

Reference: 20190564



19 September 2019



Thank you for your Official Information Act request, received on 22 August 2019. You requested:

I am seeking the following information under the Official Information Act.

From Treasury a copy of the advice to the Minister of Finance on all Cabinet Papers relating to the mycoplasma bovis.

Information being released

Please find enclosed the following documents:

Item	Date	Document Description	Decision
1.	12 February 2018	Aide Memoire: Advice regarding the Mycoplasma Bovis biosecurity response	Release in part
2.	23 March 2018	Aide Memoire: Advice Concerning Upcoming Mycoplasma Bovis Response Decisions	Release in part
3.	29 March 2018	Aide Memoire: Advice on Mycoplasma Bovis Cabinet Paper	Release in part
4.	3 April 2018	Pre-cab briefing 3 April 2018	Release in part
5.	21 May 2018	Treasury Report: Advice on Mycoplasma Bovis Management Options	Release in part
6.	25 May 2018	M Bovis (email to MoF office detailing our advice)	Release in part
7.	28 May 2018	Final Pre-Cab Briefing 28 May 2018	Release in part

1 The Terrace
PO Box 3724
Wellington 6140
New Zealand
tel. +64-4-472-2733

<https://treasury.govt.nz>

8.	19 June 2018	Final Pre-Cab Briefing 11 June 2018	Release in part
9.	27 July 2018	Treasury Report: Briefing for Cabinet Economic Development Committee Wednesday, 1 August 2018	Release in part

I have decided to release the relevant parts only of the documents listed above, subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- personal contact details of officials, under section 9(2)(a) – to protect the privacy of natural persons, including that of deceased natural persons,
- advice still under consideration, section 9(2)(f)(iv) – to maintain the current constitutional conventions protecting the confidentiality of advice tendered by Ministers and officials,
- names and contact details of junior officials and certain sensitive advice, under section 9(2)(g)(i) – to maintain the effective conduct of public affairs through the free and frank expression of opinions,
- direct dial phone numbers of officials, under section 9(2)(k) – to prevent the disclosure of information for improper gain or improper advantage.
- section 9(2)(i) – to enable a Minister of the Crown or any department or organisation holding the information to carry out commercial activities without prejudice or disadvantage,
- s9(2)(j) – to enable a Minister of the Crown or any department or organisation holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).

Some information has been redacted because it is not covered by the scope of your request. This is because the documents include matters outside your specific request.

Direct dial phone numbers of officials have been redacted under section 9(2)(k) in order to reduce the possibility of staff being exposed to phishing and other scams. This is because information released under the OIA may end up in the public domain, for example, on websites including Treasury's website.

In making my decision, I have considered the public interest considerations in section 9(1) of the Official Information Act.

Please note that this letter (with your personal details removed) and enclosed documents may be published on the Treasury website.

This reply addresses the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

Gwen Rashbrooke
Manager

OIA 20190564

Information for Release

1.	<u>Aide Memoire Advice regarding Mycoplasma Bovis Response</u>	1
2.	<u>Aide Memoire Advice Regarding the Decision Making Process Around the Mycoplasma Bovis Response</u>	3
3.	<u>Aide Memoire Advice on Mycoplasma Bovis Cabinet Paper</u>	5
4.	<u>FINAL Pre-cab briefing 3 April 2018</u>	8
5.	<u>Treasury Report Advice on Mycoplasma Bovis Management Options</u>	12
6.	<u>M Bovis (email to MoF office detailing our advice)</u>	18
7.	<u>FINAL Pre-cab briefing 28 May 2018</u>	31
8.	<u>FINAL Pre-cab briefing 11 June 2018</u>	35
9.	<u>Treasury Report Briefing for Cabinet Economic Development Committee Wednesday 1 August 2018</u>	39

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Reference: T2018/273

SH-12-3-3

Date: 12 February 2018



To: Minister of Finance (Hon Grant Robertson)

Deadline: 12 February 2018

Aide Memoire: Advice regarding the *Mycoplasma Bovis* biosecurity response

1. You are meeting with the Minister for Biosecurity at 8am on Tuesday 13 February. The Minister will be discussing Cabinet decisions that are necessary for the Ministry for Primary Industries ("MPI") to continue funding its response to *Mycoplasma Bovis* ("*M Bovis*"). This briefing draws out the key funding issues associated with these decisions, and their relationship to the Budget process.

First Decision - 5 March: Continue or cease response

2. Two options will be presented to Cabinet on March 5:
 - a. **Continue response – requiring at least \$85m new funding.** This comprises \$35m operational costs and \$50m compensation¹. MPI anticipates that it may need to seek further funding to cover additional compensation liabilities incurred under this option.
 - b. **Cease response – requiring \$62m new funding.** This comprises \$12m operational costs and \$50m compensation resulting from the response to date MPI cannot meet these costs within its baseline. This option presents no further costs.
3. For timing reasons, it is not practical to make this initial decision through the Budget process. MPI is already incurring response costs. A decision is necessary now as to whether or not it should continue to incur these expenses.

Second Decision - 2 April: Long Term Management

4. If Cabinet chooses to continue the response, the Minister intends to present a range of long-term management options for Cabinet consideration on 2 April. These options will include full eradication, which is estimated to cost at least \$200m (note that this is an optimistic estimate). The possibility of industry led management will also be explored.

¹ Under the Biosecurity Act 1993, MPI is obligated to pay compensation to affected parties in certain circumstances.

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5. The timing of MPI's nation-wide milk test (expected to be completed in April) means that the decision on the long-term response to *M Bovis* (i.e. whether to proceed with full eradication) aligns poorly with the Budget process. Budget Ministers will have determined the Budget package before MPI have options prepared on 2 April. If there is a possibility that Cabinet will provide funding for full eradication when making decision on in this second paper, the Budget package will have to be shaped by Budget Ministers with this in mind.²

Treasury Advice

6. Additional funding provided in either of these two Cabinet papers will be funded against the Budget 2018 operating allowance.
7. The Treasury notes that full eradication is a very costly option – and until the nation-wide milk testing has been completed it will not be clear whether it is even technically feasible. If Cabinet is not prepared to consider funding eradication at a future date, proceeding to long term management (ceasing response) is preferable. Cost sharing with the industry should also be explored given that it is the primary beneficiary of MPI's response operations.

s9(2)(g)(i)

Natural Resources, s9(2)(k)

Gwen Rashbrooke, Manager, Natural Resources, s9(2)(k)

² To facilitate this, a placeholder Budget initiative will be submitted providing Ministers with line of sight of the full eradication funding request.

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Reference: T2018/659 SH-12-3-3

Date: 23 March 2018



To: Minister of Finance (Hon Grant Robertson)

Aide Memoire: Advice Concerning Upcoming Mycoplasma Bovis Response Decisions

1. The Ministry for Primary Industries ("MPI") has been responding to the cattle disease Mycoplasma Bovis ("M. Bovis") since July 2017. This note sets out the latest information on response costs we have from MPI. We will provide advice next week regarding the links between these costs, and the Budget process.

Update on response costs

2. To date, Cabinet has provided MPI with an additional \$83.1m of funding in relation to the M. Bovis response (\$59.3m to cover the Crown's compensation liabilities under the Biosecurity Act, and \$23.8m to cover its operational expenditure). Industry has contributed an additional \$11.2m towards the response.¹
3. This funding has covered expenditure to date, but MPI consider that further funding is now required to allow for a long-term response to the disease.
4. MPI have identified four possible long-term response options, ranging from a large scale and rapid attempt at eradication, to winding down the response. The latest information we have for the cost of each option (from MPI as at 22 March) is set out in the table below.

	2018/19	2019/20	2020/21	2021/22	4-year total
Rapid eradication	287	171	161	101	720
Phased eradication	183	154	178	113	628
Long-term management	55	35	31	32	153
Wind down response	25	22	22	20	89

5. There are two important facts to draw-out:
 - The costs above are the estimated *total* costs. This total cost will be shared between industry and the Crown. Industry contributions to biosecurity responses are determined under "Government Industry Agreements".^{s9(2)(i)}

s9(2)(i)

¹ Cabinet approved total operational spending of \$35m, with the split between the Crown and industry to be agreed jointly by the Minister for Biosecurity and the Minister of Finance. The split noted here (\$23.8m Crown funding and \$11.2m industry funding) has been announced by the Minister for Biosecurity.^{s9(2)(f)(iv)}

s9(2)(f)(iv)

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- These costs, particularly around the eradication options, may continue to escalate. The disease has already spread further than first thought; and it is possible that forthcoming information may further increase costs.

Comment regarding Response Options

- At this stage, the economic rationale supporting the eradication-based options does not appear strong. The costs of these options (\$720m and \$628m over the forecast period, and further costs in outyears) compare poorly against the economic impact of the disease of (\$520m lost GDP over 10 years).²
- Eradication is also speculative: the costs may escalate beyond current expectations, and the eradication attempt may fail. We also note that no country that we are aware of has successfully eradicated M. Bovis on a long-term basis.
- See the below table for details of the non-eradication options:

Cost type	Description of the activity	Long-term management (4yr cost \$m)	Wind down response (4yr cost \$m)
Operational	staff costs, feeding animals under movement controls, cleaning and decontamination, and animal movement tracing	50	21
Surveillance	the cost of testing, monitoring, and surveillance activities	20	4
Investment and system resilience	creation of an industry task-force to coordinate farmer support, extension reset activities, and disease research	70	64
Compensation	Crown's legal obligation under the Biosecurity Act to pay for production losses as a direct result of MPI's actions	13	0

- It is not clear, at least in the short-term, that all of these costs are necessary. We consider that there is a need to review New Zealand's current biosecurity settings (for example, the incentives created by the compensation provisions of the Biosecurity Act, and investigating an EQC-type fund for meeting the future costs of biosecurity incursions). It is also unclear at this stage how MPI derived these numbers, or what drives the different costs for each option.
- Given this, we consider it premature to provide ongoing funding, particularly for the more discretionary activities such as "system resilience", before a more fundamental review in the underlying policy settings is carried out. We will work with MPI to develop packages for Ministers to consider.

Hamish Slack, Senior Analyst, Natural Resources, s9(2)(k)

s9(2)(g)(i) Natural Resources, s9(2)(k)

Natalie Labuschagne, Policy Manager, Natural Resources, s9(2)(k)

² Source: *Mycoplasma bovis: Economic impacts of Mycoplasma bovis* (NZIER report to MPI January 2018). MPI has since produced figures suggesting the cost to GDP could be as high as \$1,400m over 10 years; we do not know what is driving these different estimates.

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Reference: T2018/863

SH-12-3-3

Date: 29 March 2018



To: Minister of Finance (Hon Grant Robertson)

Deadline: 3 April 2018

Aide Memoire: Advice on Mycoplasma Bovis Cabinet Paper

1. On 3 April, Cabinet will consider the paper *Mycoplasma bovis response options, funding, and the resilience of the agricultural system*. The paper notes four possible response options to M Bovis – from ‘stop managing’ to ‘rapid eradication’ - and highlights that Cabinet will make a decision on the response in early May.
2. It also seeks to appropriate funding to ensure the Ministry for Primary Industries (“MPI”) is in a position to undertake eradication, should Ministers choose that option.
3. The Treasury does not support providing the funding sought at this stage.

Funding sought for Mycoplasmas bovis

4. The paper seeks \$25m of operating funding in 2017/18 to cover compensation, and \$262m of operating funding in 2018/19, to cover operational and compensation costs, in the event that Cabinet decides to pursue full eradication. The Cabinet paper seeks agreement to charge these costs against the Budget 2018 operating allowance. MPI is seeking this funding ahead of a final decision because the date of the final decision falls within the Budget moratorium (MPI advise that a decision is necessary during the moratorium as even a small delay, such as delaying the decision until after the moratorium, could put the success of eradication at risk should Cabinet choose that option).¹
5. M. Bovis response costs could be substantial over the forecast period; however, this Cabinet paper seeks funding only for 2017/18 and 2018/19. The costs of the various response options, as provided to us by MPI as at 22 March, are set out in the table below.

	2018/19	2019/20	2020/21	2021/22	4-year total
Rapid eradication	287	171	161	101	720
Phased eradication	183	154	178	113	628
Long-term management	55	35	31	32	153
Wind down response	25	22	22	20	89

¹ Runs from 9 April to 17 May (Budget Day), and during this period, no new fiscal decisions can be made.

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6. As we noted in our earlier advice, at this stage the economic rationale supporting full eradication is poor, and Ministers should keep in mind the escalating cost of eradication in comparison to the GDP impacts of M. Bovis.

Treasury comment

7. The Treasury does not support appropriating funding for 2018/19. In addition, the 2017/18 funding request is a recent development and we still have outstanding concerns around its necessity, particularly in light of the \$59.3m in funding that has already been provided for compensation relating to the M. Bovis response. We are working with MPI to resolve these concerns, but do not recommend agreeing to funding until these concerns are resolved.
8. We note that if funding does prove necessary in 2017/18 but is not agreed to before Budget decisions, there is a risk that it may not be captured in time for inclusion in the Supplementary Estimates or the forecasts included in the Budget Economic and Fiscal Update. If this is the case, there is a risk of unappropriated expenditure.
9. Regarding 2018/19 funding, the Treasury advises that a better approach would be:
- to seek an in-principle decision from Cabinet on the response option that should be pursued in the late April-early May paper; and
 - appropriate the necessary funding for this in a subsequent Cabinet paper, which would be considered after the Budget moratorium.
10. The advantage of this approach is that the exact amount necessary (factoring industry contribution to the response) can be appropriated, rather than a loose estimate under the current approach. It also reduces the impact on the 2018 operating allowance, given the number of pressures that may be crowded out if this is funded through the Budget 2018 allowances.²
11. MPI's concern with this approach is that it will be unable to pursue eradication at an optimal pace if funding is delayed. However, this applies only to funds required for 2017/18. We consider that there is sufficient time between the end of the Budget Moratorium (17 May) and the start of the new financial year (1 July) to appropriate 2018/19 funding (as a pre-commitment against Budget 2019). Furthermore, the Cabinet decision on the final response in late April-early May will provide MPI with the authorisation necessary to proceed with Cabinet's preferred option.
12. While the Treasury's first best advice would be to fund these pressures (if required) from allowances, given the likely significant costs of responding to M. Bovis, you may also wish to consider alternative funding options to the Budget 2018 and 2019 allowances:

² If funding decisions are made after 17 May, they will likely need to be made as a pre-commitment against Budget 2019 allowances.

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s9(2)(f)(iv)

Treasury Recommendation

13. If you agree with our preferred approach, we recommend you:
- a **invite Cabinet to not support financial recommendations 13, 14 and 15** (the recommendations seeking funding for 2017/18 and 2018/19); and
 - b **test with the Minister for Biosecurity the necessity of the compensation funding sought for the 2017/18 year.**

s9(2)(g)(i)

Natural Resources, s9(2)(k)

Natalie Labuschagne, Policy Manager, Natural Resources, s9(2)(k)

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Pre-Cab Briefing 3 April 2018

Notes:

- The Treasury will brief the Minister of Finance and Associate Ministers on Tuesday 3 April 2018.

Papers for Cabinet Consideration

Deleted - not within scope

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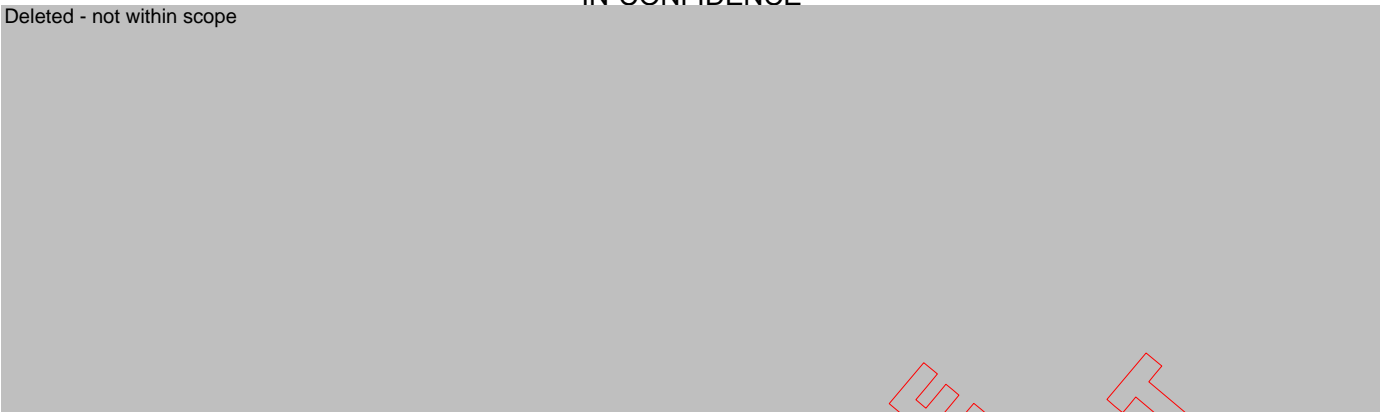
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Item	Title		
Description and analysis		Fiscal implications	Treasury Recommendation
Deleted - not within scope			
	Mycoplasma Bovis Response Options, Funding, and the Resilience of the Agricultural System		
<p>This paper relates to the on-going biosecurity response to the cattle disease M. Bovis. The paper:</p> <ul style="list-style-type: none"> updates Cabinet on the spread of the disease to-date signals that a subsequent paper will be submitted to Cabinet in late April/early May, seeking a decision which long-term response option to pursue (e.g. attempt to eradicate, transition to long term management, or to cease response) seeks funding of \$720m over the forecast period (\$25m in 2017/18, and \$695m in later years). 	<p>Decisions on the long-term response option to be pursued (sought in a late April/early May Cabinet paper) will occur during the Budget moratorium. Accordingly, this paper seeks funding now, of \$720m over the forecast period, to ensure MPI has the necessary funding for whichever response option Cabinet ultimately decides.</p> <p>If Cabinet decided to pursue a response option that costs less than \$720m, the remaining funds would be returned to the centre.</p>	<p>Do not support the funding sought in this paper. The need for additional funding in the 2017/18 year has not been well established (especially in light of the \$59.3m in funding for compensation that has already been provided), and funding for 2018/19 and later years could be sought at a later time.</p> <p>The Treasury has inserted alternative recommendations into the paper setting out its preferred approach.</p>	

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**Treasury Report: Advice on Mycoplasma Bovis Management Options**

Date:	21 May 2018	Report No:	T2018/1414
		File Number:	MS-9-1

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Grant Robertson)	Invite the Minister of Biosecurity to resubmit the "Mycoplasma bovis response options" paper for Cabinet on 28 May with updated recommendations, seeking only 2017/18 and 2018/19 funding, as well as correcting technical errors identified by the Treasury	23 May 2018 (DEV Committee)

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1st Contact
s9(2)(g)(i)	s9(2)(g)(i) Natural Resources	s9(2)(k) N/A (mob)	✓
Natalie Labuschagne	Policy Manager, Natural Resources	s9(2)(k) N/A (mob)	

Actions for the Minister's Office Staff (if required)

Return the signed report to Treasury.

Note any feedback on the quality of the report

Enclosure: No

IN-CONFIDENCE**Treasury Report: Advice on Mycoplasma Bovis Management Options**

Purpose of Report

1. On 23 May 2018, the Minister for Biosecurity will take a paper to the Cabinet Economic Development Committee (DEV) seeking final decisions regarding the Crown's future management of Mycoplasma bovis (M bovis). This report provides you with an overview of the paper, and a list of the outstanding issues that you may wish to raise with the Minister for Biosecurity at the Cabinet meeting.
2. A summary of the costs associated with each option can be found in Appendix One. The four options presented in the paper are as follows:
 - Option 1: Rapid Eradication
 - Option 2: Phased Eradication
 - Option 3: Long-term Management
 - Option 4: Winding down the response

Principles Guiding the Crown's Involvement in the M Bovis Response

3. Biosecurity incursions can result in private costs (e.g. reduced profits of businesses directly affected by the incursion) and public costs (e.g. reduced profits for those not directly affected, or because the incursion results in some cost to the wider public).
4. The Treasury considers as a default position that the Crown's degree of involvement in a biosecurity response should be proportionate to the extent that the biosecurity incursion results in public costs.
5. In the case of public costs however, it is not possible nor equitable to charge a specific person for managing these costs. Therefore, there are grounds for the Crown to step in.
6. Myrtle rust is an example of an incursion that resulted in both private and public costs. The disease affects manuka trees, which results in private costs (reduced production) borne by the manuka honey industry. It also features public costs: myrtle rust is spread by the wind so an infection from one property could spread to other properties (and it not possible for the owners of those other properties to prevent that spread).¹ Moreover, myrtle rust affects significant native New Zealand species, such as the pōhutukawa – the wider public therefore has an interest in the management of the disease over and above its impact on the profitability of commercial farmers.
7. The Cabinet paper does not establish the public costs of the M bovis incursion. While the presence of the disease has a substantial impact on farmers due to production losses, these costs are private in nature.
8. We note that M bovis does not pose a threat to human health and its presence in New Zealand does not affect our ability to export either dairy or meat products. We also note that, unlike some biosecurity incursions, the spread of the disease may be able to be

¹ We note however there is a case that this type of public cost should be met through an industry-wide levy, rather than through Crown funding.

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controlled (to some extent) by farmer actions. Careful control of cow movements may preserve a herd from the disease.

9. Given the lack of public costs, there is no prima facie case for the Crown to contribute significantly to the costs of managing M bovis. Nevertheless, there are two factors favouring *some* Crown assistance:
 - a **Value for money** - A small amount of Crown expenditure will likely result in a significant reduction in the cost of the disease to the industry, and the industry is unable to fund this cost itself.
 - b **Business expectations** - Farmers expect the Crown to assist them with biosecurity incursions – even when the costs of the incursion are predominately private.

The Treasury does not support Option 2: Phased Eradication

10. Phased eradication aims to eradicate M Bovis from New Zealand over a ten year period. It involves culling cattle at all infected, and future infected properties. This is the Minister for Biosecurity's preferred option. The response costs under this option are estimated at \$872 million. The industry will contribute 32 percent of this cost, which means that the Crown cost under this option is \$598 million over ten years.
11. The Treasury does not support phased eradication because the benefit to the Crown is unclear, and there is a considerable risk of failure.

Benefit to the Crown is unclear

12. The total cost of phased eradication, which also includes both production impacts and industry contribution is \$888 million. This compares against the other short-listed option (long-term management – option 3), which has a total estimated cost of \$1,211 million. Therefore, phased eradication produces a net benefit of \$332 million (when compared with option 3).
13. While this is a considerable benefit, this benefit primarily comprises of avoided industry impact. Therefore, these benefits mostly accrue to the industry – they are private benefits. As noted in the principles stated above, the grounds for intervention are not clear when the costs are primarily private.

Risk of Failure

14. It is uncertain whether phased eradication will successfully eradicate M bovis. The independent Technical Advisory Group is split on the issue: s9(2)(g)(i)
s9(2)(g)(i)
s9(2)(g)(i)
15. Risk is also compounded by factors affecting the Ministry for Primary Industries (MPI's) ability to accurately judge the extent of the spread of the disease. Given the nature of the disease, herds can be infected without presenting symptoms which can make it hard for farmers to report the disease. There is also considerable uncertainty about stock movements given the failure of the National Animal Identification and Tracing (NAIT) system which limits MPI's ability to accurately trace and identify further suspected properties. These factors limit our understanding of the extent of the spread, which substantially increases the risk that phased eradication may fail.²

² By failure, we mean within the funding envelope sought.
Advice on Mycoplasma Bovis Management Options

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16. Another argument in the Cabinet paper in favour of phased eradication (option 2) relative to long-term management (option 4) is the balancing of the risk of failure against the apparent uncertainty surrounding the possibility that the disease has greater impacts in New Zealand than overseas experience indicates. No evidence to support this claim is made in the paper and therefore it is not clear to what extent the risks of failure for option 2 can be mitigated by the risks of greater cost for option 3.

Deciding Between Options 3: Long-Term Management and Option 4: Winding-Down the Response

17. The Cabinet paper argues that the neither option 1: rapid eradication or option 4: wind down response is feasible. However, we consider it premature to take option 4 off the table at this stage.
18. We note that the total cost (lost production to industry plus response costs) of both options are broadly similar (option 3 has a total ten-year cost of \$1,211m, option 4 of \$1,330m). The key difference between these options is how this cost is split between the Crown and industry, with the Crown contributing far more under option 3 than 4.
19. While option 4 is dismissed in the Cabinet paper, the paper does not make a strong case why it should be preferred over option 3. The paper notes that option 4 decreases farmers' ability to effectively manage the disease in the short to medium term, but does not argue why it is appropriate for the Crown to contribute so substantially to aid the industry. We also note that option 3 does not present good value for money – compared against option 4, the cost to the Crown increases by \$443 million for a reduction in the cost to industry of \$462 million.

Treasury recommends option 3: Long-term Management at the present time

20. Despite the above considerations, the factors we noted in paragraph 9 point towards some Crown involvement in the response. Farmers may have formed an expectation that the Government will assist in biosecurity responses (based on past actions) and therefore have not planned for the alternative. There may also be an option between winding down the response and long-term management which presents the best value for money – but officials have not had the time to design such an option.
21. With that in mind, we recommend supporting option 3: long term management, but limiting the funding appropriated to only 2017/18 and 2018/19. The Minister for Biosecurity could then be invited to report back to Cabinet in early December 2018, exploring the extent to which the Crown should stay involved in the long-run in the management of the disease, and seeking further funding (or returning funding to the centre), depending on the option chosen.
22. Another reason to support option 3 is that the Crown can always scale the response down towards option 4, but it cannot be scaled back up. For example, the Crown cannot decide to wind down the response, then decide in future to impose movement controls again. Therefore, option 3 preserves the option to decrease the Crown's involvement after more detailed consideration of the Crown's involvement has occurred.

Technical Issues with the financial recommendations

23. We have identified errors in the financial recommendations in the Cabinet paper. For example, a recommendation needs to be included stating that the capital injection is to be repaid to the Crown once the industry has provided their contribution.

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24. We advise that you should invite the Minister of Biosecurity to resubmit the paper to Cabinet on 28 May, after MPI has worked with the Treasury to ensure the errors are addressed.

Recommended Action

We recommend that ahead of the consideration of the Cabinet paper "Mycoplasma bovis response options" at DEV committee on 23 May 2018, you:

- a **Note** that the Treasury does not support Option 2: Phased Eradication given the unclear benefit to the Crown, and the considerable risks of failure;
- b **Note** that the Treasury supports Option 3: Long-term Management at the present time, but notes that more work should be done to present options between Options 3: Long-term Management and 4: Winding down the response;
- c **Invite** the Minister of Biosecurity to resubmit the paper for Cabinet on 28 May with updated recommendations, seeking only 2017/18 and 2018/19 funding, as well as correcting technical errors identified by the Treasury;

Agree/ Not Agree

Natalie Labuschagne
Policy Manager, Natural Resources

Hon Grant Robertson
Minister of Finance

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Appendix One – Cost of response options

Option	Component of cost	2018/19	2019/20	2020/21	2021/22	2022/23	Ten year cost
1: Rapid eradication	Total cost	383	131	150	114	77	966
	Response cost	367	127	146	110	74	936
	Industry impact	16	4	4	4	3	30
2: Phased eradication	Total cost	335	121	141	101	71	888
	Response cost	325	119	139	100	70	872
	Industry impact	10	2	2	1	1	16
3: Long term management	Total cost	261	100	113	107	100	1,211
	Response cost	256	61	55	26	26	520
	Industry impact	5	39	58	81	74	691
4: Wind down response	Total cost	47	91	118	143	135	1,330
	Response cost	42	21	17	14	14	177
	Industry impact	5	70	101	129	121	1,153

From: s9(2)(g)(i)
Sent: Friday, 25 May 2018 3:31 PM
To: Alastair Cameron
Cc: Hamish Slack [TSY]; Natalie Labuschagne [TSY]
(Natalie.Labuschagne@treasury.govt.nz); Rachelle Earwaker [TSY]; Udayan Mukherjee [TSY]
Subject: M Bovis
Attachments: Scan-to-Me from patty.hamlet.treasury.govt.nz 2018-05-25 152233.pdf; M bovis alternative Recommendation.docx

[IN-CONFIDENCE]

Hi Alastair,

Note alternative recommendation, as well as a photocopy of the key slides from MPI's slide pack are attached.

1. Approach to the Cabinet paper on Monday 28 May 2018

We have been working with MPI to improve the financial recommendations ahead of Cabinet. However, we have found several errors in the recommendations – too many for MPI to correct ahead of Cabinet. Therefore, the technical financial recommendations will be taken out of the paper ahead of Cabinet on Monday. This approach is agreed between MPI and Treasury. On Monday Cabinet will be able to agree to the policy decision, and they will have the authorisation to progress with the agree approach. A follow up paper agreeing to the financial recommendations necessary to action Cabinet's 28 May decision will be submitted on 11 June, 2018.

Note also, that the May 23 Cabinet paper considered by DEV will be proactively released by MPI on Monday 28 May after a decision has been made. This instruction has come from the Prime Minister's Office.

2. Breakdown of the costs of Phased Eradication and Long-term management

Costs (at 90% confidence)

Response	18/19	19/20	Two year total	Ten Year Total
Phased eradication	335	121	456	886
response costs	325	119	444	
operations	99	57	156	
surveillance	14	12	26	
investment and system resilience	30	29	59	
compensation	180	21	201	
industry impact	10	2	12	
long term management	261	100	361	1,218
response costs	256	61	317	
operations	63	15	78	
surveillance	3	3	6	
investment and system resilience	29	26	55	
compensation	160	17	177	
industry impact	5	39	44	

We have confidence that the operations, surveillance, and the compensation costs are appropriately costed (but have some concerns with the investment and system resilience numbers – see below). MPI are constantly updating their epidemiological work, and adjusting their costings accordingly. In stating that, these estimates still depend on assumptions about the extent of the spread, and given the failings of the NAIT system, there will always be uncertainty around the extent of the spread (and therefore cost, given response costs scale with the extent of the spread).

3. Confidence level and the impact this has on sought funding

MPI has provided cost estimates at 50% and 90% confidence. Confidence level indicates MPI's certainty that a figure will either equal or fall below this figure. For example, 90% confidence means that MPI are 90% sure that the actual costs of the chosen option will be equal to or lower than the number presented. There are risks associated with either approach:

- If funding is provided at the 50% confidence level – it is just as likely as not that the actual costs to exceed amount of funding provided. Therefore, MPI may need further funding.
- If funding is provided at the 90% confidence level – very likely that that actual costs will fall below amount of funding provided costs. In that case MPI will have been over-appropriated

We have taken the view providing funding at 90% confidence estimates is appropriate for two reasons:

1. It means that the decision to eradicate or manage is based on a conservative (i.e. more expensive) view of the costs;
2. If the actual cost comes in below what MPI was appropriated (i.e. there are underspends), this funding can be clawed back from MPI's baselines via report backs (for example, in February 2019 when the response is reviewed).

4. Concerns with Investment and System Resilience funding

Under both options, significant funding is requested for investment and system resilience:

- **Phased Eradication Investment and System Resilience Funding: \$59 million**
- **Long term management Investment and System Resilience funding : \$55 million**

At present, we understand that this funding will fund:

- NAIT Improvement and Compliance
- Comprehensive farm planning
- Science and research
- on farm biosecurity
- internal pathways management
- accreditation scheme
- supporting resilient, sustainable productive farming systems
- review of biosecurity response funding approaches
- Biosecurity act review

We have asked MPI several times about the details of this work, but MPI have not yet provided us with the details (what each component costs, intervention logic, and whether this spending is urgent). We admit that a proportion of this funding is most likely needed to ensure the success of the operational response; however, we suspect components such as "supporting resilient, sustainable productive farming systems" are not **strongly** tied to the success of the M bovis operational response.

Treasury recommends: MPI should not seek investment and system resilience funding at Cabinet on 28 May. Instead, MPI should seek agreement to this portion of the funding via the proposed 11 June technical cabinet paper. This will provide Treasury with the opportunity to interrogate MPI's information, and determine which funding is needed now, and which funding can wait until Budget 2019.

4. Off-ramp trigger points

If Cabinet decides to pursue phased eradication, MPI proposes a review date of **February 2019**. Spring bulk milk testing will occur in November and December 2018 and the result will be ready for the review date. There are several proposed 'triggers' which if satisfied would cease the response:

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the Crown will be able to claw back funding that is intended to fund eradication activities (although noting that MPI will still require some funding to transition to long-term management).

Treasury recommends: exploring with the Minister for Biosecurity whether there are opportunities for an earlier report back. If we can assess triggers soon, we mitigate the risk that appropriate funding is spent unnecessarily.

5. Information about Industry Impacts and the industry more generally

Share of Costs between Crown and Industry of Phased Eradication and Long-Term Management								
	Confidence level	Cost	18/19	19/20	20/21	21/22	22/23	Ten Year
Phased eradication	50% confidence	Response costs	250	106	109	80	61	
		Industry Impacts	7	2	1	1	0	
		Total costs	257	108	110	81	61	
Long-term management	90% confidence	Response costs	256	61	55	26	26	
		Industry impacts	5	39	58	81	74	
		Total costs	261	100	113	107	100	

Impact split between industry and Crown			
Response option	Total cost over ten years	Proportion of industry impact to total cost	Proportion of Response costs to total cost*
Phased Eradication	781	1.66%	98.34%
Long term management	1211	57.06%	42.94%

* the industry has committed to contribute 32% towards response costs if phased eradication is pursued. It is not clear what industry will contribute if long-term management is Cabinet's preferred option.

Options analysis: Uncertainties and Risks

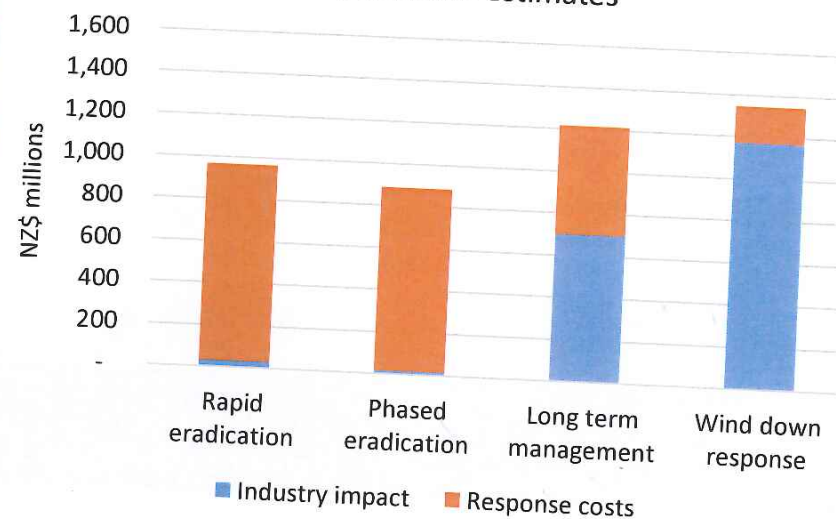
Indicators of a successful eradication programme	Status of <i>Mycoplasma bovis</i> against indicators
Effective control measures are available to prevent spread of the infection <ul style="list-style-type: none"> • Vaccination • Treatment • Movement controls • Culling 	False False True True
The disease can only persist in cattle, with no other major vertebrate reservoir and no amplification in the environment	True
Early recognition of clinical disease	False
Practical diagnostic tools are available with sufficient sensitivity and specificity to enable all infected farms to be detected <ul style="list-style-type: none"> • Testing at individual animal level • Testing at herd level 	False Uncertain
Surveillance and testing will identify infected farms at sufficient speed to prevent further spread of disease to previously uninfected farms	Uncertain
Current knowledge of the disease <ul style="list-style-type: none"> • The current distribution/extent of the disease • The incursion pathway is known and managed to prevent further incursions occurring during or after the eradication programme • Eradicating <i>Mycoplasma bovis</i> will significantly improve cattle health 	Uncertain Uncertain Uncertain



Options analysis: Modelled costs over ten years

Option	2018/19	2019/20	2020/21	2021/22	2022/23	Ten year cost
Rapid eradication	383	131	150	114	77	966
Response cost	367	127	146	110	74	936
Industry impact	16	4	4	4	3	30
Phased eradication	335	121	141	101	71	886
Response cost	325	119	139	100	70	870
Industry impact	10	2	2	1	1	16
Long term management	261	100	113	107	100	1,218
Response cost	256	61	55	26	26	520
Industry impact	5	39	58	81	74	698
Wind down response	47	91	118	143	135	1,330
Response cost	42	21	17	14	14	177
Industry impact	5	70	101	129	121	1,153

Mycoplasma bovis option costs (over ten years)
90th percentile estimates



Biosecurity New Zealand

Tiakitanga Pūtaiao Aotearoa

Options analysis: Modelled costs the next two years

Option	2018/19	2019/20	Two year cost
Phased eradication			
Response cost	335	121	456
Operations	325	119	444
Surveillance	99	57	156
Investment and system resilience	14	12	26
Compensation	30	29	59
Industry impact	180	21	201
	10	2	12
Long term management			
Response cost	261	100	361
Operations	256	61	317
Surveillance	63	15	78
Investment and system resilience	3	3	6
Compensation	29	26	55
Industry impact	160	17	177
	5	39	44

Out to 2020 we expect that there is a 90% chance that a phase eradication response will cost less than \$456 million, with \$444 million of this borne by a combination of the crown and industry.

For long-term management we expect that there is a 90% chance this will cost less than \$361 million over the next two years, with \$317 million borne by a combination of the crown and industry.



Options analysis: Costing assumptions – eradication

Main assumptions around animal replacement values and production losses have been agreed with industry

The total cost/impact of the proposed eradication option is estimated to be less than **\$888 million over ten years** (with 90% certainty). The key assumptions underlying this figure (include:

- An expectation that **192 infected properties (IPs)** will be identified, with 142 of these being identified in the first year.
- Putting aside the IPs that we are able to deal with using existing funding this translates to culling **90,699 animals** between now and June 2019, with a **further 35,550** culled over the following four years.
- The 90,699 animals culled in the first year include all risk properties (RPs), 60 animals per farm under a notice of direction for tonsillar testing, and assumes 30% of those farms tested will test positive and require culling.
- The animal replacement cost (less any revenue received from meat processors) and lost production (less production costs not incurred) associated with MPI directed animal culling will be compensated.
- Farmers of infected herds are expected to choose to milk out the season and have herds depopulated in March (to allow time to clean and repopulated the farm for the following season), minimising lost production.
- There will be significant operational costs associated with an eradication option including
 - Increased staff numbers
 - Cleaning and decontamination of depopulated farms (\$150k per farm)
- An intensive surveillance program (of both bulk milk testing and blood sampling) to track the disease and identify any as yet undiscovered IPs so they can be depopulated.



Options analysis: Costing assumptions – long term management

Main assumptions around animal replacement values and production losses have been agreed with industry

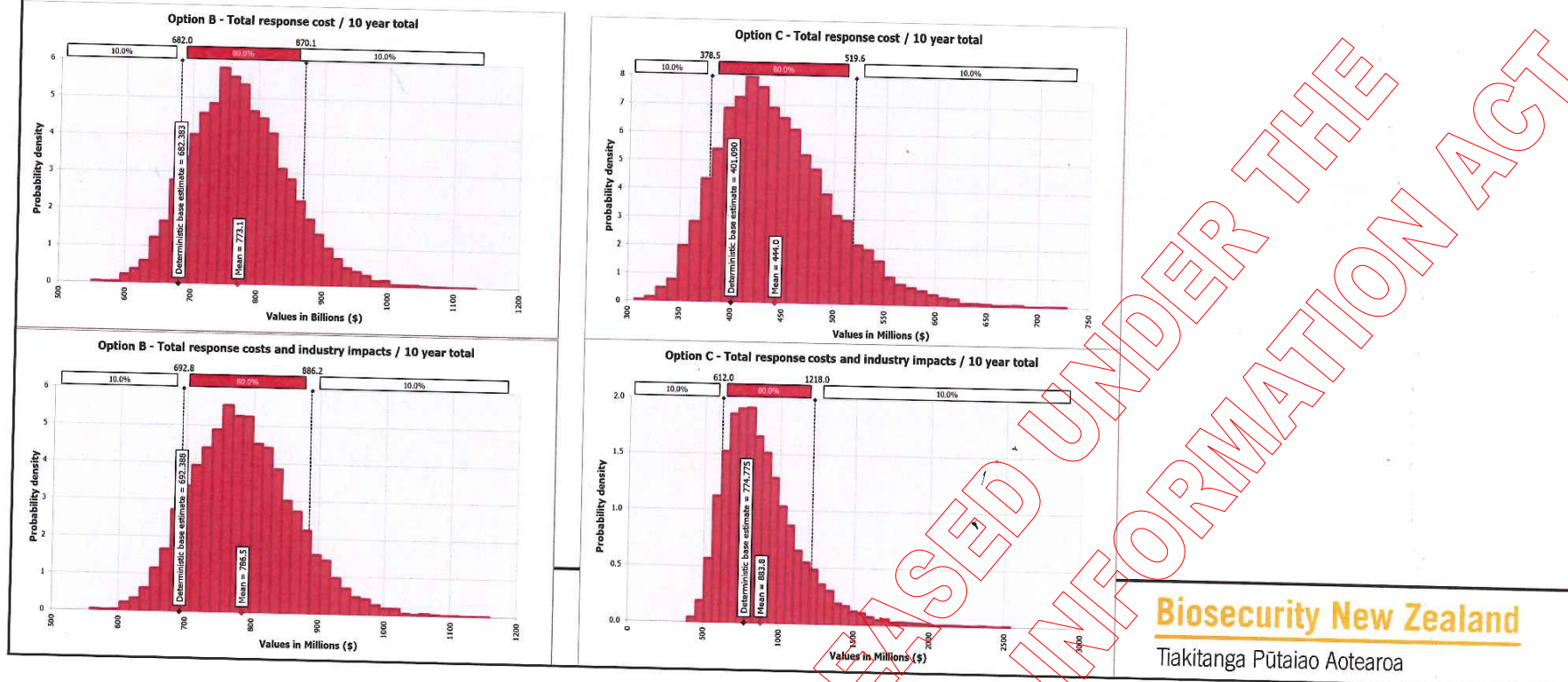
The total cost/impact of the proposed eradication option is estimated to be less than **\$1,218 million over ten years** (with 90% certainty). The key assumptions underlying this figure include:

- An expectation (based on epidemiological modelling) that the disease will **spread to 21% of farms** within ten years.
- **20% of these farms** are assumed to contain animals displaying **clinical symptoms** of the disease.
- The proportion of animals displaying **clinical signs** on these farms are expected to begin at **20% in year 1, falling to 1% by year 5**.
- Clinically diseased animals are assumed to be culled when identified, with a resulting production loss for the remainder of the season.
- An expectation (based on epidemiological modelling) that the disease will **spread to 21% of farms** within ten years.
- **20% of these farms** are assumed to contain animals displaying **clinical symptoms** of the disease.
- The proportion of animals displaying **clinical signs** on these farms are expected to begin at **20% in year 1, falling to 1% by year 5**.
- Clinically diseased animals are assumed to be culled when identified, with a resulting production loss for the remainder of the season.



Options analysis: Quantitative risk assessment

Given the uncertainty surrounding a lot of the underlying assumptions MPI have commissioned a risk assessment to quantify the variance in the estimates for our total costs and industry impacts of the disease



Options analysis: Pros and cons

Eradication		Long term management	
Pro	Con	Pro	Con
Preserves eradication	Uncertainty of achieving eradication	Farmer control	No eradication
Production impacts reduced	Unknown spread	Incentivise farm system change	Uncertain farmer compliance
Protects animal health	No pathway of origin	Accreditation scheme	Only provides certainty to currently affected farmers
Provides short term certainty to all farmers	Uncertain farmer compliance	Certainty in ability to implement	Disease will spread
Allows detailed LTM planning if required	Significant impact on affected farmers	Provides medium to long term certainty (no trigger points)	Trade implications
Allows time for NAIT changes and accreditation scheme	Trade implications	No ambiguity of trigger points	
	Culling healthy herds		
	Reduced incentive for system change		
	Sunk investment		

Options analysis: Potential triggers

- Indications that disease is significantly more widespread than thought:
 - Discover additional cluster/s of IPs that are not connected to current clusters; or
 - >100 additional IPs detected within current network; or
 - IPs detected that pre-date IP10's earliest potential date of infection; or
 - Trace farms from positive trace farms are confirmed as IPs; or
 - Identify more dairy IPs that have supplied animals to lots of farms; or
 - Identify multiple positive farms that became infected in 2018.
- Indications that there have been multiple introductions into NZ
 - Genetic analysis shows >1 strain of *M. bovis* is circulating.
- A new & significant biosecurity response or adverse event occurs
 - That requires substantial resources to be withdrawn from *M. bovis*.



Options analysis: Potential triggers

- One or more additional clusters of disease are discovered that are not connected to the two detected clusters.
- Infected properties are detected that pre-date the earliest potential date of infection on the Southland IPs.
- Trace farms from positive trace farms are detected as infected (i.e. three tiers of tracing), indicating an extensive network of infection.
- National-level surveillance indicates disease is significantly more widespread than previously thought.
 - The number of additional infected herds rising over 100;
 - an increasing number of positive dairy farms identified that have supplied animals to large numbers of farms during their infectious period;
 - Or, multiple positive farms identified that have become infected during 2018.
- Genetic analysis of isolates indicates that there is more than one strain of MB circulating, which would indicate that there have been multiple introductions into NZ.
- A new and significant biosecurity response or adverse event occurs that requires substantial resources to be withdrawn from *M. bovis*.



To come before the Agree recommendation for option 2:

X. **Note** that investment is needed to improve the biosecurity system to support the effective operational response to *Mycoplasma bovis*, and that the policy and funding decisions associated with this will be sought at Cabinet on 11 June, 2018;

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Pre-Cab Briefing 28 May 2018

Notes:

- The Treasury will brief the Minister of Finance and Associate Ministers on Monday 28 May 2018.

Papers for Cabinet Consideration

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11	Mycoplasma Bovis: Response Options	
<p>This paper seeks Cabinet's decision regarding the management of Mycoplasma Bovis (M. Bovis). The Minister is proposing a phased eradication, but the Treasury recommends long-term management at the present time.</p> <p>The Treasury has provided further substantive advice on this paper (T2018/1414 refers).</p> <p>The Minister for Biosecurity will submit a paper on 11 June 2018 seeking to appropriate the funding necessary to action the decision taken in this paper (28 May).</p>	<p>The Minister for Biosecurity's preferred option is phased eradication, and the response costs under this option are estimated at \$872 million over 10 years (at a 90% confidence level). The industry will contribute 32 percent of this cost, which means that the Crown cost under this option is \$598 million over ten years.</p> <p>Note that this paper seeks policy agreement without confirming appropriations. The paper provides indicative numbers which should be understood as an upper limit: funding for the response will be sought via Cabinet on 11 June 2018.</p>	<p>Do not support phased eradication.</p> <p>Support long term management, but limiting the funding appropriated to only 2017/18 and 2018/19</p> <p><i>If phased eradication is supported by Cabinet:</i></p> <p>Do not support agreement to the policy or funding for biosecurity system investment and resilience until the Treasury has had the opportunity to interrogate this proposal</p> <p>Invite the Minister for Biosecurity to seek policy and funding approval for system investment and resilience via the 11 June 2018 paper.</p>

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Pre-Cab Briefing 11 June 2018

Notes:

- The Treasury will brief the Minister of Finance and Associate Ministers on Monday 11 June 2018.

Papers for Cabinet Consideration

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9	Funding for the phased eradication of Mycoplasma Bovis		
<p>This paper seeks agreement to the funding necessary to action Cabinet's policy decision on 28 May 2018, to pursue the phased eradication of Mycoplasma bovis at an indicative cost of \$28 million in 2017/18 and \$444 million across 2018/19-2019/20 (CAB-18-MIN-0245 refers).</p>	<p>This paper seeks to appropriate \$384 million across 2017/18-2019/20, for the purposes of operations, compensation, and system and resilience investment related to eradication efforts. It also seeks to establish an \$88 million tagged contingency, to meet costs beyond the modelled 50 percent confidence level (joint Ministerial sign-off between yourself and the Minister for Biosecurity is proposed).</p> <p>Note that the Crown will contribute 68% and the industry will contribute 32% towards the cost of the response agreed by Cabinet on 28 May 2018. The industry contribution will be recovered as a levy within 10 years at the latest.</p> <p>The Crown will provide upfront funding as decisions around levy revenue setting are yet to be agreed by Cabinet.</p>	<p>Support appropriations for operational response and compensation (\$342.4 million), and the \$88 million tagged contingency.</p> <p>Do not support the full funding for system resilience and investment (\$41.6 million) because the urgency of many of these initiatives has not been convincingly established.</p> <p>We recommend you:</p> <ul style="list-style-type: none">• Support \$8.5 million funding for NAIT and farmer welfare in 2018/19 [actioned via recommendation 47],• Or a compromise option is to support all funding but only for 2018/19.	

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Treasury Report: Briefing for Cabinet Economic Development Committee
Wednesday, 1 August 2018

Date:	27 July 2018	Report No:	T2018/2116
		File Number:	MS-5-3-DEV

Action Sought

	Action Sought	Deadline
Minister of Finance (Hon Grant Robertson)	Read prior to Cabinet DEV Committee meeting	11:00 am, Wednesday 1 August 2018
Associate Minister of Finance (Hon Dr David Clark)	Read prior to Cabinet DEV Committee meeting	11:00 am, Wednesday 1 August 2018
Associate Minister of Finance (Hon David Parker)	Read prior to Cabinet DEV Committee meeting	11:00 am, Wednesday 1 August 2018
Associate Minister of Finance (Hon Shane Jones)	Read prior to Cabinet DEV Committee meeting	11:00 am, Wednesday 1 August 2018
Associate Minister of Finance (Hon James Shaw)	Read prior to Cabinet DEV Committee meeting	11:00 am, Wednesday 1 August 2018

Contact for Telephone Discussion (if required)

Name	Position	Telephone	1st Contact
s9(2)(g)(i)	Analyst, Business Growth and Innovation	s9(2)(k)	N/A (mob) ✓
Mark Holden	Acting Manager, Business Growth and Innovation	s9(2)(a)	

Actions for the Minister's Office Staff (if required)

Return the signed report to Treasury.

Note any feedback on the quality of the report

Enclosure: No

IN-CONFIDENCE**Treasury Report:** Briefing for Cabinet Economic Development
Committee Wednesday, 1 August 2018

The Treasury is aware of three items on the Cabinet Economic Development Committee agenda for 1 August 2018. The table below provides Treasury comment and recommendations on each item, and identifies any relevant fiscal impacts.

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Other Committee business		
Description and analysis	Fiscal implications	Treasury Recommendation
Mycoplasma Bovis Eradication Programme: Proposed Legislation Package		
<p>This paper seeks agreement to a range of amendments to the National Animal Identification and Tracing (NAIT) Act; Biosecurity Act regulations; and Animal Products Act regulations.</p> <p>These amendments support the M bovis eradication programme by increasing compliance measures on farmers. The changes to the NAIT Act and Biosecurity Act are technical in nature.</p> <p>These amendments are expected to be uncontroversial and will only affect those who are not already complying with existing obligations under the Acts.</p>	<p>There are no fiscal implications associated with the NAIT Act and Biosecurity Act amendments.</p> <p>The Animal Products Act regulations will result in additional compliance activity for MPI. Associated costs will be met from existing baseline funding.</p>	Support

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Recommended Action

We recommend that you **read** this report prior to the Cabinet Economic Development Committee meeting at 11:00am on Wednesday, 1 August 2018.

Mark Holden
Acting Manager, Business Growth and Innovation

Hon Grant Robertson
Minister of Finance

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