

The Proposed Auckland Unitary Plan (notified 30 September 2013)

4.17 Taking, using, damming and diversion of water and drilling

Introduction

The following provisions apply to the taking, using, damming and diversion of surface water and groundwater in accordance with s. 14(1) and s. 14(3) of the RMA. They also provide for a limited range of discharges of water under s. 15 of the RMA when associated with the diversion of surface water or groundwater. Drilling in accordance with s. 9(2) of the RMA is also addressed because it is associated with the taking of groundwater.

This section addresses the diversion of surface water and groundwater, and should be read in conjunction with the Auckland-wide - [Flooding](#) rules and the Auckland-wide - [Lakes, rivers, streams and wetland management](#) rules, with respect to the placement of fill and structures within floodplains and water bodies.

1. Activity table

[rp]

Activity	All zones	High-use stream management area	Wetland management areas
Water take and use of surface water (including from lawfully established dams)			
Up to 20m ³ /day of water from a lake	P	P	D
Up to 5m ³ /day of freshwater from a river or spring	P	P	D
Water from a lawfully established off-stream dam	P	P	D
Up to 5m ³ /day of water from a lawfully established on-stream dam	P	P	D
Water take and use of freshwater from puna wai (natural springs) within Māori Land	P	D	D
More than 20m ³ /day and no more than 100m ³ /day of water from a lake	RD	D	NC
Water take and use of surface water, including dams not otherwise listed or not meeting the permitted or restricted discretionary controls	D	D	D
Diverting surface water and associated discharge of water			
Drainage of production land	P	P	NC
Diversion in an artificial watercourse	P	P	NC
The discharge of water into water associated with drainage of production land or diversion of an artificial watercourse	P	P	NC
Diverting surface water not otherwise listed or not meeting the permitted activity controls	D	D	NC
Water take and use of groundwater			
Up to 5m ³ /day when averaged over any consecutive 20-day period	P	P	P
Up to 20m ³ /day, when averaged over any consecutive five-day period, and no more than 5000m ³ /year	P	P	P

The Proposed Auckland Unitary Plan (notified 30 September 2013)

Pump testing a bore for seven days at an average rate of no more than 1000m ³ /day	P	P	P
Dewatering or groundwater level control associated with a groundwater diversion permitted under the Unitary Plan	P	P	RD
Infiltration and leakage into stormwater and sewer pipes	P	P	P
Land drainage	P	P	D
Dewatering or groundwater level control associated with a groundwater diversion authorised as a restricted discretionary activity under the Unitary Plan	RD	RD	RD
Water take or use of geothermal water for communal benefit of Mana Whenua in accordance with s. 14(3)(c) of the RMA.	P	P	P
Water take and use of geothermal water for bathing use	D	D	D
Water take and use of geothermal water for non-bathing use	NC	NC	NC
Water take and use of groundwater not otherwise listed or not meeting the permitted or restricted discretionary controls	D	D	D
Diversion of groundwater			
The diversion of groundwater caused by any excavation, trench, tunnel up to 1m diameter, or thrust bore	P	P	RD
The diversion of groundwater caused by any excavation, trench, tunnel up to 1m diameter, or thrust bore that does not meet the permitted activity controls or is not otherwise provided for	RD	RD	RD
Damming water			
Off-stream dams	P	P	P
On-stream dams existing at 23 October 2001	P	P	P
Temporary dams	P	P	P
Weirs	P	P	P
Any dams otherwise listed or not meeting the permitted activity controls	D	D	D
Drilling holes and bores			
Holes for: - geotechnical investigation - mineral exploration - geological investigation - contaminated site investigation - down-hole seismometers	P	P	RD
Holes or bores for: - stormwater disposal - down-hole heat exchangers	P	P	RD

The Proposed Auckland Unitary Plan (notified 30 September 2013)

Bores for groundwater level or quality monitoring	P	P	RD
Restoration, alteration or replacement of lawfully established bores	P	P	RD
Decommissioning (abandonment) holes or bores	P	P	RD
New bores for purposes not otherwise specified	C	C	RD
Holes or bores not meeting the permitted or controlled activity controls	RD	RD	RD
Transfers of water permits			
Transfers of surface water take permits	P	P	P
Transfers not meeting the permitted activity controls	D	D	D

2. Notification

1. Restricted discretionary activities for taking, using, damming and diversion of water and drilling are subject to the normal tests for notification under the relevant sections of the RMA.

3. Controls

3.1 Permitted activities

3.1.1 Water take and use of surface water (including from lawfully established dams)

1. The water take must not be from a [Wetland Management Area](#).
2. The water intake structure must be designed, constructed, operated and maintained so that:
 - a. the maximum water velocity into the entry point of the intake structure must not be greater than 0.3m/second
 - b. the intake screen mesh spacing must not be greater in one dimension than 1.5mm
 - c. the intake screen must be located no less than 0.5m in-stream from the water's edge, or for rivers that are less than 1m wide, as far as practicable from the water's edge
3. Notice on the prescribed form must be received by the council at least 15 working days before undertaking this permitted activity.
4. The water take and use of freshwater from puna wai (natural springs) within Māori Land must be in accordance with tikanga Māori and for the communal benefit of Mana Whenua.

3.1.2 Diverting surface water and the associated discharge of water

1. Diversion and associated discharge must not be located within an Urban Lake, Natural Lake, Natural Stream or Natural Wetland Management Area.
2. Diversion and associated discharge must not cause or worsen the flooding of any property in a range of flood events.
3. Diversion and associated discharge must not cause scouring, erosion or other instability of any land or water body.
4. The activity must not lower water levels in any wetland.
5. The diversion must not prevent the passage of fish in water bodies containing fish.
6. The diversion must not adversely affect any lawfully established water take or use existing at the time

The Proposed Auckland Unitary Plan (notified 30 September 2013)

the diversion begins.

7. For diversions of surface water within or from an artificial watercourse or drain, the diverted water must not reduce the water quality of any downstream water body, including effects associated with the discharge of sediment.

3.1.3 Water take and use of groundwater

1. Up to 5m³/day when averaged over any consecutive 20-day period:
 - a. the water take must not be geothermal water, unless it is for a purpose specified in s. 14(3)(c) of the RMA.
 - b. the water take must not be from the Kumeû Waitematâ or Omaha Waitematâ High-Use Aquifer Management Areas
 - c. the water take must not be for the purpose of dewatering or groundwater level control
 - d. notice on the prescribed form must be received by the council 15 working days before undertaking this permitted activity.
2. Up to 20m³/day, when averaged over any consecutive five-day period, and no more than 5000m³/year:
 - a. the water take must not be geothermal water unless it is for a purpose specified in s. 14(3)(c) of the RMA
 - b. the water take must not be from a High-Use Aquifer Management Area
 - c. the water take must not be for the purpose of dewatering or groundwater level control
 - d. the water take must be located at least 100m from any other existing lawfully established groundwater take from the same aquifer
 - e. notice on the prescribed form must be received by the council 15 working days before undertaking this permitted activity.
3. For the purpose of a pumping test from a bore for up to seven days at an average rate of no more than 1000m³/day:
 - a. the water take must not be geothermal water.
4. Dewatering or groundwater level control associated with a groundwater diversion permitted under clause 3.1.4 below:
 - a. the water take must not be geothermal water
 - b. the water take must not be for a period of more than 30 days
 - c. the water take must only occur during construction of the excavation, trench, tunnel or thrust bore.
5. Water take or use of geothermal water for communal benefit of Mana Whenua for purposes specified in s. 14(3)(c) of the RMA
 - a. the water take or use must not be for commercial purposes.
 - b. the water take or use does must not have an adverse effect on the environment.
6. Infiltration and leakage into stormwater and wastewater pipes, manholes, catchpits and lined channels:
 - a. the water take must not be for the purpose of dewatering or groundwater level control.
7. Land drainage:
 - a. the water take, and any associated diversion, must not be in a Natural Stream or Wetland Management Area
 - b. the drainage measures must be situated less than 2m below natural ground level.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

3.1.4 Diversion of groundwater caused by any excavation, trench, tunnel up to 1m in diameter, or thrust bore

1. The diversion must not be for the purpose of taking groundwater.
2. Any excavation that extends below natural groundwater level, including any staging of the same proposal, must not exceed:
 - a. 1ha in total area for development, operation, maintenance or upgrading of a network utility.
 - b. 0.5ha in total area and 4m depth below the natural ground level.
3. The natural groundwater level must not be reduced by more than 2m.
4. Any structure that physically impedes the flow of groundwater must not:
 - a. exceed 20m in length, including any staging of the same proposal; or
 - b. extend more than 2m below the natural groundwater level.
5. The distance to any existing building or structure from the edge of any:
 - a. trench or open excavation that extends below natural groundwater level must be 4m or greater
 - b. tunnel with a diameter of 0.2-1.0m that that extends below natural groundwater level must be 2m or greater

Note:

A tunnel with a diameter of up to 0.2m that that extends below natural groundwater level has no building separation requirement

6. The distance from the edge of any excavation, including any staging of the same proposal, must not be less than 50m from any:
 - a. Wetland Management Area
 - b. scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua
 - c. surface water body
 - d. lawful groundwater take.
7. For activities other than the development, operation, maintenance or upgrading of a network utility, the length of any excavation, trench, tunnel, or thrust bore, including any staging of the same proposal, must be no greater than 50m.
8. For the development, operation, maintenance or upgrading of a network utility, including any staging of the same proposal, any backfilled trench must be designed and constructed with impenetrable seepage collars / barriers installed at intervals of no greater than 50m along the alignment.

3.1.5 Damming water

All dams

1. The dam embankment, outlets, spillways and associated structures must be designed, constructed, operated and maintained to ensure they are structurally sound, pose no undue risk to life, property or the natural environment, and are able to perform satisfactorily under all foreseeable circumstances.
2. The damming of water must not result in the loss, degradation or permanent flooding of any wetland in a range of flood events except for wetland enhancement, maintenance or restoration.
3. The dam must not result in a significant adverse effects on flows or ecology within permanent or intermittent rivers or streams.
4. The dam structure must be no greater than 4m high when measured vertically from the downstream toe

The Proposed Auckland Unitary Plan (notified 30 September 2013)

of the dam embankment to the highest point of the dam crest.

5. The dammed water must not adversely raise sub-surface or surface water levels or adversely impede drainage on adjacent properties.
6. The dam must be designed, constructed, operated and maintained with a flood spillway to pass a 100-year ARI flood event without overtopping the dam crest (see note below).
7. All spillways and bypass arrangements must be constructed, terminated and maintained to minimise erosion, and the spillway(s) entry must remain free of debris at all times.
8. Trees or vegetation which could weaken the dam stability or prevent inspection of the dam embankment must not be allowed to grow on or near the embankment.
9. Stock must not be allowed to damage the crest and downstream face of the dam.
10. The dam structure and spillway must be inspected at least once every 12 months and following any operation of the flood spillway. Any damage recorded at times of inspecting, or noticed at any other time, must be remedied as soon as practicable.

Off-stream dams

11. If, during the construction of the dam, archaeological evidence is uncovered, such as a shell midden, hangi or ovens, pit depressions, defensive ditches or human bone, work must cease immediately and the council contacted so appropriate action can be undertaken.
12. Either the surface area of the impounded water must not exceed 5000m² or the storage volume of the impounded water must not exceed 20,000m³.
13. The contributing catchment area of dams constructed on or after 23 October 2001 must not exceed 20ha.
14. The contributing catchment area of dams constructed prior to 23 October 2001 must not exceed 40ha.
15. For dams constructed on or after 23 October 2001, notice on the prescribed form must be received by the council at least 15 working days before undertaking this permitted activity.
16. Dams constructed on or after the date of notification of the Unitary Plan must not be located within the 5 per cent AEP flood plain.

Notes

Reference should be made to the Dam Safety Guidelines – Auckland Council Technical Publication 109 for further guidance on spillway sizing.

S. 17 of Building Act 2004 requires dams to comply with the building code in addition to the requirements set out in these rules.

On-stream dams existing at 23 October 2001

17. If the dam is to contain sediment runoff from cultivated land the dam embankment, outlets and spillways must be designed, constructed, operated and maintained to avoid the significant off-site movement of soil.
18. The contributing catchment area must not exceed 40ha.
19. The surface area of the impounded water must not exceed 5000m².
20. Fish passage must be provided for.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

Temporary dams

21. The temporary dam must be for diverting river floor around works in the bed of the river or stream.
22. Provision must be made for river flows up to and including the 20-year ARI event to bypass the temporary dam with the bypass flow being contained within the bed of the river.
23. The temporary dam must be constructed in accordance with best practice methods.
24. The temporary dam must be removed as soon as is practicable and no later than two weeks following completion of the works.

Weirs

25. At all times when there is natural flow upstream of the weir, equivalent flow must be maintained downstream of the weir
26. Fish passage must be provided for in water bodies that contain fish.

Note

Activities in the bed of a river or stream must also comply with relevant rules or consent granted under Auckland-wide Lakes, rivers, streams and wetland management rules and Auckland-wide earthworks rules.

3.1.6 Drilling holes and bores

General

1. The hole or bore must not be in a Wetland Management Area.
2. The hole or bore must not be for the taking groundwater except for the removal of a sample(s) for groundwater quality analysis.
3. The drilling of the hole or bore must not destroy, damage or modify:
 - a. any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua.

Holes for geotechnical, mineral exploration, geological or contaminated site investigation or down-hole seismometers and holes or bores for stormwater disposal or down hole heat exchangers

4. Other than for holes or bores for down-hole seismometers, stormwater disposal and down-hole heat exchangers, the hole or bore must be decommissioned within three months of the start of drilling.
5. Before being decommissioned, the hole or bore must be secured so that contaminants cannot enter the ground through the hole or bore.
6. Where more than one aquifer is penetrated, the hole or bore must be decommissioned immediately on completion of the drilling and the hole or bore secured so there is no hydraulic connection between the aquifers.
7. The drilling, construction and decommissioning of the hole or bore must comply with s. 1 and 2 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001), except that bores for stormwater disposal need not be constructed and maintained to prevent the authorised disposal of surface water entering the bore.

Bores for groundwater level or quality monitoring

8. The drilling and construction of the bore must comply with s. 1, 2, 3 and 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001).
9. Where more than one aquifer is penetrated, construction of the bore must not enable a hydraulic

The Proposed Auckland Unitary Plan (notified 30 September 2013)

connection between the aquifers.

10. The council must be notified on the prescribed council form prior to the bore being drilled and must be provided with details of the location and the purpose of the bore.

Restoration, alteration or replacement of lawfully established bores

11. The restored, altered or replacement bore must penetrate the same aquifer as the existing bore.
12. The replacement bore must be installed within 10m of the existing bore.
13. The drilling, construction and maintenance of the bore must comply with s. 1, 2, 3 and 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001).
14. The council must be notified on the prescribed council form prior to the bore being drilled and must be provided with details of the location and the purpose of the bore.
15. The records required under s. 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001) must be kept and forwarded to the council within one month of the bore being drilled.

Decommissioning (abandonment) holes or bores

16. The decommissioning of the hole or bore must comply with s. 2 and 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001).
17. The council must be notified on the prescribed council form prior to a bore being decommissioned and must be provided with details of the location of the bore.
18. The records required under s. 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001) must be kept and forwarded to the council no later than one month after the bore is decommissioned.

3.1.7 Transfers of water permits

1. The transfer must be within the same catchment and to any point downstream, excluding downstream tributaries of the site in respect of which the original permit was granted.
2. Written notice signed by the transferor and transferee must be received by the council five working days prior to the transfer, specifying:
 - a. full names and addresses of transferor and transferee
 - b. if the whole permit is not being transferred, the portion of the water permit being transferred
 - c. proposed daily volume (m³/day) and rate (l/second) of water take at both sites
 - d. the location of the existing and new water take and use sites (shown on a map or identified by NZTM map reference)
 - e. the date of transfer
 - f. description of purpose for which water is to be used
 - g. whether the transfer is permanent or for a limited period and, if for a limited period, the date on which the transfer ceases.
3. The permit must retain the same conditions, excluding site and rate and volume for a part transfer.
4. The water taken under the transferred permit(s) must not exceed the rate and volume allocated by the original permit.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

3.2 Controlled activities

3.2.1 Drilling holes and bores

1. New bores not otherwise specified:
 - a. the bore must not be in a Wetlands Management Area.
 - b. the drilling of the hole or bore must not destroy, damage or modify:
 - i. any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua
 - c. the bore must be constructed to avoid contaminants entering the aquifer penetrated by the bore.
 - d. the bore must be constructed to avoid a hydraulic connection between penetrated aquifers with different pressures, water quality or temperature.
 - e. the bore must be operated and maintained to avoid the leakage of groundwater to waste.
 - f. the drilling and construction of the bore must comply with s. 1, 2, 3 and 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001).
 - g. the records required under s. 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001) must be kept and forwarded to the council no later than one month after the bore is drilled.

3.3 Restricted discretionary activities

3.3.1 Water take and use of surface water (including from lawfully established dams)

1. The water take must not be from a Wetland Management Area or a High-Use Stream Management Area (the Hingaia, Mauku, Ngakaroa, Wairoa, Waitangi, Whangamaire and Whangapouri catchments) .
2. The water intake structure must be designed and constructed so that:
 - a. the maximum water velocity into the entry point of the intake structure is no greater than 0.3m/second
 - b. the intake screen mesh spacing are no greater in one dimension than 1.5mm
 - c. the intake screen is located no less than 0.5m in from the water's edge.
3. A water meter must be installed and maintained on the outlet of the pump so that:
 - a. the meter must measure the total daily quantity of water being taken
 - b. a quarterly return of water meter readings measured at daily intervals must be provided to the council no later than 10 working days after 28 February, 30 May, 30 August and 30 November each year
 - c. records may be also viewed at any time during any working day by a council enforcement officer
 - i. the water meter must be capable of measuring to an accuracy of at least plus or minus 5 per cent and it is to read the water taken to at least 1m³.
 - ii. the meter must be installed to the manufacturer's specifications and maintained to the specified requirements and in a working condition at all times.

3.3.2 Water take and use of groundwater

1. The water take must not be geothermal water.

4. Assessment - Controlled activities

4.1 Matters of control

The council will reserve its control to the following matters listed below for the controlled activities listed in the

The Proposed Auckland Unitary Plan (notified 30 September 2013)

activity table.

1. New bores for purposes not otherwise specified
 - a. the location, depth and design of the bore and the design of the head works
 - b. effects on areas any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua
 - c. the provision for bore identification
 - d. maintenance of the bore
 - e. monitoring and reporting requirements
 - f. the duration of the consent and the timing and nature of reviews of consent conditions.

4.2 Assessment criteria

The council will consider the relevant assessment criteria below for the controlled activities listed above.

1. New bores for purposes not otherwise specified
 - a. the options for the location, depth and design of the bore and the design of the head works to avoid adverse effects on the groundwater resource and other groundwater users.
 - b. the options to locate and design the bore and the head works to avoid adverse effects on any any scheduled historic heritage places or scheduled sites and places of significance to Mana Whenua.
 - c. the most effective method to identify the bore.
 - d. an effective programme of maintenance for the bore.
 - e. demonstrates consultation and engagement with Mana Whenua (Note: refer General Provisions Treaty of Waitangi, General Rules and Special Information Requirements for guidance on this matter).

The Proposed Auckland Unitary Plan (notified 30 September 2013)

5. Assessment - Restricted discretionary activities

5.1 Matters of discretion

The council will restrict its discretion to the matters below for the activities listed as restricted discretionary in the activity table.

1. Water take and use of surface water (including from lawfully established dams)
 - a. The maximum rate and volume of the take.
 - b. The location of the water take.
 - c. Effects on other lawfully established takes and use of the surface water body.
 - d. The imposition of restrictions to apply at times of water shortage.
 - e. Metering (daily), monitoring and reporting requirements.
 - f. The duration of the consent and the timing and nature of reviews of consent conditions having regard to Auckland-wide Water - Water quantity, allocation and use, [Policy 12](#).
 - g. Any effects on Mana Whenua values.

8. Water take and use of groundwater
 - a. Refer to the matters listed in clause 1(a)-(g) above.

9. Diversion of groundwater
 - a. How the proposal will avoid, remedy or mitigate adverse effects on:
 - b. the base flow of rivers and springs
 - c. levels and flows in wetlands
 - d. on lake levels
 - e. on existing lawful groundwater takes and diversions
 - f. on groundwater pressures, levels or flow paths and saline intrusion
 - g. from ground settlement that may cause distress, including reducing the ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to existing buildings, structures and services including roads, pavements, power, gas, electricity, water mains, sewers and fibre optic cables
 - h. arising from surface flooding including any increase in frequency or magnitude of flood events
 - i. from cumulative effects that may arise from the scale, location and/or number of groundwater diversions in the same general area
 - j. from the discharge of groundwater containing sediment or other contaminants
 - k. on any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua
 - l. on terrestrial and freshwater ecosystems and habitats
 - m. Monitoring and reporting requirements incorporating, but not limited to:
 - i. the measurement and recording of water levels and pressures
 - ii. the measurement and recording of the settlement of the ground, buildings, structures and services

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- iii. the measurement and recording of the movement of any retaining walls constructed as part of the excavation or trench
 - iv. requiring the repair, as soon as practicable and at the cost of the consent holder, of any distress to buildings, structures or services caused wholly or in part by settlement of the ground occasioned by the groundwater diversion.
 - v. The duration of the consent and the timing and nature of reviews of consent conditions having regard to Auckland-wide - Water quantity, allocation and use, [Policy 12](#).
 - n. The requirement for and conditions of a financial contribution and/or bond.
 - o. The requirement for a monitoring and contingency plan or contingency and remedial action plan.
10. Drilling holes or bores not meeting the permitted or controlled activity controls
- a. The options to locate and design the hole or bore to avoid adverse effects on Wetland Management Areas.
 - b. The location, depth and design of the hole or bore and the design of the head works.
 - c. The effects on any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua.
 - d. The provision for bore or hole identification.
 - e. Maintenance of the hole or bore.
 - f. Monitoring and reporting requirements.
 - g. The duration of the consent and the timing and nature of reviews of consent conditions.

5.2 Assessment criteria

The council will consider the relevant assessment criteria below for the restricted discretionary activities listed above.

1. The extent to which the proposal will be consistent the management of allocation of freshwater within the guidelines provided by [Appendix 5.2](#) and [5.5](#) of the Unitary Plan and within the priority of making water available for the following uses (in descending order of priority):
 - a. existing and reasonably foreseeable domestic and municipal water supply and animal drinking water requirements
 - b. existing lawfully established water users
 - c. uses of water for which alternative water sources are unavailable or unsuitable
 - d. all other uses.
2. Whether the proposal promotes the efficient use of freshwater and geothermal water by:
 - a. ensuring the amount of water taken and used is reasonable and justifiable with regard to the intended use, and where appropriate:
 - i. a municipal water supplies is justified by way of a water management plan
 - ii. an industrial and irrigation supply implements best practice in respect of the efficient use of water for that particular activity or industry
 - iii. an irrigation take is limited to a maximum seasonal allocation based on estimated crop water requirements
 - b. considers water conservation and thermal efficiency methods
 - c. a transfer of a surface water take permit is within the same surface water catchment and does not

The Proposed Auckland Unitary Plan (notified 30 September 2013)

result in site-specific adverse effects

- d. encourages the shared use and management of water within a water user groups or other arrangement where it will results in an increased efficiency in the use and allocation of water.
3. How the take and use of surface water from a river, stream or spring or the taking and use of groundwater from an aquifer will ensure that:
 - a. that the minimum flow and availability guidelines in Table 1 in [Appendix 5.2](#) are not exceeded
 - b. the aquifer availability and groundwater levels in Tables 1 and 2 in [Appendix 5.5](#) are not exceeded.
 4. Whether the proposal will be within specific limits that the council has developed for freshwater quantity with Mana Whenua.
 5. Whether the proposal to take and use water from lakes, rivers, streams, springs or wetlands to demonstrates that:
 - a. the taking of surface water from any river or stream is within the guideline in Table 1: River and stream minimum flow and availability in [Appendix 5.2](#) except in accordance with Auckland wide, Water quality, allocation and use, [Policy 9](#)
 - b. appropriate water levels and downstream flow regimes will be maintained, including:
 - i. low flows in rivers and streams to protect in-stream values
 - ii. flow variability in rivers, streams and springs
 - iii. water levels and flows in wetlands ensure the vegetation and habitat values of the wetland are protected throughout the year
 - iv. water levels in lakes maintain the ecological values and water quality of the lake and its shoreline stability, and enable recreational use
 - v. so that no existing lawfully established taking of water is adversely effected
 - c. the taking of water will be at times of the day or year that will safeguard the identified freshwater values of the water body
 - d. intake structures will be designed, constructed, operated and maintained to avoid adverse effects on biota, including the entrainment and impingement of fish
 - e. there are options for implementing water conservation measures in times of water shortage.
 6. How the proposal demonstrates that for a take and use groundwater from any aquifer:
 - a. the take is within the water availabilities and levels for the aquifer in Table 1: Aquifer water availabilities and Table 2: Aquifer groundwater levels, in [Appendix 5.5](#) and
 - i. recharge to other aquifers is maintained
 - ii. aquifer consolidation and surface subsidence is avoided
 - b. the taking will avoid, remedy or mitigate adverse effects on surface water flows, including:
 - i. base flow of rivers, streams and springs
 - ii. any river or stream flow requirements
 - c. the taking will avoid, remedy or mitigate adverse effects on terrestrial and freshwater ecosystem habitat
 - d. the taking will not cause saltwater intrusion or any other contamination
 - e. the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes
 - f. clause 6e above will not apply in the following circumstances:

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- i. where it is practicably possible to locate the pump intake at a greater depth within the affected bore
 - ii. where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same aquifer, if drilled or cased to a greater depth
 - g. the proposed bore is capable of extracting the quantity of groundwater applied for
 - h. the proposal avoids, remedies or mitigates any ground settlement that may cause distress, including reducing the ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to existing:
 - i. buildings
 - ii. structures
 - iii. services including roads, pavements, power, gas, electricity, water mains, sewers and fibre optic cables.
7. Whether the proposal provides mitigation options where there are significant adverse effects on the matters identified in clause 5 and 6 above, including the following:
 - a. consideration of alternative locations, rates and timing of takes for both surface water and groundwater
 - b. use of alternative water supplies
 - c. use of water conservation methods when water shortage conditions apply
 - d. provision for fish passage in rivers and streams
 - e. wetland creation or enhancement of existing wetlands
 - f. riparian planting
 - g. consideration of alternative designs for groundwater dewatering proposals.
8. How the proposal to take and use surface water and groundwater will monitor the effects of the take on the quality and quantity of the freshwater resource to:
 - a. measure and record water use and rate of take
 - b. measure and record water flows and levels
 - c. sample and assess water quality and freshwater ecology
 - d. measure and record the movement of ground, buildings and other structures.
9. Whether is it appropriate to address water availability effects where water allocation exceeds or is close to exceeding the guidelines in Table 1: River and Stream Minimum Flow and Table 2: Aquifer Groundwater Levels in [Appendix 5.5](#) of the Unitary Plan by:
 - a. not granting new consent applications to take water
 - b. reducing existing takes over time by:
 - i. encouraging voluntary reductions in water allocations
 - ii. reviewing existing consents to align water allocations to the actual historical use of water
 - c. reviews of existing allocations under b(ii) above must not apply to takes for municipal water supply, where a water management plan demonstrates a necessary increase in abstraction to cater for planned urban growth
 - d. reviewing existing consents to require the efficient use of water.
10. Refuse the proposal where the take exceeds the guidelines in Table 1 [Appendix 5.2](#) of the Unitary Plan

The Proposed Auckland Unitary Plan (notified 30 September 2013)

unless the river or stream flow is greater than the median flow, provided the total take does not exceed 10 per cent of the flow in the river or stream at the time of abstraction, and natural flow variability is maintained.

11. The matters listed in Auckland-wide - Water quantity, allocation and use, [Policies 10.1-10.2](#) that reflect Policy B7 and the direction of the NPSFM
12. How the proposal to divert groundwater will ensure that:
 - a. the proposal avoids, remedies or mitigates any adverse effects on:
 - i. scheduled historic heritage places and scheduled sites and places of significance to Mana Whenua
 - ii. people and communities
 - b. the groundwater diversion does not cause or exacerbate any flooding
 - c. monitoring has been incorporated where appropriate, including:
 - i. measurement and recording of water levels and pressures
 - ii. measurement and recording of the movement of ground, buildings and other structures
 - d. mitigation has been incorporated where appropriate including:
 - i. minimising the period where the excavation is open/unsealed
 - ii. use of low permeability perimeter walls and floors
 - iii. use of temporary and permanent systems to retain the excavation
 - iv. re-injection of water to maintain groundwater pressures.
13. Whether the proposal to drill holes or bores demonstrates that the location, design and construction:
 - a. complies with the New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001)
 - b. prevents contaminants from entering an aquifer
 - c. prevents cross-contamination between aquifers with different pressure, water quality or temperature
 - d. prevents leakage of groundwater to waste
 - e. avoids the destruction, damage or modification of any historic heritage place or scheduled sites and places of significance to Mana Whenua
 - f. avoids disturbance of wetlands.

The Proposed Auckland Unitary Plan (notified 30 September 2013)