

D1. High-use Aquifer Management Areas Overlay

D1.1. Background

Aquifers are important as direct sources of water supply for domestic, industrial and rural use. They are the major contributors to the base flow of many streams, particularly in the southern parts of Auckland. Aquifers also contribute to the overall quality and diversity of surface waterbodies.

Some aquifers are highly allocated, providing water to users as well as being major sources of spring and stream flow. They are currently adversely affected by over pumping or are likely to become highly allocated over the life of the Plan, particularly in areas of high potential growth. These aquifers are identified as High-use Aquifer Management Areas.

Aquifers in the High-use Aquifer Management Areas Overlay require careful management of water availability to meet user needs and at the same time maintain base flows for surface streams. For this reason most proposals to take or use groundwater from aquifers will be assessed through the resource consent process.

D1.2. Objectives [rp]

- (1) Aquifers identified in the High-use Aquifer Management Areas Overlay are managed so they can continue to meet existing and future water take demands and provide base flow for surface streams.
- (2) Where applicable, the Vision and Strategy for the Waikato River in Schedule 2 of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 is recognised in the management of aquifers in the lower catchment of Auckland.

D1.3. Policies [rp]

- (1) Manage proposals to take and use water from High-use Aquifer Management Areas in Table D1.3.1 to prevent groundwater allocation exceeding availability, also having regard to Table 1 Aquifer water availabilities and level in Appendix 3 Aquifer water availabilities and levels.
- (2) Require resource consents for all proposals to take and use water from the High-use Aquifer Management Areas in Table D1.3.1 (other than takes permitted by section 14(3)(b) of the Resource Management Act 1991) to assess the impacts of the proposal on water availability levels and to take account of new information on water availability as it becomes available.

Table D1.3.1 High-use aquifer management areas

Aquifer name	Description
Kumeū Waitematā	Refers to all aquifers below the ground surface shown on the overlay
Ōmaha Waitematā	Includes all rocks of the Waitematā Group, but does not include alluvium (Tauranga Group) or the underlying greywacke rocks (Waipapa Group)

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Tomarata Waitematā	Refers to all aquifers below the ground surface
Mahurangi Waitematā	Includes all rocks of the Waitematā Group, but not the overlying Tauranga Group, Mahurangi Limestone or Mangakahia Complex
Ōnehunga Volcanic	Includes all rocks of the Auckland Volcanic Field within the area shown on the overlay, all aquifers below the ground and above the Waitematā Group rocks
Mt Wellington Volcanic	Includes all rocks of the Auckland Volcanic Field within the area shown on the overlay, all aquifers below the ground and above the Waitematā Group rocks
Waiheke	Refers to all aquifers
Manukau Waitematā	Includes all rocks of the Waitematā Group, but not the overlying Tauranga Group or Kaawa Formation
Manukau Southeast Kaawa	Refers to Kaawa Formation only. It may be overlain by Auckland volcanic field or Tauranga Group which are not included. The underlying Waitematā Group is not included
Clevedon East Waitematā	Includes all rocks of the Waitematā Group, but not the underlying greywacke (Waipapa Group) or the overlying Tauranga Group or Kaawa Formation
Clevedon West Waitematā	Includes all rocks of the Waitematā Group, but not the underlying greywacke (Waipapa Group) or the overlying Tauranga Group or Kaawa Formation
Franklin Volcanic	Comprises the following aquifers: (i) Bombay Volcanic (ii) Glenbrook Volcanic (iii) Pukekohe Central Volcanic (iv) Pukekohe North Volcanic (v) Pukekohe South Volcanic (vi) Pukekohe West Volcanic Includes all aquifers from the ground surface to the base of the South Auckland volcanic field, but not the underlying Kaawa Formation or Waitematā Group
Franklin Kaawa	Comprises the following sub-zones (i) Bombay - Drury Kaawa (ii) Pukekohe Kaawa (iii) Glenbrook Kaawa (iv) Waiuku Kaawa Refers to Kaawa Formation only. It may be overlain by South Auckland volcanic field or Tauranga Group which are not included. The underlying Waitematā Group is not included
Drury Sand	Includes Tauranga Group and South Auckland volcanic field but does not include underlying Waitematā Group

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Waiwera Geothermal	Refers to all geothermal aquifers below the ground surface
Parakai Geothermal	Refers to all geothermal aquifers below the ground surface

Note 1

Refer to Geology of the Auckland Area, 1:250,000 Geological Map 3, Institute of Geological and Nuclear Sciences, Edbrooke (2001), for further guidance.

Note 2

The spatial extent of these aquifers on the ground surface under which the aquifers are located is identified on the overlay in the GIS viewer. However, the three-dimensional nature of aquifers is difficult to portray on a map. There may be more than one aquifer under the areas identified on the overlay.

Note 3

Only the aquifers listed in Table D1.3.1 are High-use Aquifer Management Areas. Aquifers not listed in Table D1.3.1, but located under the areas identified on the aquifers overlay are not High-use Aquifer Management Areas.