

Guideline Document: Evaluation of Consent Applications to Take Groundwater



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1.0 Introduction

The rocks and sediment beneath the Horizons Region contain groundwater which is accessed by thousands of bores. We use the groundwater for drinking water supply, irrigating our crops, supplying stock and servicing the needs of industry.

This document has been prepared by Pattle Delamore Partners Ltd to provide information on the process for evaluating consent applications to take groundwater. The document is aimed at both people who have submitted consent applications to take groundwater, and users of existing bores that may be affected by a new consent application.

The document provides guidance on:

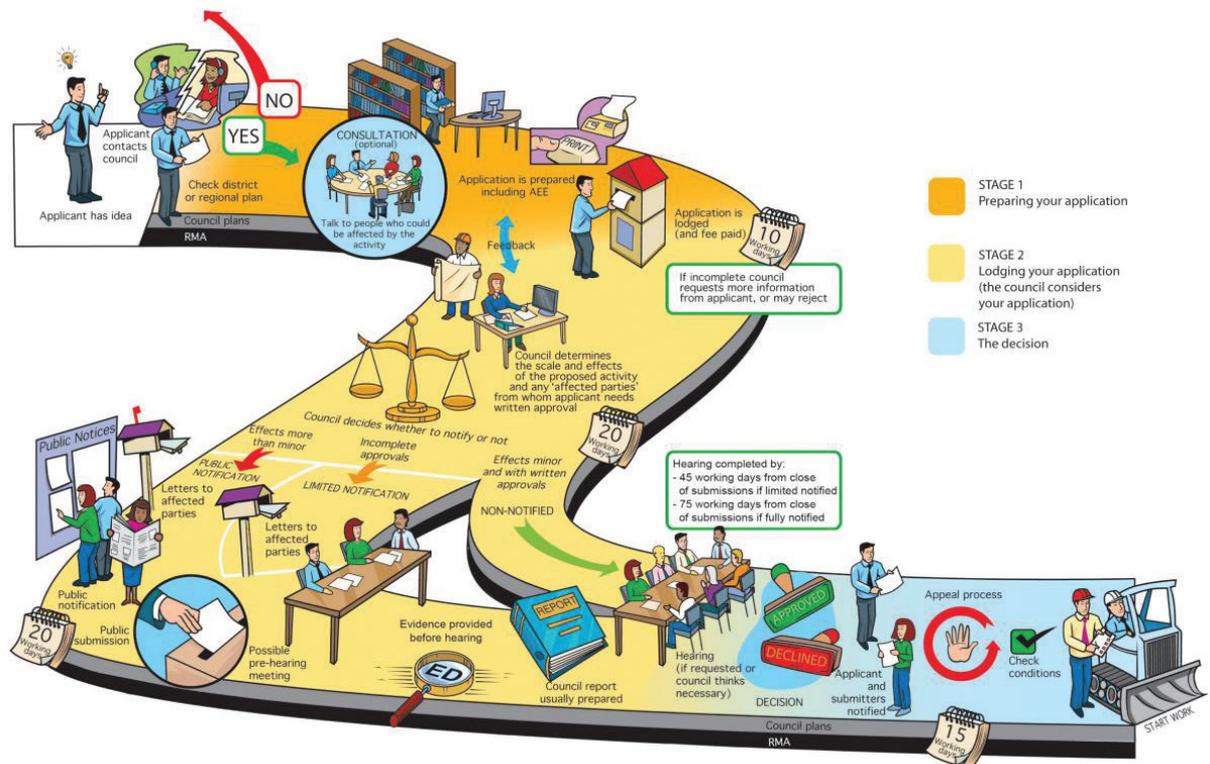
- The process for evaluating consent applications and the timescales over which that process takes place
- How we assess the significance of the effects and confirm whether they are acceptable
- When we tell other people about a consent application (notification)
- What to do if you have been notified about someone else's take

Contact details are provided in Section 7 should you require further information.

2.0 The Process for Evaluating Consent Applications

The following diagram has been prepared by the Ministry for the Environment and gives an overview of the resource consent application process. This diagram is indicative only but shows the key stages which are described further in this leaflet.

APPLYING FOR A RESOURCE CONSENT



Source: Ministry for the Environment, March 2015

3.0 Lodgement and Requests For Further Information

We can only accept resource consent applications that have all the necessary information. If applications are missing information, we may have to send them back. We will do this within 10 working days after you lodge your application. If you are uncertain whether you have included everything please call us on freephone **0508 800 800** before you submit the application. You need to make sure you include sufficient detail in

your application for us to make an assessment of your proposal. In particular, clearly describe how much water you require and how it will be used. You also need to include enough detail on the potential effects of the new take. Our leaflet on How to Obtain a Groundwater Take Consent provides more information on the assessment required.

4.0 How We Decide Whether to Notify Your Consent

Once your consent application to take groundwater has been accepted by the council, we will consider the level of effects your proposed take will have on the environment. We can take one of three approaches described in the following table.

If we notify your application, we will ask for feedback on your proposed take (submissions) from either the general public or specific individuals (known as affected parties). A hearing may be required before we decide whether to grant or decline the consent.

Notification type	What does it mean legally within the Resource Management Act	Example for new groundwater take
Non-notified application	<p>Either:</p> <ol style="list-style-type: none"> The effects of your take on the environment or persons are not adverse (less than minor) <p>OR:</p> <ol style="list-style-type: none"> The effects of the take on any person are minor or more than minor but you have obtained written approval from everyone who might be adversely affected before submitting your consent application 	<p>For example:</p> <ol style="list-style-type: none"> Drawdown at neighbouring bores is predicted to be very small and unlikely to be noticed or effects on surface water bodies are negligible <p>OR:</p> <ol style="list-style-type: none"> Drawdown at a neighbouring bore could be noticed, but your neighbour has completed an affected persons written approval form approving your new take because they don't think it will cause a significant adverse impact on their own bore's operation
Limited notification	Only people who are adversely affected by an application are notified by the council and can make a submission on a resource consent application	Drawdown at a neighbouring bore could be noticed, and your neighbour has not given written approval for the take because they think it may cause an adverse impact on the operation of their bore
Publicly notified application	Effects on the environment are more than minor, i.e. there are potentially adverse consequences. Any person can make a submission on the consent application	Large groundwater take with complex or uncertain effects, for example on rivers, lakes or wetlands

We will typically consult with you before notifying your application. In general, it is rare for us to publically notify groundwater take consent applications. We look at the effects of the take on the wider environment and consider the overall sustainability when making

our decision. We may consider that there are adverse effects on a few neighbours (potentially requiring limited notification), but if the effects on the wider environment are only minor we don't require public notification.

5.0 What is a “Minor” or “More than Minor” Effect?

Groundwater takes can have effects on the environment in four main ways:

- Effects on the overall groundwater resource
- Effects on surface water bodies that are connected to groundwater
- Effects due to saltwater intrusion (typically for takes located within 5 km of the coast)
- Effects on neighbouring bores (drawdown interference effects)

5.1 EFFECTS ON THE OVERALL GROUNDWATER RESOURCE

We have set allocation limits for groundwater and surface water bodies in the Horizons Region in order to help us manage the combined effects of all takes within a catchment.

Your assessment of effects should include a comparison between the currently consented volume of water in the groundwater management zone, and the total allocation for that zone. This comparison will provide a general indication of the likely effects on

the overall resource. However, the assessment should also include a review of groundwater level trends in the local area and if relevant, trends in flows in surface waterways that are connected to groundwater. Long term groundwater level trends provide a useful indication of the status of the local aquifer and can provide an indication of whether cumulative effects on the local resource are within reasonable levels.

5.2 EFFECTS ON SURFACE WATER BODIES THAT ARE CONNECTED TO GROUNDWATER

All groundwater takes ultimately result in an equivalent reduction in surface water flows (including coastal discharge) in the long term. Stream depletion is the flow reduction caused by groundwater abstraction.

You should use the results of your pumping test to assess the potential for stream depletion. If the groundwater take is likely to reduce flow in streams above set thresholds (defined in Table 16.1 in the One

Plan) we may subject the groundwater take consent to the same restrictions as a surface water take. These thresholds relate to the size of the stream depletion effect compared to the proposed pumping rate. For example, we could impose consent conditions which require you to stop pumping when stream flows are low.

5.3 EFFECTS DUE TO SALTWATER INTRUSION

Saltwater intrusion occurs when enough water is removed from an aquifer to allow seawater to migrate inland. Saltwater intrusion can affect the suitability of groundwater for both drinking and irrigation.

To monitor the risk of saltwater intrusion along the western coastal margin, we have a network of bores monitoring water quality and groundwater level. The network is designed to detect signs of increasing salinity as an early indication of saltwater intrusion that could potentially result from groundwater abstraction near the coast. If you wish to take groundwater from a bore within 5km of the coast (known as the line of mean high water springs), you will need to estimate the level of drawdown at the coast and the likelihood of inducing saltwater intrusion.

In cases where saltwater intrusion might occur, we have a range of measures we can use to manage the potential effects. For example, we may decline the consent application or reduce the amount of water that can be taken to reduce the likelihood of saltwater intrusion.

For all consents within 5km of the coast, we will include monitoring conditions in the resource consent. These conditions may require you to stop pumping if certain electrical conductivity thresholds (an indicator of salinity in water) are reached or exceeded. We will determine the monitoring requirements and electrical conductivity thresholds on a case-by-case basis.

5.4 DRAWDOWN IN NEIGHBOURING BORES

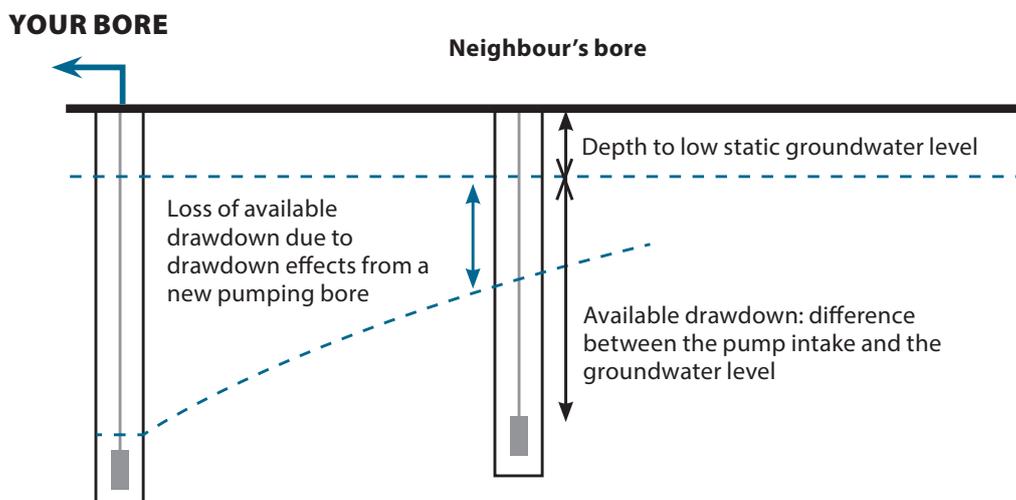
Potential drawdown effects in neighbouring bores need to be assessed on a case-by-case basis. Our guidance on new groundwater takes provides further information on how to assess these effects.

We don't have specific rules in our One Plan that we use to decide whether a drawdown effect on a neighbouring bore is minor or more than minor. We consider each groundwater take application on a case-by-case basis to help us decide whether to notify. We look at the predicted effect of your take on neighbouring bores by assessing both the change in available drawdown and the total size of the drawdown in metres. We also consider the cumulative

effects of pumping in some areas (for example, by reviewing long term trends in groundwater levels in the local area).

RELATIVE EFFECTS

We assess drawdown interference effects in relation to the total available drawdown in the bore as shown in the following diagram. If the drawdown interference effect is likely to affect the ability of the neighbouring bore to achieve its yield, this could be considered a more than minor effect. In this case, we recommend that you should consult with the neighbouring bore owner before submitting your consent application.



If drawdown in a neighbour's bore is a significant proportion of their available drawdown, this could be considered a more than minor effect. We recommend consulting with them before submitting an application

5.5 HOW DEEP IS THE BORE PUMP?

The One Plan Policy 16-5 (b) says that "...a properly constructed bore...has a pump capable of drawing water from its base to the land surface".

This means that if the drawdown effects on a neighbour's bore might be minor or more than minor and they submit in opposition of the application

following notification, the construction of their bore would be taken into consideration. For example, if they simply need to lower their pump to take water from the base of the bore, temporary conditions may apply to the new take allowing time for that person to lower their pump.

6.0 What To Do If You Have Been Notified or If You Are Concerned About a Neighbour's New Consent Application?

If you have any concerns or questions about a neighbour's consent application you are welcome to contact us for advice.

If we think that your bore might be adversely affected by a proposed groundwater take consent application, we will notify you. We will send you information including the consent application to review. The consent application should include an estimation of the drawdown effect on your bore.

You will have the opportunity to make a submission on the proposal, either supporting or opposing the proposed take. You need to prepare and lodge your submission with the Council within 20 days of being notified. There is a form on our website to complete.

Before you prepare your submission we recommend that you talk to the applicant if possible so you understand the details of the proposed take and how they have assessed the effects on your bore.

After you have made a submission, a Hearing may be required. The Hearing will decide whether the consent can be granted and what specific conditions may be required to manage or mitigate any adverse environmental effects.

Our guidance leaflet on Resource Consents: Submissions, Pre-Hearings and Hearings contains more information.

7.0 Further Information

If you have any questions about a consent application, or you have been notified about someone else's consent please contact our consents team on freephone **0508 800 800** and quote the resource consent number and applicant.

Notes

A series of horizontal dotted lines for taking notes.



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