

DRAFT REGIONAL STORMWATER STRATEGY

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Preamble

Stormwater is rainfall runoff that flows over the land into streams, underground aquifers, lakes or into public and private stormwater systems and eventually flows out to the sea. Runoff from roofs, yards, fields and roads can be both a blessing and a curse. Too much and flooding can be a problem. Too little and our region dries out. We can't control how rain falls, but we can improve what we do with rainfall runoff. As a region with many urban centres and rural settlements vulnerable to the effects of stormwater runoff, we need a collective approach to stormwater management.

The desire to protect people, property, and the environment continues to highlight the need to manage the quantity and quality of stormwater from our developed

and developing areas. The Regional Stormwater Strategy has been prepared by a regional working group comprising members from regional, district and city councils, Fish and Game HB, Department of Conservation and Maori representatives. It is intended that the Strategy will enable Hawke's Bay to move forward with an integrated approach to regional stormwater management.

The Strategy identifies stormwater runoff as having a number of known and potential adverse effects on rivers, streams, aquifers, estuaries and the coast. The effects of stormwater runoff can be classified broadly as quality and/or quantity issues. The overall vision of the Strategy is to relieve pressure on receiving environments by reducing flooding,

reducing contamination, improving environments and building resilience in our communities. These are aspirational, yet realistic, goals that our Hawke's Bay community can strive to achieve.

The Strategy is a non-statutory document, meaning it is a document that is not legally required to be produced. As a Strategy, it will be used to inform and guide statutory planning (eg: plans prepared under the Resource Management Act), and provide context for the actions that a variety of agencies will undertake to achieve the Strategy's objectives and overall vision.



1

Scope

Working together to develop a common understanding.

Scope

of Regional Stormwater Strategy

The Regional Stormwater Strategy is a strategic document for the management of stormwater within the Hawke's Bay Region. The strategy provides a non-statutory framework from which to address a range of water quantity and quality, and environmental issues in a coordinated, integrated and prioritised manner.

Purpose

of Regional Stormwater Strategy

- Coordinate the operations of the Local and Regional Authorities to achieve an integrated approach to the management of stormwater quantity and quality.
- Communicate a regional approach to key stakeholders to facilitate improved management of stormwater quantity and quality throughout the Region.
- Inform statutory planning documents.



2

Impacts

Adverse impacts of stormwater

Impacts on:	Explanation
People	Public health and wellbeing Food source and cultural harvesting (watercress, koura and mahinga kai) Recreation Mauri Potential for re-use for drinking, industrial, commercial, irrigation and amenity enhancement
Habitat & Biodiversity	Reduced riparian vegetation (sedimentation, temperature) Loss of vegetation in catchment affects hydrology (sedimentation, quantity) Stream Connectivity (ecology, migration, increased impermeable surfaces) Altered salinity regimes in marine environments
Contamination of Stormwater	Discharge from onsite wastewater disposal systems Discharges from industrial, commercial and domestic activities

Impacts on:	Explanation
	Zoning of development Agriculture & horticultural runoff (fertiliser, pesticides and insecticides) Runoff from industrial and commercial sites Sedimentation Impervious surfaces (car parks, roads and other paved surfaces)
Flooding	Risk to human health and property Risk to human life and other life. Costs of clean up and repair to public and private sector
Erosion and land instability	High sediment release potential Increased stormwater flow Stream bank erosion Risk to established development
Stormwater Management	Must expand to address quantity and quality issues Address source controls (Low Impact Design)

3

Vision

In 2050:
Less Flooding
Reduced Contamination
Improved Environments
Resilient Communities



Vision for 2050

- Drought and rain events have increased in severity and frequency, the communities of Hawke's Bay are resilient against flooding and drought. Stormwater is recognised as a valuable resource.
- Communities in Hawke's Bay have access to numerous resilient and healthy surface water ecosystems. Riparian planting shades abundant in-stream life. Waterways and their margins are valued by the community for recreation and leisure.
- The community values local government as a partner and leader in sustainable, practical and cost effective stormwater management. Regional policy and regulation is highly integrated and responsive to social, cultural, economic and environmental needs.



4

Systems, People, Environment, Asset Management

Objectives

Systems:

Agree that stormwater will be managed taking into account the needs of people and communities, natural and physical resources, amenity values, social and cultural values and asset management.

People:

Ensure that the adverse effects of stormwater on social, cultural, environmental and economic wellbeing are avoided, remedied or mitigated.

Environment:

Ensure that the integrity, functioning, resilience and intrinsic value of freshwater and marine ecosystems is not compromised by the adverse effects of stormwater.

Asset Management:

Provide for the integrated and comprehensive management of stormwater through appropriately maintained assets.



5

Goal

Stormwater Management

Stormwater in the Hawke's Bay region is managed using comprehensive, catchment based, Stormwater Management Plans that optimise the protection of people, property, culture, and ecosystems while efficiently supporting economic activity.

6

Key principles

Social, Cultural, Environmental, & Economic wellbeing.



Social Wellbeing

- Recognise that the community has a right to safe enjoyment of contact recreational activities and harvesting of food in freshwater and marine environments.
- Recognise the intrinsic value of natural environments on social wellbeing.

Cultural Wellbeing

- Establish and maintain partnerships with iwi as kaitiaki of the region's land and water resources.
- Acknowledge the relationship Maori has with water and water bodies and the potential impact on mauri from stormwater discharges.

Environmental Wellbeing

- Consider the retention and restoration of open watercourses in preference to piping.
- Consider stormwater management as part of total land and water resource management.
- Recognise that stormwater discharges shall not compromise the potability of ground water.
- Minimise the adverse effects of stormwater on land resources and

property, such as flooding or erosion or land slippage.

- Recognise the benefits of Low Impact Design stormwater solutions.
- Recognise that some receiving environments are more sensitive to stormwater discharges than others.
- Recognise that ecosystems have natural function and intrinsic value.

Economic Wellbeing

- Develop integrated Stormwater Management Plans for stormwater management which includes enhancement of the built environment.
- Consider stormwater as a resource and seek constructive, practical opportunities for reuse.
- Recognise that ecosystem function contributes to economic wellbeing (e.g. water regulation, erosion control, nutrient cycling etc).
- Recognise and plan for stormwater issues in the land use planning process.
- Ensure solutions are practical, adaptive and provide value for the rate payers' money and if possible provide multi value solutions
- Plan for the impacts of Climate Change on stormwater management.
- Maximise inter-council co-operation.



7

Implementation



Methods	Actions	Key Outcomes							Organisation							Mechanisms										
		Less Flooding	Reduced Contamination	Improved Environment	Resilient Communities	Local Authority	Regional Council	Other	Regional Resource Management Plan	District Plan	Bylaws	Regional Stormwater Strategy	Community Education Strategies	Your Choice Stormwater Education	Treaty Settlements	Hapu Management Plan	Maori Committee	Hawke's Bay Waterways Design Guidelines	Asset Management Plans	Stormwater Management Plans	Catchment Modelling	Design Codes	State of the Environment	Research & Investigation		
Education	E1	Co-ordinate the development of targeted rural and urban education packages		✓	✓	✓	✓	✓	✓																	
	E2	Promote Low Impact Design stormwater solutions	✓	✓	✓	✓	✓	✓		✓			✓				✓		✓							
	E3	Highlight stormwater issues & promote better community understanding of issues & solutions.	✓	✓	✓	✓	✓	✓					✓						✓							
	E4	Encourage partnerships with communities in managing waterways.			✓	✓	✓	✓					✓						✓							
Partnerships	P1	Establish and maintain partnerships with tangata whenua as kaitiaki of the region's land and water resources.				✓	✓	✓	✓				✓	✓	✓				✓							
	P2	Ensure continued involvement off all stakeholders to achieve a multi-disciplinary, co-ordinated approach to address all aspects of stormwater management			✓	✓	✓	✓				✓	✓						✓							
	P3	Engage with industry & commercial parties to develop appropriate industry standards which include environmental management practices at source.	✓	✓			✓	✓	✓	✓			✓	✓												
	P4	Protect identified sites or areas of significance to tangata whenua, where those sites or areas are at risk from the adverse effects of stormwater			✓	✓	✓	✓	✓	✓	✓	✓				✓	✓		✓						✓	
Policy & Regulation	R1	Develop an integrated catchment approach to stormwater management that encourages sustainable rural landuse practices.	✓	✓	✓	✓	✓	✓	✓	✓	✓								✓	✓	✓	✓		✓	✓	
	R2	Consider Low Impact Design mechanisms first when assessing the best practicable option in stormwater management.	✓	✓	✓	✓	✓	✓		✓	✓	✓						✓		✓			✓			
	R3	Recognise that some receiving environments are more sensitive to the effects of stormwater than others.		✓	✓					✓																
	R4	Reduce the effects of point & non-point source contamination.		✓	✓					✓																
	R5	Avoid connections to and discharging into municipal systems unless criteria is met.	✓	✓	✓	✓	✓			✓	✓								✓	✓	✓					
	R6	Use statutory documents to require the implementation of the principles of the Hawke's Bay Regional Council Waterways Guidelines.	✓	✓	✓	✓	✓	✓		✓	✓															
	R7	Encourage the rehabilitation of existing urban catchment and avoid further degradation.			✓	✓	✓	✓	✓	✓		✓	✓	✓				✓		✓				✓	✓	
	R8	Develop an enforcement programme to discourage potential polluters		✓	✓		✓	✓		✓		✓														
Investigation	I1	Keep up to date with current knowledge and research and where necessary consider joint initiatives.	✓	✓	✓	✓	✓	✓		✓										✓			✓	✓		
	I2	Improve monitoring of stormwater quality to better characterise contaminant loads and build up more robust baseline data to inform policy and regulation.		✓	✓	✓	✓	✓		✓										✓			✓	✓		
	I3	Encourage the use of cultural monitoring tools and parameters for stormwater management			✓	✓	✓	✓	✓	✓			✓		✓	✓			✓	✓			✓	✓		

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