



Review of AFB Pest Management Plan Round One 'Have Your Say' Consultation Findings

Executive Summary

1. A three-part consultation is being conducted during 2021-2022 on what, if any, new plan rules or powers are needed in the National American Foulbrood Pest Management Plan (AFB PMP). The first Round One consultation took place during June-July 2021 and the findings are set out in this report.
2. There were 434 submitters to the Round One consultation, and most made their submission on SurveyMonkey (414). Twenty-six submitters posted or emailed submissions, six of whom also made an on-line submission on Survey Monkey.
3. The consultation questions were:
 - How many hives do you own?
 - What do you think about beekeeper legal obligations to eliminate AFB?
 - What do you think works well?
 - What are we missing when it comes to eliminating AFB?
 - What would you change about the current AFB PMP?
 - Which changes would you prioritise?
4. The overall response rate was four percent of all registered beekeepers (that is 434 out of 10,344 registered beekeepers).
5. Most submitters answered the question 'What do you think about beekeeper legal obligations to eliminate AFB?':
 - more than half (54%) selected 'no changes to legal obligations are required'
 - 29% selected 'some changes to legal obligations are required'
 - 11% selected 'major changes to some legal obligations are required'
 - five percent selected major changes 'major changes to most legal obligations are required'
 - four percent selected 'no legal obligations are required'.
6. All submissions were analysed to identify key issues raised by submitters. Forty-eight themes were identified under fourteen topic areas. The topic areas were placed in rank order, from topic areas that contain the most raised issues, to topic areas that contain the least raised issues.
7. The four top ranked topic areas are shown below.
 - Surveillance and prevention, which includes detecting non-compliance, responding to abandoned hives, targeted elimination efforts, regulating sales, contact tracing, and honey testing. Approximately one third of submitters raised issues relating to this topic.



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- Enforcement and penalty, which includes stronger enforcement and penalties including the use of fines. Approximately one third of submitters raised issues relating to this topic.
 - Beekeeper commitment and practices, which includes the need for beekeepers to play their part and to implement good practices, and for the Management Agency to be more supportive and engaged with beekeepers. Approximately one fifth of submitters raised issues relating to this topic.
 - Education and training, including the need to increase awareness of AFB obligations, and improve the content, quality, affordability, and availability of training courses. Approximately one fifth of submitters raised issues relating to this topic.
8. The other ten topic areas are shown below (in rank order).
- Inspections and inspectors, including the need for more inspections and inspectors
 - AFB elimination goal, and different views on the goal
 - Destruction and treatment of hives and equipment, and compensation
 - Apiary density and movement, and the need to limit both
 - New methods and research, including investigating use of new detection and elimination methods and increasing understanding about the causes of AFB outbreaks
 - DECA requirements and obligations, including the need for mandatory refresher training and stricter requirements, and a view that the DECA should be used as an education tool
 - Organisation structure and governance, including the need for the Management Agency Board and the Management Agency, to be independent, representative, and transparent
 - Reporting and Administrative requirements, including suggested improvements to current requirements
 - Funding arrangements for the AFB PMP, including criticisms of the current levy as well as suggestions for additional funding
 - AFB PMP and the review process, including criticisms of the consultation process and the need for more information about the Plan and potential areas of change.

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A. Consultation Process

This consultation was undertaken as the current American Foulbrood Pest Management Plan (the Plan) is scheduled to expire on 1 April 2023 and a new one will be proposed. The Management Agency Board is undertaking a three-part consultation during 2021-2022 to develop the new Plan.

This report summarises the findings of the first round of consultation undertaken during June-July 2021. For this round, the consultation purpose was to seek the views and ideas of submitters on the potential contents of a new Plan.

The submissions received helped identify the potential contents of a new Plan and shape options that will be the subject of a second round of consultation scheduled for November 2021.

In turn, the findings from the second round of consultation will input into the development of a proposed detailed Plan. This proposal will be the subject to a third and final round of consultation scheduled for the middle of 2022.

B. Consultation Questions

For this first round of the consultation process, the questions were:

- a) How many hives do you own? (close-ended question)
- b) What do you think about beekeeper legal obligations to eliminate AFB? (close-ended question)
- c) What do you think works well? (open-ended question)
- d) What are we missing when it comes to eliminating AFB? (open-ended question)
- e) What would you change about the current AFB PMP? (open-ended question)
- f) Which changes would you prioritise? (open-ended question).

Beekeepers were invited to make submissions by:

- completing a questionnaire using the SurveyMonkey online submission tool, or
- sending their submission by email or by mailing by post to the Management Agency.

The consultation period was for two weeks and three days and opened on 24 June 2021 and closed at 5pm on 16 July 2021.

C. Method

SurveyMonkey as a consultation tool

SurveyMonkey was used as the main way of making a submission. It is cost-effective and includes software for analysing close-ended questions.

SurveyMonkey is an online survey tool that is commonly used as an online submission tool by a range of agencies and organisations. For instance, it has been used as an online submission tool by the Ministry of Primary Industries¹, the Health Research Council of New Zealand², and the Midwifery Council of New Zealand³.

¹ See: <https://www.mpi.govt.nz/consultations/new-wine-standards-management-plan/>.

Analysis of open-ended questions answers, text, and written submissions

A qualitative⁴ analytical method – a way of analysing words – and was used to analyse responses to the four open-ended consultation questions and other written submissions (i.e., letters, emails, and hard copy survey responses).

The approach of a qualitative method is to 'focus on learning the meaning that the participants hold about the problem or issue ...'.⁵ It is driven by *what is said* in the written submissions and not by the views of the researcher⁶ or the commissioning agency.

Qualitative analysis is also a form of interpretative inquiry whereby the researcher interprets the written submissions to develop themes. This process is known as 'thematic analysis' and is a way of organising text into categories or themes 'to present a coherent, consistent picture'.^{7 8}

The unit of analysis was the complete set of written comments (to all the questions) contained in an individual submission. This provided for the identification of a cohesive set of themes across all questions⁹, and was a pragmatic way of analysing a large quantity of qualitative data.

The analysis of submissions, and the reported findings, are solely the work of the researcher. The researcher is employed by the Management Agency to provide research and policy services.

Separate from the researcher analysis, submissions were independently read and considered by the Management Agency.

² See: <https://hrc.govt.nz/sites/default/files/2019-12/Consultation%20Analysis.pdf>.

³ See: <https://www.midwiferycouncil.health.nz/Public/03.-Publications/Publications-Type-B/Recertification-Programme-for-Midwives-Consultation.aspx?WebsiteKey=f0308050-1256-4559-908a-2c0b3a7fd7e5>.

⁴ Qualitative research analyses words (also images, observations, and transcripts) to 'capture and discover meaning. In contrast, quantitative research analyses numbers, typically to test a predetermined hypothesis (adapted from Neuman, 2006, p157).

⁵ Creswell, J., 2009, 'Research Design, Qualitative, Quantitative, and Mixed Methods Approaches', p.175.

⁶ Qualitative research is also a form of interpretative inquiry in which the researcher makes an interpretation of what is meant by the submitter.

⁷ Neuman, W.L., 2006, 'Social Research Methods, Qualitative and Quantitative Approaches', p.157.

⁸ Thematic analysis involves segmenting text into categories and labelling them with a descriptive term (referred to as coding). In this way a growing list of categories is developed, and similar categories are grouped together as themes. The categories and themes are not predetermined by the researcher but created from the bottom up 'working back and forth between the themes and the database' until a set of themes has been established (Creswell, J., 2009, 'Research Design, Qualitative, Quantitative, and Mixed Methods Approaches', p.175). This process of identifying categories and themes as the researcher works through the data is a form of inductive data analysis.

⁹ Analysis by each question would have created repetitive and fragmented themes. For instance, a submitter may restate or develop their view further in response to other questions, and/or refer to their responses to other questions. A submitter may also raise issues under one question that other submitters may have raised under a different question.

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Analysis of close-ended question answers

The consultation questions included two close-ended questions – these are questions that require submitters to choose an answer from a set of choices. These choices were set on a scale, known as a Likert scale¹⁰, to assess the level of agreement or disagreement to the corresponding statement.

The on-line responses to both close-ended consultation questions were analysed using SurveyMonkey software, which calculated the number and percentage of respondents that chose each of the respective answer options.

D. Respondents

There were 434 submitters, and most of these made an on-line submission on SurveyMonkey (414). The overall response rate was four percent of all registered beekeepers (that is 434 out of 10,344 registered beekeepers).

There were 26 submitters who emailed or posted submissions to the Management Agency. Six of these submitters also made an on-line submission on SurveyMonkey. For these submitters, their online submission and their emailed or posted submission were analysed together as one submission (not two separate submissions).

For the 20 submitters who did not post an on-line submission, fourteen answered one or both closed-ended consultation questions, and their answers were manually entered into SurveyMonkey by the researcher (for inclusion in the analysis of close-ended questions).

The number of submitters to this round one consultation is similar to the number of submitters responding to other consultations undertaken by the Management Agency, as shown in table one below.

Table 1: Number of responses to national surveys

Year	Survey	number of submitters
2021	Consultation on the Review of the AFB PMP, phase one	434
2020	Proposal to set the AFB Levy for 2021/22	104
2019	Proposal to Replace the AFB Apiary and Beekeeper Levy with a Hive and Beekeeper Levy	466
2018	Proposal to increase the AFB Apiary and Beekeeper Levy	828
2018	Budget Consultation	11
2017	AFB PMP – 5 Year Plan	39
2016	AFB PMP – 5 Year Plan	404
2016	Consultation Survey to Beekeepers	597

¹⁰ Likert scales are often used in survey research in which people express attitudes or other responses in terms of ordinal-level categories (e.g., agree, disagree, etc) that are ranked along a continuum (Neuman, W.L., 2006, ‘Social Research Methods, Qualitative and Quantitative Approaches’, p.207).

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The number of responses to each question varied by question as shown in table two below.

Table 2: Number of responses to each consultation question for submitters who posted their submission on SurveyMonkey¹¹

Consultation questions	number of on-line responses
How many hives do you own?	412
What do you think about beekeeper legal obligations to eliminate AFB?	407
What do you think about beekeeper legal obligations to eliminate AFB?	311
What do you think works well?	286
What are we missing when it comes to eliminating AFB?	306
What would you change about the current AFB PMP?	261
Which changes would you prioritise?	213

E. Findings

What do you think about beekeeper legal obligations to eliminate AFB?

This question was answered by 419 submitters.^{12,13} Of these submitters, 10 selected two different answer choices, and 410 selected one answer choice.¹⁴

More than half of the answers (54%) were in support of no changes to the current legal obligations and a further 29% were in support of some minor changes. Comparatively five percent were in support of major changes and four percent were in support of revoking all legal obligations.

Table 3: What do you think about beekeeper legal obligations to eliminate AFB?¹⁵

Answer choices	number of answers ¹⁶	% answers ¹⁷
No changes to legal obligations are required (existing obligations are appropriate)	225	54%
Some changes to legal obligations are required (minor changes to some existing legal obligations are required)	123	29%
Major changes to some legal obligations are required (new legal obligations are required and/or some existing legal obligations require major changes)	46	11%
Major changes to most legal obligations are required (new legal obligations may be required and most existing legal obligations require major changes)	19	5%
No legal obligations are required (all legal obligations should be revoked)	15	4%

¹¹ Figures generated by SurveyMonkey.

¹² Figure includes online submissions and hard copy submissions manually entered in SurveyMonkey.

¹³ One of the 419 submitters posted two on-line submissions, see footnote 14 below.

¹⁴ Nine submitters selected two answer choices to this question. Five selected the combination no change and some change; one selected some change and major change to some; one selected major change to some and major change to most; one selected no change and major change to some; and one selected major change to most and no legal obligations. In addition, one person submitted two submissions and selected a different answer choice in each: no change and major change to some.

¹⁵ Figures generated by SurveyMonkey.

¹⁶ Total 428 answers from 419 submitters.

¹⁷ Percentages have been rounded and total is 103% as nine submitters selected two answer choices.

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Most submissions were in support of no change or some change, regardless of the number of hives owned, as shown in Table 4 below.

Table 4: Responses to 'what do you think about beekeeper legal obligations to eliminate AFB?' by number of hives owned?¹⁸

number of hives	Answer choices										number of submissions
	no changes		some changes		major changes to some		major changes to most		no legal obligations		
	number of submissions	% ¹⁹	number of submissions	%	number of submissions	%	number of submissions	%	number of submissions	%	
1-5 hives	136	62%	60	27%	14	6%	9	4%	7	3%	220 ²⁰
6-10 hives	22	43%	15	29%	11	22%	2	4%	1	2%	51 ²¹
11-50 hives	24	44%	19	35%	5	9%	3	5%	4	7%	55
51-250 hives	16	50%	10	31%	4	13%	1	3%	1	3%	32
251-500 hives	12	55%	7	32%	3	14%	0	0%	1	5%	22 ²²
501-1000 hives	7	64%	2	18%	0	0%	2	18%	0	0%	11
1001 hives or more	6	30%	6	30%	9	45%	0	0%	0	0%	20 ²³
not applicable	1	14%	4	57%	0	0%	1	14%	2	29%	7 ²⁴

What were the key issues?

Most submitters raised one or more issues they wanted to see addressed, and many raised several issues. An issue could be a problem, or a suggested solution to a problem.

The issues were summarised and grouped into themes. Forty-eight themes were identified reflecting the wide range of issues raised by submitters. For most themes there are also sub-themes.

To help present the themes in a clear way, they have been grouped under fourteen topic areas. The topic areas have been ranked, from topic areas that contain the most raised issues, to topic areas that contain the least raised issues. The four top ranked topic areas are:

- surveillance and prevention issues, raised by approximately one third of submitters
- enforcement and penalty issues, raised by approximately one third of submitters
- beekeeper commitment and practices, raised by approximately one fifth of submitters
- education and training issues, raised by approximately one fifth of submitters.

¹⁸ Figures generated by SurveyMonkey.

¹⁹ All percentages in table rounded up.

²⁰ There were 220 submissions and six selected two answers to this question.

²¹ One submitter (6-10 hives) posted two on-line submissions, each with a different answer choice: no change; and major change to some.

²² There were 22 submissions and one selected two answers to this question.

²³ There were 20 submissions and one selected two answers to this question.

²⁴ There were 7 submissions and one selected two answers to this question.

A summary of the main topics and theme areas is shown in table six below. The topics are presented in rank order.

Table 5: Key topics, themes, and sub-themes identified in the qualitative analysis of comments

Topics, themes and sub-themes
<p>1. Surveillance and prevention</p> <p>1.1. Detect non-compliant beekeepers and beekeeping practices</p> <ul style="list-style-type: none"> ● Unregistered apiaries and unregistered beekeepers are a problem and need to be found. Some considered that penalties should be imposed and/or hives destroyed.²⁵ ● Use technology such as aerial surveys, satellite photos, and drones, and/or system for anonymous reporting of non-compliant beekeeping. <p>1.2. Target elimination and/or prevent spread in areas of AFB outbreaks</p> <ul style="list-style-type: none"> ● Locations of infected apiaries to be provided to nearby beekeepers. Some considered that notifications of exact locations should be provided. ● Regular information updates on local and national AFB hotspots are needed. ● Inspections and/or testing of all apiaries in vicinity of outbreaks should be undertaken. Some considered that random inspections should be undertaken in all areas, especially areas (and beekeepers) with history of AFB outbreaks. <p>1.3. Abandoned hives are a problem and effective responses are needed</p> <ul style="list-style-type: none"> ● Rapid response needed to notifications of abandoned hives. Some considered that hives should be destroyed quickly if hives were diseased. Some considered hives should be destroyed even if there are no clinical signs of AFB as there may still be non-clinical spores. ● Legal powers (and action) to destroy abandoned hives. Some considered abandoned hives should be destroyed if there was no identifiable owner, and some considered they should be destroyed irrespective of whether there was an identifiable owner or if the hive(s) were unregistered. Some considered abandoned hives should be destroyed within a short-time frame (e.g., within five days). <p>1.4. Regulate sale of bees, hives, and equipment</p> <ul style="list-style-type: none"> ● Suppliers of bees and beekeeping equipment (new and second-hand) only permitted to sell to registered beekeepers. ● Sale of second-hand hives, dead hives, and equipment to be managed. Some considered hives should be inspected before sale, and some considered that second-hand sales should be disallowed (or monitored) by beekeepers with a history of AFB. Some considered beekeepers should be educated about the risks of buying used hives and gear.

²⁵ Note overlap with ‘enforcement and penalties’ topic.

1.5. Contact Tracing is important

- Contact tracing of all positive cases and surrounding apiaries supported. Some considered that the mandatory marking of brood and hive boxes and the use of an apiary diary could be required.

1.6. Respond effectively and quickly to AFB notifications and infections

- Need for support, advice and monitoring for affected beekeepers. Some considered this could include advice about hive management following hive destruction, auditing beekeeper actions to eliminate AFB and follow-up to check legal obligations have been met.

1.7. Require honey testing

- Required for surveillance and/or for non-reporters of AFB and/or for commercial beekeepers.
- Some considered that all honey sample test results should be provided to the Management Agency.

1.8. Access to subsidised or free testing is needed, including

- through a negotiated contract with a laboratory
- quick affordable field-based tests for use by beekeepers.

1.9. Develop policy and approach to spore testing and AFB infected honey

- Plan of response needed for beekeepers returning positive AFB samples. Areas covered could include reinspection, training, support, and interpreting lab results.
- Spore testing is not a basis for hive or gear destruction (rather it's a management tool).

2. Enforcement and Penalties

2.1. Strong enforcement and penalties for non-compliant beekeepers.

- Stronger enforcement and penalties were required for unregistered beekeepers, unregistered apiaries, and repeat offenders. Some considered that compliance wasn't enforced.
- Some considered penalties should also be applied to beekeepers who fail to meet AFB obligations for other reasons, including by not reporting AFB, failing to destroy infected hives, dumping hives and equipment, selling infected hives or gear, defaulting on a COI, and failing to furnish an ADR.
- Suggested penalties included fines and instant fines, increased levy for repeat offenders, recouping costs from non-compliant beekeepers (e.g., inspection costs), and a ban from beekeeping.

2.2. More regulation isn't needed, or the focus should be on education not penalties²⁶

- Some considered that increasing regulation may reduce compliance, or that regulation doesn't work, or that a PMP is not needed.

3. Beekeeper commitment and practices – and ways the Agency can help

3.1. Beekeepers need to play their part and comply with AFB obligations

- Beekeepers to collectively work together to tackle AFB. Lack of co-operation and vested interests in the beekeeping industry could be a barrier.

²⁶ Note overlap with 'training and education' topic.

3.2. Some beekeepers flout the rules, are indifferent, or don't know about them

- Some noted that there were beekeepers who don't care, repeatedly break the rules, and cause local AFB outbreaks. Some expressed frustration about non-compliant beekeepers.
- Some considered there were too many inexperienced and uninformed beekeepers, or new beekeepers who may be unaware of need to register or did not know about their AFB obligations.

3.3. Vigilance and good beekeeping practices are vital

- The need to ensure hygienic practices and quality equipment and keep hives strong was raised by some. These included the need for regular hive checks, using varroa treatments, disinfecting gear, implementing practices to prevent robbing, and implementing practices to support bee immunity.
- Ideas for local action included developing local disease management plans, disease-a-thons, and AFB blitzes by bee clubs (with support from the Agency).
- Stop practices that increase risks of AFB spread to neighbouring apiaries.²⁷ Such practices included open feeding of wet frames, leaving untreated hives to die, and practices that increase the risk of robbing. Some considered open feeding should be illegal.
- Some expressed frustration at getting AFB infections from poor practices of other beekeepers.

3.4. Management Agency to help through more support and engagement

- More engagement and support to help beekeepers comply is needed. Some considered more support was needed for hobbyists.
- There are many ways for providing support to beekeepers. These included more phone support and AP2 visits. Some saw the need for local information, local meetings, and the increasing the visibility of inspectors in their communities. The need for audit tools and checklists were also mentioned.
- Agency to incentivise good practices and AFB notifications. Suggestions included acknowledging and supporting beekeepers who've notified AFB and who have taken tough action to eliminate AFB. Beekeepers who have successfully eliminated AFB should also be recognised.

4. Education and Training

4.1. Awareness of AFB recognition and obligations needs to increase through more education

- Training courses and refresher courses to be mandatory (or this could be considered). There was also suggested that course attendance could be monitored.

4.2. Content and/or quality of training courses could improve

- Content needs to be up to date, provide practical AFB recognition skills, and promote best practices. This should include managing the risk of AFB being missed in inspections and handling diseased hives.
- Provide more training (and up to date) resources. Some suggestions were to provide an easy-to-read book, downloadable information, video or slide shows, educational packages, and a mobile app on AFB detection.

²⁷ Note overlap with 'apiary movement and density' topic.

- Courses to be interactive (with more discussions), interesting, and well organised.
- Course exam to be reviewed and changed. Suggestions included requiring an exam, setting an open book test, setting an online competency test, and making the course exam harder.

4.3. Affordability and availability of training courses could improve

- Provide more courses and ensure widespread availability, including refresher courses, courses for new beekeepers, and courses orientated to commercial beekeepers.
- Free (or low cost) courses and/or refresher courses, with some suggesting courses should be free to levy payers. Other suggestions included increasing the size of workshops to make them more cost effective and providing online courses.

4.4. Public education about AFB and obligations to increase awareness and compliance

- There were suggestions that educating the public about AFB would also raise awareness of the disease amongst beekeepers.

5. Inspections and inspectors

5.1. Conduct regular hive inspections

- Ensure regular (and more frequent) inspections, by an AP2 or DECA holder.
- Some considered more inspections were specifically needed for new beekeepers, or for hobbyist beekeepers, or for commercial operators, or for apiaries located in AFB high-risk areas.

5.2. More inspectors are needed

- Increase the number of inspectors (including full time inspectors, DECA holder inspectors, and voluntary AP2 inspectors) in all areas, so that requests could be easily and quickly met. Sometimes finding an inspector can be difficult.

5.3. Inspectors need to be skilled and experienced

- Inspectors to be fit for the role and trained, use hygienic inspection practices, avoid conflicts of interest, and have appropriate understanding of different size operations.

6. AFB Elimination goal

6.1. Elimination goal supported

- Some considered a wider acceptance of the goal is needed. Benefits of achieving the goal included the marketing of superior NZ honey.

6.2. Viability of elimination goal questioned, or refuted, and/or shift to mitigation

- Some questioned whether elimination was a realistic goal. Others considered elimination isn't possible and will always remain. One view was that AFB couldn't be eliminated due to the long survival of spores in the soil.

6.3. Focus solely on AFB elimination or widen to include other threats such as varroa

- A small number of submitters considered the focus should widen to include tackling other threats to honeybees. Conversely others considered the focus should remain solely on AFB elimination.

7. Destruction and treatment of infected hives and equipment, and compensation

7.1. Destruction of infected hives and equipment supported

- Some considered that evidence of destruction should also be required (e.g., photo evidence).

7.2. Practices, options, and advice for destroying hives and equipment is needed.

- Need to provide advice, options and services for beekeepers needing to destroy AFB infected hives and equipment. This included providing including information about how to destroy hives and equipment safely and setting up designated destruction sites and destruction services.
- Information is needed about how to dispose of unwanted hives and bees.
- Burning plastic hives is environmentally unfriendly (so some people don't) and they should be banned or need options to sterilise.

7.3. Compensate beekeepers for destroyed hives and equipment

- Beekeepers should be fully or partially compensated when they need to destroy hives and equipment. Loss of hives is a disincentive to reporting AFB. Compensation would encourage best practice and minimise future AFB risks.
- Compensate for destroyed hives and equipment if AFB was detected through spore testing.²⁸
- Support beekeepers who must destroy infected hives. Follow-up with affected beekeepers to ensure they improve practices to minimise future risk of AFB.

7.4. Treatment of AFB

- Consider options other than burning infected hives and gear, such as using Cobalt 60.

8. Apiary density and movement

8.1. Hive movement to be managed

- Hives to be inspected and cleared of AFB before moving. Restrictions moving hives to be placed on beekeepers with repeat AFB outbreaks.
- Movement of hives between districts to be monitored and controlled.

8.2. Number of apiaries in a local area to be controlled and/or limited

- Require a minimum distance between apiaries and limit the number of hives that can be placed in an area (e.g., per hectare).

²⁸ Note overlap with 'honey testing' topic.

9. New methods and research

9.1. Investigate new methods for detecting and eliminating AFB

- Investigate using new and cost-effective detection methods, including sub-clinical detection methods and the use of dogs.
- Investigate AFB prevention and elimination methods and treatments. Suggestions included methods for increasing bee immunity or resilience to infection, sterilisation treatments for equipment, and bacteria phage research.

9.2. Undertake research to understand causes of AFB and how to contain outbreaks

- Undertake research to understand where outbreaks are occurring, why they aren't reducing, and the contributing factors. Provide data that shows rate of AFB over time and consider setting up demonstration sites that showcase successful elimination.

9.3. AFB PMP needs the flexibility to use new technologies that will come (including use of detector dogs).

10. DECA requirements and obligations

10.1. Requirements and obligations to increase or be more strict

- Regular review periods are needed to ensure compliance. If necessary, DECAs to be cancelled for non-compliant beekeepers.
- DECA to be required after specified period (or for owners with more than five hives).
- Consider replacing with a license, WOF, or qualification (especially for larger operators).

10.2. Mandatory refresher courses to retain DECA²⁹

- Employers also need to ensure workers attend training and refresher courses.

10.3. DECA is an education tool

- DECA to be used as a tool to help beekeepers improve practices to minimise AFB risk and not removed as a punitive measure. A DECA should only be cancelled for beekeepers with repeat AFB.

11. Organisation structure and governance

11.1. The Management Agency Board to be representative and independent.

- The Board should have independence, be representative of beekeepers across the industry, and levy payers should have a say on board appointees.

11.2. The Management Agency to change, be replaced, or be disestablished

- The Agency to be more transparent, accountable, and be audited to ensure obligations are being met and improvement areas are identified.
- The Agency to be replaced with a new entity, disestablished, or be separate entity to APINZ.

²⁹ Note overlap with 'education and training' topic.

12. Reporting and Administrative requirements

12.1. Changes required to reporting requirement and or time frames, including

- Provide clearer and simpler communication of obligations and requirements
- Colony returns³⁰ to be declared at different time of year (May or June).
- Reduce the time allowed to register apiaries and/or time to allowed to notify AFB.

12.2. The Terms of Use for the database should change to allow beekeepers to access their own data.

13. Funding arrangements for AFB PMP

13.1. The Levy is too high

- AFB Levy is too high or should be abolished, and/or recent AFB Levy Order Review unsatisfactory.

13.2. The Plan is underfunded

- AFB PMP is underfunded, and needs funding for more enforcement, and/or for more research and/or for more surveillance.

13.3. The Plan could be funded in other ways

- Suggestions for other funding sources included government funding assistance, honey sales levy, apiary levy (not hives) or a commodity levy to pay for research.

14. AFB PMP and Review Process

14.1. Consultation documents to provide sufficient information

- Management Agency Board should have provided more information, including an outline of current legal obligations and/or a proposal for potential areas of change.

14.2. Consultation process could have been better

- Consultation process could have been more interactive and included face-to-face meetings. Some considered the webinars were not helpful and that surveys are not consultation).
- Need to make sure there is sufficient participation by commercial operators in the consultation.
- An industry group (or MPI) should undertake the review, not the Management Agency.
- More time to prepare submissions was needed.

³⁰ Colony returns currently declared 31 March each year.