

Pathway risk analysis for weed spread within Australia (UNE61)

Appendix 1 – Survey document

September, 2008

WEED SPREAD ASSESSMENT

Assessing risk of different pathways of weed ingress

Survey of Weed Professionals



Australian Government
Land & Water Australia



*This project has been approved by the Human Research Ethics Committee of the University of New England
(Approval No. HE07/122 Valid to 15/06/2008)*

*Should you have any complaints concerning the manner in which this research is conducted, please contact the
Research Ethics Officer at the following address:*

Research Services, University of New England, Armidale, NSW 2351.

Telephone: (02) 6773 3449

Facsimile: (02) 6773 3543

Email: Ethics@pobox.une.edu.au

The Weed Spread Assessment Survey

The University of New England is currently undertaking an Australia-wide research project under the national 'Defeating the Weed Menace' program. Our project, entitled 'Pathway Risk Analysis for Weed Spread within Australia' will:

1. identify the primary sources and pathways responsible for weed spread *within* Australia (we are *not* considering the means by which weeds *enter* Australia),
2. assess the risk associated with each pathway, and
3. identify ways to reduce these risks.

Your input will help to identify the risks associated with various sources and pathways, and the best methods to manage these risks.

The survey is being conducted by the Institute for Rural Futures (IRF) at the University of New England. The IRF will be responsible for collection, analysis, and storage of survey data.

This survey is divided into three sections. Section 1 asks for your contact details, allowing us to assess responses in terms of area of expertise, and to ensure that you do not receive survey reminder emails if you have already completed the survey.

Section 2 asks you to assess the importance of a variety of weed *sources*.

Finally, in Section 3 you are asked to indicate which *pathways* of weed spread you believe to be important, to assess the *effectiveness* of these pathways, and to indicate ways of minimising pathway risk.

Definitions of weeds, pathways and sources are provided on the following page.

All survey data will be aggregated in the project report and any other publications arising from the project, such as journal articles and conference papers. This ensures that no individual respondent can be identified. **Confidentiality and anonymity is assured.** As part of a University of New England research project, this survey must comply with the University's ethical guidelines.

If you know of anybody else who would be interested in participating in this survey, please feel free to forward the survey file to them. We welcome their input.

If you would like to talk about this survey, please don't hesitate to give me a call on 02 6773 3747, or email bsindel@une.edu.au.

Thank you for your involvement in this research project. Your input is greatly appreciated.



Associate Professor Brian Sindel
School of Environmental and Rural Science
University of New England
Armidale NSW 2351
bsindel@une.edu.au

19th November, 2007

Survey Instructions

The survey has been created as a Microsoft Word form. To answer the survey questions, click in the grey cells and type, tick, or choose your answer. Most grey cells will contain three letter O's ("OOO") by default. Please type over the top of these letters. The first grey cell can be found on the following page under Section 1 – Contact Details, next to 'Name':

OOO

Grey text boxes such as the one illustrated above will expand while you type, allowing you to type as much text as necessary. Some grey cells have been formatted as pop-up lists of options, or check boxes. For these, you only need to click on the correct response.

To move to the next question, simply press the 'Tab' key (you can also scroll to the next question, if you need to skip part of the survey). To make answering the survey easier, the document has been formatted so that you are only able to type in or select the grey cells.

Although the survey appears quite long, particularly with respect to Section 3, only some parts of the survey will be relevant to most individuals. *You should not need to complete all parts of the survey, only those pathways with which you are familiar. Please answer Section 3 with regard to no more than five pathways.*

Please be sure to save the document regularly while completing the survey.

When you have completed the survey, please save the file, attach it to an email, and send to: surveys@une.edu.au

If you have any problems completing the survey form, please contact Michael Coleman on 02 6773 3616 or mcoleman@une.edu.au (technical problems with the form), or Brian Sindel on 02 6773 3747 or bsindel@une.edu.au (questions about survey content).

Important Definitions

Pathway

Any means or mechanism by which weed plants or propagules may be dispersed. In the case of human directed activities, spread may be through either the intentional trade in invasive plants or their propagules for some perceived benefit, or as the result of contaminated products, clothing, machinery, equipment etc.¹.

Propagule

A structure with the capacity to give rise to a new plant, e.g. a seed or a vegetative part of a plant, capable of independent growth if detached.

Source

A source differs from a pathway in that it is not the means of moving weeds. It is a site or area of land where weeds are actively growing and from which new invasions may emerge.

Weed

A weed is a plant that requires some form of action to reduce its harmful effects on the economy, environment, human health and amenity. This definition includes plants not native to Australia and native plants growing outside their known natural range².

1. Barker, M. 2006. *National Weed Spread Prevention draft action plan*. Prepared by the National Weed Spread Prevention Committee, July 2006. Available at: http://www.weeds.org.au/docs/Draft_National_Weed_Spread_Action_Plan.pdf

2. Australian Weeds Committee. 2006. *Australian Weeds Strategy: A national strategy for weed management in Australia*. Prepared for the Natural Resource Management Ministerial Council. Available at: http://www.weeds.org.au/docs/Australian_Weeds_Strategy.pdf

Section 1 – Contact Details

Please fill in your contact details below.

Name 000

Organisation/Affiliation 000

Town 000

State

Post Code 000

Position Title 000

Specialty/Expertise 000

Geographical Area of Responsibility 000

Please scroll to the next page to begin Section 2

Section 2 – Weed Sources

In your personal experience, how important are the following sources as contributors to weed spread?

Using the pop-up boxes below, please choose one of the available options for each source.

Nature conservation (nature reserves, national parks, flora and fauna reserves, traditional/indigenous land, other protected landscapes)	<input type="text" value="000"/>
Minimal use (stock route, residual native cover, rehabilitation etc.)	<input type="text" value="000"/>
Land in transition (degraded, abandoned, unused land)	<input type="text" value="000"/>
Forestry (native and planted forests)	<input type="text" value="000"/>
Cropping (dryland and irrigated)	<input type="text" value="000"/>
Horticulture – edible (fruit, nuts, bulbs, roots, seeds, berries, herbs, vegetables, etc.)	<input type="text" value="000"/>
Horticulture – ornamental (fresh flowers, garden plants, aquarium plants, bulbs and seeds, etc.)	<input type="text" value="000"/>
Pasture/rangelands (cattle, sheep, dairy, goats, etc.)	<input type="text" value="000"/>
Intensive animal use (feedlots, pigs, poultry, saleyards, aquaculture, etc.)	<input type="text" value="000"/>
Private gardens (includes water gardens and aquariums)	<input type="text" value="000"/>
Public gardens (botanic, civic, zoos, schools, water gardens etc.)	<input type="text" value="000"/>
Utilities (sites used for energy or telecommunication i.e. for generation, storage, transmission)	<input type="text" value="000"/>
Mining (mines, quarries, tailings, etc.)	<input type="text" value="000"/>
Transport (roads, railways, ports and water transport, airports etc.)	<input type="text" value="000"/>
Waste treatment and disposal (landfill, green waste, stormwater, sewage, etc.)	<input type="text" value="000"/>

(Question continued over page)

In your personal experience, how important are the following sources as contributors to weed spread? (Continued)

Using the pop-up boxes below, please choose one of the available options for each source.

Manufacturing and services (commercial centres and industrial estates)		<input type="text" value="000"/>
Research (plant research and development facilities)		<input type="text" value="000"/>
Defence (land owned or managed by the Australian Defence Forces)		<input type="text" value="000"/>
Lake (natural body of standing water)		<input type="text" value="000"/>
Reservoir/dam (artificial body of standing water)		<input type="text" value="000"/>
River (natural water courses streams, creeks, etc.)		<input type="text" value="000"/>
Channel/aqueduct (artificial water courses for supply or drainage)		<input type="text" value="000"/>
Marsh/wetland (ephemeral and permanent)		<input type="text" value="000"/>
Estuary/coastal waters (beach, dunes, mangroves, etc.)		<input type="text" value="000"/>
Other Source 1 (<i>Please specify</i>)	<input type="text" value="000"/>	<input type="text" value="000"/>
Other Source 2 (<i>Please specify</i>)	<input type="text" value="000"/>	<input type="text" value="000"/>

Are there any other comments you would like to make with regard to weed sources in Australia?

Please scroll to the next page to begin Section 3

Section 3 – Weed Pathways

Our research of the literature has identified the following pathways for weed spread.

Deliberate Spread by Humans

- | | |
|------------------------------|--|
| 1. Ornamental plant trade | <i>Through nursery sales and escape of garden and landscaping plants.</i> |
| 2. Aquarium plant trade | <i>Through sales at nurseries, pet shops and escape into waterways.</i> |
| 3. Medicinal plant trade | <i>Plants propagated and sold in nurseries and among alternative medicine enthusiasts.</i> |
| 4. Food plant trade | <i>Plants grown and promoted as food for humans.</i> |
| 5. Fodder trade | <i>Sales and planting of fodder plants for livestock grazing.</i> |
| 6. Revegetation and forestry | <i>Planting for soil conservation and to produce timber.</i> |

Accidental Spread by Humans

- | | |
|---|--|
| 7. Human apparel and equipment | <i>Attachment of seeds to clothes and footwear.</i> |
| 8. Machinery and vehicles | <i>Attachment of seeds to passenger vehicles, slashers, farm equipment, boats, and earth moving equipment.</i> |
| 9. Construction and landscaping materials | <i>Contamination of gravel, soil, sand, mulch and turf.</i> |
| 10. Agricultural produce | <i>Contamination of hay, grain and pasture seed.</i> |
| 11. Research sites | <i>Escape from research sites.</i> |
| 12. Livestock movement | <i>Through faeces or attached to livestock such as sheep, cattle, horses and goats.</i> |
| 13. Waste disposal | <i>Unsafe dumping of garden refuse and aquarium plants.</i> |

Natural Spread

- | | |
|-------------------|--|
| 14. Birds | <i>Through consumption and excretion of seeds and fruits.</i> |
| 15. Other animals | <i>Through consumption and excretion of seeds and fruits, and external attachment to native and introduced wildlife.</i> |
| 16. Wind | <i>Distribution of wind blown seeds.</i> |
| 17. Water | <i>Distribution of seeds or plant parts via waterways.</i> |

For each of these pathways, this section asks if you have observed the pathway as an important factor in weed spread. There is also a series of questions of pathway effectiveness, risk minimisation and available information.

We are aware that there is some overlap in the list of pathways identified here. Please choose a maximum of five pathways from this list which best fit *your experience with weed spread*.

Space has been provided for you to identify up to two other pathways.

If you are not familiar with a pathway, please choose ‘No’ for the first question ‘Are you aware of instances where this pathway is a factor in weed spread?’.

You can then move on to the next pathway by scrolling through the document.

Please scroll to the next page to begin the pathway questions

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 2

Deliberate Spread - Pathway 2: Aquarium plant trade

Through sales at nurseries, pet shops and escape into waterways.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > please answer the questions below

No > please continue to Pathway 3

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km). 0

Ability to transport a high diversity of weed species. 0

Ability to transport large numbers of weed propagules (of one or more species) in a single event. 0

Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event). 0

Hospitability to weeds (able to deliver live plants or viable propagules). 0

Ability to introduce weeds into hospitable environments. 0

Ability to avoid/overcome prevention and management strategies. 0

Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact). 0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes

No

(a) If yes, how?

000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 3

Deliberate Spread - Pathway 3: Medicinal plant trade

Plants propagated and sold in nurseries and among alternative medicine enthusiasts.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 4*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 4

Deliberate Spread - Pathway 4: Food plant trade

Plants grown and promoted as food for humans.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below*

No > *please continue to Pathway 5*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km). 0

Ability to transport a high diversity of weed species. 0

Ability to transport large numbers of weed propagules (of one or more species) in a single event. 0

Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event). 0

Hospitability to weeds (able to deliver live plants or viable propagules). 0

Ability to introduce weeds into hospitable environments. 0

Ability to avoid/overcome prevention and management strategies. 0

Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact). 0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes

No

(a) If yes, how?

000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 5

Deliberate Spread - Pathway 5: Fodder trade

Sales and planting of fodder plants for livestock grazing.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 6*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? OOO

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 6

Deliberate Spread - Pathway 6: Revegetation and forestry

Planting for soil conservation and to produce timber.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below*

No > *please continue to Pathway 7*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km). 0

Ability to transport a high diversity of weed species. 0

Ability to transport large numbers of weed propagules (of one or more species) in a single event. 0

Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event). 0

Hospitability to weeds (able to deliver live plants or viable propagules). 0

Ability to introduce weeds into hospitable environments. 0

Ability to avoid/overcome prevention and management strategies. 0

Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact). 0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes

No

(a) If yes, how?

000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 7

Accidental Spread by Humans

Pathways in this category include accidental movement of weeds (e.g. hitchhiking seeds contaminating machinery, produce, packing material etc.) during transport over land and water.

Accidental Spread - Pathway 7: Human apparel and equipment

Attachment of seeds to clothes and footwear.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 8*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 8

Accidental Spread - Pathway 8: Machinery and vehicles

Attachment of seeds to passenger vehicles, slashers, farm equipment, boats, and earth moving equipment.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > please answer the questions below No > please continue to Pathway 9

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? OOO

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 9

Accidental Spread - Pathway 9: Construction and landscaping materials

Contamination of gravel, soil, sand, mulch and turf.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > please answer the questions below No > please continue to Pathway 10

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km). 0

Ability to transport a high diversity of weed species. 0

Ability to transport large numbers of weed propagules (of one or more species) in a single event. 0

Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event). 0

Hospitability to weeds (able to deliver live plants or viable propagules). 0

Ability to introduce weeds into hospitable environments. 0

Ability to avoid/overcome prevention and management strategies. 0

Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact). 0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? OOO

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 10

Accidental Spread - Pathway 10: Agricultural produce

Contamination of hay, grain and pasture seed.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > please answer the questions below No > please continue to Pathway 11

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 11

Accidental Spread - Pathway 11: Research sites

Escape from research sites.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 12*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 12

Accidental Spread - Pathway 12: Livestock movement

Through faeces or attached to livestock such as sheep, cattle, horses and goats.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > please answer the questions below No > please continue to Pathway 13

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 13

Accidental Spread - Pathway 13: Waste disposal

Unsafe dumping of garden refuse and aquarium plants.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 14*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 14

Natural Spread

These pathways facilitate spread of weeds without human involvement. With animals and birds, weeds may be transported internally (i.e. seeds are swallowed and later excreted) or externally (e.g. seeds adhering to animal hides).

Natural Spread - Pathway 14: Birds

Through consumption and excretion of seeds and fruits.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 15*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? OOO

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 15

Natural Spread - Pathway 15: Other animals

Through consumption and excretion of seeds and fruits, and external attachment to native and introduced wildlife.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 16*

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 16

Natural Spread - Pathway 16: Wind

Distribution of wind blown seeds.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 17*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 17

Natural Spread - Pathway 17: Water

Distribution of seeds or plant parts via waterways.

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Are you aware of instances where this pathway is a factor in weed spread?

Yes > *please answer the questions below* No > *please continue to Pathway 18*

2. Pathway Characteristics

How would you rate the following pathway characteristics? *Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.*

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes No

(a) If yes, how? 000

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 18

Other pathways

If you have first hand experience with another pathway or pathways which are not identified in our list, please answer the following questions. Space for up to two additional pathways has been provided.

Pathway 18: Other pathway 1

Please answer the questions below with reference to this pathway.

When you are finished, please continue to the next pathway.

1. Please give a name and description for this pathway.

OOO

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes

No

(a) If yes, how?

OOO

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page for Pathway 19

Pathway 19: Other pathway 2

Please answer the questions below with reference to this pathway.

When you are finished, please continue to provide any additional comments.

1. Please give a name and description for this pathway.

OOO

2. Pathway Characteristics

How would you rate the following pathway characteristics? Please rate from 1 to 5 using the pop-up boxes, where 1 = Low/Non-Existent Capability, and 5 = High Capability. If you are not sure, please choose 'Unsure'.

Ability to transport weeds quickly over long distances (>1km).	0
Ability to transport a high diversity of weed species.	0
Ability to transport large numbers of weed propagules (of one or more species) in a single event.	0
Ability to transport weeds frequently (making it a regular/ongoing instead of occasional event).	0
Hospitability to weeds (able to deliver live plants or viable propagules).	0
Ability to introduce weeds into hospitable environments.	0
Ability to avoid/overcome prevention and management strategies.	0
Ability to transport weeds into sensitive areas (e.g. areas where the weed may have a high impact).	0

3. To the best of your knowledge, is this pathway regulated for weeds in any way?

Yes

No

(a) If yes, how?

OOO

(Question continued over page)

4. Are current management and regulatory arrangements for this pathway adequate?

Yes > go to Q. 6 below.

No > go to Q. 5 below.

5. In what ways are management and regulatory arrangements for this pathway inadequate? (please choose all appropriate boxes)

(a) The pathway is insufficiently regulated for weeds.

Do you have any suggestions for improving the effectiveness of regulation for this pathway?

OOO

(b) There is insufficient information to identify the importance of this pathway.

(c) There is insufficient information to design management strategies for this pathway.

Do you have any suggestions for managing current and future risks with regard to this pathway?

OOO

(d) Are there any other ways in which management of this pathway is inadequate?

OOO

6. What is the outlook for this pathway in the future? Will it be:

More Important

As Important

Less Important

Unsure

Please give your reasons for your choice above. OOO

7. Do you know of any scientific or other research that has investigated this pathway in an Australian context?

OOO

8. Do you have any other comments to make about this pathway?

OOO

Please scroll to the next page to provide any additional comments

If you would like to provide any further comments, please include them below.

Additional Comments

OOO

Please save the file, attach to an email, and send to surveys@une.edu.au

*Thank you once again for your input.
A summary of the project results will be forwarded to you.*