

## EXECUTIVE SUMMARY

### Purpose

An Assessment of Effects on the Environment (AEE) has been prepared on behalf of Wellington City Council (WCC) to accompany applications to Greater Wellington Regional Council (GWRC) for resource consents for discharges of runoff from Wellington stormwater catchments to the coastal marine area (CMA) (or to land adjacent to the CMA) from infrastructure owned, or under the control of, WCC.

### Wellington City Stormwater

Wellington City has numerous stormwater discharges to the coastal marine area between Horokiwi in Wellington Harbour and Owhiro Bay on Wellington's South Coast. The Wellington City stormwater network includes an estimated 650 kilometres of stormwater pipe ranging from 100mm to 3200mm in diameter. Many of these discharges are contaminated from time to time, to varying degrees, by wastewater (low level background pollution or wet weather overflows) and/or by urban runoff.

The stormwater discharges that are the subject of this application fall within 3 categories:

- Category 1: Stormwater discharges, at specified locations, where it is known there are constructed overflows from the wastewater network which result in the occasional discharge of wastewater to the stormwater system.
- Category 2: Stormwater discharges, at specified locations, which may from time to time not meet the conditions of the permitted activity rules in the Regional Coastal Plan or Discharges to Land Plan.
- Category 3: All other stormwater discharges located on the coastline between Horokiwi and Owhiro Bay under the control of WCC that may from time to time not meet the conditions of the permitted activity rules in the Regional Coastal Plan or Discharges to Land Plan.

Category 1 discharges are Discretionary and Restricted Coastal Activities under Rule 58 of the Regional Coastal Plan (RCP). All other discharges (in Categories 2 and 3) are Discretionary Activities under Rules 57 or 61 of the RCP.

### Consents Sought

WCC seeks the following resource consent for a term of 10 years:

- A discharge and coastal permit to authorise the discharges of stormwater collected from urban areas in infrastructure owned or under the control of Wellington City:
  - (a) To the coastal marine area (CMA) of Wellington Harbour and the South Coast.
  - (b) To land adjacent to the CMA of Wellington Harbour and the South Coast.

In the catchment area there are also three streams (Owhiro, Kaiwharawhara and Ngauranga) which are open channel water courses that receive multiple stormwater inputs. These are not considered to be discharges to the CMA under the RMA. However, these streams flow into the CMA, within the area covered by these consent applications, and are relevant as part of the receiving environment. Accordingly, these streams are included in WCC's stormwater monitoring programme and proposed conditions of consent, but consents are not sought for these discharges.

The resource consent will replace the 11 existing discharge consents and will authorise other existing discharges which are not currently consented and have not previously been regarded as requiring consents.

### Planning Context

Discharges to the CMA are governed by the provisions or requirements of:

- The Resource Management Act 1991 (RMA)
- The New Zealand Coastal Policy Statement (NZCPS)
- The Wellington Regional Policy Statements (RPS) (operative and proposed)
- The Regional Coastal Plan (RCP) for the Wellington Region and (because in some circumstances the point of discharge is to land adjacent to the coastal marine area) the Regional Discharges to Land Plan (DLP).
- The Marine Reserves Act 1971

These are detailed in section 4 of the AEE

### Effects of stormwater discharges to the CMA

The discharges of stormwater to Wellington Harbour and the South Coast have been assessed in terms of their effects on the environment over the proposed 10 year duration of the consent. There are some potential and actual adverse effects but these are minor and mostly occur within the immediate vicinity of the stormwater outfalls.

A 30m radius mixing zone is proposed for stormwater discharges to bathing beaches and the Taputeranga Marine Reserve, and a 50m radius mixing zone is proposed for all other stormwater discharges. This two tier approach recognises the more efficient physical mixing characteristics of the exposed waters of the South Coast compared with the relatively sheltered waters of the inner harbour. It also recognises the greater values associated with receiving waters in the marine reserve and at bathing beaches compared with, for instance, the operational port area.

The key findings of this assessment are:

- The stormwater discharges are unlikely to cause the *Contact Recreation* or *Shellfish Gathering* water quality criteria in the RCP to be exceeded, but have the potential, from time to time, to affect water quality at bathing beaches, and to temporarily increase the health risks for bathers and those engaged in other contact recreational activities at such times.
- The risks to public health are appropriately mitigated by WCC's ongoing efforts to detect and correct reticulation faults and by the GWRC/WCC bathing beach monitoring programme, which includes a management response to address health risks, and which may from time to time result in the erection of public health warning signs at bathing beaches.
- The discharges are substantially free of oil and grease and the suspended solids content is normally lower than in natural water courses during an equivalent rainfall event (for example, during a sustained rainfall event the Hutt River can have a major impact on the colour and clarity of Wellington Harbour whereas runoff from urban Wellington is unlikely to have more than a minor effect).
- Stormwater discharges have increased contaminant concentrations in marine sediments around stormwater outlets and to a lesser extent at more distant locations in Wellington Harbour.

- Stormwater discharges have also disturbed marine benthic biota communities within a radius of up to 35 metres from stormwater outlets, but there is no evidence of adverse effects on biological communities beyond the immediate vicinity of outfalls.
- Further monitoring is required to determine if contaminant concentrations in marine sediments are likely to increase, or whether adverse effects on biological communities are likely to occur in the future, beyond a reasonable mixing zone, from these continued discharges of stormwater. For this reason WCC has sought a consent of 10-year duration, and has proposed a significantly enhanced stormwater quality, marine sediment and benthic ecology monitoring programme to be undertaken over that period.
- The cultural concerns of tangata whenua relate to the effects of the discharge on the mauri of the waters of Wellington Harbour and Cook Strait and on the paua, finfish and rock lobster fisheries in the area.

### **Suggested Conditions**

Resource consent conditions are proposed by WCC to ensure that the effects associated with the discharge of stormwater to the CMA (and land adjacent to the CMA) are appropriately avoided, remedied or mitigated for the proposed 10 year consent duration that is sought. The proposed conditions include a comprehensive programme for monitoring indicator bacteria, nutrients, metals and polycyclic aromatic hydrocarbons (PAHs) at selected stormwater culverts. The suggested programme also includes monitoring of contaminants in marine sediments near stormwater outlets to the CMA, and monitoring of marine benthos at these locations.

### **Overall Conclusion**

The AEE describes WCC's present stormwater collection and disposal system for the urban area of Wellington City, and supports applications for consents for continuing discharges. The system is an important part of the infrastructure of Wellington City and contributes significantly to the health, safety and wellbeing of the city's people and communities and underpins its economic and community development.

The effects of the stormwater discharges have been outlined and evaluated. The available evidence, from monitoring and special studies, indicates that subject to the mitigation measures proposed and the suggested conditions of consent, the stormwater discharges will not have a significant adverse effect on the water quality or the ecology of receiving waters over the proposed 10 year term of consent.