

Water Take & Use – Waikanae borefield

Purpose: To take and use up to a maximum of 30,700m³/day of groundwater from the Waikanae borefield abstraction area as defined on Location Plan [REF] for the purpose of public water supply for the communities of Waikanae, Paraparaumu and Raumati

General conditions

1. The location, design, implementation and operation of the take shall be in general accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX

In terms of Section 123(d) of the Resource Management Act 1991, the period for which this permit is granted is limited to 35 years from the date of granting.

Staging

2. The extension to the Waikanae borefield shall be staged in general accordance with the Staging Plan [REF].
3. Any changes to the Staging Plan shall be submitted to Manager, Consents Management, Wellington Regional Council for certification at least two months prior to being implemented, including any decommissioning of existing production bores and/or any implementation on new monitoring wells and new production bores.
4. The Waikanae Borefield Operating and Maintenance Manual and Waikanae Borefield Monitoring Manual shall be updated at each stage shown on the Staging Plan [REF] and/or if any changes to the staging of the extension to the Waikanae borefield as shown on that Staging Plan are made to reflect the additions or changes to the borefield.

Operational conditions

5. The rate of groundwater abstracted from the production wells in the Waikanae borefield abstraction area as defined on Location Plan [REF] shall not exceed a combined total of 30,700 m³/day.
6. The maximum allowable annual volume of groundwater take shall be 2.3 million cubic metres per year (from 1 July to 30 June).
7. The Waikanae borefield supply shall be used only in the following circumstances:
 - (a) To provide recharge water for the Waikanae River on days when limited water, or no water, can be taken from the Waikanae River without breaching the minimum flow of 750L/s or the natural river flow, whichever is the lesser.
 - (b) To provide from time to time recharge water for short-term flushing flows in the river to manage algal growth or otherwise;
 - (c) To provide water for public supply in the event that the Waikanae River supply or the Waikanae Water Treatment Plant is rendered unusable (e.g. in the event of a major flood when the river quality may be poor or the intake structure is damaged); or
 - (d) As required to commission and maintain the pipeline and wells in a state of operational readiness.
8. The permit holder shall meter all abstractions from each individual well and the meters shall have an accuracy of +/- 5%.
9. The wells and their connection to the pipeline to the Waikanae WTP shall be designed so that excess water does not run to waste and backflow is prevented.

10. The permit holder shall take all practicable steps to ensure that leaks within the wellheads and pipeline are identified and repaired.
11. This permit shall be exercised in accordance with an Operations and Maintenance Manual which shall be prepared by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council for certification within three months of the date of granting of this permit. The manual is to include sections on:
- (a) Type and capacity of the pumps in each well;
 - (b) Details of the well head and connection from the wells to pipeline;
 - (c) Pumping regimes;
 - (d) Measures taken to prevent aquifer contamination from surface sources (e.g. security of wellhead, backflow prevention);
 - (e) Requirement, procedure and schedule for maintenance of pipeline and wells;
 - (f) Requirement and procedures for implementation of restrictions in abstraction;
 - (g) Procedures for resumption of normal pumping rates;
 - (h) Procedures for notification to the Wellington Regional Council; and
 - (i) An operation log which will record information such as:
 - (i) date and hours of operation of the take;
 - (ii) abstraction rates and volumes for each well;
 - (iii) total daily abstraction;
 - (iv) any changes in operational procedures;
 - (v) any maintenance carried out; and
 - (vi) any unusual events which occur.

Note: The permit holder shall update the existing Operations and Maintenance Manual for the Waikanae borefield to account for any proposed changes to that current document.

12. These operational logs shall be made available for inspection by the Wellington Regional Council at any time, and a summary shall be sent to the Manager, Consents Management, Wellington Regional Council, on an annual basis.
13. Any changes to the Operational and Maintenance Manual shall be forwarded to the Manager, Consents Management, Wellington Regional Council, within one month of the change being made.

Monitoring conditions

14. This permit shall be exercised in accordance with a Monitoring Manual which shall be prepared by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council for certification within three months of the date of granting of this permit. The manual shall include:
- (a) Monitoring of water levels in the shallow aquifer and wetlands as specified in the Boffa Miskell Wetlands Report [REF], this shall include monitoring of selected wetlands prior to the implementation of Stage 1 to establish baseline monitoring information;
 - (b) Monitoring for interference or drawdown effects in the deep aquifer;
 - (c) Monitoring for seawater intrusion (electrical conductivity) in shallow aquifer and deep aquifer;
 - (d) Monitoring methods, frequency and locations;
 - (e) Action levels, and the derivation of appropriate trigger levels to determine if changes in abstraction are required;
 - (f) Procedures for if/when any trigger levels are breached;
 - (g) Procedures and timing for notification to the Wellington Regional Council if any trigger levels are breached; and
 - (h) Frequency and method of reporting the monitoring information to the Wellington Regional Council.

Note: The permit holder shall update the existing Monitoring Manual for the Waikanae borefield to account for any proposed changes to that current document.

15. Any changes to the Monitoring Manual shall be submitted to the Manager, Consents Management, Wellington Regional Council, for certification prior to the changes being implemented.
16. Should the trigger levels set in the Monitoring Manual indicate it necessary, the permit holder shall comply with abstraction restrictions as directed by the Manager, Consents Management, Wellington Regional Council.
17. Should the trigger levels for saline intrusion set in the Monitoring Manual indicate it necessary, the permit holder shall propose mitigation measures for certification by the Manager, Consents Management, Wellington Regional Council, and implement the certified measures. Mitigation measures may include, but are not limited to:
 - (a) Reconfiguring the use and abstraction rates of the existing bores; and/ or
 - (b) Constructing additional bores within the Waikanae borefield abstraction area as defined on Location Plan [REF] to spread out drawdown effects; and/ or
 - (c) Implementating aquifer injection ; and/ or
 - (d) Decommissioning bores; and/ or
 - (e) Any other measure deemed appropriate by the permit holder and certified by the Manager, Consents Management, Wellington Regional Council.
18. If so requested by the Manager, Consents Management, Wellington Regional Council, the permit holder shall make the wells available for the monitoring of water levels, water quality and seawater intrusion.

Reporting conditions

19. The permit holder shall prepare and submit an Annual Monitoring Report to the Manager, Consents Management, Wellington Regional Council before 1 July each year. This Annual Monitoring Report shall include:
 - (a) A summary of monitoring results in accordance with Condition x, including but not limited to a review of data for trigger levels;
 - (b) Reasons to support the use of the borefield recharge supply, if recharge has been used during the year being reported.
20. The permit holder shall submit a report to the Manager, Consents Management, Wellington Regional Council, ten years after the granting of this permit, which provides a detailed analysis including, but not limited to, available data on aquifer performance, bore use, river hydrology and the environment. This report shall include details of adaptive management measures and the triggers for those measures that may be required over the remaining term of this permit

Water Conservation

21. The permit holder shall prepare and submit a Water Conservation Report to the Manager, Consents Management, Wellington Regional Council before 1 July each year. This Water Conservation Report shall document and summarise the Kāpiti Coast District Council's progress towards achieving its water conservation targets, including the outcomes of any water conservation measures, including but not limited to water meters, any increases in population, any reduction in peak daily water demand and the achieved results of these measures.

Review conditions

22. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within three months of receiving the Annual Monitoring Report from the permit holder, for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.

Construct & operate bores – Waikanae borefield

Purpose: To construct and operate bores within the Waikanae borefield as defined on Location Plan [Ref] for the purpose of public water supply, including but not limited to bores N3, S1 and S2

General conditions

1. The location, design, implementation and operation of the activity shall be carried out in accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX. Bores may include production bores within the identified abstraction area and saline monitoring bores within the monitoring area.

Construction conditions

2. That at least one month prior to construction works commencing, the permit holder shall submit to Wellington Regional Council for certification a Construction Methodology Statement and Construction Environmental Management Plan that includes the following:
 - (a) The details of construction methodology, including duration of works and work detail;
 - (b) Environmental effects management for bore construction;
 - (c) Noise management;
 - (d) Dust and sediment control;
 - (e) Traffic management;
 - (f) Address for contact and roles and responsibilities;
 - (g) Reporting, including advising Wellington Regional Council when the works will commence and when they have finished;
 - (h) Procedures for any complaints received;
 - (i) Accidental Discovery Protocol.
3. The existing Operating and Maintenance Manual and Monitoring Manual shall be updated to reflect any new bore constructed at least one month prior to that new bore commencing operation on site.

Review conditions

4. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within three months of receiving the Annual Monitoring Report from the permit holder, for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.

Water Take & Use – Waikanae River

Purpose: To take and use up to a maximum of 30,700m³/day of water from the Waikanae River at the Waikanae Water Treatment Plant for the purpose of public water supply.

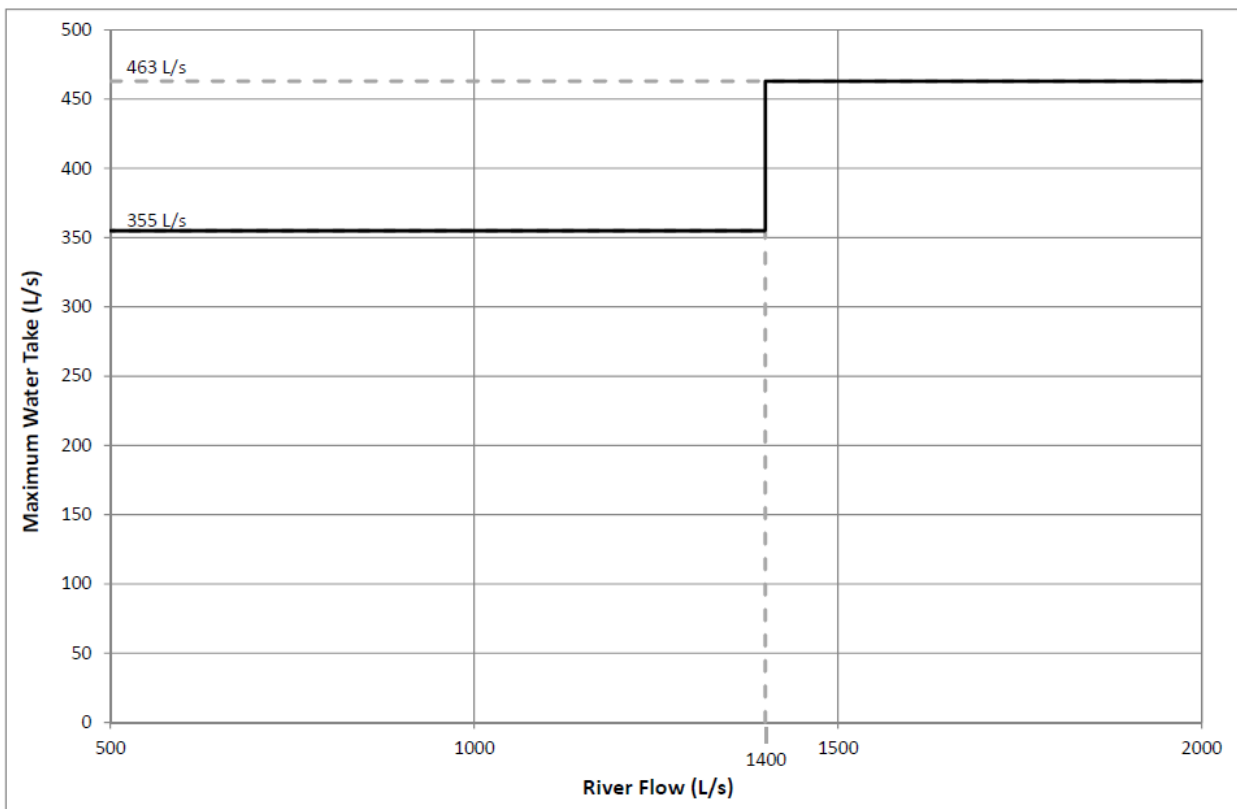
General conditions

1. The location, design, implementation and operation of the activity shall be carried out in accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX

In terms of Section 123(d) of the Resource Management Act 1991, the period for which this permit is granted is limited to 35 years from the date of granting.

Operational conditions

2. The maximum take and use shall not exceed 30,700 m³/day at a maximum rate of up to 463 L/s, 7 days/week, 52 weeks/year, when river flows are above 1,400 L/s. For river flows below 1,400 L/s, the maximum rate of take will be 355 L/s.
3. The rate of take and use shall be in accordance with the graph below, subject to the recharge of the river [pursuant to consent REF XXX] occurring to ensure that a minimum residual flow of 750 L/s is maintained at all times downstream of the WTP, or the natural river flow, whichever is the lesser.



4. For the purpose of this permit, all flows in the Waikanae River shall be measured at the water level recorder station immediately above the Waikanae Water Treatment Plant intake weir (Site No. 31504)
5. The permit holder shall ensure that a minimum residual flow of 750 L/s is maintained at all times immediately below the Waikanae Water Treatment Plant rive recharge discharge point, unless the flow naturally falls below this level.
6. The permit holder shall maintain a residual flow (the difference between natural river flow and abstraction) over the intake gate and weir at all times to allow fish passage.
7. This permit shall be exercised in accordance with an Operations and Maintenance Manual which shall be updated by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council for certification within three months of the date of granting of this permit. The manual is to include sections on:
 - (a) Pumping regimes;
 - (b) Storage capacities;
 - (c) Mitigation measures for when demand for water exceeds the supply available;
 - (d) Requirement, procedures and schedule for maintenance of the plant;
 - (e) Requirement and procedures for implementation of restrictions in abstraction;
 - (f) Procedures for resumption of normal pumping rates; and
 - (g) An operation log which will record information such as:
 - i) date and hours of operation of the take;
 - ii) instantaneous abstraction rates;
 - iii) total daily abstraction;
 - iv) any changes in operational procedures;
 - v) any maintenance carried out; and
 - vi) any unusual events which occur.

Note: The permit holder shall update the existing Operations and Maintenance Manual for the Waikanae River water take to account for any proposed changes to that current document.

8. These operational logs shall be made available for inspection by the Wellington Regional Council at any time, and shall be supplied to the Manager, Consents Management, Wellington Regional Council, on request.
9. Any changes to the Operational and Maintenance Manual shall be forwarded to the Manager, Consents Management, Wellington Regional Council, within one month of the changes being made.

Monitoring conditions

10. This permit shall be exercised in accordance with a Monitoring Manual which shall be prepared by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council for certification within three months of the date of granting of this permit. The Plan shall include the details of all monitoring activities at two points upstream and two points downstream of the discharge point to determine the impacts of the discharge on water quality and aquatic ecosystems, including:
 - (a) Water quality indicators (regular monitoring during periods of recharge of at least temperature, dissolved oxygen, conductivity);
 - (b) Sampling of DRP (monthly sampling increasing to weekly during periods of recharge);
 - (c) Native fish surveys (at least at 3 yearly intervals) and the methodology for carrying out the survey in accordance with national fish monitoring protocols;
 - (d) Algae cover during recharge (at two week intervals during periods of recharge) and the methodology for carrying out the survey in accordance with national algae monitoring protocols, including guidelines for Cyanobacteria in recreational fresh waters;

- (e) Adaptive management procedures – including set trigger levels that if breached specific response actions will be taken. This shall include specific actions to mitigate high periphyton biomass;
 - (f) Frequency and method of reporting the monitoring information to the Wellington Regional Council.
11. Any changes to the Monitoring Manual shall be submitted to the Manager, Consents Management, Wellington Regional Council, for certification prior to the changes being implemented.
12. The permit holder shall maintain a data recording system compatible with the Wellington Regional Council's telemetry system and a telemetry unit to record the rate and volume of take.

Adaptive Management Committee and Reporting conditions

13. The permit holder shall prepare and submit an Annual Monitoring Report to the Manager, Consents Management, Wellington Regional Council, before 1 July each year. This annual report shall include:
- (a) The information recorded from all monitoring activities at two points upstream and two points downstream of the discharge point as undertaken in accordance with Condition 10;
 - (b) A summary of monitoring results and an assessment of any adaptive management actions undertaken during that year;
 - (c) Any communications, observations and feedback from the Adaptive Management Committee made during that year.
14. The Annual Monitoring Report shall be made available to the public on the KCDC website in the month of July each year.
15. An Adaptive Management Committee shall be established at least one month prior to the first discharge to the Waikanae River under this permit, with representatives from KCDC; GWRC; Te Āti Awa or appointed representatives. The role of the Adaptive Management Committee shall be to review the Annual Monitoring Report and any adaptive management response actions implemented over the course of that reporting year and make any recommendations for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.
16. The Adaptive Management Committee and stakeholders shall be sent a copy of the Annual Monitoring Report by the permit holder in the month of July each year for their record.

Note: stakeholders include the Department of Conservation; Fish and Game; Forest and Bird; Friends of the Waikanae River; Kāpiti Fly Fishing Club; or other relevant person(s) or group(s) with an interest in the Waikanae River as approved by the Manager, Consents Management, Wellington Regional Council.

Water Conservation

17. The permit holder shall prepare and submit a Water Conservation Report to the Manager, Consents Management, Wellington Regional Council before 1 July each year. This Water Conservation Report, shall document and summarise the Kāpiti Coast District Council's progress towards achieving its water conservation targets, including the outcomes of any water conservation measures, including but not limited to water meters, any increases in population, any reduction in peak daily water demand and the achieved results of these measures.

Review conditions

18. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within three months of receiving the Annual Monitoring manual from the permit holder, for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.

Groundwater Recharge Discharge to the Waikanae River

Purpose: To discharge groundwater from the Waikanae borefield to the Waikanae River immediately downstream of the Waikanae Water Treatment Plant intake weir.

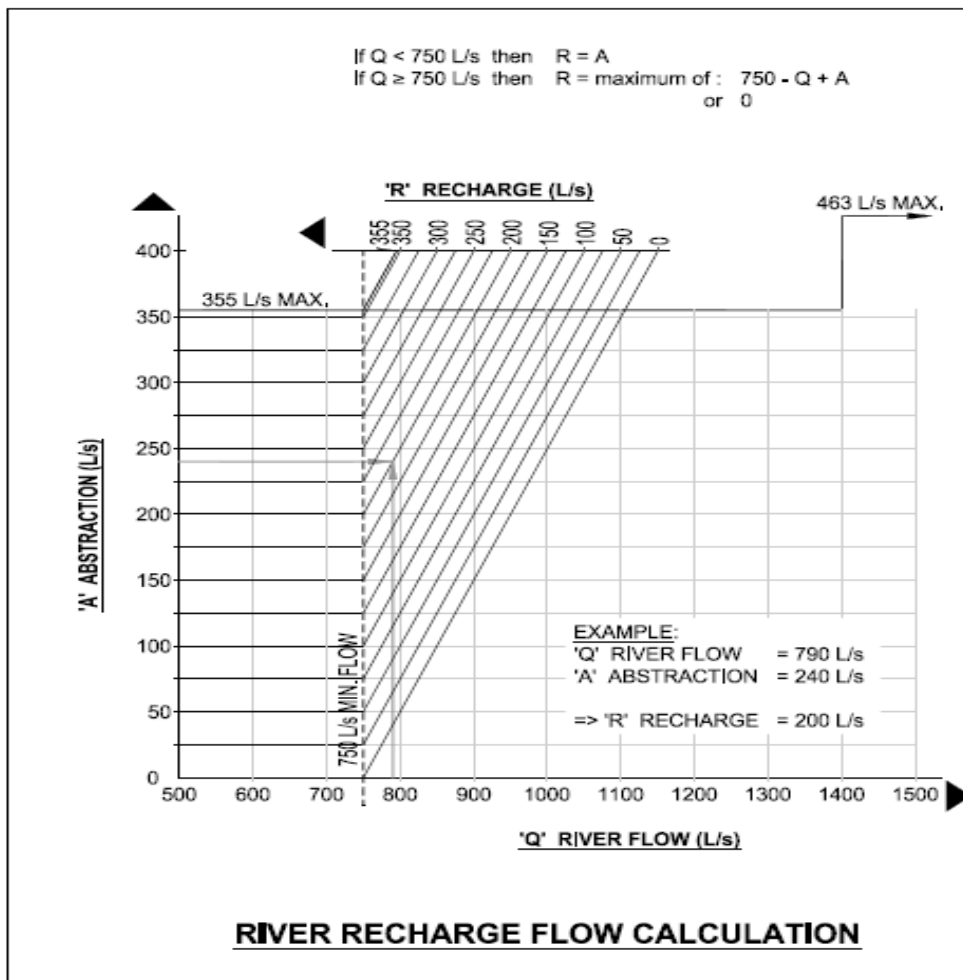
General conditions

- The location, design, implementation and operation of the activity shall be carried out in general accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX

In terms of Section 123(d) of the Resource Management Act 1991, the period for which this permit is granted is limited to 35 years from the date of granting.

Operational conditions

- The rate of discharge for the purpose of river recharge shall be in accordance with the table and graph below:



Note: While the water abstracted ('A' in the graph above) and the water recharged ('R' in the graph above) are expressed in L/s, and this will be the operational target, compliance will be determined over a 24 hour period (midnight to midnight), rather than on an instantaneous basis.

3. For the purpose of this permit, the total recharge discharge flow shall be measured at the Waikanae Water Treatment Plant site before entering the Waikanae River. The meter shall have an accuracy of at least +/- 5%.
4. The permit holder shall ensure that a minimum residual flow of 750 L/s is maintained at all times immediately below the Waikanae Water Treatment Plant river recharge discharge point, unless the flow naturally falls below this level.
5. The permit shall be exercised in accordance with an Operations and Maintenance Manual which shall be updated by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council, for certification within three months of the date of granting of this permit. The manual shall include:
 - (a) operational procedures demonstrating a hierarchy of bore preference, generally using bores supplying groundwater with the lowest phosphorus concentrations for discharge in the first instance;
 - (b) operational procedures demonstrating how the discharge will comply with the conditions of this permit; and
 - (c) an operational log which will record information such as:
 - i) rate of discharge, volume, duration, date and time of each discharge and the flow in the Waikanae River and rate of abstraction at the time of discharge;
 - ii) any changes in operational procedures;
 - iii) any maintenance carried out; and
 - iv) any unusual events which occur.
6. These operational logs shall be made available for inspection by the Wellington Regional Council at any time, and shall be supplied to the Manager, Consents Management, Wellington Regional Council, on request.
7. Any changes to the Operational and Maintenance Manual shall be forwarded to the Manager, Consents Management, Wellington Regional Council, within one month of the changes being made.

Monitoring conditions

8. This permit shall be exercised in accordance with a Monitoring Manual which shall be prepared by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council for certification within three months of the date of granting of this permit. The Plan shall include the details of all monitoring activities at two points upstream and two points downstream of the discharge point to determine the impacts of the discharge on water quality and aquatic ecosystems, including:
 - (a) Water quality monitoring of each bore during its period of use for recharge (one sample after the bore has been operational for 3 days);
 - (b) Water quality indicators (regular monitoring during periods of recharge of at least temperature, dissolved oxygen, conductivity);
 - (c) Sampling of DRP (monthly sampling increasing to weekly during periods of recharge);
 - (d) Native fish surveys (at least at 3 yearly intervals) and the methodology for carrying out the survey in accordance with national fish monitoring protocols;
 - (e) Algae cover during recharge (at two week intervals during periods of recharge) and the methodology for carrying out the survey in accordance with national algae monitoring protocols, including guidelines for Cyanobacteria in recreational fresh waters (periphyton visual assessments shall be undertaken during summer months before recharge occurs to get baseline data on periphyton naturally occurring prior to recharge);
 - (f) Adaptive management procedures – including set trigger levels that if breached specific response actions will be taken. This shall include specific actions to mitigate high periphyton biomass;
 - (g) Frequency and method of reporting the monitoring information to the Wellington Regional Council.

9. Any changes to the Monitoring Manual shall be submitted to the Manager, Consents Management, Wellington Regional Council, for certification prior to the changes being implemented.

Adaptive Management Committee and Reporting conditions

10. The permit holder shall prepare and submit an Annual Monitoring Report to the Manager, Consents Management, Wellington Regional Council, before 1 July each year. This annual report shall include:
 - (a) The information recorded from all monitoring activities at two points upstream and two points downstream of the discharge point as undertaken in accordance with Condition 8; and
 - (b) A summary of monitoring results and an assessment of any adaptive management actions undertaken during that year;
 - (c) Any communications, observations and feedback from the Adaptive Management Committee made during that year.
11. The Annual Monitoring Report shall be made available to the public on the KCDC website in the month of July each year.
12. An Adaptive Management Committee shall be established at least one month prior to the first discharge to the Waikanae River under this permit, with representatives from KCDC; GWRC; Te Āti Awa or appointed representatives. The role of the Adaptive Management Committee shall be to review the Annual Monitoring Report and any adaptive management response actions implemented over the course of that reporting year and make any recommendations for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.
13. The Adaptive Management Committee and stakeholders shall be sent a copy of the Annual Monitoring Report by the permit holder in the month of July each year for their record.

Note: stakeholders include the Department of Conservation; Fish and Game; Forest and Bird; Friends of the Waikanae River; Kāpiti Fly Fishing Club; or other relevant person(s) or group(s) with an interest in the Waikanae River as approved by the Manager, Consents Management, Wellington Regional Council.

14. The permit holder shall prepare a Public Communications Plan that will set out how the public will be communicated with to inform them of how and when the River Recharge with Groundwater Project will be implemented over time and what environmental effects they may reasonably expect. The permit holder shall submit that Public Communications Plan to the Manager, Consents Management, Wellington Regional Council for certification at least 2 months prior to Stage 1 of the project commencing on the ground.

Water Conservation

15. The permit holder shall prepare and submit a Water Conservation Report to the Manager, Consents Management, Wellington Regional Council before 1 July each year. This Water Conservation Report, shall document and summarise the Kāpiti Coast District Council's progress towards achieving its water conservation targets, including the outcomes of any water conservation measures, including but not limited to water meters, any increases in population, any reduction in peak daily water demand and the achieved results of these measures.

Review conditions

16. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within three months of receiving the Annual Monitoring Report from the permit holder, for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.

Works in the bed of the Waikanae River – intake structure

Purpose: Works and structure within the bed of the Waikanae River – minor modifications to the existing intake structure

[it is expected that individual permits will be issued for each component of works/ disturbance of the river bed and structure/ occupation.]

General conditions

1. The location, design, implementation and operation of the activity shall be carried out in accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX

In terms of Section 123(d) of the Resource Management Act 1991, the period for which this permit is granted is limited to 5 years from the date of granting (for the works/disturbance – the structure/ occupation will be permanent).

Construction conditions

2. That at least one month prior to construction works commencing, the permit holder shall submit to Wellington Regional Council for approval a Construction Methodology Statement and Construction Environmental Management Plan that includes the following:

- (a) The details of construction methodology, including duration of works and work detail;
- (b) Environmental effects management for works within the bed of the Waikanae River;
- (c) Noise management;
- (d) Dust and sediment control;
- (e) Traffic management;
- (f) Address for contact and roles and responsibilities;
- (g) Reporting, including advising Wellington Regional Council when the works will commence and when they have finished;
- (h) Procedures for any complaints received;
- (i) Accidental Discovery Protocol

3. The existing Waikanae Water Treatment Plant Operating and Maintenance Manual and Monitoring Manual shall be updated to reflect the changes to the intake structure and operation at least one month prior to the works commencing on site.

Works in the bed of the Waikanae River – discharge structure

Purpose: Works and structure within the bed of the Waikanae River – new discharge structure

[it is expected that individual permits will be issued for each component of works/ disturbance of the river bed and structure/ occupation.]

General conditions

1. The location, design, implementation and operation of the activity shall be carried out in accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX

In terms of Section 123(d) of the Resource Management Act 1991, the period for which this permit is granted is limited to 5 years from the date of granting (for the works/disturbance – the structure/ occupation will be permanent).

Construction conditions

2. That at least one month prior to construction works commencing, the permit holder shall submit to Wellington Regional Council for certification a Construction Methodology Statement and Construction Environmental Management Plan that includes the following:

- (a) The details of construction methodology, including duration of works and work detail;
- (b) Environmental effects management for works within the bed of the Waikanae River;
- (c) Noise management;
- (d) Dust and sediment control;
- (e) Traffic management;
- (f) Address for contact and roles and responsibilities;
- (g) Reporting, including advising Wellington Regional Council when the works will commence and when they have finished;
- (h) Procedures for any complaints received;
- (i) Accidental Discovery Protocol

3. The existing Waikanae Water Treatment Plant Operating and Maintenance Manual and Monitoring Manual shall be updated to reflect the new discharge structure and operation at least one month prior to the works commencing on site.

Aquifer injection - discharge of Waikanae River water to the Waikanae borefield abstraction area

Purpose: To discharge up to a maximum of 10,000m³/day of water from the Waikanae River into the Waikanae aquifer through bores within the Waikanae borefield abstraction area as defined on Location Plan [Ref] for the purpose of public water supply

General conditions

1. The location, design, implementation and operation of the activity shall be carried out in accordance with the application, and its associated plans and documents, lodged with the Wellington Regional Council on XXX

In terms of Section 123(d) of the Resource Management Act 1991, the period for which this permit is granted is limited to 35 years from the date of granting.

Operational conditions

2. The rate of river water discharged to the aquifer shall not exceed 10,000m³/day of water.
3. The existing Waikanae Water Treatment Plant and Waikanae Borefield Operating and Maintenance Manual and Monitoring Manual shall be updated to reflect the aquifer injection measure and operation at least one month prior to the works commencing on site.
4. An operational log shall be maintained by [the permit holder and it will record the rate, location and timeframe of each aquifer injection period. These operational logs shall be made available for inspection by the Wellington Regional Council at any time, and shall be sent to the Manager, Consents Management, Wellington Regional Council, on a three monthly basis.
5. Any changes to the Operational and Maintenance Manual shall be forwarded to the Manager, Consents Management, Wellington Regional Council, within one month of the change being made.

Monitoring conditions

6. This permit shall be exercised in accordance with a Monitoring Manual which shall be prepared by the permit holder and submitted to the Manager, Consents Management, Wellington Regional Council for certification within three months of the date of granting of this permit. The manual shall include:
 - (a) Monitoring of water levels in the shallow aquifer and wetlands as specified in the Boffa Miskell Wetlands Report [REF];
 - (b) Monitoring of water levels in the deep aquifer;
 - (c) Monitoring of electrical conductivity in the shallow aquifer and deep aquifer;
 - (d) Monitoring methods, frequency and locations;
 - (e) Action levels, and the derivation of appropriate trigger levels to determine if changes in injection are required;
 - (f) Procedures for if/when any trigger levels are breached;
 - (g) Procedures and timing for notification to the Wellington Regional Council if any trigger levels are breached; and
 - (h) Frequency and method of reporting the monitoring information to the Wellington Regional Council.

Note: The permit holder shall update the existing Monitoring Manual for the Waikanae borefield to account for any proposed changes to that current document.

7. Prior to the discharge of river water to the aquifer, the permit holder shall determine the water quality parameters of the water to be used for injection. Parameters including turbidity, temperature, biological elements, level of treatment if any shall be set. These water quality parameters shall be set and recorded in the Monitoring Manual for approval by the Manager, Consents Management, Wellington Regional Council.

To avoid clogging the injection bores and aquifer with fine silt or clay particles there would need to be limits on the quality of water for reinjection, for example turbidity may need to be. A 50 µm self-cleaning strainer or similar could be installed to the injection bores for to reduce the risks of particulates being injected. Further pre-treatment of the water for injection (e.g. pH adjustment or treatment to remove biological elements from the water) may be required. This would be determined prior to injection taking place.

8. Any changes to the Monitoring Manual shall be submitted to the Manager, Consents Management, Wellington Regional Council, for certification prior to the changes being implemented.

Note: it is expected that the monitoring undertaken under both the Waikanae borefield take and the Waikanae River take consents will together provide the information required to assess the success or otherwise of aquifer injection.

Reporting conditions

9. The permit holder shall prepare and submit an Annual Monitoring Report to the Manager, Consents Management, Wellington Regional Council before 1 July each year. This Annual Monitoring Report shall include:
 - (a) A summary of monitoring results in accordance with Condition 6, setting out the results of aquifer injection;
 - (b) Measures undertaken to investigate, implement and manage water conservation methods to reduce water demand on the Kāpiti Coast and the achieved results of these measures;
 - (c) Reasons to support the use of aquifer injection, if injection has been used during the year being reported.

Review conditions

10. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within three months of receiving the Annual Monitoring Report from the permit holder, for the purpose of dealing with any adverse effects on the environment which may arise from the exercise of this consent.