

19-E-0487 / DOC 6038215

16 August 2019



Thank you for your Official Information Act (OIA) request dated 16 July 2019 relating to planned 1080 operations in the Milford Sound area. Hon Eugenie Sage has referred your request to the Department of Conservation for a response.

I understand you have also contacted and to discuss your concerns regarding this operation. I have addressed some of those concerns in this letter.

Before responding to your request, I have set out the following contextual information in the hope that it will assist your understanding of some of the issues you have raised.

1080 and water

Published research has confirmed that 1080 is highly water-soluble. If a 1080 bait pellet enters water, the 1080 will quickly leach out of the pellet and break down into harmless non-toxic products.

Extensive scientific research has determined that there is no evidence of significant or prolonged 1080 contamination in surface waters. Between 1990 and 2018, 1,380 water samples (taken from New Zealand drinking water supplies, including streams with water intake points) were tested for 1080. Only five of those 1,380 samples showed harmless traces of 1080 (which were all well below the Ministry of Health's contamination standards for drinking water). The remaining 1,375 samples showed no detectable trace of 1080.

A helpful summary of various scientific studies on the effects of 1080 on water can be found in the following published article: https://newzealandecology.org/nzje/2968.pdf.

1080 in streams and rivers

If a 1080 bait pellet falls into a stream or a river, the 1080 in that pellet will quickly dissolve and leach out of the pellet. Microorganisms and plants in the water will then break down the 1080 into other, harmless, compounds. If it rains after a 1080 operation, rainwater will wash most of the 1080 from uneaten pellets into the soil, where it will be broken down into harmless compounds by microorganisms in the soil.

1

¹ RL Parfitt et al (1995) "Sodium monofluoroacetate (1080) leaching through soils", *Bulletin of Environmental Contamination and Toxicology* 55:162–169.

Measures to mitigate the risk of 1080 bait pellets entering water

The Department uses GPS technology to ensure that 1080 bait pellets are not applied near large rivers and lakes. This further reduces the risk of 1080 bait pellets entering waterways in the first place.

Local Public Health Units ("PHUs") set conditions around the application of 1080 to mitigate the risk of 1080 bait pellets entering domestic and public water supplies. These conditions may include:

- Verifying the location of water supply intakes within, and near, the treatment block:
- Notifying people that source their water supply from within the treatment block that a 1080 operation has been scheduled to take place; and
- Setting exclusion zones around water supply intakes.

In addition to the permissions issued by PHUs, contractors are also issued permissions by the Department to apply 1080 over public conservation land. These permissions contain performance standards that further mitigate any risk of 1080 bait pellets entering waterways (for example, by specifying exclusion zones for the aerial application of 1080).

Your OIA request

We now consider your OIA request. For ease of reference, we have addressed the various issues you have raised under separate headings.

PHU permission relating to the 2017 operation

You have asked that we provide a copy of the PHU permission relating to the 2017 pest control operation in the Cleddau/Milford Sound area. I have attached a copy of that document to my email ("Document 1"). The conditions upon which that permission has been issued are included in Document 1.

I have withheld the names of individuals and identifying information under sections 9(2)(a) and 9(2)(g) of the Official Information Act 1982 to protect their privacy and to prevent any improper pressure or harassment of officials or employees. In making this decision, I have taken into account the public interest considerations set out in section 9(1) of the OIA.

Warning signs erected by the Department and its contractors

You requested information on whether any signs were erected during the 2017 operation to notify tourists of "potentially contaminated water". You also asked whether DOC intends to notify the public and tourists of the presence of "contaminated water" during the 2019 operation.

The Department did not arrange for any signs to be erected during the 2017 operation to notify tourists of contaminated water. This was on the basis that it was extremely unlikely for waterways in that area to be contaminated by 1080. Water samples that were collected from waterways in the Milford Sound area following the completion of the 2017 operation and tested for 1080 confirmed the Department's view that there were no detectable levels of 1080 in those samples.

I also note that the Department does not intend to erect signs to indicate the presence of contaminated water during the 2019 operation because waterways within the Milford Sound area are extremely unlikely to be contaminated with 1080.

However, the contractor responsible for carrying out this operation will arrange for signs to be erected within the treatment block to notify the public that 1080 bait pellets may be present on the ground.

I acknowledge your concerns that some tourists might not understand the English wording on these warning signs and might therefore be unaware of the presence of 1080 bait pellets in the Milford Sound/Cleddau area. Unfortunately, we do not have the resources to erect warning signs containing wording that will be understood by all tourist groups. However, the warning signs that are to be erected will include an international hazard symbol for toxic substances (ie, a skull and crossbones) to ensure that tourists in the area are made aware of the presence of toxic substances.

Testing of water samples after the 2017 operation

The 2017 Milford Sound/Cleddau operation was carried out by Contract Wild Animal Control NZ Limited ("CWAS"). Shortly after the completion of that operation, CWAS arranged for water samples collected from waterways in the area to be tested for 1080 residue. The tests were carried out by Southern Monitoring Services Ltd (SMSL) and Landcare Research.

The results of those tests, as well as the dates on which the samples were collected and tested, are set out in the Water Quality Monitoring Report prepared by SMSL (and attached to my email as "Document 2"). You will see that the results confirmed that there were no detectable levels of 1080 in the water samples that were tested.

Please note that I have withheld the names of individuals under section 9(2)(a) of the OIA in order to protect their privacy.

I also note that the date on page 1 of this Water Quality Monitoring Report is incorrectly recorded as 2 September 2014. SMSL has confirmed that this is a typographical error, and that the report was actually prepared on 4 October 2017.

Provision of alternative water supplies

You have sought information on alternative water supplies that might have been offered to the public, and to tourists, while the 2017 water testing was underway. You have also asked for information on plans to provide alternative water supplies during the 2019 operation.

The Department did not provide alternative water supplies at the time the 2017 water testing was undertaken because it considered the risk of contamination to be extremely unlikely, and because it was not a requirement under the 2017 permission granted by the PHU.

For similar reasons, the Department does not intend to provide alternative water supplies for the duration of the 2019 operation.

Monitoring of non-target species following the 2017 operation

Outcome monitoring of non-target species was carried out in the Cleddau catchment in 2017/18 post aerial control in relation to whio, but not the other species mentioned in your request. A copy of the monitoring report is attached.

Of note, figure 6 on page 7 shows the relationship between predator numbers and whio survival and discloses a dip in whio numbers after each beech mast except after the 2016/17 mast event, which is the only time aerial 1080 had been applied in the area. There was no other non-target monitoring carried out in this catchment.

I have withheld the names of individuals and identifying information under sections 9(2)(a) and 9(2)(g) of the Official Information Act 1982 to protect their privacy and to prevent any improper pressure or harassment of officials or employees. In making this decision, I have taken into account the public interest considerations set out in section 9(1) of the OIA.

PHU permission relating to the 2019 operation

You have asked that we provide a copy of the PHU permission relating to the 2019 operation in the Cleddau/Milford Sound area. I have attached a copy of that document to my email ("Document 3"). The conditions upon which that permission was issued are included in Document 3. This document also includes the mitigation outcomes relating to that permission.

I have withheld the names of individuals and identifying information under sections 9(2)(a) and 9(2)(g) of the OIA to protect their privacy and to prevent any improper pressure or harassment of officials or employees. In making this decision, I have taken into account the public interest considerations set out in section 9(1) of the OIA. I have also withheld some information under section 6(d) of the OIA because releasing that information is likely to endanger the safety of the Department's staff and contractors.

You are entitled to seek an investigation and review of my decision by writing to an Ombudsman as provided by section 28(3) of the OIA.

If you wish to discuss this response to your request, please contact us by email at replies@doc.govt.nz.

Yours sincerely



Hilary Aikman Director National Operations

Document schedule

Item	Date	Document description	Decision
1	18 August 2017	2017 PHU permission document	Released in part
2	4 October 2017	Water Quality Monitoring report	Released in part
3	9 August 2019	Cleddau Annual Report 2017/18	Released in part
4	29 April 2019	2019 PHU permission document	Released in part