

E7. Taking, using, damming and diversion of water and drilling

E7.1. Introduction

Taking, using, damming and diversion of surface water and groundwater provisions in this plan apply in accordance with section 14(1) and section 14(3) of the Resource Management Act 1991. They also provide for a limited range of discharges of water under section 15 of the Resource Management Act 1991 when associated with the diversion of surface water or drainage of production land. Drilling in accordance with section 9(2) of the Resource Management Act 1991 is also addressed because it is often associated with the taking of groundwater.

This section also addresses the diversion of surface water and groundwater, and should be read in conjunction with E36 Natural Hazards and flooding and E3 Lakes, rivers, streams and wetlands, with respect to the placement of fill and structures within floodplains and waterbodies.

E7.2. Objectives [rp]

- (1) Objectives are located in E1 Water quality and integrated management, E2 Water quantity, allocation and use, D3 High-use Stream Management Areas Overlay and D8 Wetland Management Areas Overlay.

E7.3. Policies [rp]

- (1) Policies are located in E1 Water quality and integrated management, E2 Water quantity, allocation and use, D3 High-use Stream Management Areas Overlay and D8 Wetland Management Areas Overlay.

E7.4. Activity table

Table E7.4.1 Activity table specifies the activity status in relation to the taking, using, damming and diversion of surface water and groundwater in accordance with section 14(1) and section 14(3) of the Resource Management Act 1991. Table E7.4.1 also provides for a limited range of discharges of water pursuant to section 15 of the Resource Management Act 1991 when associated with the diversion of surface water or drainage of production land. Drilling in accordance with section 9(2) of the Resource Management Act 1991 is also addressed because it is associated with the taking of groundwater.

Table E7.4.1 Activity Table

Activity		Activity status		
		All zones	High- Use Stream Management Areas Overlay	Wetland Management Areas Overlay
Take and use of surface water (including from lawfully established dams)				
(A1)	Up to 20m ³ /day of water from a lake	P	P	D
(A2)	Up to 5m ³ /day of freshwater from a river or spring	P	P	D
(A3)	Take and use water from a lawfully established off-stream dam	P	P	D
(A4)	Up to 5m ³ /day of water from a lawfully established on-stream dam	P	P	D
(A5)	Take and use of freshwater from puna wai (natural springs) within Māori Land	P	P	D
(A6)	More than 20m ³ /day and no more than 100m ³ /day of water from a lake	RD	D	NC
(A7)	Replacement of an existing resource consent to take and use surface water from a municipal water supply dam	C	C	D
(A8)	Replacement of an existing resource consent to take and use surface water for municipal water supply purposes (excluding from a municipal water supply dam)	RD	RD	D
(A9)	Take and use of surface water, including dams not meeting the permitted activity, controlled activity or restricted discretionary activity standards or not otherwise listed	D	D	D
Diverting surface water and associated discharge of water				
(A10)	Drainage of production land	P	P	NC
(A11)	Diversion into an artificial watercourse	P	P	NC
(A12)	The discharge of water into water associated with drainage of production land or diversion of an artificial watercourse	P	P	NC
(A13)	Diverting surface water not meeting	D	D	NC

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	the permitted activity standards or not otherwise listed			
Take and use of groundwater				
(A14)	Up to 5m ³ /day when averaged over any consecutive 20-day period	P	P	P
(A15)	Up to 20m ³ /day, when averaged over any consecutive five-day period, and no more than 5000m ³ /year	P	P	P
(A16)	Pump testing a bore for seven days at an average rate of no more than 1000m ³ /day	P	P	P
(A17)	Dewatering or groundwater level control associated with a groundwater diversion permitted under the Unitary Plan	P	P	RD
(A18)	Infiltration and leakage into stormwater and sewer pipes	P	P	P
(A19)	Land drainage	P	P	D
(A20)	Dewatering or groundwater level control associated with a groundwater diversion authorised as a restricted discretionary activity under the Unitary Plan, not meeting permitted activity standards or is not otherwise listed	RD	RD	RD
(A21)	Replacement of an existing resource consent to take and use groundwater for municipal water supply purposes	RD	RD	D
(A22)	Take or use of geothermal water for communal benefit of Mana Whenua in accordance with section 14(3)(c) of the Resource Management Act 1991	P	P	P
(A23)	Take and use of geothermal water for bathing use from Waiwera and Parakai geothermal aquifer	RD	RD	RD
(A24)	Take and use of geothermal water for bathing use not otherwise provided for	D	D	
(A25)	Take and use of geothermal water for non-bathing use	NC	NC	NC
(A26)	Take and use of groundwater not meeting the permitted activity or	D	D	D

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	restricted discretionary activity standards or not otherwise listed			
Diversion of groundwater				
(A27)	Diversion of groundwater caused by any excavation (including trench) or tunnel	P	P	RD
(A28)	The diversion of groundwater caused by any excavation, (including trench) or tunnel that does not meet the permitted activity standards or not otherwise listed	RD	RD	RD
Damming water				
(A29)	Off-stream dams	P	P	P
(A30)	On-stream dams existing as at 23 October 2001	P	P	P
(A31)	On-stream dams on intermittent streams existing as at 29 September 2013	P	P	P
(A32)	Temporary dams	P	P	P
(A33)	Weirs	P	P	P
(A34)	Replacement of existing consents for dams used for municipal water supply purposes	C	C	D
(A35)	Dams not otherwise listed or not meeting the permitted activity standards or controlled activity standards	D	D	D
Drilling and Use of holes and bores				
(A36)	Holes for: <ul style="list-style-type: none"> • geotechnical investigation; • mineral exploration; • mineral extraction; • geological investigation; • contaminated site investigation; or • down-hole seismometers 	P	P	RD
(A37)	Holes or bores for: <ul style="list-style-type: none"> • stormwater disposal • down-hole heat exchangers 	P	P	RD
(A38)	Bores for groundwater level or quality monitoring	P	P	RD
(A39)	Restoration, alteration or replacement of lawfully established	P	P	RD

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	bores			
(A40)	Decommissioning (abandonment) of holes or bores	P	P	RD
(A41)	New bores for purposes not otherwise specified	C	C	RD
(A42)	Holes or bores not meeting the permitted activity standards or controlled activity standards or not otherwise listed	RD	RD	RD
Transfers of water permits				
(A43)	Transfers of surface water take permits	P	P	P
(A44)	Transfers not meeting the permitted activity standards or not otherwise listed	D	D	D

E7.5. Notification

- (1) An application for resource consent for a controlled activity listed in Table E7.4.1 Activity table above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) Any application for resource consent for an activity listed in Table E7.4.1 Activity table and which is not listed in E7.5(1) will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (3) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

E7.6. Standards

E7.6.1. Permitted activities

All activities listed as permitted activities in Table E7.4.1 must comply with the following permitted activity standards.

E7.6.1.1. Take and use of surface water (including from lawfully established dams)

- (1) The water take must not be from an area scheduled in the Wetland Management Areas Overlay.
- (2) The water intake structure must be designed, constructed, operated and maintained so that:

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- (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; and
 - (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, except in the case of network utility operators, in which case notice on the prescribed form must be received by the Council within 24 hours of undertaking this permitted activity.
- (4) The take and use of freshwater from puna wai (natural springs) within Māori Land must be completed in accordance with tikanga Māori and for the communal benefit of Mana Whenua.

E7.6.1.2. Diverting surface water and the associated discharge of water

- (1) The diversion of surface water and the associated discharge of water must not be located within areas identified in the Urban Lake Management Areas Overlay, the Natural lake Management Areas Overlay, the Natural Stream Management Areas Overlay or the Wetland Management Areas Overlay.
- (2) The diversion of surface water and the associated discharge of water must not cause or worsen the flooding of any property in a range of flood events.
- (3) The diversion of surface water and the associated discharge of water must not cause scouring, erosion or other instability of any land or waterbody.
- (4) The activity must not lower water levels in any wetland, except for wetlands designed and used for stormwater management by a network utility.
- (5) The diversion must not prevent the passage of fish in waterbodies containing fish.
- (6) The diversion must not adversely affect any lawfully established water take or use existing at the time 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 waterbody, including effects associated with the discharge of sediment.

E7.6.1.3. Take and use of groundwater up to 5m³/day when averaged over any consecutive 20-day period

- (1) The groundwater take must not be geothermal water, unless it is for a purpose specified in section 14(3)(c) of the Resource Management Act 1991.
- (2) The groundwater take must not be from the Omaha Waitematā High-Use Aquifer Management Area (refer to Table D1.3.1 High-use aquifer management areas).
- (3) The groundwater take must not be for the purpose of dewatering or groundwater level control.
- (4) Notice on the prescribed form must be received by the Council 15 working days before undertaking this permitted activity.

E7.6.1.4. Take and use of groundwater up to 5m³/day when averaged over any consecutive 20-day period and no more than 5000m³/year

- (1) The groundwater take must not be geothermal water unless it is for a purpose specified in section 14(3)(c) of the Resource Management Act 1991.
- (2) The groundwater take must not be from the High-use Aquifer Management Areas Overlay.
- (3) The groundwater take must not be for the purpose of dewatering or groundwater level control.
- (4) The groundwater take must be located at least 100m from any other existing lawfully established groundwater take from the same aquifer.
- (5) Notice on the prescribed form must be received by the Council 15 working days before undertaking this permitted activity.

E7.6.1.5. Take and use of groundwater 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, the following must be met:

- (1) The water take must not be geothermal water.

E7.6.1.6. Dewatering or groundwater level control associated with a groundwater diversion permitted under Standard E7.6.1.10, all of the following must be met:

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- (1) The water take must not be geothermal water;
- (2) The water take must not be for a period of more than 10 days where it occurs in peat soils, or 30 days in other types of soil or rock; and
- (3) The water take must only occur during construction.

E7.6.1.7. Take or use of geothermal water for communal benefit of Mana Whenua for purposes specified in section 14(3)(c) of the Resource Management Act 1991

- (1) The geothermal water take or use must not be for commercial purposes.
- (2) The geothermal water take or use must not have an adverse effect on the environment.

E7.6.1.8. Infiltration and leakage into stormwater and wastewater pipes, manholes, catchpits and lined channels

- (1) The water take must not be for the purpose of dewatering or groundwater level control.

E7.6.1.9. Land drainage

- (1) The water take, and any associated diversion, must not be in a Natural Stream Management Areas Overlay or Wetland Management Areas Overlay.
- (2) The drainage measures must be situated less than 2m below natural ground level.

E7.6.1.10. Diversion of groundwater caused by any excavation, (including trench) or tunnel

- (1) All of the following activities are exempt from the Standards E7.6.1.10(2) – (6):
 - (a) pipes cables or tunnels including associated structures which are drilled or thrust and are less than 1.2m in external diameter;
 - (b) pipes including associated structures up to 1.5m in external diameter where a closed faced or earth pressure balanced machine is used;
 - (c) piles up to 1.5m in external diameter are exempt from these standards;
 - (d) diversions for no longer than 10 days; or
 - (e) diversions for network utilities and road network linear trenching activities that are progressively opened, closed and stabilised where the part of the trench that is open at any given time is no longer than 10 days.

- (2) Any excavation that extends below natural groundwater level, must not exceed:
 - (a) 1ha in total area; and
 - (b) 6m depth below the natural ground level.
- (3) The natural groundwater level must not be reduced by more than 2m on the boundary of any adjoining site.
- (4) Any structure, excluding sheet piling that remains in place for no more than 30 days, that physically impedes the flow of groundwater through the site must not:
 - (a) impede the flow of groundwater over a length of more than 20m; and
 - (b) extend more than 2m below the natural groundwater level.
- (5) The distance to any existing building or structure (excluding timber fences and small structures on the boundary) on an adjoining site from the edge of any:
 - (a) trench or open excavation that extends below natural groundwater level must be at least equal to the depth of the excavation;
 - (b) tunnel or pipe with an external diameter of 0.2 - 1.5m that extends below natural groundwater level must be 2m or greater; or
 - (c) a tunnel or pipe with an external diameter of up to 0.2m that extends below natural groundwater level has no separation requirement.
- (6) The distance from the edge of any excavation that extends below natural groundwater level, must not be less than:
 - (a) 50m from the Wetland Management Areas Overlay;
 - (b) 10m from a scheduled Historic Heritage Overlay; or
 - (c) 10m from a lawful groundwater take.

E7.6.1.11. 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 natural wetland in a range of flood events except for wetland enhancement, maintenance or restoration.

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- (3) The dam must not result in 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 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 1 and 2 below) except for as provided for in Standard E7.6.1.11(7) below.
- (7) Dams for the purposes of stormwater management or flood control that are:
 - (a) designed by a suitably qualified and experienced person; and
 - (b) constructed, operated and maintained to pass the design flow; and
 - (c) designed to allow for resilient failure during over-design events.
- (8) All spillways and bypass arrangements must be constructed, terminated and maintained to minimise erosion, and the spillway(s) entry must be designed to remain free of debris at all times.
- (9) 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.
- (10) Stock must not be allowed to damage the crest and faces of the dam.
- (11) 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.

Note 1

Reference should be made to the Dam Safety Guidelines – Auckland Council Technical Publication 109 and the New Zealand Dam Safety Guidelines – New Zealand Society Of Large Dams 2000 for further guidance on spillway sizing.

Note 2

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

E7.6.1.12. Damming water - off-stream dams

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- (1) All applications must meet the standards in E7.6.1.11 above.
- (2) 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.
- (3) The contributing catchment area of dams constructed on or after 23 October 2001 must not exceed 20ha.
- (4) The contributing catchment area of dams constructed prior to 23 October 2001 must not exceed 40ha.
- (5) 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, unless the dam is owned or operated by a network utility operator for stormwater management purposes and the location and design of the dam is consistent with an authorised diversion and discharge stormwater consent.
- (6) Dams constructed on or after the date of notification of the Unitary Plan must not be located within the 5 per cent annual exceedance probability (AEP) flood plain, except for dams owned or operated by a network utility operator for the purposes of stormwater management.

Note 1

Reference should be made to the Dam Safety Guidelines – Auckland Council Technical Publication 109 and the New Zealand Dam Safety Guidelines – New Zealand Society Of Large Dams 2000 for further guidance on spillway sizing.

Note 2

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

E7.6.1.13. Damming water - On-stream dams existing at 23 October 2001

- (1) All applications must meet the standards in E7.6.1.11 above.
- (2) 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 significant off-site movement of soil.
- (3) The contributing catchment area must not exceed 40ha.
- (4) The surface area of the impounded water must not exceed 5000m².
- (5) Fish passage must be provided for.

E7.6.1.14. Damming water - Temporary dams

- (1) All applications must meet the standards in E7.6.1.11 above.

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- (2) The temporary dam must be for diverting flow around works in the bed of the river or stream.
- (3) Provision must be made for flows up to and including the 20-year average rain index (ARI) event to bypass the temporary dam with the bypass flow being returned to the bed of the river downstream of the dam.
- (4) The temporary dam must be constructed in accordance with best practice methods.
- (5) The temporary dam must be removed as soon as is practicable and no later than two weeks following completion of the works.

E7.6.1.15. Damming water - Weirs

- (1) All applications must meet the standards in E7.6.1.11 above.
- (2) At all times when there is natural flow upstream of the weir, the equivalent flow must be maintained downstream of the weir
- (3) Fish passage must be provided for in waterbodies that contain fish.

Note 1

Activities in the bed of a river or stream must also comply with relevant rules or consent granted under E3 Lakes, rivers, streams and wetland and E11 Land disturbance – Regional and E12 Land disturbance – District.

E7.6.1.16. Drilling and Use of holes and bores

- (1) The drilled hole or bore must not be in a Wetland Management Areas Overlay.
- (2) The drilled 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 any places scheduled in the Historic Heritage Overlay.

E7.6.1.17. Drilling and Use of holes and bores - holes for geotechnical, mineral exploration, mineral extraction, geological or contaminated site investigation or down-hole seismometers and holes or bores for stormwater disposal or down hole heat exchangers

- (1) All applications must meet the standards in E7.6.1.16 above.
- (2) Other than for holes or bores for down-hole seismometers, stormwater disposal and down-hole heat exchangers, the drilled hole or bore must be decommissioned within three months of the start of drilling.

- (3) Before being decommissioned, the drilled hole or bore must be secured so that contaminants cannot enter the ground through the hole or bore.
- (4) Where more than one aquifer is penetrated, the drilled hole or investigation bore must be decommissioned on completion of the drilling investigation and the drilled hole or bore secured so there is no hydraulic connection between the aquifers.
- (5) The drilling, construction and decommissioning of the hole or bore must comply with section 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.

E7.6.1.18. Drilling and Use of holes and bores - Bores for groundwater level or quality monitoring

- (1) All applications must meet the standards in E7.6.1.16 above.
- (2) The drilling and construction of the bore must comply with section 1, 2, 3 and 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001).
- (3) Where more than one aquifer is penetrated, construction of the bore must not enable a hydraulic connection between the aquifers.
- (4) 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.

E7.6.1.19. Drilling and Use of holes and bores - Restoration, alteration or replacement of lawfully established bores

- (1) All applications must meet the standards in E7.6.1.16 above.
- (2) The restored, altered or replacement bore must penetrate the same aquifer as the existing bore.
- (3) The replacement bore must be installed within 10m of the existing bore.
- (4) The drilling, construction and maintenance of the bore must comply with section 1, 2, 3 and 4 of New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001).
- (5) 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.
- (6) The records required under section 4 of “New Zealand Standards - NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock” must be

kept and forwarded to the Council within one month of the bore being drilled.

E7.6.1.20. Drilling and Use of holes and bores - Decommissioning (abandonment) holes or bores

- (1) All applications must meet the standards in E7.6.1.16 above.
- (2) The decommissioning of the drilled hole or bore must comply with section 2 and 4 of “New Zealand Standards - NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock”
- (3) 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.
- (4) The records required under section 4 of “New Zealand Standards - NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock” must be kept and forwarded to the Council no later than one month after the bore is decommissioned.

E7.6.1.21. 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; and
 - (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.

E7.6.2. Controlled Activities

All activities listed as controlled activities in Table E7.4.1 must comply with the following controlled activity standards.

E7.6.2.1. Replacement of an existing resource consent to take and use surface water from a municipal water supply dam

- (1) At the time of application, the take is an authorised take
- (2) A water management plan has been prepared.
- (3) The downstream flow regime remains unchanged from that allowed in the existing resource consent.
- (4) The water take must not be in a Wetland Management Areas Overlay.

E7.6.2.2. Replacement of existing of existing consents for dams used for municipal water supply purposes

- (1) There are no changes to the structure of the dam.
- (2) The dam must not be High-use Stream Management Area as identified in the High-use Stream Management Areas Overlay or a Wetland Management Area as identified in the Wetland Management Areas Overlay.

E7.6.2.3. Drilling and Use of holes and bores - New bores not otherwise specified

- (1) The bore must not be in a Wetland Management Areas Overlay.
- (2) The drilling of the hole or bore must not destroy, damage or modify any places scheduled in the Historic Heritage Overlay.
- (3) The bore must be constructed to avoid contaminants entering the aquifer penetrated by the bore.
- (4) The bore must be constructed to avoid a hydraulic connection between penetrated aquifers with different pressures, water quality or temperature.
- (5) The bore must be operated and maintained to avoid the leakage of groundwater to waste.
- (6) The drilling and construction of the bore must comply with section 1, 2, 3 and 4 of "New Zealand Standards - NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock".
- (7) The records required under section 4 of "New Zealand Standards - NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock" must be kept and forwarded to the Council no later than one month after the bore is drilled.

E7.6.3. Restricted discretionary activities

All activities listed as restricted discretionary in Table E7.4.1 must comply with the following restricted discretionary activity standards.

E7.6.3.1. Take and use of surface water (including from lawfully established dams) for more than 20m³/day and no more than 100m³/day of water from a lake

(1) The water take from:

- (a) a lake must not be from a Wetland Management Areas Overlay or
- (b) from a High-use Stream Management Areas Overlay (the Hingaia, Mauku, Ngakaroa, Wairoa, Waitangi, Whangamaire and Whangapouri catchments).

E7.6.3.2. Take and use of surface water (including from lawfully established dams) for replacement of an existing resource consent to take and use surface water for municipal water supply purposes (excluding from a municipal water supply dam)

(1) Replacement of an existing resource consent to take and use surface water for municipal water supply purposes (excluding from a municipal water supply dam):

- (a) at the time of application, the take is an authorised take;
- (b) there is no increase in the rate and volume of the take from that previously authorised;
- (c) a water management plan has been prepared;
- (d) the take will not result in the guidelines provided in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability of the Plan being exceeded, except in accordance with E2 Water quantity, allocation and use, Policy E2.3(9); and
- (e) the water take must not be from a Wetland Management Areas Overlay.

(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 is no greater than 0.3m/second;
- (b) the intake screen mesh spacing are no greater in one dimension than 1.5mm; and
- (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;
 - (d) 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; and
 - (e) the meter must be installed to the manufacturer's specifications and maintained to the specified requirements and in a working condition at all times.

E7.6.3.3. Take and use of groundwater

- (1) The water take must not be geothermal water.
- (2) The replacement of an existing resource consent to take and use groundwater for municipal water supply purposes:
 - (a) at the time of the application, the take is an authorised take;
 - (b) a water management plan has been prepared;
 - (c) the take will not result in the water availabilities and levels in Table 1 Aquifer water availabilities and Table 2 Aquifer groundwater levels, in Appendix 3 Aquifer water availabilities and levels being exceeded, except in accordance with E2 Water quantity, allocation and use Policy E2.3(9); and
 - (d) the take must not be from an area in the Wetland Management Areas Overlay.

E7.7. Assessment – Controlled activities

E7.7.1. Matters of control

The Council will reserve its control to the following matters when assessing a controlled activity resource consent application:

- (1) general:
 - (a) the effects on Mana Whenua values.
- (2) replacement of an existing resource consent to take and use surface water from a municipal water supply dam:

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- (a) the maximum rate and volume of the take;
 - (b) the provision of down-stream flow regimes and ecological values;
 - (c) lawfully established down-stream takes and uses;
 - (d) water management plan;
 - (e) metering, monitoring and reporting requirements; and
 - (f) the duration of the consent and the timing and nature of reviews of consent conditions.
- (3) replacement of existing consents for dams used for municipal water supply purposes:
- (a) the design of the dam embankment, outlets, spillways and associated structures;
 - (b) maintenance and operation of the dam;
 - (c) downstream flow regimes;
 - (d) monitoring and reporting requirements; and
 - (e) the duration of the consent and the timing and nature of reviews of consent.
- (4) 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;
 - (c) the provision for bore identification;
 - (d) maintenance of the bore;
 - (e) monitoring and reporting requirements; and
 - (f) the duration of the consent and the timing and nature of reviews of consent conditions.

E7.7.2. Assessment criteria

The Council will consider the relevant assessment criteria below for controlled activities:

- (1) all controlled activities:
 - (a) the extent to which any effects on Mana Whenua values are avoided, remedied or mitigated.

- (2) replacement of an existing resource consent to take and use surface water from a municipal water supply dam:
 - (a) the adequacy of the water management plan;
 - (b) whether the proposal demonstrates appropriate 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 where relevant;
 - (iv) the requirements of existing lawfully established downstream takes and uses; and
 - (c) the extent to which the intake structures are designed, constructed, operated and maintained to minimise adverse effects on biota, including the entrainment and impingement of fish.
- (3) replacement of existing consents for dams used for municipal water supply purposes:
 - (a) the dam embankment, outlets, spillways and associated structures avoid risk to life, property or the natural environment;
 - (b) the maintenance of the dam avoids risk to life, property or the natural environment;
 - (c) the proposal demonstrates appropriate 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 where relevant;
 - (iv) the requirements of existing lawfully established downstream takes and uses; and
 - (v) provision for fish passage in rivers and streams.
- (4) 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;

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- (b) the options to locate and design the bore and the head works to avoid adverse effects on any scheduled historic heritage places;
- (c) the most effective method to identify the bore;
- (d) an effective programme of maintenance for the bore; and
- (e) demonstrates consultation and engagement with Mana Whenua.

E7.8. Assessment – Restricted discretionary activities

E7.8.1. Matters of discretion

The Council will restrict its discretion to all of the following matters when assessing a restricted discretionary resource consent application:

- (1) general:
 - (a) the effects on Mana Whenua values.
- (2) take and use of surface water from a lake:
 - (a) the maximum rate and volume of the take;
 - (b) the location of the take;
 - (c) effects on other lawfully established takes and use of the surface waterbody;
 - (d) the imposition of restrictions at times of water shortage;
 - (e) metering (daily), monitoring and reporting requirements; and
 - (f) the duration of the consent and the timing and nature of reviews of consent conditions.
- (3) replacement of an existing resource consent to take and use surface water for municipal water supply purposes (excluding from a municipal water supply dam):
 - (a) maximum rate and volume of the take;
 - (b) the location of the take;
 - (c) downstream flow regimes;
 - (d) lawfully established down-stream takes and uses;
 - (e) the water management plan;
 - (f) metering, monitoring and reporting requirements and results; and
 - (g) the duration of the consent and the timing and nature of reviews of consent conditions.

- (4) take and use of groundwater for dewatering or groundwater level control associated with groundwater diversion:
 - (a) refer to the matters listed in E7.8.1(6)(a)-(f) below.
- (5) replacement of existing consent to take and use of groundwater for municipal supply purposes:
 - (a) the maximum rate and volume of the take;
 - (b) the location of the take;
 - (c) effects on other lawfully established groundwater and surface water takes and uses;
 - (d) mitigation measures to address any adverse effects on the aquifer;
 - (e) the water management plan;
 - (f) metering (daily), monitoring and reporting requirements; and
 - (g) the duration of the consent and the timing and nature of reviews of consent conditions.
- (6) diversion of groundwater:
 - (a) how the proposal will avoid, remedy or mitigate adverse effects:
 - (i) on the base flow of rivers and springs;
 - (ii) on levels and flows in wetlands;
 - (iii) on lake levels;
 - (iv) on existing lawful groundwater takes and diversions;
 - (v) on groundwater pressures, levels or flow paths and saline intrusion;
 - (vi) from ground settlement on existing buildings, structures and services including roads, pavements, power, gas, electricity, water mains, sewers and fibre optic cables;
 - (vii) arising from surface flooding including any increase in frequency or magnitude of flood events;
 - (viii) from cumulative effects that may arise from the scale, location and/or number of groundwater diversions in the same general area;
 - (ix) from the discharge of groundwater containing sediment or other contaminants;
 - (x) on any scheduled historic heritage place; and
 - (xi) on terrestrial and freshwater ecosystems and habitats.

- (b) the need for mineral extraction within a Special Purpose - Quarry Zone to carry out dewatering or groundwater level control and diversion and taking of groundwater in the context of mineral extraction activity.
 - (c) 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;
 - (iii) the measurement and recording of the movement of any retaining walls constructed as part of the excavation or trench; and
 - (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 by the groundwater diversion.
 - (d) the duration of the consent and the timing and nature of reviews of consent conditions;
 - (e) the requirement for and conditions of a financial contribution and/or bond; and
 - (f) the requirement for a monitoring and contingency plan or contingency and remedial action plan.
- (7) Take and use of geothermal water for bathing purposes from the Waiwera and Parakai geothermal aquifers:
- (a) maximum rate and volume of the take;
 - (b) the location of the take;
 - (c) effects on other lawfully established takes and use of the aquifer;
 - (d) metering, monitoring and reporting requirements; and
 - (e) the duration of the consent and timing and nature of reviews of consent conditions.
- (8) 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 areas in the Wetland Management Areas Overlay;
 - (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;
 - (d) the provision for bore or hole identification;
 - (e) maintenance of the hole or bore;

- (f) monitoring and reporting requirements; and
- (g) the duration of the consent and the timing and nature of reviews of consent conditions.

E7.8.2. Assessment criteria

The Council will consider the relevant assessment criteria below for restricted discretionary activities:

- (1) all restricted discretionary activities:
 - (a) the extent to which any effects on Mana Whenua values are avoided, remedied or mitigated;
 - (b) the extent to which the proposal will be consistent with the management of allocation of freshwater within the guidelines provided by Appendix 2 River and stream minimum flow and availability and Appendix 3 Aquifer water availabilities and levels, and give priority to making fresh water available for the following uses (in descending order of priority):
 - (i) existing and reasonably foreseeable domestic and municipal water supply and animal drinking water requirements;
 - (ii) existing lawfully established water users;
 - (iii) uses of water for which alternative water sources are unavailable or unsuitable;
 - (iv) 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) municipal water supplies are supported by 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) all takes (other than for municipal water supply from dams) are limited to a maximum annual allocation based on estimated water requirements
 - (b) considers water conservation and thermal efficiency methods
 - (c) encourages the shared use and management of water within a water user groups or other arrangement where it will result in an increased efficiency in the use and allocation of water.
- (3) whether the proposal to take and use water from lakes, rivers, streams, springs or wetlands demonstrates that:

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- (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 2 River and stream minimum flow and availability except in accordance with E2 Water quantity, allocation and use, Policy E2.3(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 (except for dams used for municipal water supply); and
 - (v) existing lawfully established taking of water is not adversely affected
 - (c) the taking of water will be at times of the day or year that will safeguard the identified freshwater values of the waterbody
 - (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.
- (4) Whether the proposal to take and use groundwater from any aquifer demonstrates that:
- (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 3 Aquifer water availabilities and levels 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;

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- (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) E7.8.2(5)(e) above will not apply in the following circumstances:
 - (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; and
 - (iii) services including roads, pavements, power, gas, electricity, water supply and wastewater networks and fibre optic cables.
- (5) Whether the proposal provides mitigation options where there are significant adverse effects on the matters identified in E7.8.2(4) and (5) 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; and
 - (g) consideration of alternative designs for groundwater dewatering proposals.
- (6) Whether 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:

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- (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; and
 - (d) measure and record the movement of ground, buildings and other structures.
- (7) Whether it is 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 3 Aquifer water availabilities and levels 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; and
 - (d) reviewing existing consents to require the efficient use of water.
- (8) Refuse the proposal where the take exceeds the guidelines in Table 1 River and stream minimum flow in Appendix 2 River and stream minimum flow and availability 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.
- (9) The matters listed in E2 Water quantity, allocation and use, Policies E2.3(13) and (14) which reflect the direction of the National Policy Statement for Freshwater Management.
- (10) Whether 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
 - (ii) people and communities;
 - (b) the groundwater diversion does not cause or exacerbate any flooding;
 - (c) monitoring has been incorporated where appropriate, including:

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- (i) measurement and recording of water levels and pressures; and
 - (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; and
 - (iv) re-injection of water to maintain groundwater pressures;
- (11) 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; and
 - (f) avoids disturbance of wetlands.

E7.9. Special information requirements

There are no special information requirements in this section.