

**BEFORE THE BAY OF PLENTY REGIONAL COUNCIL**

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*Sub 52*

**IN THE MATTER OF:** the Resource Management Act  
1991

**AND**

**IN THE MATTER OF:** a submission on the Proposed  
Plan Change 13 (Air Quality) to  
the Bay of Plenty Regional  
Natural Resources Plan

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**EVIDENCE OF PAUL BARRY CASHMORE  
FOR DIRECTOR-GENERAL OF CONSERVATION**

Dated 23 OCTOBER 2018

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Director General of Conservation

## STATEMENT OF EVIDENCE OF PAUL BARRY CASHMORE

### INTRODUCTION

- 1 My full name is **Paul Barry Cashmore**
- 2 I am a Ranger specialising in Flora including invasive pest plants at the Department of Conservation's Rotorua District Office. I have been in this role for the past 6 years. This role includes managing all the DOC pest plant programmes for the Rotorua District office which ranges from large wilding conifer programmes through to both aerial and ground based herbicide spraying programmes.
- 3 Prior to that I was the Department's Botanist for the Bay of Plenty Conservancy based in Rotorua providing technical advice on flora issues including all DOC pest plant management programmes across the Bay of Plenty since 1996.
- 4 I hold the following qualification which is relevant to this hearing: a Master of Science in Environmental Science and Botany from University of Auckland.
- 5 I have provided a wide range of pest plant advice and management at local and regional level for the past 22 years in the Bay of Plenty. This has included managing a range of wetland, geothermal and forest restoration which included both aerial and ground based spraying programmes. I have personally undertaken and also managed multiple staff and contractors undertaking ground-based pest plant control work. This has mostly involved herbicide spraying at a multitude of small pest plant sites for a large range of serious ecological plant pests on public conservation land administered by the Department of Conservation. This is a large part of DOCs pest plant programme in the Bay of Plenty.

- 6 I am therefore familiar with the day to day management approaches for pest plant control related to a range of ecosystems including wetlands, geothermal and forest ecosystems in the context of DOCs pest plant control programme. This includes notifications, consents, HASNO and regional plan rules as they relate to discharge of herbicides
- 7 I am familiar with the Bay of Plenty Proposed Plan Change 13 (Air Quality) to the Regional Natural Resources Plan
- 8 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this evidence are within my area of expertise.

#### **SCOPE OF EVIDENCE**

- 9 My evidence will deal with the following:
- Discuss the Department of Conservation's statutory duties to perform plant pest control;
  - Provide an overview of the Department's pest plant programme in the Bay of Plenty.
  - Comment on the provisions of the Bay of Plenty Proposed Plan Change 13 (Air Quality) to the Regional Natural Resources Plan that pertain to pest plant spraying notifications.

## **THE DEPARTMENT OF CONSERVATION'S ROLE IN PEST PLANT MANAGEMENT**

- 10           The Department of Conservation ("DOC") is the leading central government agency responsible for the conservation of New Zealand's natural and historic heritage.
  
- 11           DOC has duties under several pieces of legislation to control pest plants on land that it manages.
  
- 12           DOC's primary legislative mandate for controlling pest plants is the Conservation Act 1987. Other key statutes, specifically the National Parks Act 1980 and Reserves Act 1977, also impose obligations upon DOC to manage pest plants.
  
- 13           DOC must also meet requirements for pest plant control under the Biosecurity Act 1993. Under this legislation Bay of Plenty Regional Council has in place a Regional Pest Management Strategy (RPMP) 2011 – 2016 which is currently under review and open for submissions. This strategy requires the control of a number of pest plant species that occur on DOC administered land, be they in aquatic, riparian or terrestrial locations.
  
- 14           In performing pest plant control on land which it administers DOC will need to comply with the rules contained in the Bay of Plenty Regional Natural Resources Plan. It therefore has an interest in the content of the rules, policies and objectives which touch upon pest plant management.
  
- 15           My role within DOC means that I have direct responsibility for working within those planning constraints.

## **DOC'S PEST PLANT MANAGEMENT PROGRAMMES IN THE BAY OF PLENTY**

- 16 DOC carries out a wide range of plant pest control throughout the Bay of Plenty. DOC currently controls approximately 196 different pest plant species in the Bay of Plenty Region in a large range of different native ecosystems ranging from wetlands, forests, dunelands through to geothermal areas and aquatic environments.
- 17 Approximately 95% of these species are treated using some form of herbicide application with the vast majority being regularly treated using non-motorised handheld e.g. knapsack spraying methodology. Aerial application and hand-held motorized application e.g. gun and hose spraying make up only a small proportion of DOCs pest plant control application methods.
- 18 Currently DOC is controlling pest plants at approximately 165 sites across the Bay of Plenty region. All these sites would have herbicide spray applications used at different frequencies. In addition, there would be approximately another 20 revegetation sites where herbicides would be regularly used for controlling vegetation competition affecting plant establishment.
- 19 Most of the herbicide spraying occurs from September through to late May with minimal spraying occurring over winter months. During peak season (October to March) staff and contractors could be controlling more than a dozen sites in a week across the Bay of Plenty with the majority of these pest plant sites receiving treatment probably several times per year.
- 20 The majority of DOCs pest plant sites that are controlled using knapsacks (non-motorised hand held) in the Bay of Plenty are relatively small. They can range from a few square metres, which is

typical of many infestations of species such as tradescantia or African clubmoss, through to a few larger sites approaching a few hectares. Within the larger infestations the actual areas that are spot sprayed would usually amount to a much smaller area. Quantities of herbicide used at most sites are relatively small often much less than 1 litre of active ingredient depending on herbicide.

- 21 At the small number of pest plant sites where there are larger infestations the methods used include gun and hose spraying or aerial spraying or in the case of wilding conifers felling to waste without herbicide use.
- 22 This also needs to be taken in the context of the size of the DOC administered reserves. Compared to many other landowners in the Bay of Plenty DOC administered reserves in which the spraying activities outlined in paragraphs 16 to 21 above occur are generally very large. As most of the biodiversity focused work including pest plant control occurs in the areas of higher conservation value these are generally the larger reserves which range in size from several hectares up to more than 40,000 ha each (Kaimai Mamaku and Whirinaki te Pua-a-Tane Conservation Park respectively). In many cases neighbours are many kilometres away from the spraying site and therefore it would be extremely unlikely for them to suffer any adverse effects given the distances and small quantities used and the method of application.
- 23 The points raised above show that the majority of DOC pest plant spraying operations are in relatively localized sites within much larger reserves of indigenous vegetation, with little or no public use with no neighbours in the immediate vicinity and using small quantities of herbicide applied using a low risk method (knapsack).

## NOTIFICATION REQUIREMENTS

- 24 Pest plant spraying programmes are constantly changing mostly due to constant weather changes e.g. wet or windy weather will prevent spraying and put the whole programme back. Often sites require more work than planned due to new sites being located or more pest plant regrowth than estimated. Additionally, DOC staff who undertake pest plant control work usually have a range of other work responsibilities including fire and compliance work and marine mammals. Other unplanned work priorities including emergency work can often mean they need to postpone pest plant spraying operations due to these other unforeseen work commitments.
- 25 Therefore because of the very large number of pest plant sites being controlled with herbicides across the Bay of Plenty and the high likelihood the timing of spray operations will be changed for one or more of the reasons outlined above the current proposed notification requirements in 4(e) place an unfair large burden on the Department to maintain up to date notifications for all its planned work within the 10 days to 24 hours timeframe proposed.
- 26 The Department needs more flexibility around its lead in time for the notification process so that it is not in the potentially time-consuming situation of constantly having to renotify its operations because of last minute delays.
- 27 A longer notification period would allow notifications to occur while taking into account operational changes as they inevitably occur without needing to retract or amend the notifications.

## CONCLUSIONS

- 28 I have demonstrated in my evidence the scale of the Departments pest plant control programme in the Bay of Plenty comprising at least 196 different pest plant species being controlled in over 165 sites, mostly using herbicides by knapsack spraying.
- 29 Given the high number of relatively small pest plant sites being controlled by a low risk method the requirements proposed in the plan for public notification being 10 days to 24 hours before the herbicide application occurs is unwieldy and onerous for the level of risk attached relative to the scale of the operations.
- 30 A longer notification period would enable the Department to fully comply with the proposed plan whilst allowing some flexibility for changes in the proposed work programme due to unforeseen circumstances, examples of which I have outlined above.

Paul Barry Cashmore

23 October 2018