



# Integrating Integrated Water Management in the City of Casey

## *Internal Engagement and Consultation Leading the Development*

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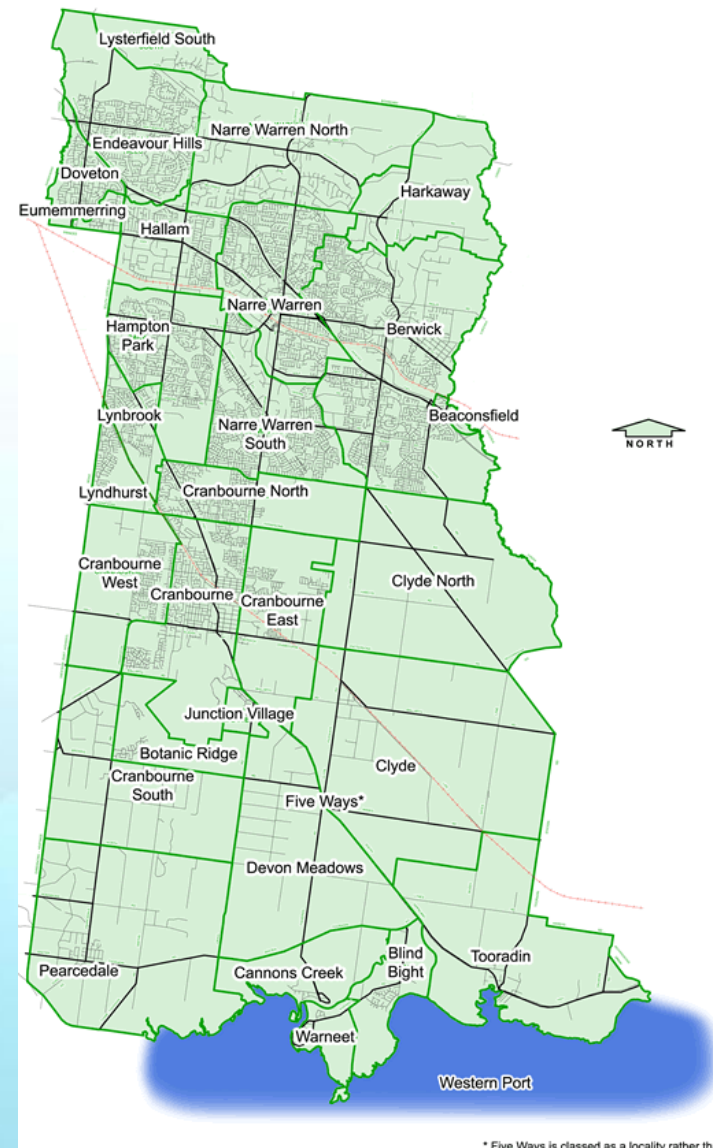
# Outline

- Background
- Casey's Water Management Achievements
- Casey's Water Management Challenges
- What is Integrated Water Management
- Need & Benefits of an Integrated Water Management (IWM)
- Steps for developing an IWM – Strategy for Casey
- Challenges & Risks
- Learning and future direction



# City of Casey

- Located 40km south east of Melbourne
- Victoria's largest Municipality
  - Current population :270,000
  - Future population: 450,000 (2036)
- Municipality has a mixture of established urban areas, growth areas and rural land
- Located in the growth corridor of Melbourne South East



\* Five Ways is classed as a locality rather than a suburb



Victoria's Largest and Most Vibrant Municipality



# Casey's water management achievements (to date)

- Existing water policies:
  - Stormwater Management Plan (2004)
  - Sustainable Water Use Plan (2006)
    - reduce Council's per capita water use by 15% by 2010 (exceeded)
- 3 Stormwater harvesting and irrigation project for irrigating sporting facilities with a potential to save up to 39 million litres of potable water
- Extensive WSUD assets in theory achieving the best practice pollutant reducing targets for the municipality



# Casey's water management challenges

- Casey maintain approx. 1200 hectares of open space
  - Council only irrigated sports grounds
  - only approximately 70 hectares of the total open space is being irrigated
  - Council is receiving 2- 3 (parks, gardens, sporting fields) each year
- Casey has 105 sportsground (Council only irrigates 50 )
  - annual usage for sportsground irrigation about 150 ML in a dry summer
  - 20 % of the 150 ML is recycled or harvested stormwater
- 76 Council owned WSUD assets in the municipality
  - Council acquired responsibility of 35 new WSUD assets over the last 10 years
- Approximately 50 Melbourne Water owned WSUD assets



# Natural assets in Casey

## Western Port Bay

- Marine Parks
- Watsons Creek
- Cardinia Creek
- Koo Wee Rup Swamp
- Port Phillip Catchment
- Extensive waterways and wetlands



# Threats to Casey's waterways

- Increased urbanisation & in-fill development
  - increased inflow to western port bay
  - Increased P & N loads to Casey's waterways
  - Increased sediment loads Casey's waterways
- Climate change impacts
  - Frequent and intense flooding
  - Decreased rainfall
  - Rise in sea-level





# What is Integrated Water Management (IWM)

Integrated Water Management (IWM):

- Brings together all facets of the water cycle (Potable water supply, sewage management, stormwater management )
- Allows utilisation of all available water sources



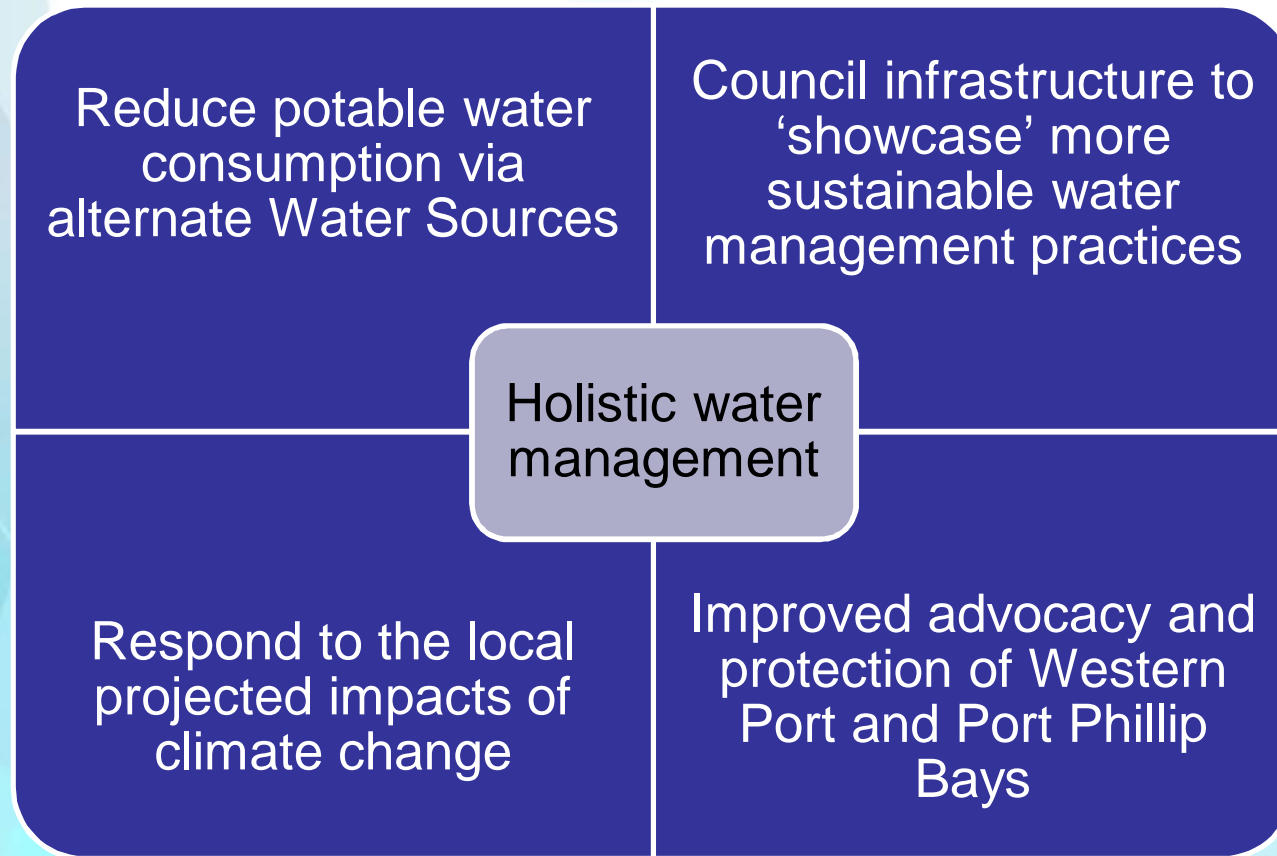


# The need for an Integrated Water Management Strategy in Casey

- Manage large number of existing WSUD assets ( more is coming)
- Improve poor and deteriorating water quality of Casey's valuable waterways
- Prepare for future demands due to change in growth and climate change
- Replace out dated existing strategies
- Better monitoring and evaluation of progress
- Respond to state government policy changes



# Benefits of an Integrated Water Management Strategy



# Key Features of Casey's IWM Strategy

- Detailed and comprehensive brief
- Cross-departmental engagement
- Dedicated resource for project management



# Steps involved in Casey's IWM Strategy development

Review Existing information and identify key drivers for an IWM approach

Identifying gaps in existing Council Plans/Policies

Developing a clear and comprehensive brief for engaging a consultant to conduct an IWM study

Liaison with key external stakeholders for data collection (e.g. MW, SEW, DSE, GAA )

Workshops with key Council departments for influencing the IWM study

Environment department presentation to Council executives on the IWM study

Business case with levelised costing for greater level of commitment

Water conservation and stormwater pollutant reduction targets to be established in collaboration of different departments and Council

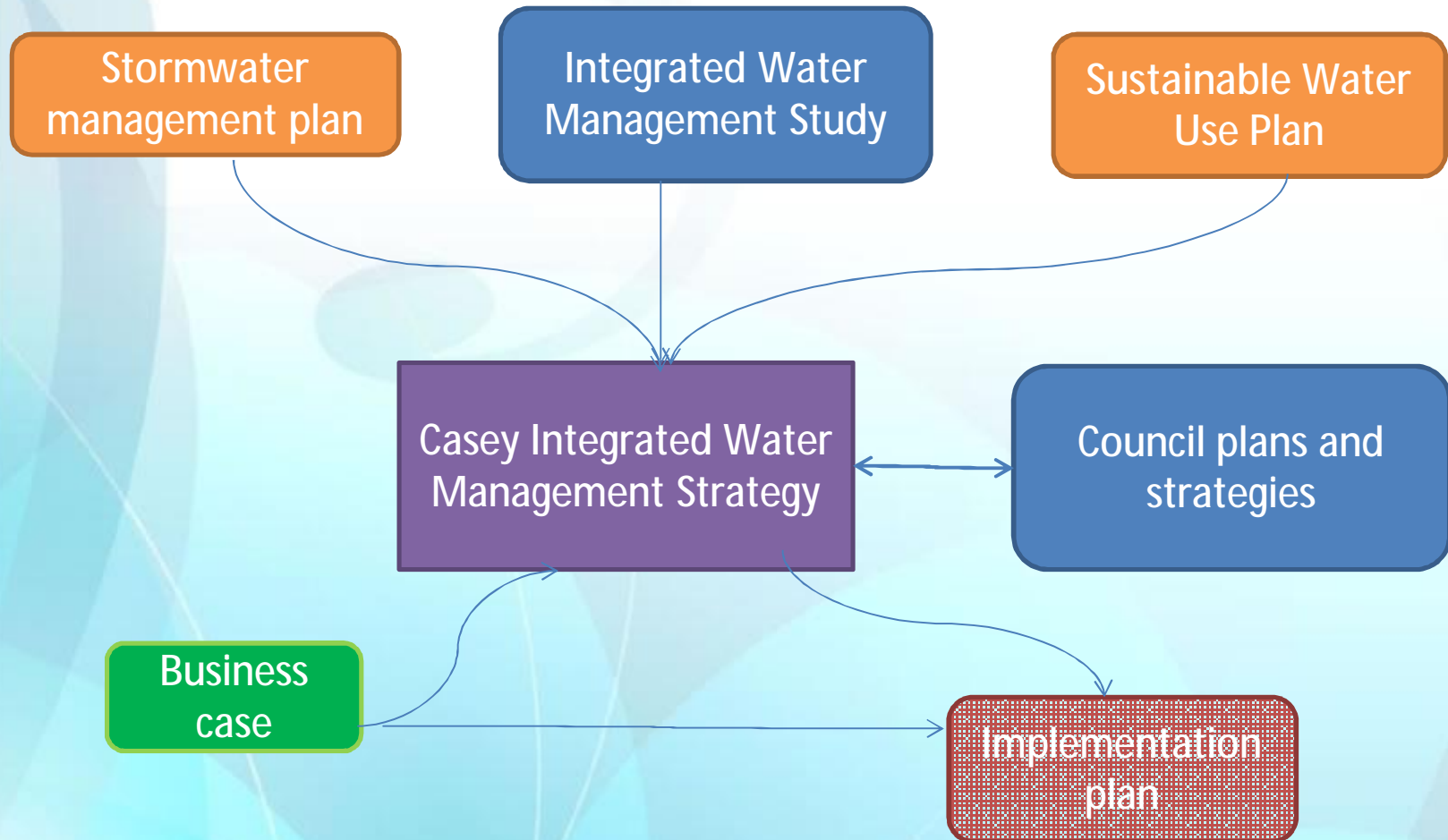
Develop implementation plan in consultation with multiple departments

Council to develop a Casey IWM Strategy





# Casey Integrated Water Management Strategy



# Challenges and barriers

Challenges /Risks	Casey's Approach
<p>Limited availability of information (water consumption data, WSUD asset details) impacting on timely delivery of milestones</p>	<ul style="list-style-type: none"> <li>- Identified the required data sets early in the process</li> <li>- Council departments were approached early on for collecting information</li> <li>- Liaison with Melbourne Water and South East Water</li> <li>- Identified the gaps and need for an integrated asset management system</li> <li>- WSUD officer to manage</li> </ul>
<p>Council &amp; Executives view on targets</p>	<ul style="list-style-type: none"> <li>- Business case and evidence scenarios supporting the targets presented to Council executives</li> </ul>
<p>Ownerships of IWM – strategy across Council</p>	<ul style="list-style-type: none"> <li>- Strategy and Plan will need to be developed with inputs from stakeholders</li> </ul>
<p>Budget allocation for delivery of the action items (e.g maintenance of WSUD)</p>	<ul style="list-style-type: none"> <li>- Business case to support future budget allocation</li> </ul>



## Future steps

- Establish new set of targets for the municipality
- Prepare IWM Strategy implementation plan and start delivering the action
- New asset management system
- Promotion of IWM through various Council projects
- Monitor and evaluate success
- Strengthen Council management practices, Plans and Policies to deliver IWM
- Prepare for future growth and climate change



# Learnings

- Internal stakeholder engagement early in the process is crucial
- Identifying the probable gaps/issues early in the process to inform the brief
- Clear idea on the expected deliverables
- Connect with key stakeholders to ensure good data access
- Provide regular update to Executives





# Questions ??



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