

BEFORE THE SOUTHLAND REGIONAL  
COUNCIL HEARING COMMITTEE

IN THE MATTER OF A PROPOSED SOUTHLAND REGIONAL PEST  
MANAGEMENT PLAN AND PROPOSED BIOSECURITY STRATEGY

EVIDENCE OF WILLIAM PATRICK CHISHOLM BSC, MSC (HONS)

Dated this 18th day of February 2019

**1. Introduction:**

1.1 My name is William Patrick Chisholm. I am an Environmental Consultant residing in Canterbury. I have run my own environmental consultancy business - Chisholm Associates, since April 1991. Prior to this, for seven years I held forest survey and vertebrate pest management positions with the New Zealand Forest Service (three years) and Department of Conservation (four years).

1.2 I hold a Masters degree with honours in Zoology from Victoria University of Wellington. I am a member of the New Zealand Ecological Society and the New Zealand Freshwater Sciences Society. I am currently registered as a Certified Environmental Practitioner (CENVP). The CENVP programme is run by the Environment Institute of Australian and New Zealand (EIANZ) and requires its members to act in a professional manner at all times.

1.3 Over the past 15 years, I have worked on a wide variety of environmental projects throughout New Zealand, including biosecurity projects. During my time with the NZ Forest Service and Department of Conservation working on wild animal management I worked on control options for feral cats on Stewart Island. I have also had 5 years experience working for Land Information NZ as their National Biosecurity Service Provider. I have also lectured in ecological and vertebrate pest management at Massey University.

1.4 Bill and Julie Smellie have asked me to review and comment on the “site-led programme” for cats at Omaui, as outlined in the proposed Southland Regional Pest Management Plan (hereafter referred to as “the proposal”). I have also read the proposed Southland Biosecurity Strategy and the Cost-Benefit analysis prepared by Mr Simon Harris of Landwaterpeople Ltd.

**1. The proposal is muddled, and does not adequately meet the requirements of the Biosecurity Act nor the National Policy Direction (2015) (NPD) for Regional Pest Management Plans**

The proposal seeks to protect various native species including lizards and birds. The proposal correctly states that it is not its role to specify criteria for, or to identify, sites of value. However, there are specific requirements in the Biosecurity Act S. 70 and 71, and S. 5, 1, (e) of the NPD; which are lacking. These requirements can be summarised thus:



1.1 The proposal should specifically identify the values in an area (a protection goal), the threats to those values, how these threats will be managed and how success/failure will be monitored. From my reading of the proposal and the other two documents (i.e. the proposed Biosecurity Strategy and Cost-benefit analysis), I have gleaned the following information:

1.2 The proposal's protection Goal:

The proposal states that the Omaui Bush values are under threat from predators including (but not limited to) feral and domestic cats. These values include adult native birds and their eggs, native lizards and large native invertebrates.

1.3 Threats to the values in the Omaui Reserve:

The proposal states (P. 87) "*The characteristics of each of these pests, and adverse effects that they pose, are set out in Table 25 above.*" Table 25 does not do this. However, the proposal (P. 79) states: *Feral cats kill young and adult birds and occasionally take eggs, prey on native lizards, fish, frogs and large invertebrates.*

1.4 Other introduced mammals prey on native birds, lizards, and large invertebrates; such as mustelids, hedgehogs, rats, mice and possums. The proposal offers no information on the relative effects of each predator on the values described.

1.5 There is no "Objective", or target level of cats which is consistent with the proposal's goal. I have attempted to find a specific Objective or "target level" of domestic and/or feral cats which would be consistent with the proposal's goal of protecting native species. The only statements which come close to a meaningful Objective are:

*"...progressively contain and reduce the geographic distribution or extent of feral cats at the Omaui site ..."* (Objective 16, Page 87)

and

*"Feral cats are contained within the site."* (P 92)

1.6 These two statements are essentially meaningless. The term "contain" is not a measurable target. Without a measurable target level of cats which is consistent with the stated goal of protecting native species, the ability to monitor success or failure of the proposal is lost.

1.7 Methods to achieve the Objective ("target level") of cats:

The Plan (P. 87) discusses "*bringing about the desired levels of environmental protection to this site*"; but then fails to state what the desired levels should be. The Plan (Section 5.3 & P. 87) outlines "appropriate measures" to achieve the stated Goal of protecting native species. These "appropriate measures" are extensive and wide-ranging. They allow Council to impose whatever measures they wish, and charge landowners for whatever measures are taken. In addition, a Rule is proposed which prohibits anyone from owning or harbouring a feral cat, and all domestic cats must be de-sexed, microchipped and registered with Council within 6 months of Plan implementation, and not replaced.



1.8 The Plan's "appropriate measures" provide no clarity on how the native bird/lizard/invertebrate values will be protected from the presumed threat of cat predation. The Plan outlines measures to control domestic cats but provides no corresponding measures against feral cats. Indeed, the proposal is wholly deficient in defining precisely what measures will be taken to achieve its stated goal.

1.9 The proposed Biosecurity Strategy (Page 32) provides a little insight into how Council will bring about the "containment of cats". It states:

*"Advocacy and education will be the main tool that is used. During the first year we will also subsidise cat microchipping programmes for Omaui and Rakiura/Stewart Island."*

1.10 If advocacy and education are the "main tools", what are the other tools which will be used? The proposed Biosecurity Strategy is also deficient in clarifying how the control of feral and domestic cats will be carried out to achieve the proposal's stated protection goals. The proposed Biosecurity Strategy states that "*Environment Southland will support the community control efforts by providing technical advice, control support and by monitoring control success*", but does not state precisely what these efforts consist of.

1.11 How will success/failure will be monitored? The Plan (P. 92) intends to monitor success or failure of the site-led programme by 1: Monitoring the registration of domestic cats and 2. (Presumably) assessing community support through public meetings. The Plan has no provision for monitoring the density of feral cats in the area. It therefore cannot measure success or failure of the site-led programme; which is unsurprising because the proposal does not provide any detail on how its Goal will be achieved.

## **2. The rationale for the proposal is based on conclusions unsupported by science**

2.1 The proposal makes an assumption that the values of the Omaui Bush area are under threat from feral and domestic cats. The basis for this is that cats are known to predate on birds etc, so therefore they must be controlled. This ignores the threats posed by upsetting the current ecological balance, and threats posed by other introduced predators, namely mustelids, hedgehogs and rats. No studies nor data are provided to support the contention that reducing cat (feral and domestic) numbers in the area will have any beneficial effect on the values described.

2.2 Of more concern is the possibility that reducing cat numbers could lead to cycles (or "explosions") in rat numbers. Feral cats are known to predate heavily on rodents. Removal of cat predation could upset the current ecological balance in the area, thereby causing greater adverse effects on the protection values than currently exist.

## **3. The proposal does not adequately consider alternatives**

3.1 The proposal describes the only viable alternative as "do nothing". This is, indeed, a viable option when comprehensive data on predator/prey relationships in the



area is lacking (see 2. above). However, there are alternatives which should be considered before committing to what appears to be a risky course of action.

3.2 These include:

- Identifying predator habitats (e.g. rubbish bins, informal dumps, other sources of food and shelter) and removing them.
- Translocating rare or endangered species to a predator-free environment.
- Full predator-proof fencing of the Omaui Bush area.

#### **4. The proposal may cause more harm than good**

4.1 It was noted that 1080 poisoning in the area caused a resurgence in rat numbers 18 months after poisoning. A reduction in cat numbers or complete removal of cats could have the same effect. Rodent population densities can often “cycle” in response to external environmental factors, because of their high reproductive rate. One of these factors is predation. Without adequate data showing this to be unlikely, the risk of the proposal causing environmental harm is increased.

#### **5. The cost benefit analysis is seriously deficient**

5.1 A cost-benefit analysis has been prepared by “Landwaterpeople” (Harris 2018).

5.2 The analysis states:

*Site led pests programme is considered likely to have a net benefit because of the requirement for land holder agreement, which suggests that the costs of control will be exceeded by the benefits to the parties involved.*

5.3 In other words, site-led programmes are always beneficial because they cannot happen without land holder agreement. This is confirmed in Table 1 which states that the outcomes are “*Likely to be Positive assuming land holder agreement*”, and page 75 which states: “*Site led programmes will only be undertaken where there is land holder agreement. Any cost sharing arrangements and ongoing obligations for land holders will be part of the agreement.*”

5.4 However, there is nothing in the proposal stating that extensions to the Omaui site-led programme require land holder agreement to proceed. The proposal states:

*Further sites may be added to the Plan as a result of community requests or new knowledge and information being acquired by Environment Southland*

#### **5.5 This is a serious error of the cost-benefit analysis which voids its conclusion that land holders will not be adversely affected.**

5.6 The analysis actually does not analyse costs or benefits for site-led programmes. Page 75 of the analysis states:

*“The proposed costs for the Site Led pests ... will be finalised once the locations are known and agreed.”*



5.7 The analysis then conflates landholder agreement and Council decisions (Page 75- 76) by stating:

*“The agreement of the land holder signals that for them the benefits of the programme are likely to exceed the costs they will incur. Therefore, as long as the Council is satisfied that the benefits of the site led programme exceed the costs, the requirements of Section 6 of the NPD will have been met.”*

**5.8 It appears that landholder agreement is not necessary for the site-led programme to be extended, only a Council decision. It is therefore patently false for the cost-benefit analysis to state that this meets the requirements of Section 6 of the National Policy Direction (2015).**

## **6. Summary:**

- The proposal is muddled and does not adequately conform to the requirements of the Biosecurity Act S 70 and 71.
- The rationale for the proposal is based on conclusions unsupported by data or science
- The proposal does not adequately consider alternatives
- The proposal may cause more harm than good
- The cost benefit analysis is seriously deficient and contains errors of fact.

6.1 All of the above deficiencies of the proposal culminate in a demonstrable inability to meet the requirements of the NPD. In addition, the proposal does not adequately meet the statutory requirements of the Biosecurity Act 1993, most notably Sections 70 and 71 of that Act.



W.P (Bill) Chisholm  
CHISHOLM ASSOCIATES

