INTEGRATED WATER MANAGEMENT PLAN
2027-2032

City of Casey





Contents

Integrated Water Management Plan Purpose and Strategic Outcomes **4**

Integrated Water Management 6

Our Vision for Water Management 7

Strategic Context **8**

Governance, Roles and Partnerships 9

Casey's Waterways and Catchments 10

Strategic Drivers and Challenges 11

Progress and Achievements to Date **12**

Water Reduction Achievements 13

Stormwater Quality Achievements 14

Water Use and Future Demand **16**

Council's Water Use Profile 18

Stormwater Quality and Treatment **20**

Flood Resilience and Risk Management **22**

Strategic Targets and Outcomes **24**

Target Framework and Priorities 25

Implementation Plan **27**

Performance Monitoring, Evaluation and Review **28**

MERI Framework 29

Glossary 30

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Acknowledgement of Country

The City of Casey proudly acknowledges the Traditional owners, Casey's Aboriginal and Torres Strait Islander communities, their rich cultures and pays respect to their Elders past, present and future. We acknowledge Aboriginal and Torres Strait Islanders people as Australia's first peoples and as the Traditional Owners and Custodians of the land on which we work and live.

Reconciliation Statement

The City of Casey is committed to reconciliation and to strengthening respectful relationships with Aboriginal and Torres Strait Islander Communities. Building on the foundations established through this work to date, we are embedding reconciliation across our systems, leadership and service delivery. Guided by Casey Aboriginal Gathering Place, we will continue to support cultural connection, build community capacity and work in partnership to achieve lasting, positive outcomes.

Diversity Statement

The City of Casey is home to a remarkable diversity of cultures, languages, faiths, identities, landscapes and stories. From our first Australians to our most recent arrivals and every wave between, the City of Casey welcomes and represents all community members and their respective ambitions to live healthy, rewarding and happy lives.

These intersecting and overlapping community stories from Casey's collective identity and contribute to its evolving, rich history. We recognise this diversity as our strength and aim to share, nurture and celebrate it.

Image (cover): Anniversary Lake Wilson Botanic Park

Image credit (above): "Many Journey's, One Community" Merindah-Gunya Art

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INTEGRATED WATER MANAGEMENT PLAN PURPOSE AND STRATEGIC OUTCOMES

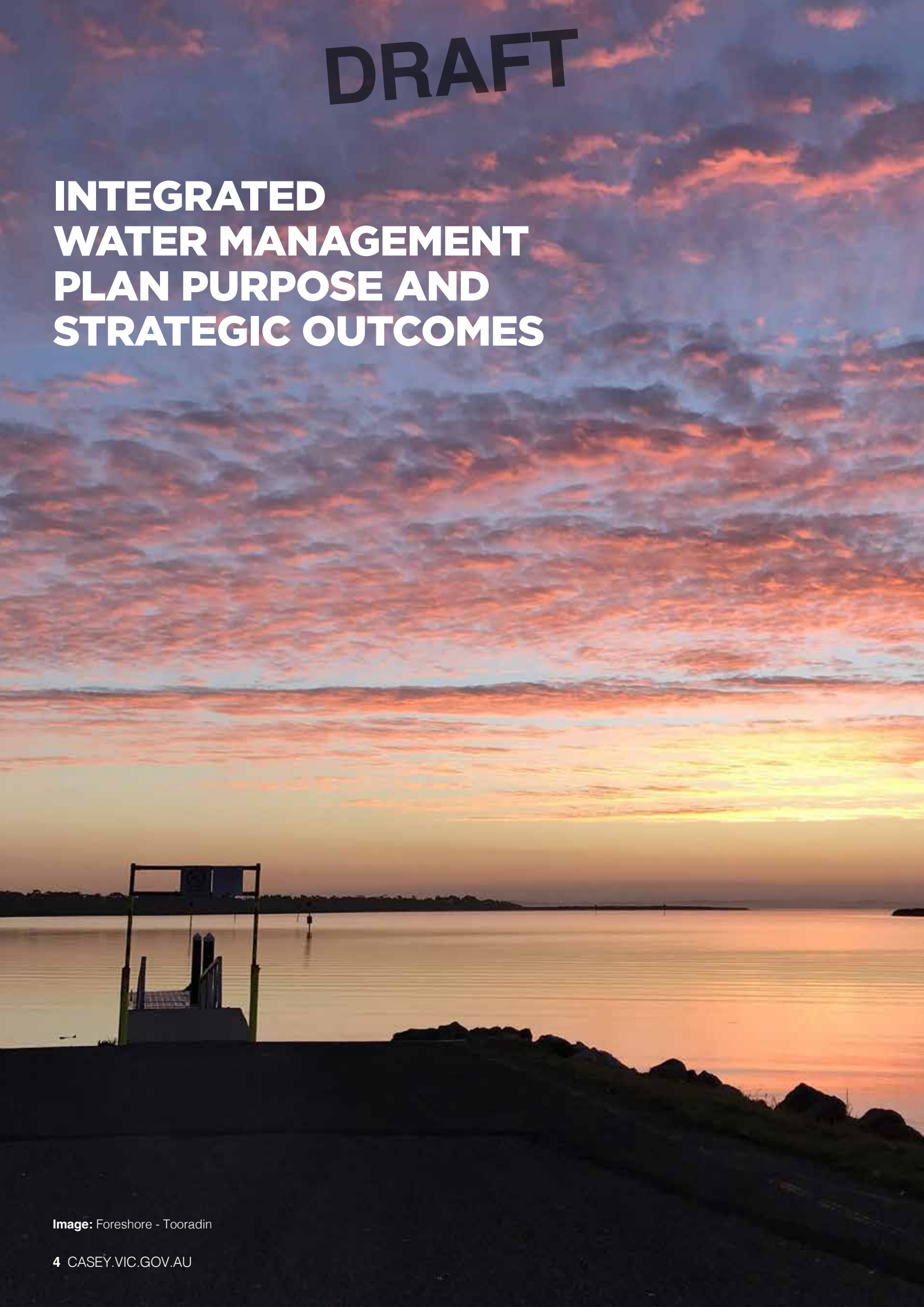
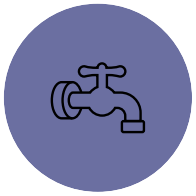


Image: Foreshore - Tooradin

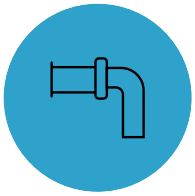
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The Integrated Water Management (IWM) Plan sets Council's vision for water management and healthier waterways. It provides a five-year roadmap with measurable targets and supports Council's obligations under the Planning and Environment Act 1987.

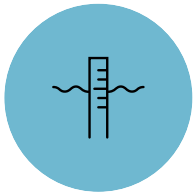
The Plan aligns with the Port Philip and Western Port Strategic Direction Statement and supports Council's contribution to the following seven strategic outcomes:



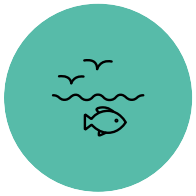
Safe, secure and affordable water supplies in an uncertain future:
Ensuring reliable, fit-for-purpose water is available for Council use despite climate and growth pressures.



Effective and affordable wastewater systems:
Reducing wastewater discharge by increasing recycled water use at Council facilities.



Existing and future flood risks are managed to maximise outcomes for the community:
Reducing community exposure to stormwater and riverine flooding.



Healthy and valued waterways and marine environments:
Protecting and enhancing the ecological health of rivers, creeks, wetlands and bays.



Healthy and valued urban and rural landscapes:
Supporting parks, street trees, agriculture and open spaces that enhance liveability.



Community values are reflected in place-based planning:
Embedding community aspiration including Traditional Owner values in water cycle planning and decisions.

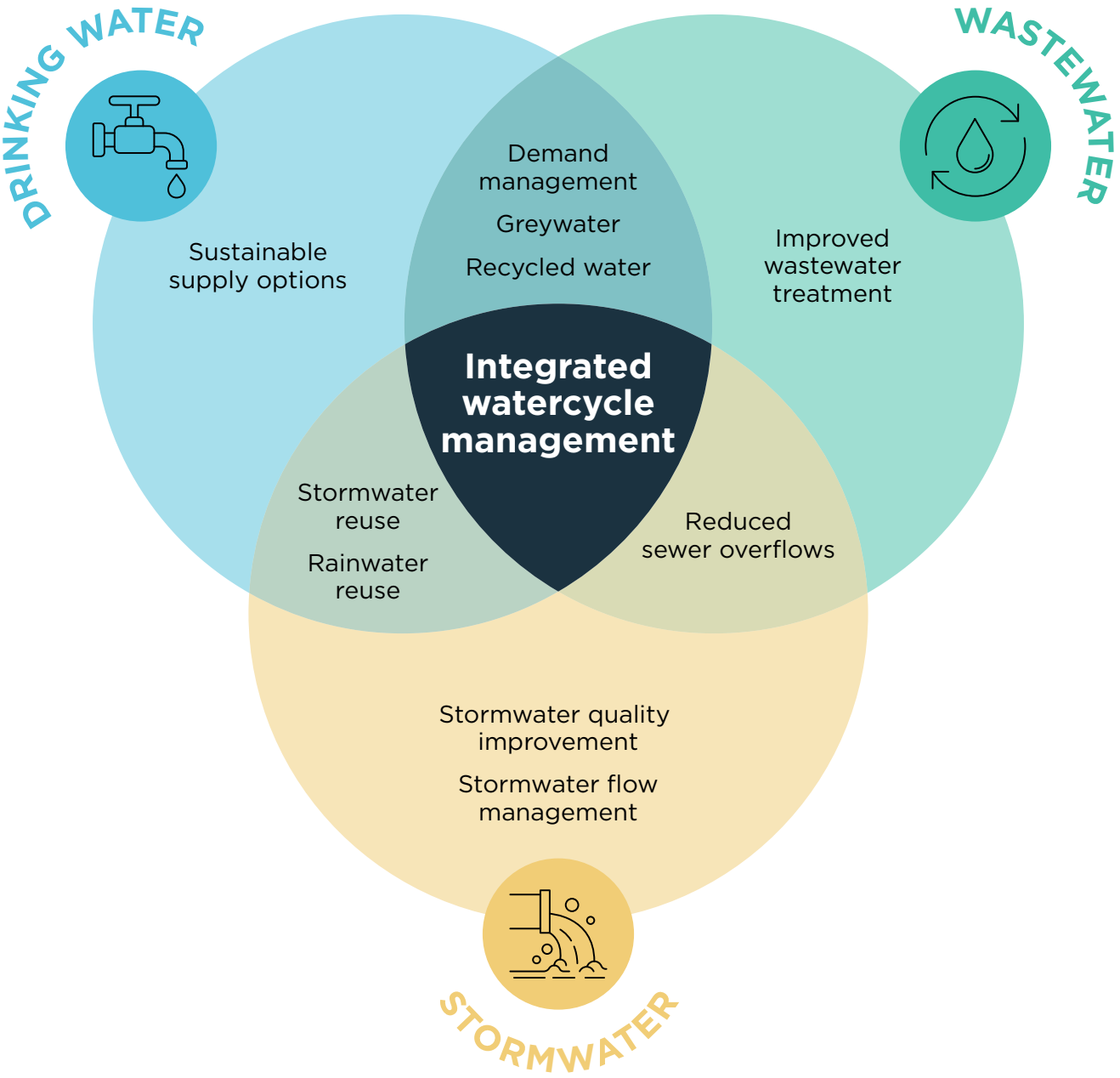


Jobs, economic benefits and innovation:
Supporting economic growth and innovation through water-related projects.

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Integrated Water Management

Integrated Water Management is a coordinated approach to managing the whole water cycle—including drinking water, stormwater, wastewater and waterways—to deliver social, environmental and economic benefits. It brings together land-use planning, infrastructure, and natural systems to improve water security, waterway health, flood resilience, and liveability.



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Our Vision for Water Management

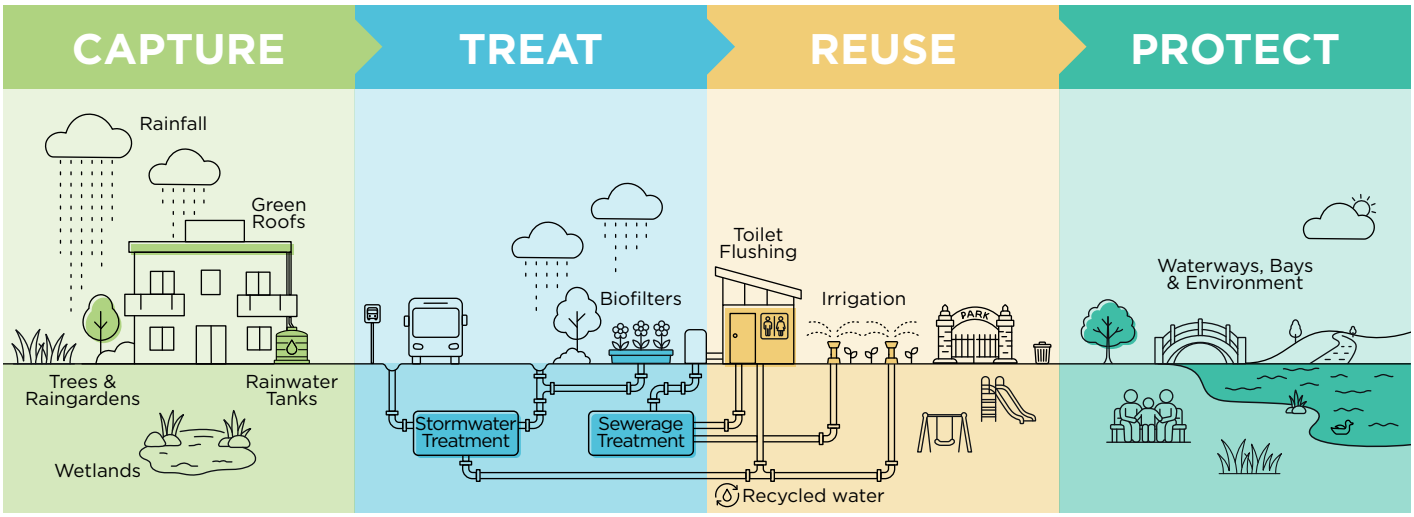
A water-sensitive and resilient Casey where the whole water cycle is managed sustainably to support healthy waterways, secure water supplies, reduced flood risk and deliver liveable communities.

MANAGING WATER LIKE NATURE

Cooler

Greener

Water Resilient



Community Benefits

- Reduced Urban Heat
- Greener Neighbourhoods
- Improved Water Security
- Climate Resilience
- Healthier Waterways & Bays
- Reduced Flood Risk

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STRATEGIC CONTEXT

Water management is a shared responsibility involving Council, all levels of government, Traditional Owners, water authorities and retailers. Casey works in partnership with these organisations to deliver coordinated integrated water management outcomes. The respective roles and responsibilities of each organisation are outlined in Table on page 9.



Image: Wetland - Max Pawsey Reserve

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Governance, Roles and Partnerships

The table below summarises the water management roles and responsibilities of key authorities.

ORGANISATION	ROLE AND RESPONSIBILITY
City of Casey (Local Government)	Manages local drainage systems in catchments smaller than 60 hectares that discharge to Melbourne Water's regional network. Works with Melbourne Water and VICSES on flood management and emergency planning and applies planning controls in flood-prone areas. Promotes sustainable water management, protects waterways and bays, and operates and maintains Council-owned water and drainage assets. Uses planning controls and permit conditions to ensure new development meets stormwater quality and drainage requirements.
Melbourne Water	Manages Melbourne's water supply catchments, waterways, major drainage and sewerage networks, and supplies treated drinking and recycled water.
South East Water	Provides retail drinking water, sewerage and recycled water services, and delivers related infrastructure and integrated water management initiatives.
Southern Rural Water	Manages rural water infrastructure, irrigation and drainage systems, groundwater resources and water licensing.
State Government	Sets Victoria's legislative, policy and funding framework for water management.
Department of Energy, Environment and Climate Action (DEECA)	Leads statewide water policy and strategic planning and advises the Minister on bulk water entitlements.
Catchment Management Authorities (CMA)	Coordinates catchment and waterway planning, floodplain management and biodiversity programs, and advises government on regional land and water priorities.
Victorian Planning Authority	Plans new communities and urban renewal areas with government, councils and service agencies, integrating water management into precinct planning.
Department of Transport and Planning (DTP)	Oversees Victoria's planning system and transport planning, ensuring water, flood and drainage matters are considered in land-use planning and development approvals.
Environment Protection Authority Victoria (EPA Victoria)	Regulates pollution prevention, wastewater discharges and environmental compliance under the *Environment Protection Act 2017.*
The Victoria State Emergency Service (VICSES)	Designated control agency for flood response and supports community preparedness and planning for flood and storm events.

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Casey's Waterways and Catchments

Stormwater runoff from the City of Casey flows into Port Phillip Bay and Western Port Bay through a drainage network of natural waterways and constructed pipes.

Casey's key waterways, which connect local waterways ultimately to the bays include:

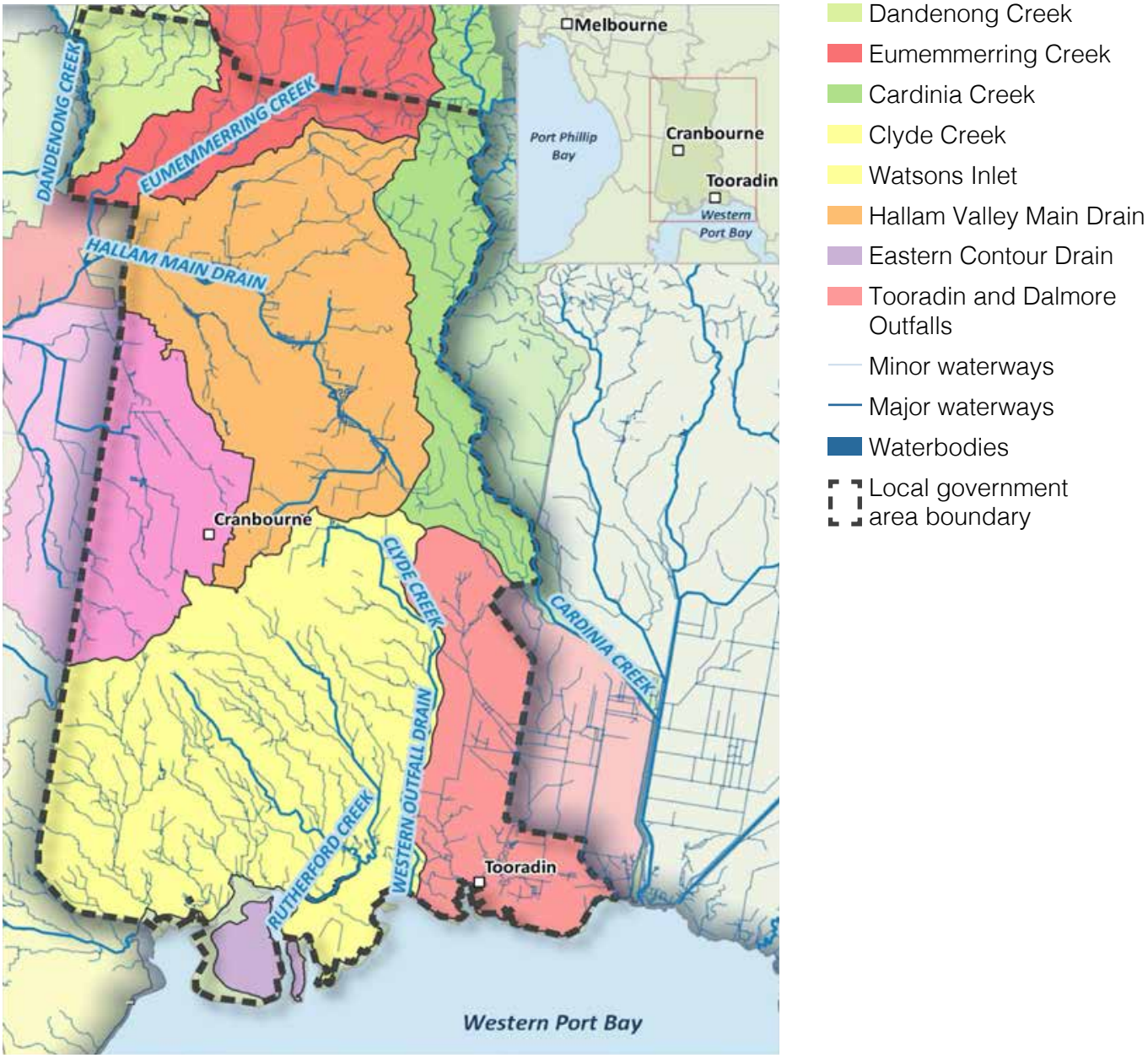


Figure 1: Casey's Waterways and Catchments (Source: Alluvium Consulting)

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Strategic Drivers and Challenges

Population growth, urban development and climate change are placing increasing pressure on Casey's water supplies, waterways, drainage networks and public infrastructure. More intense rainfall, flooding and drought, together with expanding impervious surfaces, are increasing stormwater runoff, flood exposure and demand for water and drainage services.

These pressures are compounded by ageing drainage and stormwater treatment assets, gaps in flood information, and increase in pollutant loads into waterways. Without coordinated action, these pressures could weaken water security and flood resilience, degrade waterways and biodiversity, and reduce community liveability.

A coordinated, long-term approach to water management is essential to protect the community and prepare Casey for these challenges.



Image (top): Wetland - Casey Fields

Image (bottom): Flooding - Centre Road, Narre Warren

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PROGRESS AND ACHIEVEMENTS TO DATE

Casey adopted its first Integrated Water Management (IWM) Plan in 2015 to reduce Council's reliance on drinking water and improve waterway health through better stormwater management. The achievements below demonstrate progress against the 2015 Plan targets and provide a foundation for the next phase of the plan.



Image: Anniversary Lake - Wilson Botanic Park

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Water Reduction Achievements

The 2015 IWM Plan set a target to reduce Council's projected 2025 drinking water use by 30%. Council exceeded this target, achieving a 36% reduction by replacing suitable drinking water demand with alternative water sources.

Key projects included stormwater harvesting systems at Max Pawsey Reserve and Wilson Botanic Park, recycled water for oval irrigation, and leak detection systems. Figure 2 below shows the significant increase in Council's use of alternative water over the past decade and the resulting reduction in overall drinking water use.

COUNCIL WATER USAGE

Council alternative water use increased to 195 ML/yr in 2024/25

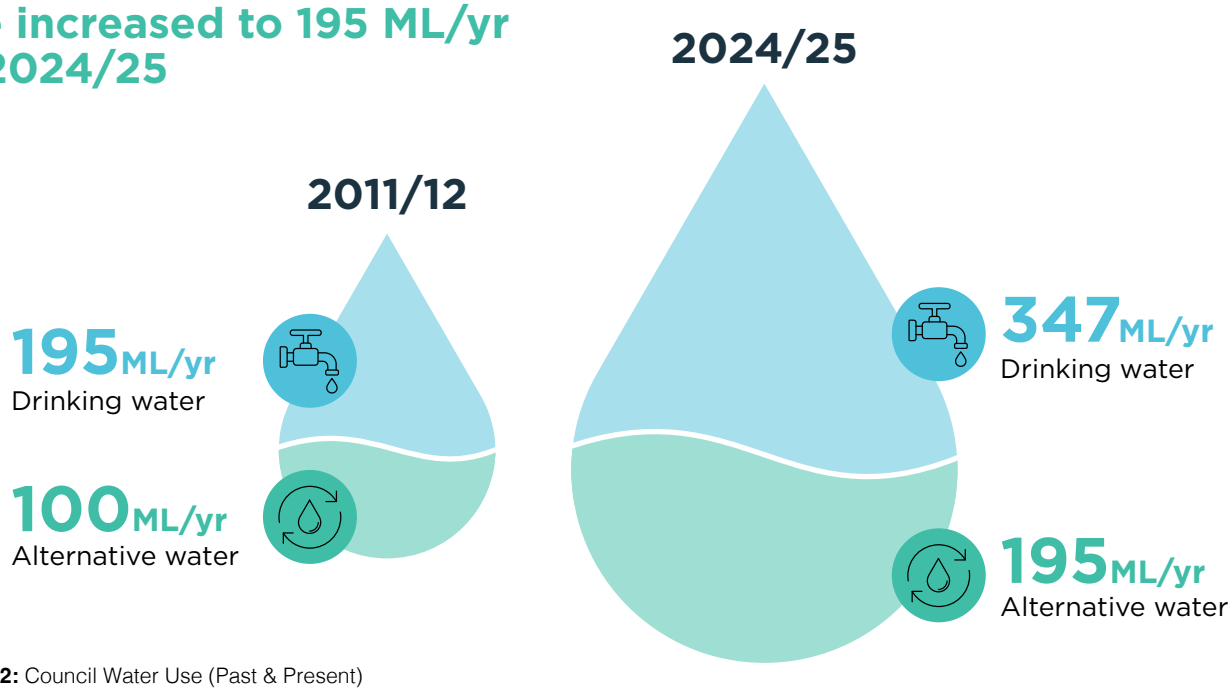


Figure 2: Council Water Use (Past & Present)



Image: Rainwater Tank - Casey Race

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Stormwater Quality Achievements

In 2015, Council set a target to ensure its stormwater treatment assets—including bioretention systems, sediment ponds and wetlands—effectively removed pollutants before stormwater entered waterways and bays. Casey achieved this target through a proactive maintenance and renewal program, including regular inspections, maintenance, rectification and renewal work to keep assets operating to best-practice stormwater treatment standards.



Image: Sediment Pond - Sweeney Reserve

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Image: Raingarden - Wilson Botanic Park

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WATER USE AND FUTURE DEMAND

The water balance diagram below illustrates how water enters, moves through and leaves Casey, both now and in the future. It includes inflows from drinking water, rainfall, recycled water and groundwater, as well as outflows and reuse through wastewater, stormwater runoff, infiltration, evapotranspiration and alternative water use. Casey's current and projected water use information presented below is based on the City of Casey—Municipal Water Balance and Integrated Water Management Targets Report, prepared by Water Technology in May 2026.

Current drinking water use

In 2025, Casey used approximately 41,188 ML/yr of drinking water. The community accounted for 99% of this use and Council operations for 1%.

Stormwater runoff

Approximately 91,192 ML/yr of stormwater runoff is discharged into Port Phillip Bay and Western Port Bay each year.

Alternative water use

Approximately 2,853 ML/yr of alternative water is used across Casey each year for toilet flushing, laundry, garden watering and irrigation of public open space.

Future outlook

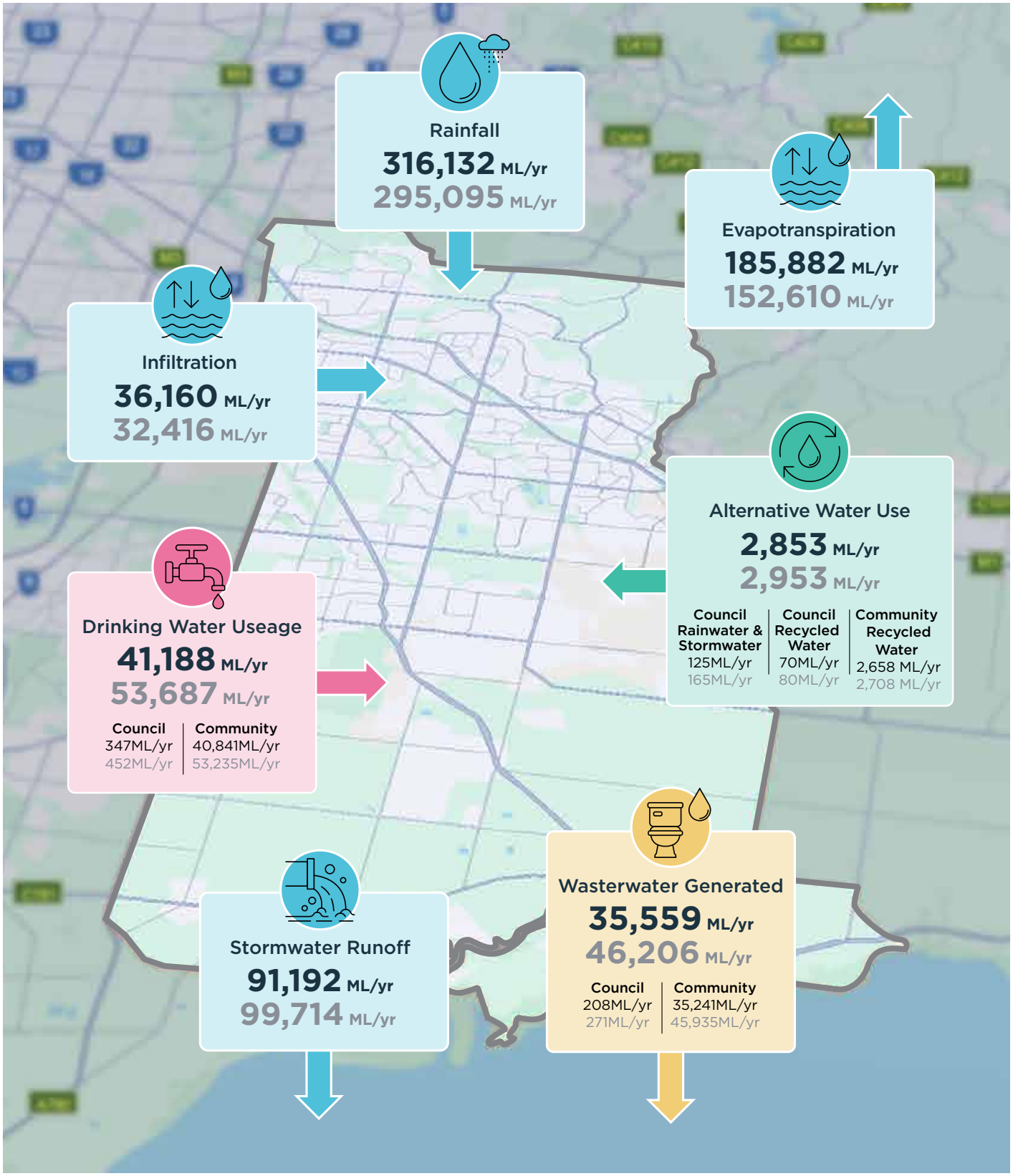
Casey's population is projected to reach 559,681 by 2036. Population growth, urban development and climate change are expected to significantly increase water demand and stormwater runoff.

By 2036, annual drinking water demand is projected to reach 53,687 ML/yr, while annual stormwater runoff is expected to increase to 99,714ML/yr.

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INTEGRATED WATER CYCLE IN CASEY

● Current (2024/25) ● Future (Projected 2036)*



*The future (Projected 2036) water use is approximate only and is subject to change with population growth and climate change.

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Council's Water Use Profile

Drinking water use

Council's annual drinking water use increased from 195 ML in 2011/12 to 347 ML in 2024/25, reflecting population growth and the expansion of community services and facilities. Figure 2 below shows Council's water use by service area.

Alternative water use

In 2024/25, Council used 195 ML of alternative water, representing approximately 36% of its total water use of 542 ML.

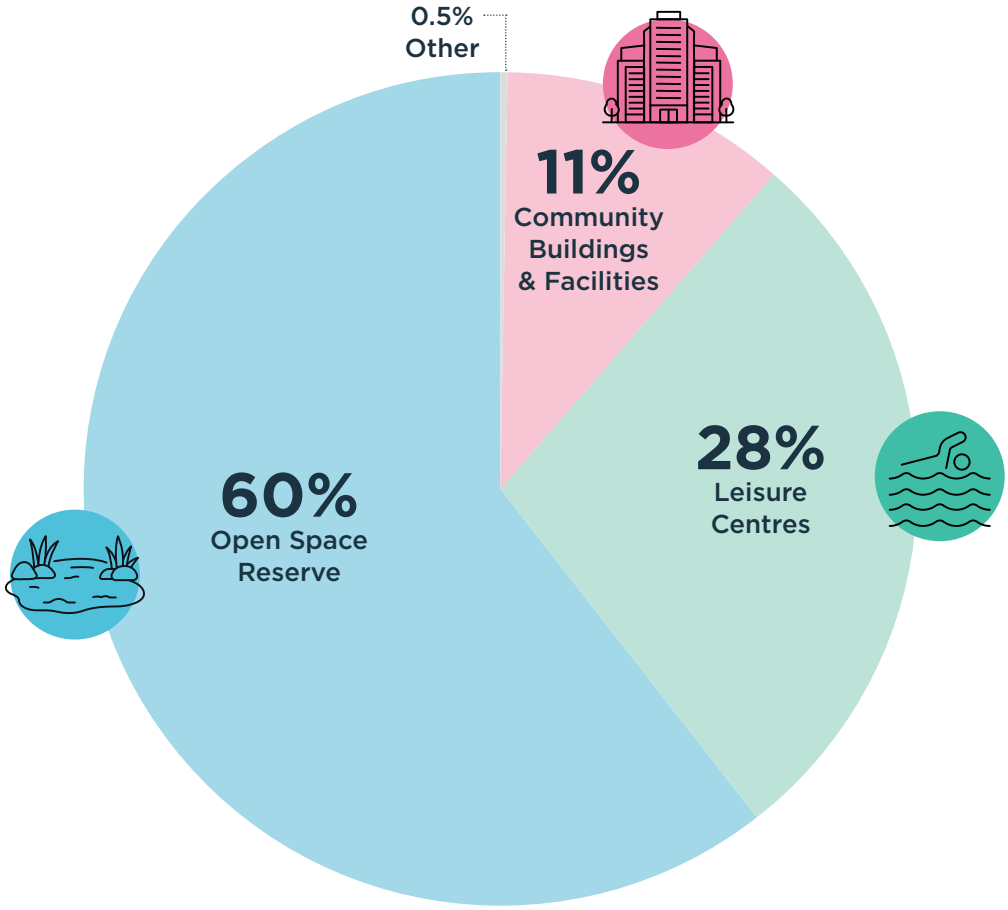


Image (top right): Sportsground - Casey Fields
Image (middle left): Rainwater Tank - City of Casey Works Depot
Image (bottom right): Swimming Pool - Casey Race

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STORMWATER QUALITY AND TREATMENT



Image (top): Swales - Sambur Road, Tooradin
Image (bottom): Passive Irrigation - Minta Shadeway, Clyde North

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Casey is one of Victoria's fastest-growing municipalities and is experiencing substantial greenfield development to meet the needs of its rapidly growing population. Stormwater runoff drains to both Port Phillip Bay and Western Port Bay. Most of Casey's Port Phillip catchment is already developed, with further multi-lot and high-density development expected. In contrast, most greenfield growth areas drain to the Western Port Bay catchment, where residential and employment precincts are expanding rapidly.

This growth increases impervious surfaces and stormwater runoff. Under the Urban Stormwater Management Guidance, new developments must meet best-practice treatment requirements and, where practicable, retain and reuse stormwater before it enters waterways.

In 2025, Casey recorded 256 stormwater treatment assets, including 179 owned and maintained by Council and 77 owned and operated by Melbourne Water. These assets were constructed to meet best-practice stormwater requirements under the planning requirements. Although these assets have improved stormwater treatment performance across the municipality, gaps remain in meeting overall best-practice treatment requirements for all impervious areas in the Port Phillip and Western Port catchments. The image below shows the treatment gaps for each stormwater pollutant in each catchment. Casey's stormwater treatment performance below is based on the *City of Casey—Municipal Water Balance and Integrated Water Management Targets Report*, prepared by Water Technology in May 2026.

As Casey continues to develop, additional stormwater runoff is projected to increase pollutant loads by an average of 7.5% by 2036. Under the Victorian Planning Provisions, eligible developments must meet best-practice pollutant reduction requirements before stormwater enters waterways and bays. These measures will help close the current treatment gap. Continued investment in stormwater treatment, including harvesting and Water Sensitive Urban Design infrastructure, will further reduce this gap, improve waterway health and move both catchments towards best-practice standards.

STORMWATER POLLUTION REDUCTION PERFORMANCE

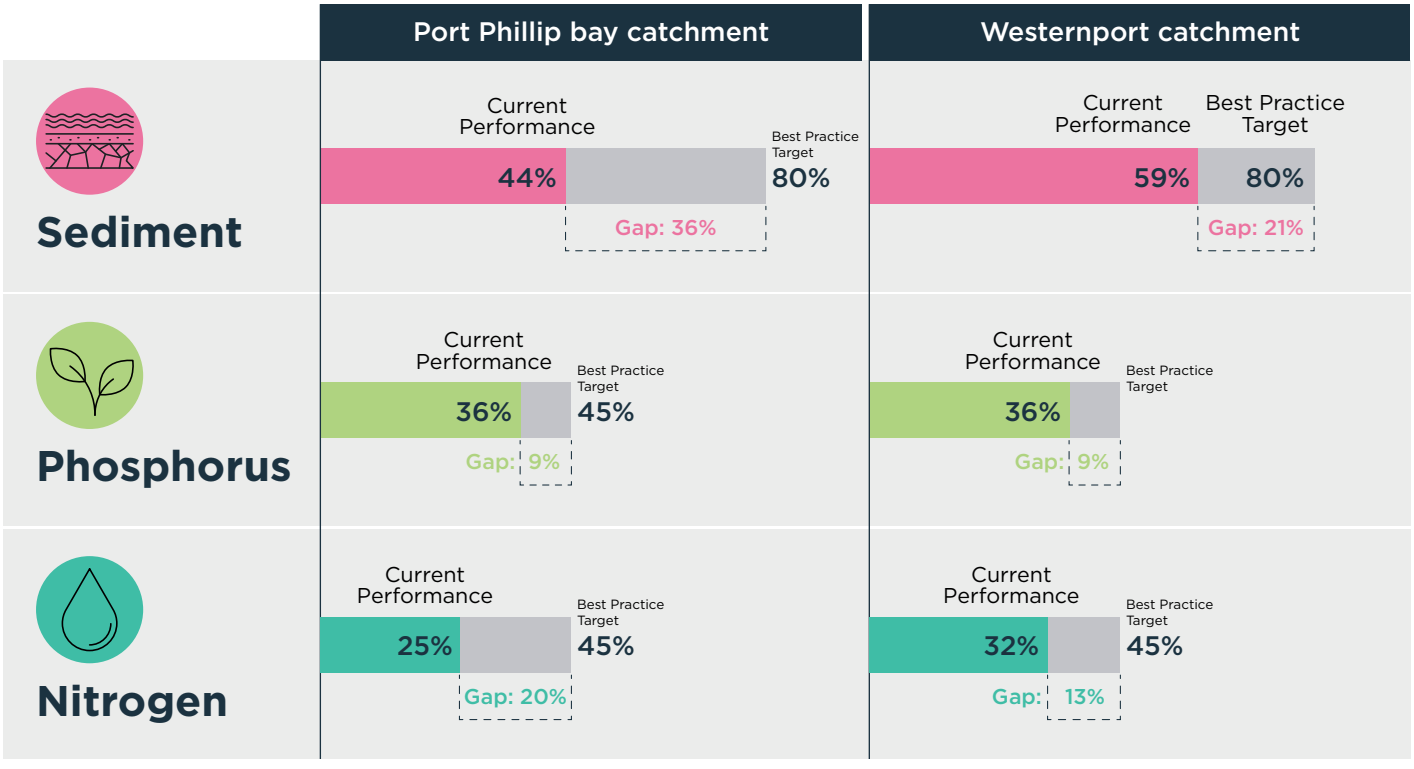


Figure 3: Casey's Stormwater Treatment Performance

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FLOOD RESILIENCE AND RISK MANAGEMENT



Image: Flooding - Magid Drive/
Princes Highway Intersection, Narre Warren

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Flooding is a natural occurrence and cannot be completely prevented. Casey is exposed to stormwater, waterway and coastal flooding. Stormwater flooding occurs when heavy rainfall exceeds the capacity of local drains and pipes, while waterway flooding occurs when rivers and creeks overflow. In low-lying coastal areas, high tides, storm surges and rising sea levels can also cause inundation.

Flood risk is expected to increase as Casey continues to grow. New development and urban consolidation create additional hard surfaces, increasing stormwater runoff and pressure on drainage systems. Climate change is also expected to bring more intense rainfall and greater coastal inundation risk, while ageing infrastructure and changing land use may alter how floodwater moves through the municipality. These pressures mean that historical flood information alone maynot adequately represent future risk.

Council is working with Melbourne Water and other agencies to improve flood modelling and mapping across Casey. Updated flood information will provide a clearer understanding of the areas, properties, roads and community infrastructure that may be affected now and in the future.

This evidence will inform land-use planning, development controls, emergency management, infrastructure design, asset renewal and the prioritisation of flood mitigation works.

The Integrated Water Management Plan supports a coordinated approach to flood management by considering the whole water cycle, maximising stormwater reuse and reducing the volume of runoff that contributes to flooding.

Managing flood risk is a shared responsibility between Council, Melbourne Water, the Victorian Government, VICSES, property owners and the community. Through coordinated planning, investment and access to reliable flood information, Casey will build safer, better prepared and more resilient communities now and into the future.

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STRATEGIC TARGETS AND OUTCOMES

Targets translate Casey's Integrated water management vision into measurable objectives, enabling effective monitoring, accountability and decision-making across key water management outcomes. The Plan is aligned with the Catchment Scale Integrated Water Management Strategic Directions Statement and supports a shared regional vision.



Image: Storage Pond - Casey Fields

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Target Framework and Priorities

Building on the achievements of the 2015 IWM Plan, the new targets set Casey's priorities for the next phase of integrated water management. They focus on reducing reliance on drinking water, improving stormwater treatment and infiltration, maintaining effective treatment assets, and reducing flood impacts in priority locations.

The targets are measurable and time-bound to support transparent monitoring, informed investment decisions and accountability. Progress will be assessed through the Plan's monitoring, evaluation, reporting and improvement framework, with targets reviewed as new evidence, policy requirements and delivery opportunities arise.

The table below outlines the targets for the next five years.

2032 TARGETS



Potable Water Reduction

Substitute at least 40% of Council's water use with alternative sources



Stormwater Treatment

Ensure all eligible new developments meet best practice stormwater treatment requirements

Maintain or renew stormwater treatment assets so they continue to protect local waterways

Increase stormwater infiltration across local landscapes to reduce runoff and support greener, cooler places



Flood Management

Reduce flood impacts in priority locations by targeted flood mitigation works and improved stormwater management

STRATEGIC OUTCOMES



Safe, secure and affordable supplies in an uncertain future



Effective and affordable wastewater systems



Existing and future flood risks are managed to maximise outcomes to the community



Healthy and valued waterways and marine environments



Healthy and valued urban and rural landscapes



Community values are reflected in place-based planning



Diverse jobs, economic benefits and innovation

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IMPLEMENTATION

Council will prepare a detailed action plan outlining the initiatives required to achieve the targets set out in this Plan. The action plan will identify priority projects, responsibilities, delivery timeframes, funding requirements and measures for monitoring progress. Initiatives may include stormwater harvesting, rainwater tanks for toilet flushing and irrigation, passive irrigation for trees, drainage upgrades and detention systems to support water reduction, stormwater treatment and flood mitigation outcomes. The action plan will be reviewed and updated to reflect progress, changing priorities, available funding and emerging delivery opportunities.



Image: Wetland - Fairground Promenade, Clyde North

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Image: Waterbody - Bridgewater Boulevard, Berwick

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EVALUATION AND REPORTING

Council will monitor and report on the implementation of the IWM Plan to track progress, support accountability, and identify opportunities for continuous improvement. Findings will be used to inform future priorities and updates to the Plan.

The IWM Plan is intended to be a living document that can be adapted over time to respond to changing community needs, environmental conditions, and strategic priorities.



Image: Stormwater Storage Pond - Casey Fields

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Monitoring , Evaluation, Reporting and Improvement (MERI) Framework

ACTIVITY	PURPOSE	FREQUENCY
Action Monitoring	Track progress and completion of individual actions, identify implementation barriers, and record key achievements.	Ongoing / As required
Annual Progress Reporting	Report on implementation of the IWM Action Plan, monitor progress against strategic objectives, and identify emerging priorities or risks.	Annually
Partnership and Stakeholder Review	Engage implementation partners to review progress, share knowledge and strengthen collaborative delivery.	As required
Mid-Term Evaluation	Assess effectiveness of actions, progress towards intended outcomes, and identify opportunities for adaptive management and continuous improvement.	2029
IWM Plan Review and Update	Undertake a comprehensive review of the IWM Plan, including strategic directions, actions, priorities and performance outcomes to ensure continued relevance and alignment with Council and partner objectives.	Every 5 years (2032)

The IWM Plan is intended to be a living document that can be adapted over time to respond to changing community needs, environmental conditions, and strategic priorities.

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Glossary

TERM	DEFINITION
Water Sensitive Urban Design (WSUD)	Water Sensitive Urban Design (WSUD) is a way of managing water in urban areas using natural and engineered features that help clean stormwater, reduce flooding, support water reuse, and create healthier, greener communities.
Potable Water	Potable water is water that is safe for people to drink and use for cooking and food preparation.
Stormwater	Stormwater is rainwater that flows over roofs, roads, driveways, footpaths and other hard surfaces instead of soaking into the ground.
Runoff	Runoff is rainwater that flows over the land and into drains or waterways instead of soaking into the ground.
Wastewater	Wastewater is collected through the sewerage system and taken to a treatment plant, where it is cleaned before being released back into the environment or reused.
Waterway	A waterway is any natural or constructed channel where water flows or collects, such as a river, creek, wetland or lake.
Liveability	Liveability is how well a place meets the needs of the people who live there and supports a healthy, enjoyable quality of life.
Flood Risk	Flood risk is the possibility that an area may experience flooding, causing impacts to homes, businesses, roads, community infrastructure and the environment.
Wetland	A wetland is an area that holds water permanently or after rainfall. Natural and constructed wetlands help slow stormwater flows, filter pollutants, improve water quality, reduce flood impacts, and provide habitat for wildlife.

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TERM	DEFINITION
Rain Garden	A rain garden is a shallow, planted garden designed to capture and treat stormwater runoff from roofs, roads, car parks and footpaths before it enters drains and waterways.
Swale	A swale is a shallow, grassed or planted channel that helps slow, filter and carry stormwater, reducing pollution and flood impacts while improving water quality.
Sediment Basin	A sediment basin is a pond that captures stormwater and allows dirt and sediment to settle out, helping to improve water quality and protect downstream waterways.
Waterbody	A waterbody is any natural or man-made area that contains water, such as a lake, pond, wetland, creek or reservoir.
Catchment	A catchment is an area of land where rainfall and stormwater flow to the same creek, river, wetland, bay or other waterbody.
Best Practice Stormwater Treatment Requirements	Best practice stormwater treatment requirements are the standards used to ensure stormwater is cleaned before it enters waterways. These standards help reduce pollution, protect waterway health, and improve environmental outcomes.
Infiltration	Infiltration is the process of rainwater soaking into the ground instead of flowing over the surface.
Evapotranspiration	Evapotranspiration is the process of water moving from the land and plants back into the air.
Pollutants	Pollutants are substances such as litter, dirt, chemicals and other contaminants that can enter stormwater and reduce the health of waterways and the environment.

Contact the City of Casey:

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Post: PO Box 1000, Narre Warren VIC 3805
NRS: 133 677 (for the deaf, hearing or speech impaired)

TIS: 131450 (Translating and Interpreting Service)
المترجم الفوري 翻译 مترجم شفاهی ਦੁਭਾਸ਼ੀਆ භාෂණ පරිවර්තක

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Customer Service Centres:

Narre Warren:
Bunjil Place, Patrick Northeast Drive

Cranbourne:
Cranbourne Park Shopping Centre

MIX
Paper from responsible sources
FSC C102126

City of Casey