growing population, aging infrastructure and a warming climate, while maintaining affordability and equity for Sydney's diverse communities;

- (xi) the City of Sydney is a member of the Cooperative Research Centre for Water Sensitive Cities Limited which in collaboration with over 80 research, industry and government partners, delivers the socio-technical urban water management solutions, education and training programs, and industry engagement required to make towns and cities water sensitive;
  - (xii) the Lord Mayoral Minute on water security on 28 October 2019; and
  - (xiii) the City of Sydney has taken action locally incorporating water sensitive urban design in public projects by:
    - (a) building major stormwater recycling projects at Sydney Park and Green Square to save up to one billion litres of water per year and reduce pollution of the Cooks River;
    - (a) building rain gardens within streetscapes to filter stormwater and reduce pollution discharged into waterways;
    - (b) installing rainwater tanks at child care, kindergartens and community centres;
    - (c) stormwater harvesting and reuse projects to irrigate the City's parks and sporting field; and
    - (d) ensuring that a recycled water pipe has been laid down George Street from Circular Quay to beyond Central Station (as part of the CBD and South East Light Rail project). This has the capacity to connect to recycled water facilities at Barangaroo and Central Park; and
- (B) as part of the Climate Emergency Response, the Chief Executive Officer be requested to:
- (i) review relevant Development Control Plans and Policies and Development Application conditions to see where additional stormwater retention, water tanks, dual plumbing and slotted pipes could be promoted as best practice and required in consents, as part of the implementation of the Climate Emergency Response planning framework;
  - (ii) investigate initiatives, grants and/or pilot projects for existing residential, commercial and industrial buildings to upgrade their water retention capabilities through strategies such as decreasing impervious areas (e.g. surface car parks), additional landscape, adding water tanks, water recycling and infiltration trenches;
  - (iii) audit other smaller community assets such as pocket parks and community gardens to harness any available run off; and
  - (iv) investigate street improvement projects targeted at low traffic local streets. Where there are possibilities, decrease hardstand areas, introduce permeable surfaces and raingardens / planting, re-engineer for improved water infiltration, particularly in areas that feed the Botany Aquifer.

The motion, as varied by consent, was carried unanimously.

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