



# FSC Highly Hazardous Pesticide Derogations – 2016

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*INTERIM Stakeholder Feedback Report*

December 2015

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## Report Overview

The following report provides a summary of the outcomes of the FSC Highly Hazardous Pesticide Derogation stakeholder feedback, including survey responses and additional feedback received from public comments and communication with forest company representatives.

This feedback was used by the independent advisory group in making recommendations to forest managers regarding pesticide acceptance and preferred conditions of use. These recommendations were then considered in the further development of the various derogation applications.

At the completion of the second feedback period (December 24 2015 to January 24 2016), feedback from both stakeholder feedback periods will be collated and submitted to the FSC International Pesticides Committee.

Following the recent change in derogation process by FSC International, this report only includes stakeholder feedback for those derogations being submitted to FSC International at this stage. This is the derogation renewal applications for 1080, Amitrole, Alpha-Cypermethrin and Fipronil.

The stakeholder report includes a brief overview of the survey respondent characteristics, and other responding stakeholders where information is available. Stakeholder feedback is then provided for each of the four pesticide derogation applications, including selected quotes from stakeholder comments are provided to show the range of stakeholder concerns and preferred management approaches. Basic comparative data for each pesticide by state is provided to show the differences and similarities in perceptions of the pesticides across the jurisdictions. Very little stakeholder comment was provided directly relating to individual forest companies and hence the analysis by state is provided. The report finishes with a description of the survey respondents understanding and acceptance of forest certification.

Appendix 1 lists a direct copy of stakeholder feedback provided in the survey, and Appendix 2 provides the stakeholder feedback received through public comments, email, and communication with forest managers. This feedback is listed by state not pesticide due to many stakeholders responding to multiple pesticide applications. All feedback is de-identified as far as practicable to assist with stakeholder anonymity. For email chain discussions stakeholders will be aware of each other's identity and as such anonymity cannot be ensured.

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## Stakeholder response

In total 125 stakeholders have provided feedback on the derogations applications as December 21, 2015. This includes 75 survey respondents and 50 stakeholders who participated through providing public comment and communication with the National Coordinator or forest company representatives. Many survey respondents also provided feedback through other approaches such as email and/or communication with forest company representatives.

The majority of survey respondents were individuals living on or owning properties adjacent to forested areas (63%) as shown in Table 1. These high numbers of stakeholders who live on or adjacent to forest areas was expected given that forest companies primarily approached those stakeholders registered on company databases for stakeholder feedback. The number of survey respondents identifying as being members of environmental groups was lower than anticipated given the typically high level of interest of such groups in forestry issues.

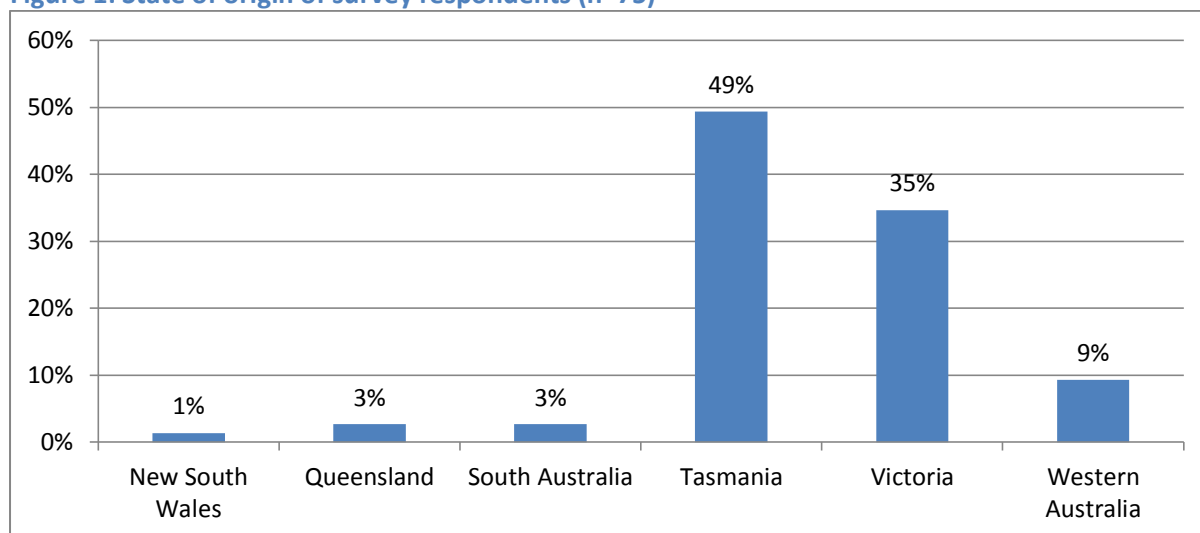
**Table 1: Types of stakeholders who participated in feedback opportunities**

<b>Stakeholder Type (n=75)</b>	<b>No. Survey Responses</b>	<b>% of Survey Responses</b>	<b>No. Comment Responses</b>	<b>Total % of Responses</b>
<b>I am a member of an environmental group with an interest in forestry activities</b>	5	7%	4	7.2%
<b>I am a member of the general public with an interest in forestry activities</b>	10	13%	4	12.8%
<b>I live on a property adjacent to or near a forested area (native forest and/or plantation forest)</b>	22	29%	1	18.4%
<b>I own or manage land adjacent to near a forested area (native forest and/or plantation forest)</b>	18	24%		14.4%
<b>I work, or used to work, within the forest industry</b>	11	15%		8.8%
<b>My business, or place of employment, is impacted by forestry activities</b>	4	5%	4	6.4%
<b>Government</b>	3	4%	2	4.0%
<b>Other, or unknown</b>	2	3%	35	29.6%

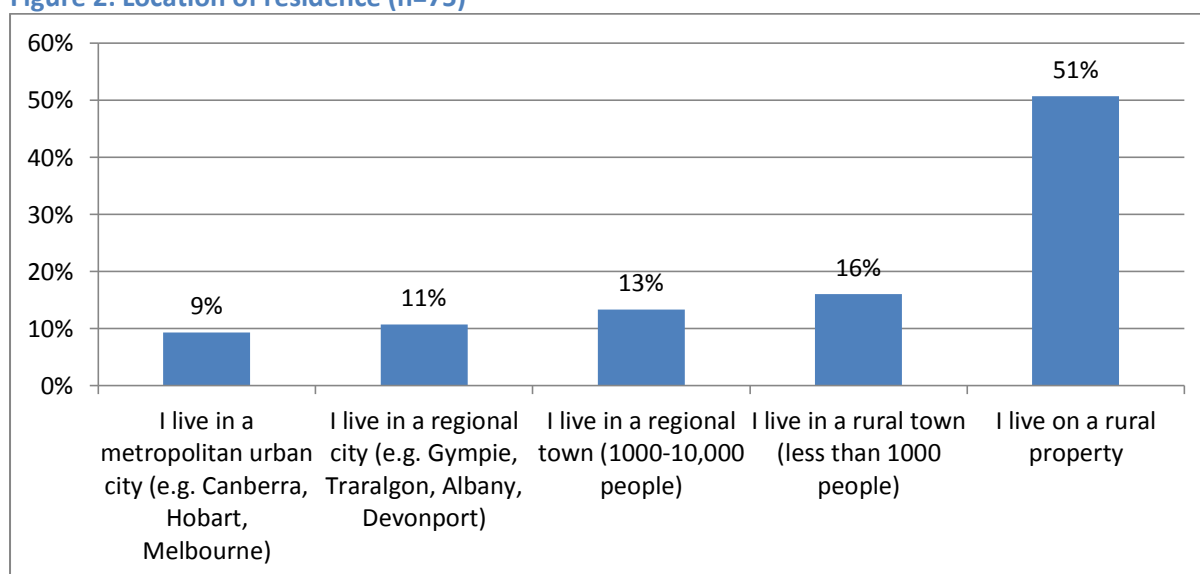
## State of origin (survey respondents only)

Survey respondents were predominantly from Tasmania (49%), followed by Victoria (35%) and Western Australia (9%) (Figure 1), with very little response from other jurisdictions. The majority of survey respondents were potentially affected stakeholders from rural and regional areas, with 51% living on a rural property and a further 29% in regional and rural towns (Figure 2).

**Figure 1: State of origin of survey respondents (n=75)**



**Figure 2: Location of residence (n=75)**



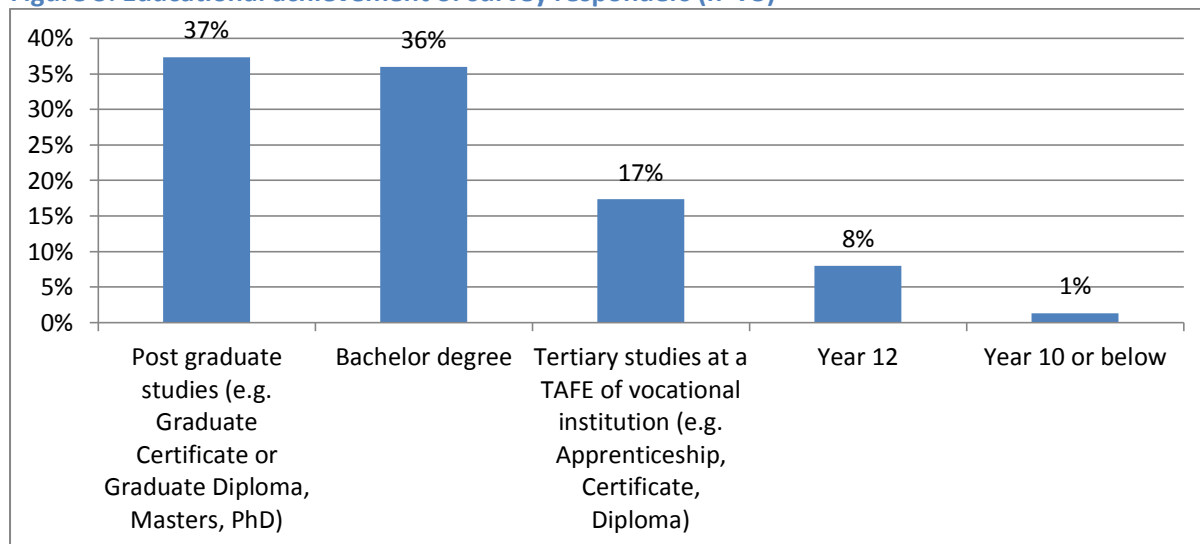
### Survey responder demographics

Of the 75 survey respondents 41% were female, 55% male and 4% preferred not to state their gender. This represents a higher sample of men to women; however this is a good sample of women, with rural and regional women not often completing surveys pertaining to rural matters.

Survey respondents were highly educated as shown in Figure 3, with 74% of stakeholders have a bachelor degree or higher. While this is not representative of the general Australian public with a substantially higher level of education reported, it is indicative of the education levels of those individuals interested in forest management with forest managers reporting that this level of education is typical of their stakeholder registers.



**Figure 3: Educational achievement of survey responders (n=75)**



### Stakeholder interest in derogation applications

As indicated in Table 2 the majority of survey comments were in regards to Tasmanian derogation applications. Some stakeholder comments were received for pesticides not under application for that jurisdiction (e.g. 1080 received 5 comments from Tasmania despite Tasmanian companies not seeking a derogation for this pesticide). This widespread interest highlights the level of concern of stakeholders regarding the use of pesticides.

**Table 2: Stakeholder interest in derogation applications by state (n=75)**

Pesticide commenting on*	NSW	QLD	SA	TAS	VIC	WA	Total
1080	0	0	1	5	15	4	25
Amitrole	0	0	1	5	5	2	13
Alpha-cypermethrin	0	1	1	28	5	2	37
Fipronyl	0	0	0	24	7	1	32
Cuprous Oxide	0	0	0	2	8	1	11
Copper Sulphate	0	0	0	2	1	0	3
Picloram	0	0	0	3	2	1	6
Glufosinate ammonium	0	0	0	4	3	1	8
Pindone	0	0	0	4	2	5	11
All Derogation Applications	1	1	1	9	11	3	26
<b>Total</b>	1	2	4	86	59	20	172
	1%	1%	2%	50%	34%	12%	

*\*Note – due to a change by FSC International derogations are now only being sought for 1080, Amitrole, Alpha-Cypermethrin and Fipronil pesticides*



Table 3 provides a breakdown of the company derogations survey respondents provided comment on, highlighting the high focus of stakeholders on Tasmanian and to a lesser extent Victorian forest companies derogations.

**Table 3: Company derogations commented on (n=75)**

Derogations Commenting On	Number of respondents
Albany Plantations Fibre Limited (WA)	14
Hancock Queensland Plantations – HQP (QLD)	8
PF Olsen (Aus) Pty Ltd (VIC, SA, QLD, WA)	20
Australian Bluegums Ltd (VIC, SA, WA)	25
Forestry Tasmania	41
Hancock Victoria Plantations - HVP (VIC, SA)	20
WAPRES(WA)	14
Bunbury Fibre (WA)	13
Forico (TAS)	30
SFM (TAS, VIC, SA)	26
National Coordinator (Pinnacle Quality)	9

### Initiation of stakeholder participation

The majority of survey respondents were attracted to the stakeholder feedback process through invitations received from local forest company(s) or friends (see Table 4). Participation through environmental group dissemination of invitations was very low. Public comment feedback provided some insights into this potential low rate of interest from environmental groups, with a poor perception of FSC engagement processes and hence a lack of interest in participating due to perceived no influence on the process.

**Table 4: Participant involvement initiation (n=75)**

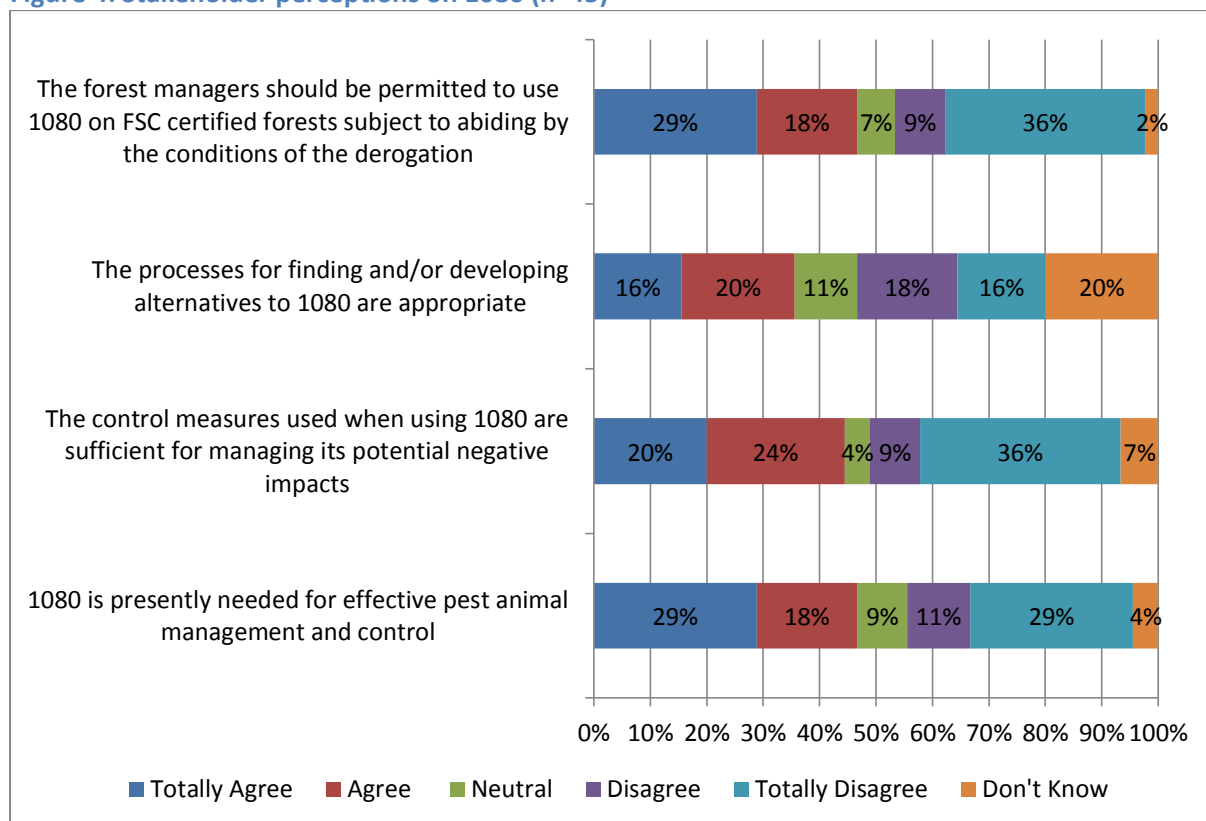
Participation Initiation	Response	% Responses
Direct email invitation from my local forest company	39	52%
Direct email invitation from the National Coordinator (Kevin O’Grady)	2	3%
Forest company website	4	5%
FSC Australia website	4	5%
Information was provided to me from a friend	23	31%
Information was provided to me from an environmental group	2	3%
Information was provided to me from through my place of work	8	11%

## Feedback on Derogation Applications

### 1080

Survey respondent’s acceptance of 1080 was fairly evenly distributed and consistent across the questions. As shown in Figure 4, 47% of respondents agree that 1080 should be permitted and 45% disagree, 7% were neutral. Similarly 47% of respondents felt that 1080 was needed for effective pest control, 40% disagreed that it was needed, and 44% perceived control measures used were sufficient compared to 45% who see them as insufficient.

Figure 4: Stakeholder perceptions on 1080 (n=45)



The disparity of views on 1080 was echoed in the broader stakeholder feedback, with many stakeholders concerned about the impact of 1080 on non-target species, including domestic animals:

*“I have lost 2 dogs to 1080 poisoning. It is a cruel poison resulting in a horrendous death for the animal (whether pest or pet). There is no way to guarantee that non-targeted species will not be affected, nor that animals will not unduly suffer.”*

*“1080 is a cruel and inhumane pesticide that also impacts native wildlife”*

However, there was also recognition that 1080 is an effective pest control method capable of mitigating impact of pest animals on wildlife:

*“Australian wildlife is being decimated by introduced predators. Unfortunately poisons such as 1080 are needed to control predators that are pushing small mammals and some bird and reptile species to extinction. Banning the use of 1080*

*though certification under the FSC would be disastrous to many threatened species.”*

The use of 1080 in Western Australia, where it is a naturally occurring substance, is more acceptable for some stakeholders who recognise the reduced impact of 1080 on non-target species in Western Australia, and its contribution to broader public pest control programs:

*“1080 is found naturally in WA native plants. Its use on pest species such as foxes, cats and dogs is well controlled and very effective. It is used by National Park Managers why would we not, under controlled conditions use it on our plantation lands.”*

*“In the South-West of Western Australia foxes (and feral cats) have a high negative impact on native fauna - both through predation, and competition, as well as on the agricultural sector through the loss of livestock (namely sheep). The impact of 1080 ingestion by native animals within this region is negligible, and extremely unlikely to result in mortality, making it an appropriate poison in the control of introduced pests.”*

*“The use of 1080 baits by the plantation companies also make the companies “good neighbours” as they are supporting the community wide baiting program and increasing the overall effectiveness.”*

Stakeholders indicated their preference for alternative browsing control methods, despite the associated increased cost:

*“There are also alternative methods of controlling browsing animals (such as fencing, tree guards etc.) which would preclude the use of 1080 poison but forest managers will attempt to use the easiest and cheapest option available.”*

Overall the high toxicity of 1080 to non-target species, including native fauna, concerned many stakeholders, including those not in those jurisdictions seeking to use the highly hazardous pesticide. The public benefit of 1080 in controlling predatory pest animal species was well recognised, particularly in Western Australia where many non-target native species are resistant to 1080 poisoning.

Table 5 and Figure 5 compares the acceptance of 1080 for use on FSC certified lands for Victoria and Western Australia (the low number of respondents for South Australia, New South Wales and Queensland preclude its inclusion here with only 4 respondents across these states). As Tasmania is not seeking a derogation for 1080 it is not included here, however those stakeholders who commented on the 1080 application are included in the analysis presented above.

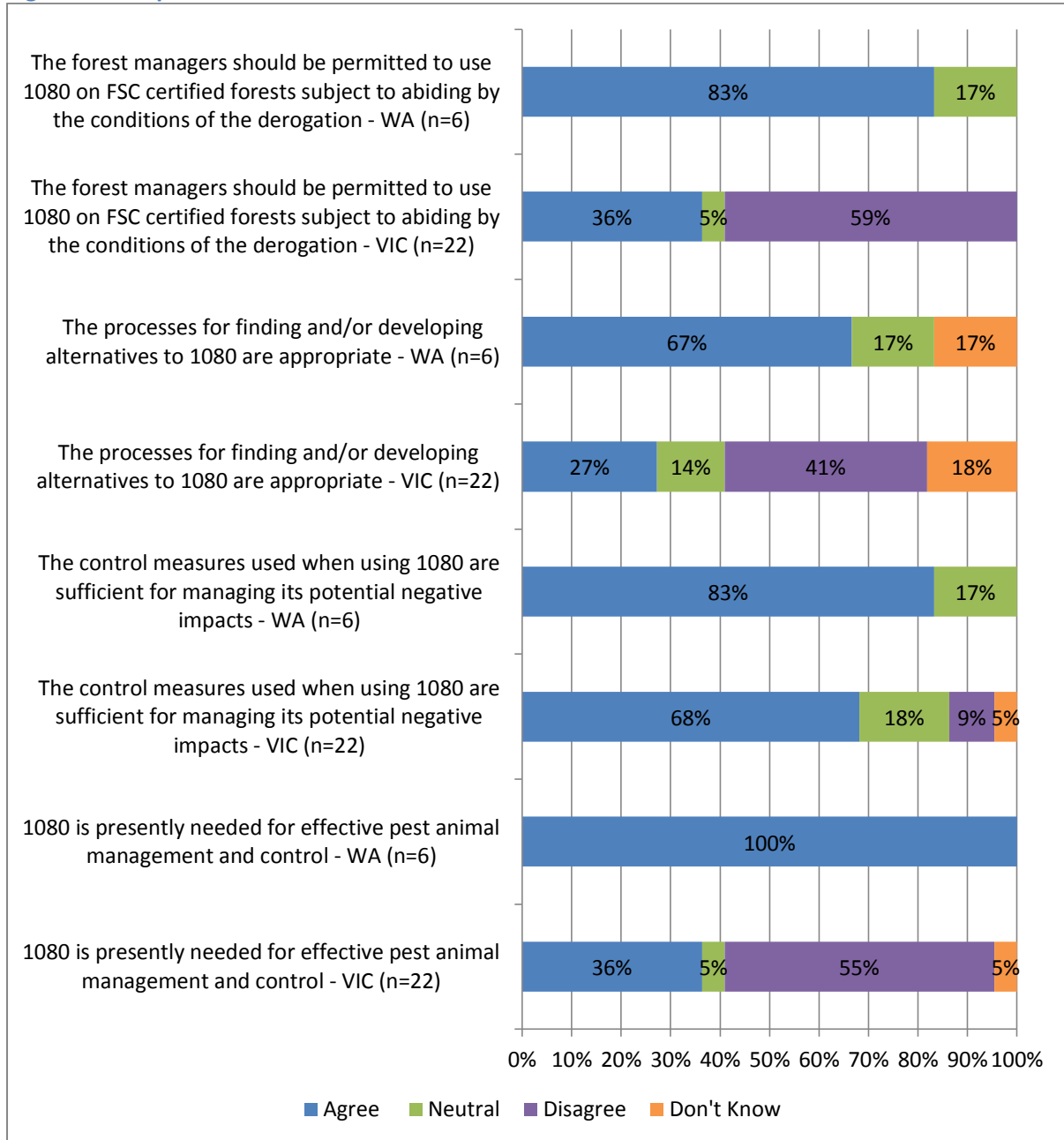
As can be seen in Table 5 and Figure 5, 1080 is highly accepted for use on FSC certified lands in Western Australia, with 83% of survey respondents agreeing to its use, and 100% agreeing that 1080 is needed to control pest animal species. In Victoria this level of acceptance is substantially lower, with only 36% of respondents agreeing that forest managers should be permitted to use 1080 on FSC certified forests, and 59% disagreeing. However, 68% of survey respondents commenting on

Victorian derogations thought that control measures used in the application of 1080 were sufficient, with only 9% disagreeing that control measures were sufficient.

**Table 5: A comparison of acceptance for use of 1080 across Victoria and Western Australia**

	Agree	Neutral	Disagree	Don't Know
<b>1080 is presently needed for effective pest animal management and control - VIC (n=22)</b>	36%	5%	55%	5%
<b>1080 is presently needed for effective pest animal management and control - WA (n=6)</b>	100%	0%	0%	0%
<b>The control measures used when using 1080 are sufficient for managing its potential negative impacts - VIC (n=22)</b>	68%	18%	9%	5%
<b>The control measures used when using 1080 are sufficient for managing its potential negative impacts - WA (n=6)</b>	83%	17%	0%	0%
<b>The processes for finding and/or developing alternatives to 1080 are appropriate - VIC (n=22)</b>	27%	14%	41%	18%
<b>The processes for finding and/or developing alternatives to 1080 are appropriate - WA (n=6)</b>	67%	17%	0%	17%
<b>The forest managers should be permitted to use 1080 on FSC certified forests subject to abiding by the conditions of the derogation - VIC (n=22)</b>	36%	5%	59%	0%
<b>The forest managers should be permitted to use 1080 on FSC certified forests subject to abiding by the conditions of the derogation - WA (n=6)</b>	83%	17%	0%	0%

Figure 5: Acceptance of 1080 within Victorian and Western Australian FSC certified forests

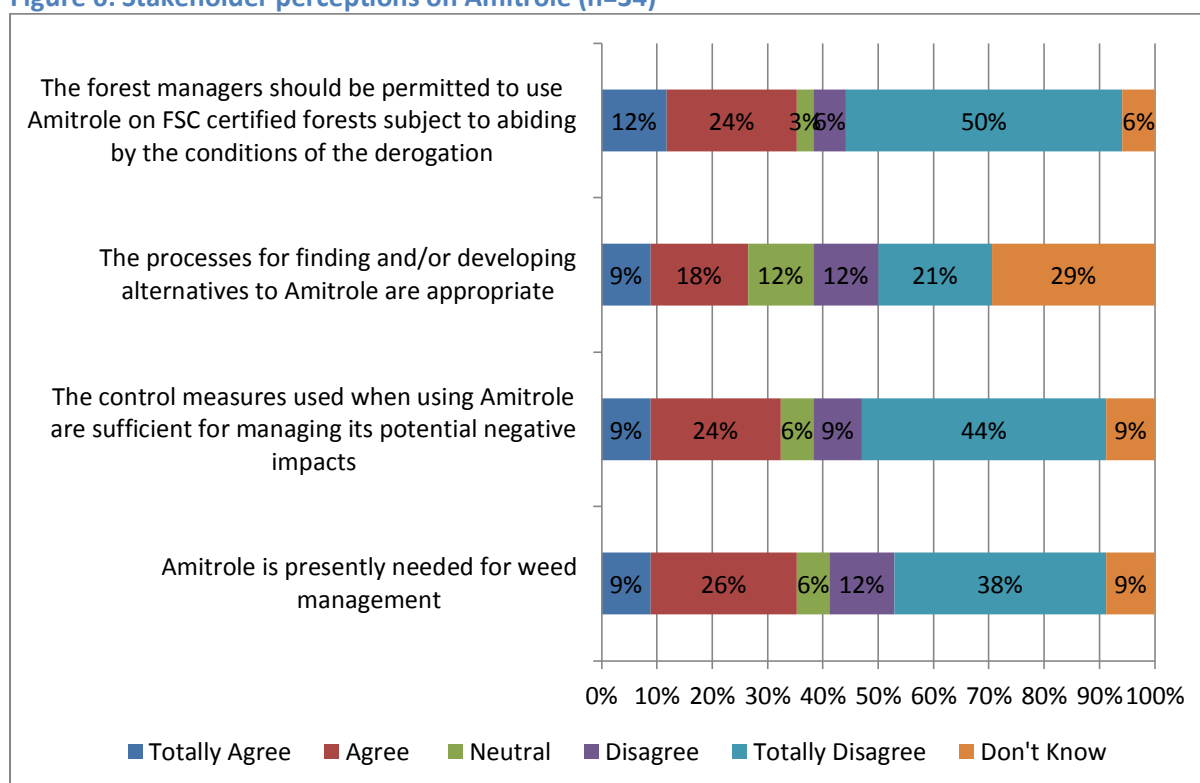


## Amitrole

Survey respondents on a whole are not accepting of the use of Amitrole on FSC certified lands, with 56% of respondents disagreeing with its use and 26% agreeing (Figure 6). This is consistent with the perceived need for Amitrole, with 50% of survey respondents disagreeing that Amitrole is needed for weed management compared with 35% of respondents who agreed that its use is needed.

There was some concern about the sufficiency of the control measures used to reduce risks associated with the use of Amitrole, with 53% of respondents perceiving control measures as insufficient, and 33% as sufficient. There was some uncertainty regarding the acceptability of process to find alternative management approaches with 29% responding that that ‘don’t know’ if approaches are appropriate, 33% perceiving current approaches as inappropriate and 27% seeing them as appropriate.

Figure 6: Stakeholder perceptions on Amitrole (n=34)



The broader feedback on Amitrole was similar to Alpha-Cypermethrin, with many responding stakeholders highly concerned about Amitrole due to it being an endocrine disrupter and hence the potential risks for humans and the environment:

*“Amitrole causes cancer. In 1971 the EPA cancelled the use of Amitrole on food crops. Although the plantations are not food crops, anything that has the potential to cause cancer should not be used in any form whatsoever. It is not worth the risk to human health. ... There is a moderate potential for groundwater contamination - any potential for groundwater contamination makes it therefore inappropriate to use.”*

Some stakeholders understand the increased costs associated with the use of alternative pesticides, but would like to see these costs absorbed by the forest management companies to protect the environment:

*“There can be no 'safe' levels of an endocrine disrupting pesticide in the environment. There are alternatives but the excuse given is they cost more. That cost needs to be born by forest managers and not the environment and communities by exposing them to an endocrine disrupting pesticide!”*

Other stakeholders see the benefit of Amitrole given that forest managers are experienced in using the pesticide, its use is regulated, and that its inclusion as an allowable pesticide is important to reduce chemical resistance:

*“Good long-standing, safe and reliable chemical that has stood the test of time.*

*“Its use is effectively and efficiently controlled by appropriate local authorities / regulators.”*

*“Can also use glyphosate a little more carefully (so as not to damage crop trees) but it's good to have a range of chemicals to avoid chemical resistance.”*

However, stakeholders expressed the need to ensure controls are in place to ensure risk to no-target area is minimised:

*“Can also use glyphosate a little more carefully (so as not to damage crop trees) but it's good to have a range of chemicals to avoid chemical resistance.”*

Table 6 and Figure 7 compare the acceptance of using Amitrole on FSC certified lands for Victoria and the combination of New South Wales, Queensland, South Australia and Western Australia (due to the low number of respondents within each state these responses were consolidated to retain anonymity).

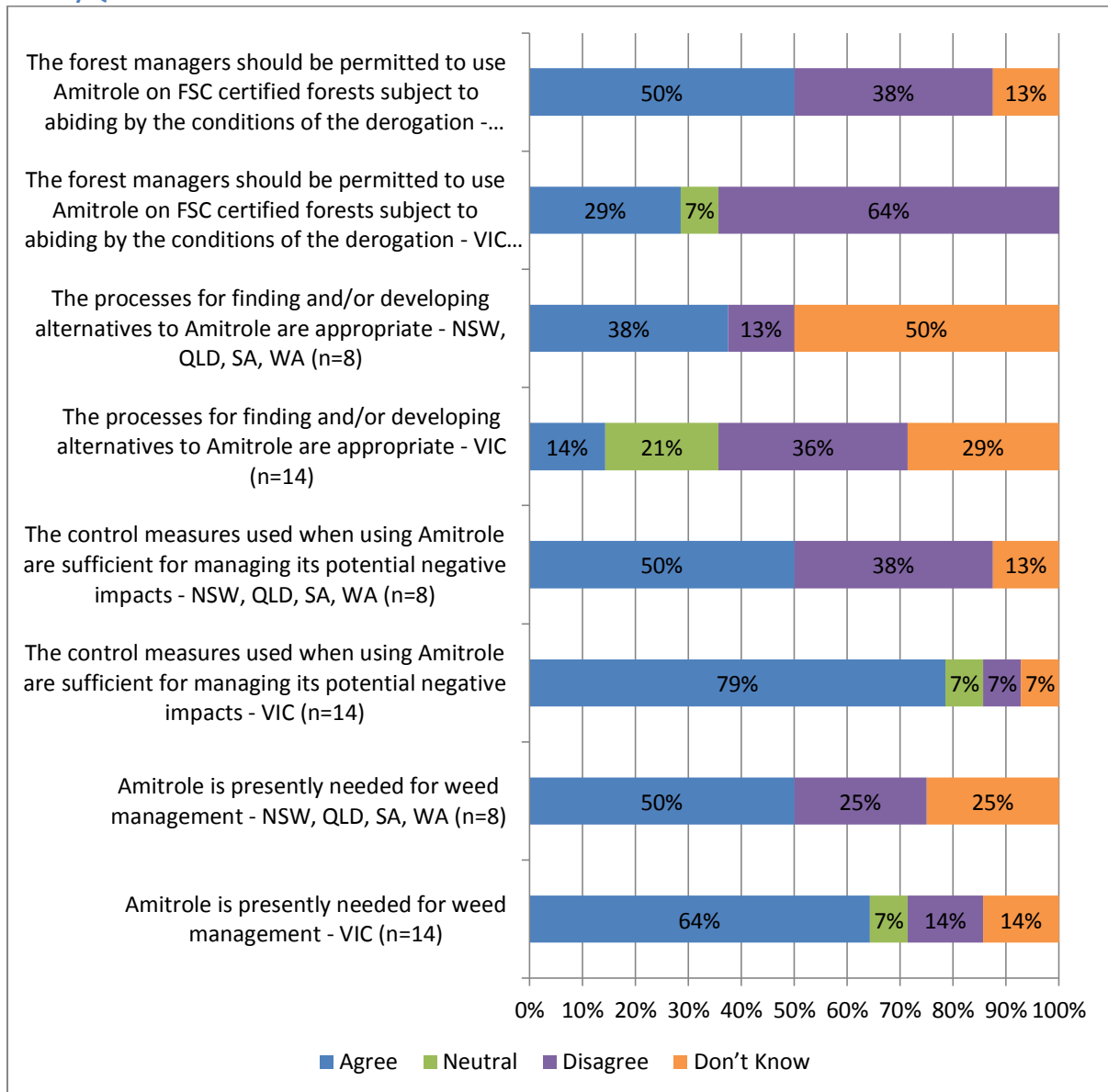


**Table 6: A comparison of acceptance of Amitrole within Victorian and Western Australian/New South Wales/Queensland and South Australian FSC certified forests**

	Agree	Neutral	Disagree	Don't Know
<b>Amitrole is presently needed for weed management - VIC (n=14)</b>	64%	7%	14%	14%
<b>Amitrole is presently needed for weed management - NSW, QLD, SA, WA (n=8)</b>	50%	0%	25%	25%
<b>The control measures used when using Amitrole are sufficient for managing its potential negative impacts - VIC (n=14)</b>	79%	7%	7%	7%
<b>The control measures used when using Amitrole are sufficient for managing its potential negative impacts - NSW, QLD, SA, WA (n=8)</b>	50%	0%	38%	13%
<b>The processes for finding and/or developing alternatives to Amitrole are appropriate - VIC (n=14)</b>	14%	21%	36%	29%
<b>The processes for finding and/or developing alternatives to Amitrole are appropriate - NSW, QLD, SA, WA (n=8)</b>	38%	0%	13%	50%
<b>The forest managers should be permitted to use Amitrole on FSC certified forests subject to abiding by the conditions of the derogation - VIC (n=14)</b>	29%	7%	64%	0%
<b>The forest managers should be permitted to use Amitrole on FSC certified forests subject to abiding by the conditions of the derogation - NSW, QLD, SA, WA (n=8)</b>	50%	0%	38%	13%

As shown here, Amitrole is more accepted in NSW/QLD/SA/WA than Victoria with 50% of respondents agreeing that Amitrole should be permitted compared with 29% in Victoria, although the low number of respondents means that such findings need to be treated with caution. In all jurisdictions the need for Amitrole and the control measure used is accepted. However respondents are more cautious about the processes for finding alternatives, with a high proportion of survey respondents either disagreeing, or do not know if processes to find alternatives are appropriate.

**Figure 7: Acceptance of Amitrole within Victorian and Western Australian/New South Wales/Queensland and South Australian FSC certified forests**

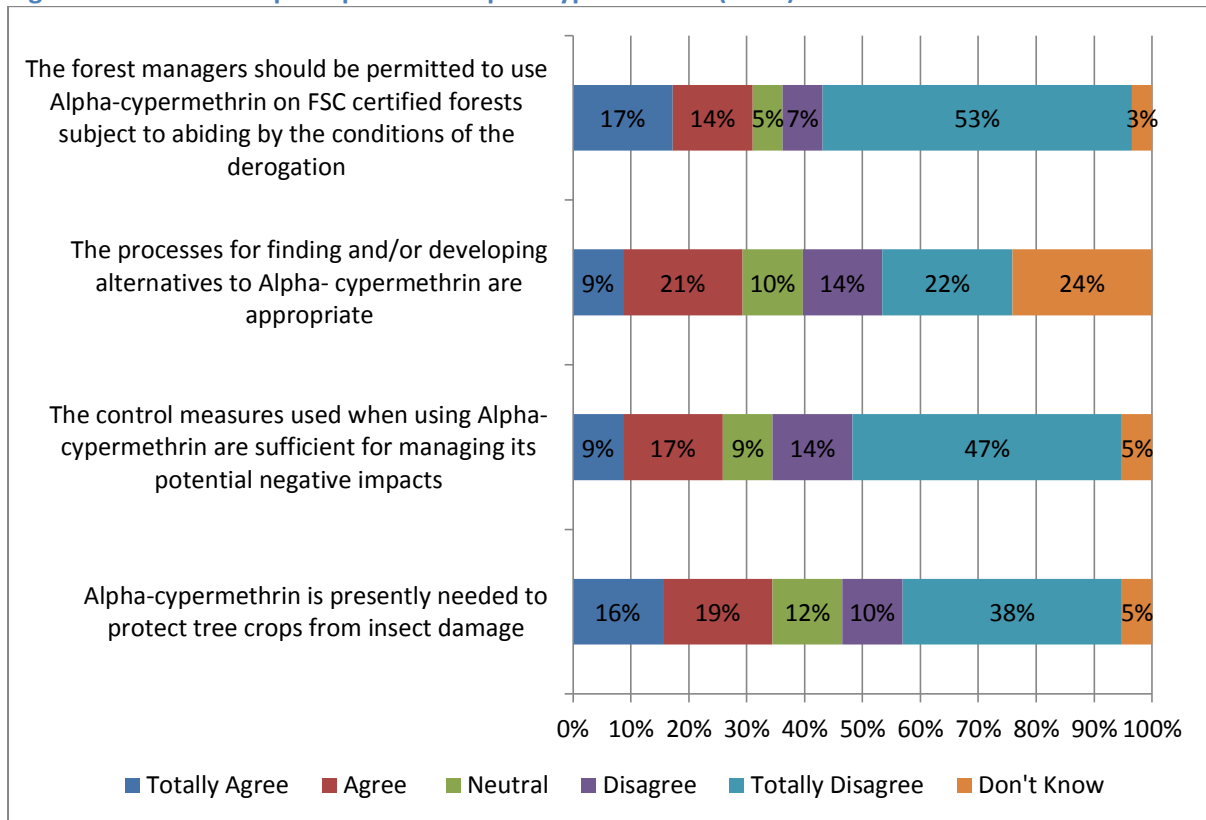


## Alpha-Cypermethrin

Responding stakeholders do not accept the use of Alpha-Cypermethrin, with 60% of respondents disagreeing with the use of Alpha-Cypermethrin on certified land, and 21% agreeing (Figure 8). The perceived need for Alpha-Cypermethrin is questioned with 35% of survey respondents agreeing that there is a need to use the pesticide, and 48% disagreeing that there is a need.

Stakeholders are concerned about acceptable control measures given the perceived potential impacts of the pesticide, with 61% disagreeing that control measures provided in the draft derogations are sufficient.

**Figure 8: Stakeholder perceptions on Alpha-Cypermethrin (n=58)**



Stakeholders expressed significant concern over the use of Alpha-Cypermethrin due to its potential toxicity to the environment and human health:

*“It is a broad spectrum insecticide that is highly toxic to fish, water insects, aquatic invertebrates and bees.”*

*“Any pesticide with this degree of toxicity and potential to cause harm should not be used anywhere ... we believe the use of Alpha-cypermethrin should not be considered for use given its highly toxic properties.”*

*“It is highly toxic to fish and highly toxic to bees... this is disastrous given the importance of bees and the other issues impacting bees.”*

*“Due to its acute toxicity to aquatic organisms, mammals and birds there is just too much risk involved with the use of this pesticide over such large areas in so many States.”*

For some, aerial application further heightens this risk due to perceived increased risks of spray drift, although others feel that proper control measures such as buffers, and technical advances GPS tracking as being important and effective in reducing this risk:

*“NO AERIAL SPRAYING [emphasis original] should be permitted of this or any other chemical as spray drift cannot be prevented.*

*“Aerial application of pesticides results in widespread and indiscriminate impacts on non-target species, and can affect water quality.”*

*“[Stakeholder] has concerns about Alpha-Cypermethrin due to aerial application, but as long as buffers are applied it can be used safely.”*

*“An excellent chemical for insect pest control in hardwood plantations. Modern DGPS tracking systems in aircraft have ensured application is accurately targeted and chemical is kept out of waterways.”*

However, despite these improvements some stakeholders see that more work is needed on such control measures as the risks are too high for potentially affected stakeholders and the environment:

*“The Tasmanian Code of Practice for Aerial Spraying has not been significantly upgraded since 1998. ... As it currently stands it does not provide adequate provisions to ensure that aerial spraying does not contaminate certified organic operations ... If our property is contaminated with a hazardous pesticide such as Alpha cypermethrin, we are likely to lose our organic certification.”*

*“Aerial spraying has great capacity to drift from target areas ... The water sampling technique, mid level/mid stream ( relatively high flow ) is not the habitat of most aquatic insects and may not be location of the highest concentrations of any contaminants present.”*

The perceived environmental costs of using Alpha-Cypermethrin and perceived economic costs of not controlling pest insect populations are often difficult to reconcile, with some stakeholders concerned over the priorities of forest management organisations and the lack of efforts in finding safer alternatives:

*“One of the criteria for chemical use of alpha cypermethrin (costs vs alternatives) makes it clear that economics are considered more important than human and environmental health ... So called ‘safe’ use in a forestry context can have impacts way beyond forestry operations ... what efforts have been made to find safer alternatives ? ... Is financial gain more important?”*

*“Invest money in the research for safer alternatives.....maybe more costly now but in the long term it will benefit everyone ... The report clearly states that there are alternatives*

*available but that they are more expensive. The forestry industry needs to factor this cost in."*

*"Forestry should spend the money and make sure less toxic pesticides get registered in Australia rather than just claim there is no alternative."*

Some stakeholders are more pragmatic on the use of Alpha-Cypermethrin and see it as being an important, regulated and controlled pesticide that can be used safely when sufficient controls are put in place:

*"The use is essential for control of leaf defoliating insects"*

*"This product is widely used in the agricultural industry for management of pests on crops. Forestry in Tasmania has strict controls on usage and if used appropriately it should be available for use"*

*"If leaf beetle populations are monitored to determine if controls are necessary after most natural predation has occurred the negative effects of applying alpha-cypermethrin are reduced if it is applied on this basis."*

*"This chemical has a known off-target negative impact on aquatic life. If to be used in environments where seasonally ephemeral wetlands and remnant water bodies are located - either in adjoining land or within remnants within forestry plantations; careful application to avoid run-off and contamination impacts must be observed."*

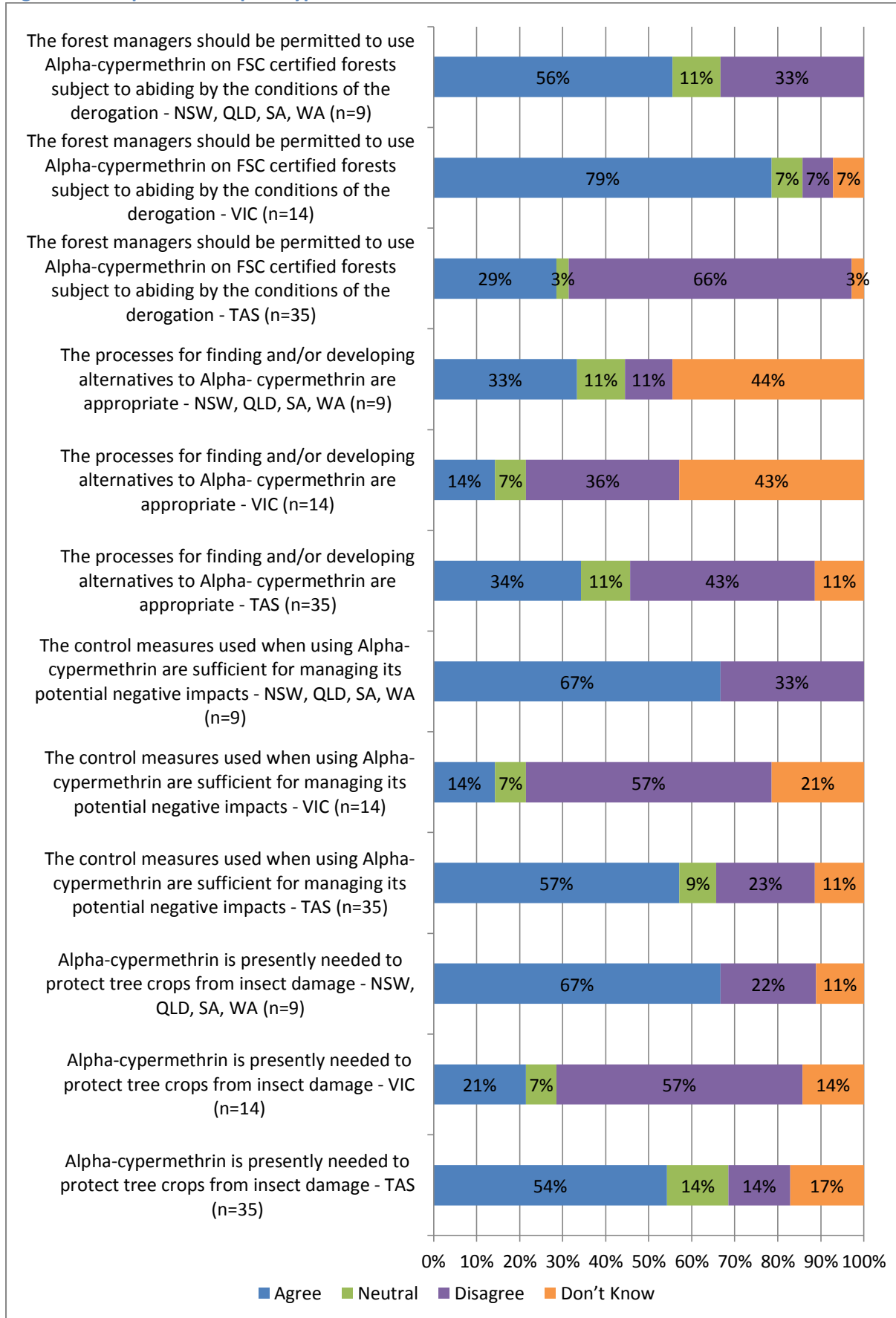
The acceptance of using Alpha-Cypermethrin on FSC certified lands for each of the relevant states is provided in Table 7 and Figure 9. Again New South Wales, Queensland, South Australia and Western Australia have been combined due to the low number of respondents within each state.

The acceptance of Alpha-cypermethrin for use on FSC certified lands varies considerably across each state, with Tasmanian survey respondents critical of its use with only 29% of respondents agreeing that forest managers should be able to use Alpha-cypermethrin on FSC certified forests, compared to 79% in Victoria and 56% across the other states. This is in stark contrast to survey respondent's perceptions of the need for Alpha-cypermethrin where 54% of Tasmanians agreed it was necessary, 67% of NSW, QLD, SA and WA, and only 21% of Victorians. This acceptance of the need is similar to the perceived sufficiency of control measures where again those interested in Victorian derogations were critical, with 57% disagreeing that control measures are sufficient, compared to 57% agreeing in Tasmania and 67% in NSW/QLD/SA and WA.

**Table 7: A comparison of acceptance of Alpha cypermethrin for use on FSC certified forests across the states**

	Agree	Neutral	Disagree	Don't Know
Alpha-cypermethrin is presently needed to protect tree crops from insect damage - TAS (n=35)	54%	14%	14%	17%
Alpha-cypermethrin is presently needed to protect tree crops from insect damage - VIC (n=14)	21%	7%	57%	14%
Alpha-cypermethrin is presently needed to protect tree crops from insect damage - NSW, QLD, SA, WA (n=9)	67%	0%	22%	11%
The control measures used when using Alpha- cypermethrin are sufficient for managing its potential negative impacts - TAS (n=35)	57%	9%	23%	11%
The control measures used when using Alpha- cypermethrin are sufficient for managing its potential negative impacts - VIC (n=14)	14%	7%	57%	21%
The control measures used when using Alpha- cypermethrin are sufficient for managing its potential negative impacts - NSW, QLD, SA, WA (n=9)	67%	0%	33%	0%
The processes for finding and/or developing alternatives to Alpha-cypermethrin are appropriate - TAS (n=35)	34%	11%	43%	11%
The processes for finding and/or developing alternatives to Alpha-cypermethrin are appropriate - VIC (n=14)	14%	7%	36%	43%
The processes for finding and/or developing alternatives to Alpha-cypermethrin are appropriate - NSW, QLD, SA, WA (n=9)	33%	11%	11%	44%
The forest managers should be permitted to use Alpha-cypermethrin on FSC certified forests subject to abiding by the conditions of the derogation - TAS (n=35)	29%	3%	66%	3%
The forest managers should be permitted to use Alpha-cypermethrin on FSC certified forests subject to abiding by the conditions of the derogation - VIC (n=14)	79%	7%	7%	7%
The forest managers should be permitted to use Alpha-cypermethrin on FSC certified forests subject to abiding by the conditions of the derogation - NSW, QLD, SA, WA (n=9)	56%	11%	33%	0%

Figure 9: Acceptance of Alpha-Cypermethrin for use on FSC certified forests across the states

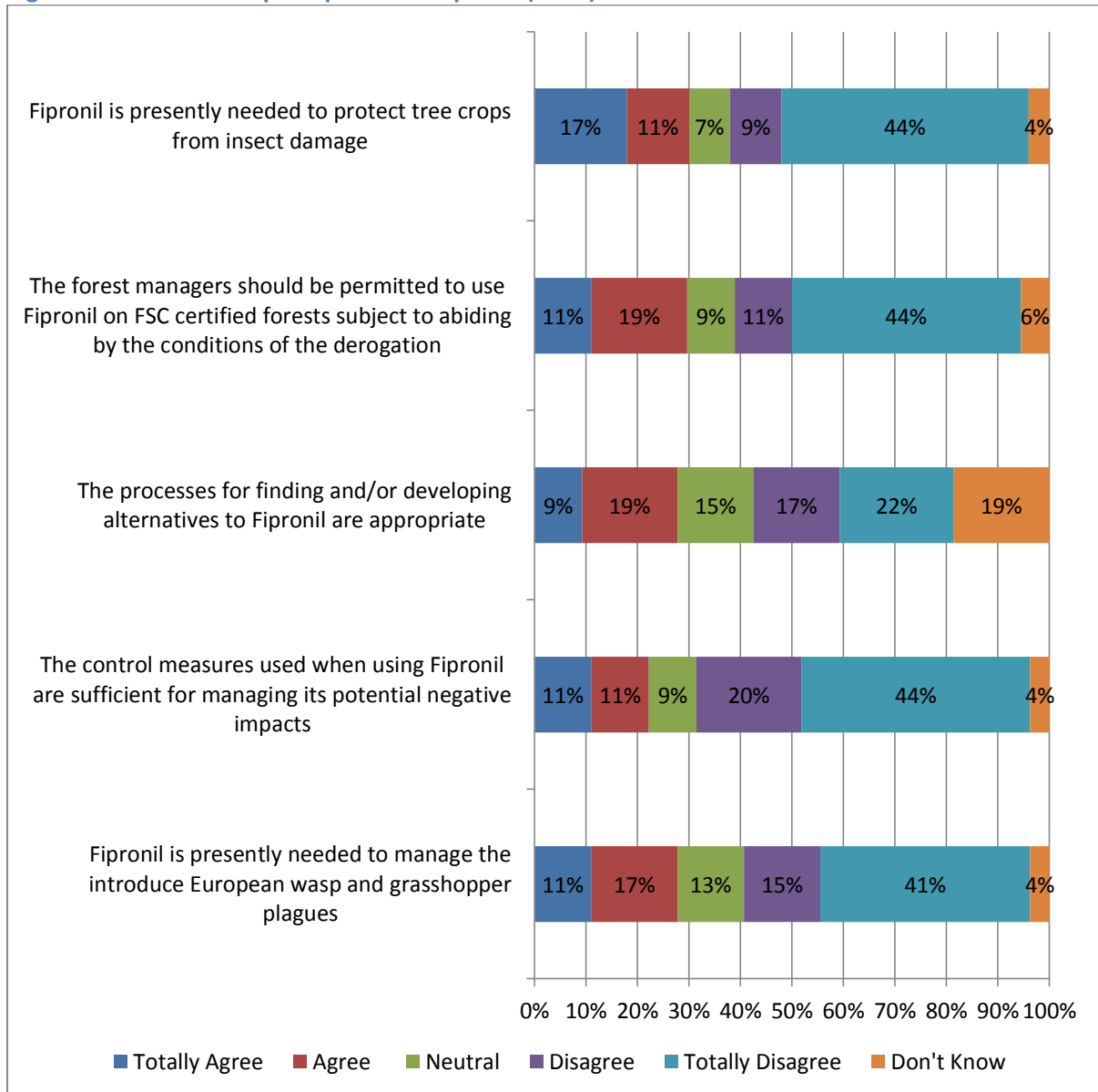




## Fipronyl

Survey respondents predominantly disagreed (56%) with the use of Fipronil as provided in the draft derogation applications, with 30% agreeing with its use (Figure 10). Additionally stakeholders did not accept that there was a real need to use Fipronil to protect trees (53% disagreed), or to control European wasps and grasshoppers (56% disagreed). Stakeholders were highly concerned about the sufficiency of control measures given the potential impacts of the pesticide on non-target species, with 64% disagreeing that control measures detailed in the draft derogations were sufficient.

Figure 10: Stakeholder perceptions on Fipronil (n=54)



Like Amitrole and Alpha-Cypermethrin, many stakeholders are highly concerned about the use of Fipronil on FSC certified lands due to its toxicity and hence potential impact on environmental and human health:

*“The potential hazards of Fipronyl make it inappropriate to use in plantations close to human habitation.”*

*“Fipronil was found to be highly toxic to some birds and to honey bees. Honey bees are already under immense pressure. No honey bees equates to long term no sustainable life.”*

*“Fipronyl is highly toxic to freshwater fish and invertebrates and it should not be used near or about water ways as minute quantities in waterways can kill fish and crustaceans”*

There are also concerns over the use of aerial spraying to apply Fipronil given its toxicity:

*“We are also concerned about the aerial application of all pesticides and the adverse impact this has on communities living adjacent to and in near proximity to these operations. Despite the latest technology spray drift, mobilisation through water tables and water courses poses threats to sensitive people.”*

*“Fipronyl has been banned in other countries. We should not be using this chemical particularly NO AERIAL SPRAYING [emphasis original] should take place.”*

Some stakeholders questioned the need for Fipronil at all given the potential impacts:

*“Being a resident, I do not believe either of these pests are a significant problem - I have a real issue for the impacts on birds, mammals and bees in our area, of which there are many! Perhaps for employee safety, proper safety clothing should be issued for wasps?”*

*“... In WA we rarely have grass hopper plagues and I haven't heard of grass hopper damage to blue gum plantations when they did occur. I am unsure of the European wasp situation however the death of beneficial insects and bees vastly outweighs any reason to use this highly hazardous chemical.”*

*“European wasps can be controlled by other means. Use of dangerous chemicals should be discouraged according to FSC principles.”*

*“Is it clear that the benefits of very occasional use in extreme circumstances only, outweigh the negatives? Again something with such acute toxicity should be a last resort not become part of standard practice.”*

There is concern from some stakeholders regarding the effectiveness of control measures and the enforcement of breaches with such controls:

*“The checks in place for its application, monitoring, frequency of use are not stringent enough. It is not enough that notices will be put up to notify communities....communities should have the right to say no to spraying in their area if the forestry industry cannot convince them otherwise.”*

*“Fipronil spray would require very careful management of off-target spray drift onto grazing land, high conservation land including that found within plantations, and water bodies within 1.5km of the spray zone.”*

The acceptance of using Fipronil on FSC certified lands for each of the relevant states is provided in Table 8 and Figure 11. Again New South Wales, Queensland, South Australia and Western Australia have been combined due to the low number of respondents within each state.

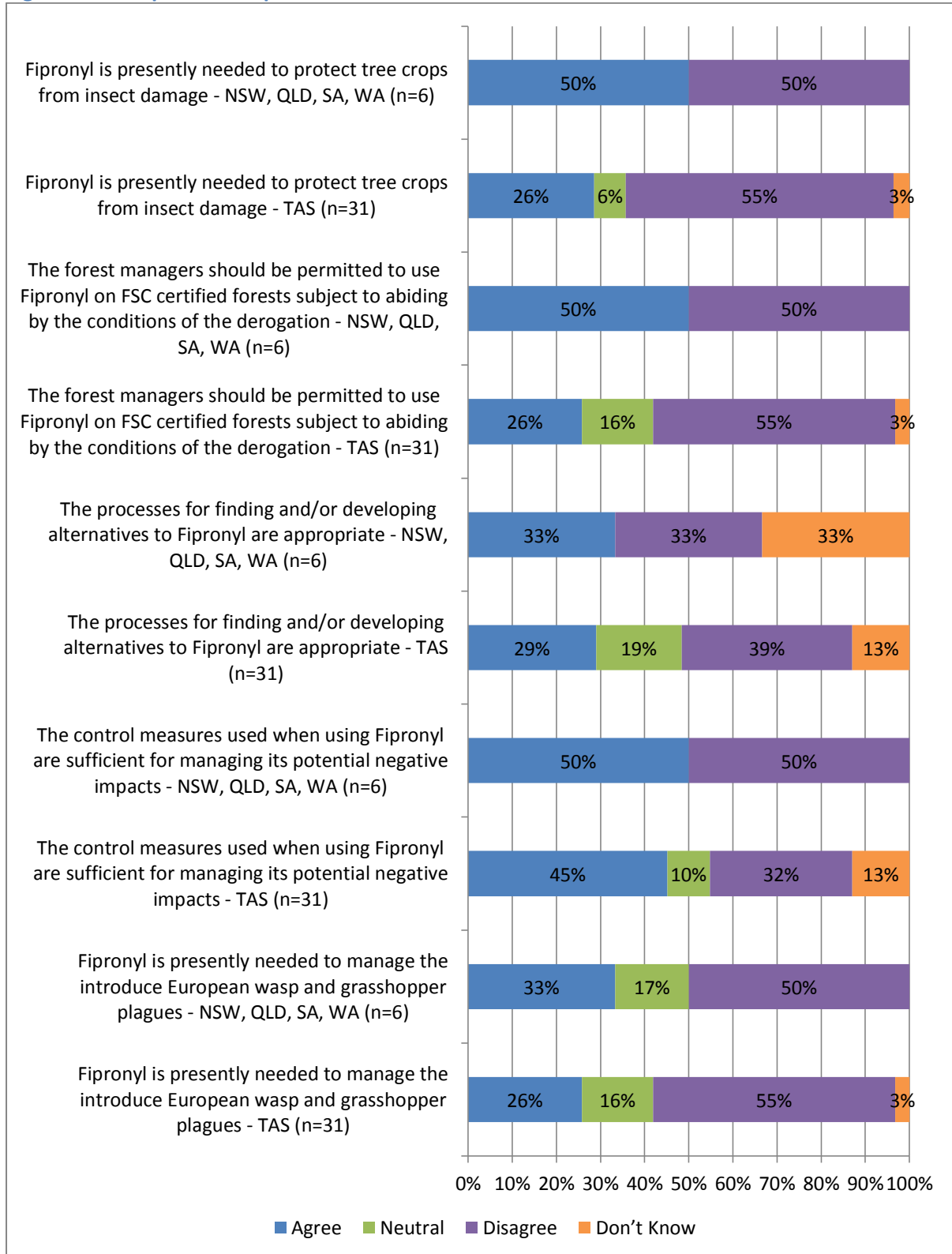
**Table 8: A comparison of acceptance of Fipronil for use on FSC certified forests across the states**

	Agree	Neutral	Disagree	Don't Know
<b>Fipronil is presently needed to manage the introduce European wasp and grasshopper plagues - TAS (n=31)</b>	26%	16%	55%	3%
<b>Fipronil is presently needed to manage the introduce European wasp and grasshopper plagues - NSW, QLD, SA, WA (n=6)</b>	33%	17%	50%	0%
<b>The control measures used when using Fipronil are sufficient for managing its potential negative impacts - TAS (n=31)</b>	45%	10%	32%	13%
<b>The control measures used when using Fipronil are sufficient for managing its potential negative impacts - NSW, QLD, SA, WA (n=6)</b>	50%	0%	50%	0%
<b>The processes for finding and/or developing alternatives to Fipronil are appropriate - TAS (n=31)</b>	29%	19%	39%	13%
<b>The processes for finding and/or developing alternatives to Fipronil are appropriate - NSW, QLD, SA, WA (n=6)</b>	33%	0%	33%	33%
<b>The forest managers should be permitted to use Fipronil on FSC certified forests subject to abiding by the conditions of the derogation - TAS (n=31)</b>	26%	16%	55%	3%
<b>The forest managers should be permitted to use Fipronil on FSC certified forests subject to abiding by the conditions of the derogation - NSW, QLD, SA, WA (n=6)</b>	50%	0%	50%	0%
<b>Fipronil is presently needed to protect tree crops from insect damage - TAS (n=31)</b>	26%	6%	55%	3%
<b>Fipronil is presently needed to protect tree crops from insect damage - NSW, QLD, SA, WA (n=6)</b>	50%	0%	50%	0%

Survey respondents in NSW/QLD/SA and WA were much more accepting of Fipronil than Tasmanian respondents, with 50% agreeing to use Fipronil on FSC certified lands compared to 26% in Tasmania. However, the sufficiency of control measures was relatively similar with 45% of Tasmanian respondents agreeing they were adequate and 50% of NSW/QLD/SA and WA respondents.

The need for Fipronil to control European wasps and grasshoppers was less accepted for QLD/NSW/SA and WA respondents (33%) than the need to protect tree crops from damage in general (50%), Tasmanian respondents did not agree with either of these needs with 55% of respondents disagreeing with both statements.

Figure 11: Acceptance of Fipronil for use on FSC certified forests across the states



## Survey respondents awareness and acceptance of forest certification

### Knowledge of Forest Certification

Respondents had a good understanding of forest certification, with 67% having heard of forest certification before, and 79% having heard of FSC (see Table 9). This knowledge of certification is not surprising given that stakeholders informed of the derogation process were primarily those registered on company of FSC Australia databases and hence had dealings with certified companies previously. Similarly, given that this survey is relating to an FSC process it is unsurprising that a reduced number of survey respondents were aware of the PEFC (33%).

However, stakeholder knowledge of certifying bodies was significantly less, with only 56% of responders aware of Rainforest Alliance, and less for other certifying bodies. This lack of knowledge of certifying bodies provides an insight into the poor depth of knowledge regarding forest certification of many stakeholders, highlighting that stakeholders are potentially aware of certification but have insufficient understanding of how forest certification works and hence limited capacity to engage in certification processes when requested and/or concerned about forest management practices of certified forest managers.

**Table 9: Knowledge of forest certification and its organisations**

Have you heard of...	Yes	% of Respondents
Forest certification	50	67%
Forest Stewardship Council (FSC)	59	79%
Programme for the Endorsement of Forest Certification (PEFC)	25	33%
Australian Forestry Standard (AFS)	55	73%
FSC Australia	49	65%
Rainforest Alliance	42	56%
Soil Association Woodmark	20	27%
Scientific Certification Services (SCS Global Services)	23	31%

### Acceptance of forest certification

Figure 12 shows the level of stakeholder acceptance of forest certification, with 67% of respondents agreeing that forest certification should influence forest policy and 56% of respondents believing that forest certification has a positive influence on sustainable forest management.

The forest management practices of non-certified organisations are not accepted by 67% respondents. However, there remains a low level of acceptance of certified organisations as well, with those certified to PEFC accepted by only 31% of survey respondents, and FSC certified organisations recording a slightly higher acceptance at 39%, with both having high levels of neutrality.

Similarly the establishment and review processes for each certification standard is questioned. More survey respondents were dissatisfied with the establishment and review processes than satisfied for

both certification standard schemes, with 32% dissatisfied with PEFC processes compared to 26% satisfied, and 45% of respondents dissatisfied with FSC processes and 29% satisfied.

This questioning of certification governance is further highlighted by the moderate level of acceptance with current opportunities for engagement in certification processes, with 40% of survey respondents satisfied with current engagement opportunities and 37% dissatisfied.

**Figure 12: Acceptance of forest certification as forest governance (n=75)**

