Stormwater

Performance monitoring summary for the Healthy Waterways Strategy 2018

Overview

Stormwater performance objectives aim to ensure stormwater is adequately managed to protect key values and the bays. Performance objectives are set regionally, as regional performance objectives (RPOs), and at the subcatchment, as subcatchment performance objectives (SCPOs).

The various themes within this group of stormwater performance objectives include:

- Managing the construction phase of development
- Ensuring best practice standards are achieved everywhere and
- Meeting new higher standards for managing stormwater volumes in priority catchments.

This group aligns very closely with the Water Quality group and should be read in junction. It has been separated due to its focus on the urban environment and the need to manage flows from impervious surfaces as the primary driver for protecting stream health. Water quality impacts from urban development are also important and while in many cases the same treatment measures are applied – there are also quite specific management actions associated with managing pollution eg industrial sites. These are considered in the Water Quality group.

Managing sediments and pollutant runoff during the construction phase of urban development has been highlighted in the strategy at both a regional level and in key sub-catchments – particularly those in the Westernport catchments due to the impacts on sea grass in the bay.

The Strategy POs relating to the adoption of these higher stormwater standards specifies levels of Directly Connected Imperviousness (DCI) to meet to support target trajectories for key values. The corresponding harvesting and infiltration volumes specified have been calculated to mimic the natural water balance.

Stormwater performance objectives have been established for rivers and constructed wetlands. No specific targets are established for estuaries, but actions upstream will benefit downstream systems including estuaries and bays.

Typical actions for managing stormwater include: raingardens, rainwater tanks, stormwater harvesting, swales, wetlands and pervious pavement. In addition to these, foundational activities, like tools and guidelines are needed to ensure adequate management is occurring. Overall, stormwater performance objectives align with water quality and flow regime themes.

Performance indicators and data:

Performance Objective theme	Performance indicators	Data required to track progress –	Timing	Who is involved in reporting
Infiltrating and harvesting stormwater implemented as per the HWS objectives for each catchment.	ML stormwater harvested, ML stormwater infiltrated DCI levels	MUSIC model outputs Impervious mapping	Annual from 2020	Melbourne Water Local government
Build and maintain stormwater treatment systems RPO-18 Critical waterway health assets including stormwater treatment systems, fishways and erosion control structures, are maintained for their designed purpose or the same outcomes are delivered by alternative means. (foundational)	Number and type of stormwater treatment systems in priority sub-catchments Melbourne Water investment plan for maintenance	TBC Investment plan	TBC Annual from 2020	TBC Melbourne Water
RPO-17 Water quality in waterways and bays is improved by reducing inputs of sediment and other pollutants from urban construction and development. Plus specific sub-catchment performance objectives	proportion of all PSPs which specify no sediment laden runoff should enter waterways from construction activities Developer Services Schemes – works surveillance Local Government works surveillance	PSPs Developer Services Schemes Council data	Annual from 2020	Melbourne Water Local government

Performance Objective theme	Performance indicators	Data required to track progress –	Timing	Who is involved in reporting
RPO-13 Industry capacity for whole of water cycle and stormwater management is increased to enable collaboration, improved access to information and knowledge, and a skilful and capable industry with strong established networks. (foundation)	Training delivered through Clearwater New flow based stormwater standards developed and implemented	Clearwater database	Annual from 2020	Melbourne Water Local government
RPO-15 Victoria's planning system is used effectively to protect and enhance waterway values. (foundational)	Number of times new flow standards been used in planning responses and complied with? No. of times HWS referenced in successful VCAT applications, VPP references the Healthy Waterways Strategy	Melbourne Water scheme information DevConnect planning response data	Annual from 2020	Melbourne Water Local government
RPO-16 Protection mechanisms are in place for headwaters to ensure that they are retained as features in the landscape for environmental, social, cultural and economic benefits. (foundational)	length of easements in place to protect headwater streams Proportion of headwater streams NOT piped or built over	headwater streams, pipes, easements	Annual from 2020	Melbourne Water Local government

Catchment wide stormwater performance objectives

Scale	PO
Werribee Catchment	Progressively implement stormwater harvesting in the lower and middle reaches of the Werribee River and Toolern and Lollypop Creeks. Once this catchment has reached its anticipated long term urban footprint (2050), this will require around 16.9 GL/year of stormwater harvested and 3.0 GL/ year infiltrated. Ensure directly connected impervious (DCI) levels in these priority catchments do not increase beyond current levels and headwater streams are retained as features in the landscape for environmental and social benefits.
Maribyrnong Catchment	Progressively implement stormwater harvesting, focusing on rural townships such as Lancefield, Romsey, Macedon and Mt Macedon and new urban areas such as Sunbury. Once this catchment has reached its anticipated long-term urban footprint (2050), this will require around 15 GL/year of stormwater harvested and 3.9 GL/year infiltrated. Ensure directly connected imperviousness (DCI) levels in these priority catchments do not increase beyond current levels and headwater streams are retained as features in the landscape for environmental and social benefits.
Yarra Catchment	Progressively implement stormwater harvesting, focusing on rural townships along the Middle and Upper Yarra River, Woori Yallock, Olinda Creek catchments and new urban areas in the Merri Upper and Darebin Creek sub-catchments. Once this catchment has reached its anticipated long-term urban footprint based on the urban growth boundary, this will require around 37.8 GL/year of stormwater harvested and 10.7 GL/year infiltrated. Ensure DCI levels in the above priority catchments do not increase beyond current levels and headwater streams are retained as features in the landscape for environmental and social benefits.
Dandenong Catchment	Progressively implement stormwater harvesting, focusing on rural townships in the Dandenong Creek Upper and the Corhanwarrabul, Monbulk and Ferny Creek sub-catchments. Once this catchment has reached its anticipated long-term urban footprint based on the current urban growth boundary, this will require around 0.4 GL/year of stormwater harvested and 0.2 GL/year infiltrated. Ensure DCI levels in the above priority catchments do not increase beyond current levels and headwater streams are retained as features in the landscape for environmental and social benefits.

Westernport and Mornington regions	Progressively implement stormwater harvesting, focusing on Casey Clyde Growth Area and outer lying towns (for example, Drouin). Once this catchment has reached its anticipated long-term urban footprint based on the current urban growth boundary, this will require around 11.8 GL/year of stormwater harvested and 4.4 GL/year infiltrated. Ensure DCI levels in these priority catchments do not increase beyond current levels and headwater streams are retained as features in the landscape for environmental and social benefits.

Number of Performance Objectives within each theme:

PO theme	Regional	Rivers	Wetlands	Estuaries
Infiltrating and harvesting stormwater		36		
Foundational	5		3	
reduce sedimentation from run-off associated with construction for urban development	1	10		

About this document

Delivering the Performance Objectives

Melbourne Water and partners will approach implementation of the many different Performance Objectives within this theme according to each organisations obligations and delivery mechanisms and their associated capacity and capability to plan and deliver the required activities/works.