# Melbourne Water's Urban Cooling Program

A tangible climate change adaptation initiative

#### **Stormwater Victoria**

IWM for Cooler, Greener Cities – Is It Really So Easy?

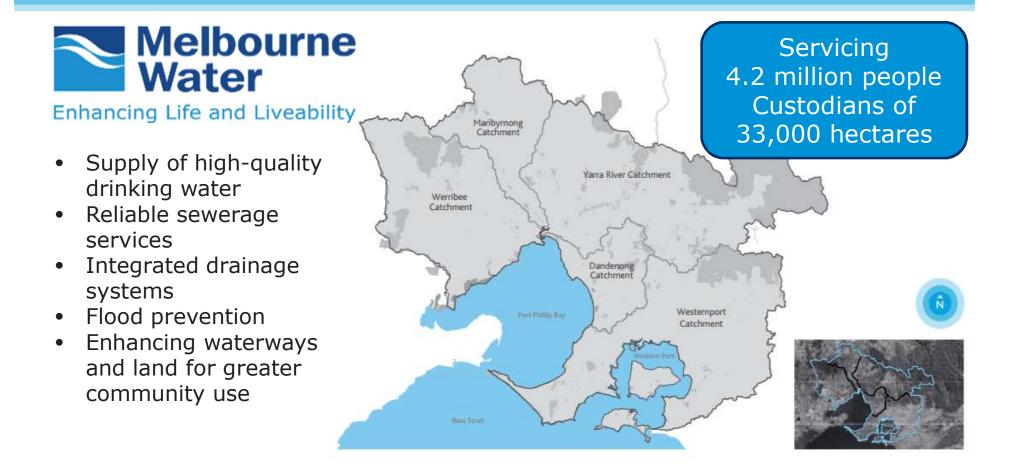
6 March 2018

**Carol Jadraque** Acting Principal, Resilience Manager, Clearwater





# Who are we?



# **Projects with Urban Cooling**



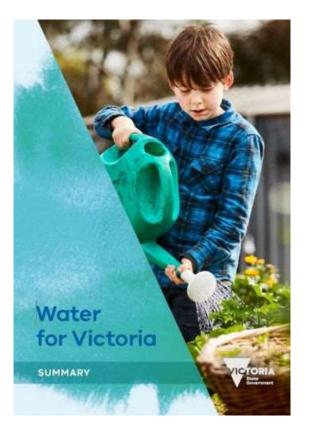
# **Projects with Urban Cooling**

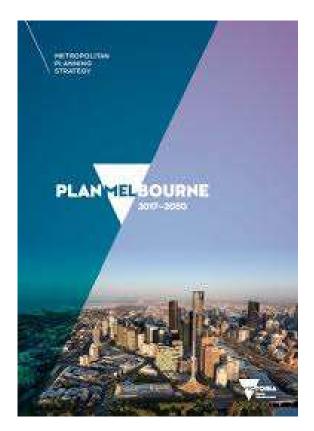


# **Projects with Urban Cooling**



# **Policy Enablers**





# Where to go?



Victoria Walks

It says: "Urban shade and greenery goes here **U**" Yes please!



"Urban Shade Greenery goes here"

...

# **Internal Drivers**

### **Strategic Framework:**

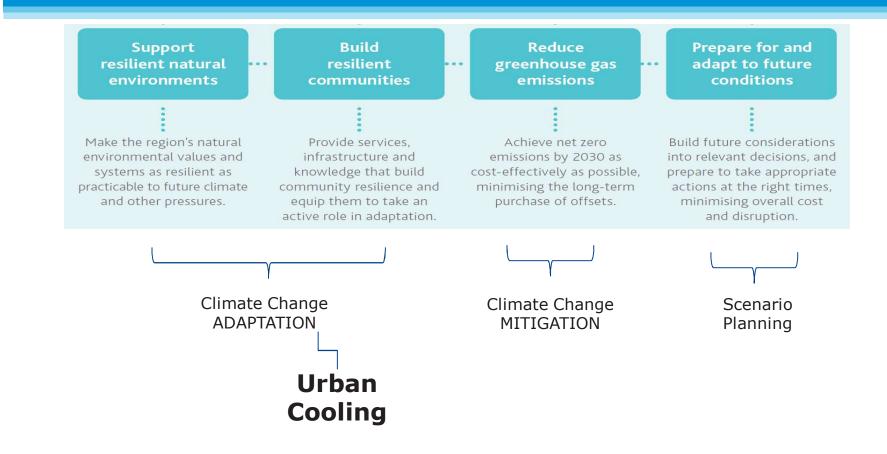
Adapt our services to an increasingly variable climate; Continue to make our region resilient to floods and manage the impacts of climate change and urban development; Partner to deliver a water sensitive city through innovative integrated planning, **creating a greener, cooler urban environment**; Help to create a sustainable region through innovative resource recovery and reducing our emissions

**Environment Scan:** climate change identified as highest

likelihood/consequence

Climate & Resilience Plan (2017): 10 priority actions

### **Climate & Resilience Plan** (2017)

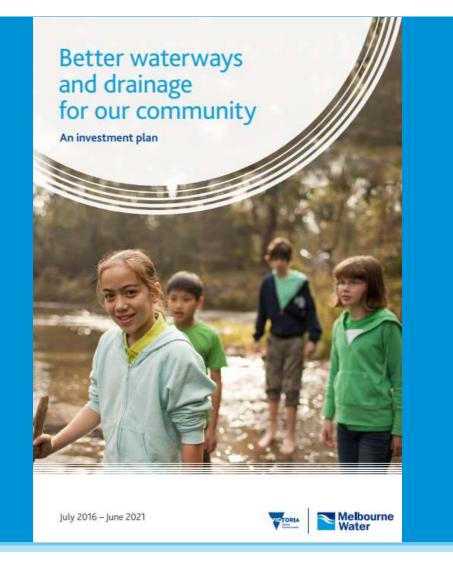


# **A Target to Deliver**

# "Invest directly in improving 30 ha of green spaces for shade and cooling across Melbourne by 2021."

Waterways and Drainage Investment Plan

# Policy Challenges – Evidence Base

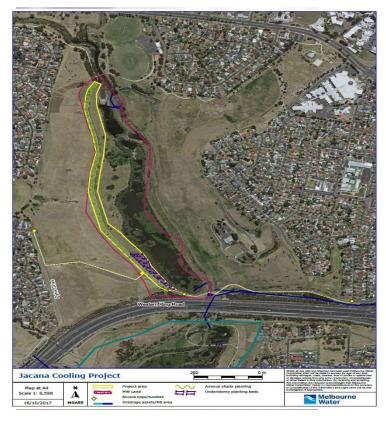


# 2 Urban Cooling Pilot Sites: 5ha

### Edithvale (South-East)



### Jacana (West)

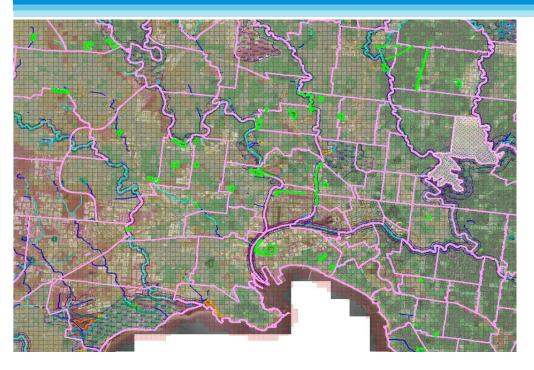


# **Urban Cooling Beyond Tree Canopy**



- New parks
- Stormwater from local catchments
- Raingarden treatments
- Irrigation of vegetation
- Canopy trees

# Location is everything!



 $\Rightarrow$  According to postcode areas in most need of urban cooling

- Canopy cover
- Imperviousness
- Open space area per capita (OS)
- Heat Vulnerability Index (HVI)
- Stormwater drains
- Access to open space
- Scale of benefitting population

 $\Rightarrow$  80 opportunities; 30 on MW land

# **Challenges & Opportunities**

#### **Challenges:**

- Measuring benefits (M&E to inform next pricing submission)
- Key message around WHY we do urban cooling on MW (and beyond!) land
- Creating canopy when trees are inconsistent with Ecological Vegetation Classes (EVCs)
- Urban consolidation and provision of cooling and greening on private property

#### **Opportunities**:

- Urban cooling portfolio is tangible; people connect
- Enhanced use of stormwater & IWM
- Citizen science
- Existing grants programs

Partnership & collaboration opportunities

# Working together towards a greener, thriving & cooler region

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Deb Riley (from April 2018)

Matilda Manning & Louise Lovell (job-share)

