

## 12. Summary of Fourth Schedule Requirements

Part VI of the RMA sets out matters in relation to resource consent requirements. Section 88 of the RMA provides the procedure to be followed in making a resource consent application. This section requires an applicant to prepare an assessment of environmental effects in such detail as corresponds with the scale and significance of the likely effects, and in accordance with the matters provided in the Fourth Schedule to the Act. The Fourth Schedule provides as follows:

- 1. Matters that should be included in an assessment of effects on the environment** — Subject to the provisions of any policy statement or plan, an assessment of effects on the environment for the purposes of section 88(6)(b) should include—
  - (a) A description of the proposal:
  - (b) Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:
  - (c) *Repealed, as from 7 July 1993, by s 225 Resource Management Amendment Act 1993 (1993 No 65).*
  - (d) An assessment of the actual or potential effect on the environment of the proposed activity:
  - (e) Where the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment which are likely to arise from such use:
  - (f) Where the activity includes the discharge of any contaminant, a description of —
    - (i) The nature of the discharge and the sensitivity of the proposed receiving environment to adverse effects; and
    - (ii) Any possible alternative methods of discharge, including discharge into any other receiving environment:
  - (g) A description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:
  - (h) An identification of those persons interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted:
  - (i) Where the scale or significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom.
  
- 2. Matters that should be considered when preparing an assessment of effects on the environment** — Subject to the provisions of any policy statement or plan, any person preparing an assessment of the effects on the environment should consider the following matters:
  - (a) Any effect on those in the neighbourhood and, where relevant, the wider community including any socio-economic and cultural effects:
  - (b) Any physical effect on the locality, including any landscape and visual effects:
  - (c) Any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:
  - (d) Any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural, or other special value for present or future generations:
  - (e) Any discharge of contaminants into the environment, including any unreasonable emission of noise and options for the treatment and disposal of contaminants:
  - (f) Any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.

Auckland City and Metrowater have prepared a comprehensive assessment of the effects of discharges from the drainage system on the Auckland Isthmus environment. The assessment is in accordance with the requirements of the Fourth Schedule and provides detail commensurate with the scale and significance of the potential effects of the discharges.

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A summary of how the Fourth Schedule requirements have been addressed in this document is set out below.

- Cl 1(a) Description of the proposal** – Chapter 3 of this assessment provides a detailed description of the activities that are the subject of this resource consent application. In summary, the collection, transportation and discharge of stormwater and combined stormwater and wastewater within Auckland City occurs within five integrated catchment areas: Waitemata – Pt Chevalier, which includes the CBD to Three Kings; Hobson Bay – Waitemata which includes Parnell and Remuera to Orakei; Western Bays including Avondale to Blockhouse Bay and Lynfield; Central Manukau, which includes Onehunga and the Manukau Harbour catchments; and Tamaki – Eastern Bays which includes Mission Bay, Glen Innes and Mt Wellington to Otahuhu. All stormwater and combined stormwater and wastewater discharged within the five catchment areas eventually discharges into the coastal marine area. Resource consents are sought for all discharges associated with the drainage system together with consents for associated structures and diversions.
- Cl 1(b) Possible alternative locations or methods** – The diversion and discharge of stormwater and combined stormwater and wastewater are an inevitable consequence of urban development in Auckland City. Given the existing infrastructure and the need to provide drainage systems to ensure the economic and social wellbeing of the community, there are few practicable alternative methods and/or locations. Those that are available have been considered in Chapter 9 of this assessment.
- Cl 1(d) Actual or potential effects on the environment** – Comprehensive information about the actual and potential effects of the continued operation of the network is provided in Chapters 4 to 8 of this document. The possible effects range from flooding of private and public property if the stormwater system were not in place to the effects on aquatic biota as a result of contaminated stormwater discharges. In some instances the actual or potential effects on the environment are not yet well known. The integrated catchment studies and the adaptive management system outlined in this assessment will enhance the current level of knowledge of actual and potential effects and provide a framework in which to manage those effects as they are identified.
- Cl 1(e) Use of hazardous substances and installations** – Hazardous substances are not used in the operation of the drainage system or pipe network. However, methane and hydrogen sulphide gases may accumulate in enclosed spaces within the network. While these gases do not pose any risk outside of the network, appropriate work practices are followed when maintenance of the network is being carried out. Both Auckland City and Metrowater have in place comprehensive health and safety policies which are revised and updated on a regular basis. Adherence to these policies is mandatory for Auckland City and Metrowater employees.

The primary purpose of a stormwater network is to manage stormwater in a way that avoids or mitigates flooding hazards to life and property. However, as with any stormwater network, there are possible flooding hazards caused by the stormwater infrastructure during periods of heavy rainfall. These effects are considered minimal when compared to the flooding effects that would occur in the absence of the network. These effects are discussed in more detail in Chapter 8 of this document.

- Cl 1(f) Discharge of contaminants** – Effects associated with the discharge of contaminants are fully considered in this AEE. Specifically, the effects of contaminant discharges on the coastal marine area and inland waterbodies are described in detail in Chapters 7 and 8 of this assessment.

Alternative methods of discharge are limited due to the fact that the network is already in place, and its location and extent are dictated by the location and extent of urban development. Alternative methods of operation to mitigate the effects of contaminants on the environment are discussed in Chapters 4 and 9.

- Cl 1(g) Mitigation measures** –Chapter 9 provides detail about the integrated catchment studies that will be completed over the next five years. The results of these studies will ensure a comprehensive understanding of the movement of water and its components through the system with the aim of predicting the effects of rainfall events on coastal and estuarine water quality and biota. The integrated catchment studies are aimed at assisting Auckland *City* and Metrowater to manage the stormwater and wastewater network into the future in the manner which best provides for growth in the urban area whilst minimising environmental effects. The studies will identify areas which require remedial and development works and where stormwater treatment opportunities exist. The studies will form a comprehensive framework against which the performance of the system can be monitored and reviewed.

- Cl 1(h) Interested or affected parties** – The process of identifying key stakeholders, including tangata whenua, and consulting with them and the wider community is outlined in Chapter 11. This assessment provides information on the results of consultation initiatives to date and confirms the commitment of Auckland *City* and Metrowater to an on-going programme of consultation and discussion with the community. In addition, Auckland *City* and Metrowater have identified the benefits of an integrated approach to stormwater management throughout the Auckland region and have initiated a series of discussions with other local authorities/entities responsible for stormwater and/or wastewater management.

- Cl 1(i) Proposed monitoring** – Ongoing investigation and monitoring form a pivotal part of managing the effects of the drainage system discharges. Chapter 9 provides a detailed discussion of the integrated catchment studies and the associated monitoring programmes. These programmes include development of detailed studies of the movement of water and its components (including

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sediment, plant nutrients, chemical contaminants and bacterial pathogens or indicator organisms) with the aim of predicting the current and future effects of any rainfall event on stream and estuary water quality and biota. Monitoring will also include comprehensive audit and review processes, with reporting on environmental management responses and outcomes. A system of adaptive management is proposed with the aim of securing environmental improvements through a system of ongoing research and review.

- Cl 2(a) Effects on the neighbourhood and wider community** – The stormwater and combined stormwater/wastewater network has significant implications for Auckland City and its communities. These matters are addressed in detail in Chapters 6 and 8. The drainage system is an essential component of the development and use of urban areas in Auckland City and it is recognised that its operation has significant effects on the community ranging from the use and enjoyment of beaches to the avoidance of flooding in private and public areas.
- Cl 2(b) Physical effects** – The physical effects associated with the operation of the stormwater network are described in Chapters 3, 6, 7 and 8 of this AEE. Both positive effects, such as the avoidance of flooding, and potential adverse effects, such as erosion and downstream flooding, have been investigated and all known information included in this assessment.
- Cl 2(c) Effect on ecosystems** – Descriptions of ecosystems and their components, together with the effects of the stormwater and combined stormwater/wastewater network on those ecosystems, are contained in Chapters 7 and 8.
- Cl 2(d) Effect on resources of special value** – Resources of special value, including resources of cultural, scientific and historical value, have been identified in the plans of the ARC and Auckland City. The resources potentially affected by the drainage system, and the nature of the possible effects, are described in Chapters 6, 7 and 8.
- Cl 2(e) Discharge of contaminants** – The nature and extent of contaminants likely to be discharged, and the effects of these, are assessed in detail in Chapters 5 and 8.
- Cl 2(f) Risks to neighbourhood and wider community** – The primary risks to the community relate to the possibility of sporadic localised flooding and contamination. Contamination risks may include accumulation of metals in shellfish and bacterial contamination of areas used by the public. These matters are addressed in Chapter 8. A description of the location, likelihood and extent of flooding is contained in Chapters 7 and 8.