



**Dieback**  
WORKING GROUP INC

## Strategic Communication Plan for Phytophthora Dieback in Australia



**2017**



[dwg.org.au](http://dwg.org.au)

## Acknowledgements

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## Disclaimer and Limitations

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Prepared by BARK Environmental, Bruno Rikli and reviewed by DWG Inc Board, August 2017.

Reference: 'Dieback Working Group Inc. – Strategic Communication Plan for Phytophthora Dieback in Australia. Bark Environmental, August 2017'

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natural resource  
management program



## Contents

## Page No.

<b>Executive Summary</b> .....	3
1. Purpose of this Plan.....	6
2. Implementation.....	7
3. Key Directions for Communications .....	8
4. Our Stakeholders.....	9
5. Key Messages .....	10
6. Monitoring and Evaluation.....	13
7. Review .....	13
8. References.....	14

### List of Tables

1: Stakeholder Groups

2: Stakeholder types, support that DWG seeks and their impact and influence

### Appendices

A - DWG Inc. Communication Assessment and Monitoring Sheet

B - DWG Communication Tools

# Strategic Communication Plan for *Phytophthora* Dieback in Australia

DIEBACK WORKING GROUP INC.

## Executive Summary

### Where we have come from?

The Dieback Working Group (DWG) formed in 1996 in response to the need for a coordinated approach to communicate about the devastating plant disease caused by *Phytophthora cinnamomi* in Western Australia (WA). Under the former direction of Chairman Dr Ian Colquhoun, DWG's key purpose was, and continues to be:

*“To increase awareness and management of Phytophthora Dieback to protect environmental values.”*

Since its inception, DWG has become widely recognised as an important authority and information provider for raising awareness of Phytophthora Dieback and its best-practice management. In 2014 DWG became incorporated and today it is a not-for-profit national entity with charity organisation status. It is chaired by Chairman Emeritus Professor Hans Lambers. DWG's membership is diverse. It includes professional industry, government, scientific and community representation that can reach an extensive stakeholder network. DWG has clearly achieved one of its key priorities of becoming a central point for the provision of information and increasing awareness about Phytophthora Dieback, the highly destructive introduced plant disease known to be present in all states and territories of Australia, except the Northern Territory. But there is more communication work needed to sustain and progress DWG's remaining priorities that are listed herein.

DWG has established a number key communication channels that are now extended by its online website and facebook pages. In recent years it commenced delivery of industry recognised training for biosecurity-hygiene (the 'Green Card'). By August 2017, a total of 755 participants have completed this training in WA that was developed with inputs from scientists, Phytophthora industry specialists and the WA Department of Biodiversity, Conservation and Attractions (DBCA). Green Card training has proven very popular among all stakeholders. DWG also sources, produces and circulates a suite of information and tools aimed at mitigating risks and the negative impacts associated with Phytophthora Dieback. It also collaborates with government agencies, communities and Non-Government Organisations (NGO's) to deliver projects and schools to deliver the award-winning Discovering Dieback Program. DWG's large annual Dieback Information Group (DIG) conference held in Perth (WA) also attracts state, national and internationally recognized speakers. Overall, the actions outlined above have contributed to the success and growth of the DWG as it continues to attain the main purpose of the Association that is:

**“** To minimise the spread and impact of *Phytophthora* Dieback in Australia through the provision of education, information, support and advice; and through the encouragement of the implementation of best practice policy and management by key stakeholders. **”**

## What is the problem?

Phytophthora Dieback is a real threat to Australia's biodiversity.

Phytophthora Dieback is a plant disease caused by a range of soil-borne water moulds in the genus *Phytophthora*. One of these is known to be particularly destructive to many plants, *Phytophthora cinnamomi*, and has been recognized as causing a 'key threatening process' in Australia, under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). *P. cinnamomi* is considered to have originated from South-East Asia and occurs in many other countries causing disease in native and introduced plant species alike. Other *Phytophthoras* should not be ignored as they can impact susceptible plants and contribute to altering vegetation composition and structure within vulnerable plant communities.



[www.dpaw.wa.g](http://www.dpaw.wa.g)

*Phytophthoras* can spread in contaminated water, soil and organic material and infect a diverse range of native, ornamental, forestry and horticultural plants. The disease it causes has the capacity to kill susceptible plants which has adverse flow-on impacts to ecosystem functions in natural areas including forests, heathlands and woodlands.

WA's south west is one of the top 35 global biodiversity hotspots. Its concentration of endemic plants (plants found nowhere else on the planet) is exceptionally high. A great concern is the high percentage of plants known to be susceptible to *Phytophthora*.

Shearer *et al.* (2004) estimated that a mean of 40 per cent are susceptible and 14 per cent are highly susceptible to *P. cinnamomi* amongst all of the described plant species in Western Australia's South-West Botanical Province. Furthermore, O'Gara *et al.* (2005) prepared a list of over 1000 native plant species known to be susceptible to disease by *P. cinnamomi* in Australia and Hardham (2005) suggests that *P. cinnamomi* is likely to infect over 2500 Australian native species. This plant disease can dramatically impact ecosystems in vulnerable Australian vegetation resulting in major biodiversity loss and increased risk of rare plant extinctions along with some insect, bird and animal species due to the loss of habitat and food sources (Commonwealth of Australia, 2017a and 2017b).

**"Phytophthora Dieback is arguably the greatest biological threat to Australia's natural biodiversity."**

Biosecurity is managing the risk of animal and plant pests and diseases entering, emerging, establishing or spreading, to protect our economy, environment and the community (DAFWA, 2017). It involves actions to prevent, respond to and recover from pest and disease threats (Commonwealth of Australia, 2016). Protecting Australian plants and ultimately ecosystems from biological threats such as *Phytophthora Dieback* is extremely important because our environmental assets support many aspects of our lives and culture such as nature experiences, economy and market access, a multitude of industries, recreation, science, medicine, tourism and employment.

## Where we are heading?

DWG aims to sustain and enhance its position as an authority on Phytophthora Dieback by providing awareness and information to all affected stakeholders that encourages best-practice management. DWG is focused on future actions and enabling opportunities to protect Australia's enviable environmental assets. This Strategic Communication Plan is one of DWG's tools designed to support its decision-making, prioritisation and investment in the extensive communications necessary to influence positive human behaviours. The interconnected nature of environmental management highlights the advantages of a coordinated approach to managing biosecurity where a 'shared responsibility' is the paradigm (CSIRO, 2014). There is a need to maximise the partnership approach that can increase opportunities for individuals' to participate in sharing the responsibility for implementing biosecurity-hygiene and related actions (Commonwealth DAWR, 2017).

*"Much more can be done by individuals to avoid and reduce the impact of Phytophthora Dieback."*

Informed decisions and actions can make a profound difference to mitigating the spread and negative impacts of Phytophthora Dieback (and other pests, diseases and pathogens). Urgent adoption of biosecurity-hygiene when working or recreating in natural areas is a great start! Although Phytophthora Dieback can spread autonomously in landscapes, people are the most significant vector for rapidly spreading infected soil, organic material and water across landscapes during their activities. We are all responsible for maintaining the integrity of Australia's unique ecosystems, a valuable asset for future generations.

### DWG is moving towards a risk-based approach in its communications where:

- Resources are focused on environmental assets and stakeholders; and
- Phytophthora Dieback is, or needs to be, of greatest concern (such as the 100 Priority Protection Areas (PPAs) in Western Australia that were identified in the South Coast NRM's Project Dieback).

This document encourages Australia's communicators to utilise best available resources and technology and to design messages that are personal and enable people to relate to them. It is envisaged that this approach can contribute to encouraging wider audience participation to reap the environmental and social benefits from their actions for many decades to come. DWG will continue to focus on promoting effective biosecurity-hygiene standards, tools and science using various communication technologies using Phytophthora Dieback as the prime example of a significant threat to Australia's biodiversity.

The group recognises that all Australian's are involved in biosecurity either consciously or "unconsciously". By providing relevant information and sharing experiences in mitigating this biological threat, there is likely to be a greater opportunity for stakeholders' actions to make a positive difference.



# I. Purpose of this Plan

The purpose of this Strategic Communication Plan is to support and guide decision making, prioritisation and investment in DWG’s ongoing communications on the topic of biosecurity focusing on *Phytophthora Dieback*. “Biosecurity is a shared responsibility” and requires a coordinated approach between community, government and industry to research, mitigate and manage the associated risks (Australian Commonwealth Government, 2013; CSIRO, 2014; DAFWA, 2017). The paradigm of “shared responsibility” is supported by the draft Commonwealth *Threat abatement plan for disease in natural ecosystems caused by *Phytophthora cinnamomi** that identifies the need to raise awareness of the pathogen’s threat nationally (Commonwealth of Australia, 2017a). We all play an important role in protecting Australia from pest and diseases threats. Therefore, this Plan targets all stakeholders (see figure 1).

DWG is a responsive and outcome focused association that has served the community and stakeholders for several decades. The growth in media communications over the last decade has significantly expanded of opportunities for DWG to engage with its stakeholders. However, it has also increased the volume of queries and expectations placed on DWG and its committee members.

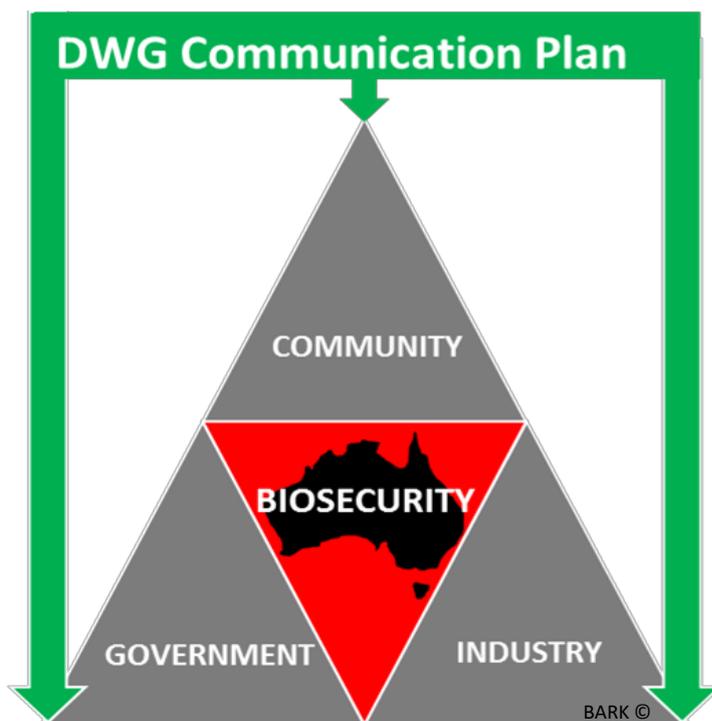


Figure 1. DWG’s Communication Plan targets all stakeholders as biosecurity is a “shared-responsibility”

This plan provides a tool that can be implemented to support DWG in meeting the increasing demands placed on it by engaged stakeholders (Section 2 and Appendix A). It sets out a series of steps to plan communication actions that are designed to consolidate and reinforce DWG’s focus on core Association business, goals, priorities and key messages. These are listed in Sections 3 and 5 below. Consideration of these guiding directions when making communication decisions will be critical to sustain the effectiveness of DWG within the limits of its human and financial resources that can fluctuate over time. Appendix B lists DWG’s existing communication tools.

This Plan will ideally be supplemented by project/operational-type of plans that provide specific details on agreed communication actions. Typically within DWG, detailed planning follows committee meetings and the plans are developed

during funding applications or in-kind by volunteer members. Importantly, DWG acknowledges the ongoing cultural responsibility that Traditional Owner custodians have for looking after country. DWG encourages communication planning, its project partners and stakeholders to include opportunities to engage with indigenous Australian’s to collaborate, share knowledge and further benefit the protection of Australia’s cultural and environmental heritage.

## 2. Implementation

Implementing this plan should be kept simple.

To ensure strategic communications decisions are made, a 3-step formula and checklist is suggested.

It follows the path of “engaging” the individuals responsible for communication planning and implementation, “assessing” proposed communications against DWG’s core business, goals and priorities; and “monitoring” the results regularly for any evaluation, reporting or continual improvement purposes.

### Step 1 – Get Engaged

#### HOW:

- Make this document accessible to all DWG members and provide a summary to stakeholders in the public domain (so they can see the scope of DWG’s business).
- Invite members to familiarise themselves with DWG’s key directions (see Section 3).

### Step 2 – Assess Proposed Communications

#### HOW:

- Add “Communications” to the committee meeting agenda and apply the following:
- Maintain an accessible copy of this document in all relevant meetings.
- Assess key communication proposals against the “Assessment and Monitoring Sheet” (see Appendix A) for their relevance to DWG’s Association objectives.
- Consider the benefits of the proposal against DWG’s goals/priorities (Section 1).
- Determine if the association and its partners and stakeholders have available funds, time and human resources to implement the communication proposed.
- Identify the target stakeholder group and what key messages may be appropriate (see Sections 5, Table 2.).
- For exceptional communication proposals that do not align with DWG’s key directions, the Committee may vote whether to progress it, delay it, or abandon it after giving due consideration to the above.
- Check DWG’s existing tools for communication that may be used or modified to suit the proposed communication proposal (Appendix B).

### Step 3 – Monitor Results

#### HOW:

- Record outcome data on the ‘Assessment and Monitoring Sheet’ (see Appendix A).
- For DWG this could be done during its monthly General Committee Meetings.
- Evaluate monitoring data when required.

### 3. Key Directions for Communications

DWG has already demonstrated its capability to establish its position as an authority on Phytophthora. This has largely been the result of dedicated members' inputs and sound use of sponsorship funding. In order to sustain and expand effective communications about Phytophthora Dieback to all affected residents and visitors across Australia, the focus now is on the core association objectives, goals and priorities. These are listed below and will need continual consideration when making decisions for all future communication proposals.

#### DWG objects of the Association:

These form the focus of DWG's communication actions.

- a) Increase awareness and management of Phytophthora Dieback by key stakeholders;
- b) Be a source of knowledge and facilitate the development of best management practices for Phytophthora Dieback;
- c) Promote best practice Phytophthora Dieback management by government, industry and the community;
- d) Encourage adoption of Phytophthora Dieback best practice policy in government, industry, utilities and NGOs; and
- e) Apply for, and coordinate funding applications and facilitate effective partnerships.

#### Communication Goals:

DWG's communication goals were identified during a members' workshop in August 2014. These set the organisation's general direction in the short term (1-3 years) and long-term (4-10 years) as summarised below (draft DWG Communication Plan 2016).

##### Goal 1

Engaged, informed and concerned communities within Phytophthora Dieback vulnerable landscapes.

##### Goal 2

Engaged stakeholders within Phytophthora Dieback vulnerable landscapes actively managing the disease.

##### Goal 3

Best-practice management within relevant tiers of government.

##### Goal 4

A significant increase in the breadth and depth of engagement, awareness and biosecurity-hygiene practice by visitors to Australia.

##### Goal 5

Align with, and contribute to, Phytophthora Dieback communications strategies and plans in WA (e.g. Department of Biodiversity Conservation and Attractions and South Coast NRM) and Australia (e.g. Department of Environment and Energy and Leave No Trace Limited).

## Key Priorities:

The key priorities identified during a DWG planning process in August 2014 and in a DWG meeting in 2017 are given below. All priorities will require ongoing maintenance and investment.

- DWG accepted as the authority in the area of Phytophthora management in Australia
- Effective communication networks to inform about Phytophthora Dieback
- Healthy ecosystems free from Phytophthora Dieback or managed for the disease
- Focus on opportunities to acquire funding through sponsorship, partnerships and grants.
- Foster opportunities with project partners and stakeholders to engage with indigenous Australian's to participate in sharing knowledge related to Phytophthora Dieback and maintaining healthy 'country'.

## 4. Our Stakeholders

Five major stakeholder groups are being engaged by DWG. Together they represent the wide diversity of individuals, organisations and volunteers that play a critical role in promoting awareness and actively managing threats associated with Phytophthora Dieback. Given the rise and fall of funding available to support DWG's actions, it aims to communicate using methods that achieve maximum impact and create positive behaviour changes in these stakeholder groups.

Table 1 shows the overall types of support that DWG is seeking from each stakeholder group, and the impact and influence they can have on raising awareness and the management of Phytophthora Dieback. Modes of communication and tools used for each group should be selected on a case-by-case basis with DWG members' inputs as they may have already established trust with the group.

**Table 1: Stakeholder types, support that DWG seeks and their impact and influence**

Stakeholder Type	The support DWG seeks to maintain				Impact & Influence (DWG, 2016)
	Active Involvement	Advocate*	Sponsor**	Information ^	
<b>Government</b> (Federal & State)	✓	✓	✓	✓	Very High
<b>Local Government</b>	✓	✓	✓	✓	Very High
<b>NRM Groups</b>	✓	✓	✓	✓	Very High
<b>Community</b>	✓	✓		✓	Very High
<b>Industry</b>	✓	✓	✓	✓	High

\***Advocate** – promotes their involvement in Phytophthora Dieback; this may be through their communication channels, with colleagues, friends, social media or promoting their or DWG's related activities and experience.

\*\***Sponsor** – support may be in-kind sharing of knowledge and expertise, provision of media opportunities or financial sponsorship/grants.

^**Information** – maintaining access to best-practice, innovation, observations, science and research and opportunities to collaborate.

## 5. Key Messages

There are a number of major challenges for communicating about Phytophthora Dieback in Australia that centre around its name, the nature of the causal organisms and lack of nationally agreed terms and communication messages. There is evidence that ‘the community at large’ does not understand what Phytophthora Dieback or how it impacts (Risk Communications Australia, 2015 and Beckwith, 2010).

Designing communication messages so that the people receiving them can understand and relate to them personally is worth considering. Social science research techniques can be used to obtain an understanding of stakeholders’ knowledge, attitudes and perceptions towards Phytophthora Dieback. RCA (2015) notes the importance of ‘content’ that should present intrinsic value in the form of new knowledge and useful advice to cater for varied levels of interest and attention, and the importance of segmenting audiences into groups according to their power and influence to clarify messages and tactics appropriate to each stakeholder. In addition, making information accessible in different languages also warrants consideration if the target audiences include visitors to Australia. In the absence of significant funding to undertake extensive analysis and producing materials in various languages, below are some key points to keep in mind when designing future messages to generate positive behaviour changes. These were adapted (in part) from the *South Coast NRM Project Dieback Risk Communication Strategy* (RCA, 2015), Beckwith (2010) and DWG (2016).

- Focus on the simple actions you want them to take.
- Include ‘Positive’ messages, branding, and address the values of the target audience.
- Encourage perceptions of self-efficacy (e.g. “it is easy to do”).
- Focus on things individuals and stakeholder can relate to or value (e.g. biodiversity, recreation, camping, etc.).
- Promote a sense of ownership (e.g. “We all need to do the right thing”).
- Address community misconceptions and avoid re-enforcing them (e.g. avoid using old terms such as ‘Jarrah Dieback’).
- Be cautious in the use of fear appeals and analogies (e.g. avoid images such as the Grim Reaper).
- Relate messages to families and positive success stories (e.g. “You can repeat their successful approach easily”).
- Expert advice can build trust and support behaviour change (e.g. “Ask a Dieback Interpreter for advice”).

DWG’s current stakeholder audiences have been grouped and examples of targeted messages are given below (Table 2). These messages were identified during informal DWG meetings, discussions, in member emails, DWG documents and reviewing literature in the public domain. Those planning or implementing specific Phytophthora Dieback communications are encouraged to incorporate and adapt these where relevant. This is not an exhaustive list, but is one attempt to solidify the approach to communicating on this topic beyond the DWG and its membership. By placing these messages in the public domain and DWG’s activities such as Green Card training content, they will become accessible immediately to wide stakeholders, other parts of Australia and beyond.

Table 2: Audience Segments and Key Messages

Stakeholder Group	Key Message Examples for Behaviour Change
<p><b>All stakeholders</b></p>	<p><b>“Arrive Clean-Leave Clean”</b>, it’s the easiest way you can save money otherwise spent on managing introduced pests and disease in your bushland, business or farm.</p> <p><b>Our WA Biodiversity is a unique and invaluable asset for future generations to come</b> – Dieback is a real threat to our biodiversity.</p> <p><b>Stop, be aware and act!</b> You can do something to protect your globally unique biodiversity in WA / Australia from Dieback.</p> <p><b>It is easy for you to prevent damage by Dieback to natural areas</b>, see our website and Facebook for helpful contacts, links and tactics.</p> <p><b>By keeping on tracks and practicing good hygiene when working or recreating</b>, you can make a significant different to containing the spread of Dieback.</p> <p><b>Clean all soil from footwear, gear, tools, equipment and vehicles meticulously</b> - particularly before entering bushland reserves, National Parks, protected areas and plant nurseries.</p> <p><b>Avoid entering bushland in wet-weather</b> because soil and mud sticks more to your boots and can spread devastating plant diseases.</p> <p><b>Read and follow signs</b> – Do the right thing.</p> <p><b>If you are aiming to create positive behaviour changes for your audience or business, design them so people can relate and that are personal. Scan our QR code for examples.</b></p>
<p><b>Government (State &amp; Federal); Industry, NRM State and Regional (Seeking sponsors / grants)</b></p>	<p><b>DWG is experienced in delivering projects in effective partnerships</b>, would you like to join us?</p> <p><b>We have a demonstrated history of coordinating successful projects</b>, your contribution will be used effectively.</p> <p><b>Your funding could contribute to important research and promote your business</b> while improving methods to control Phytophthora Dieback.</p> <p><b>We welcome your funding support to enable us to implement actions that benefit the environment and your business reputation through media opportunities.</b></p> <p><b>Doing the right environmental thing is easy</b>, connecting with us can help you achieve that in your work, activity or business.</p> <p><b>Would you like our support to extend your messages</b> – our networks are extensive (e.g. message for Leave No Trace and national / state tourism organisations).</p>

<p><b>All stakeholders</b> <b>(Promoting Green Card)</b></p>	<p><b>Have you got your Green Card?</b> scan our QR Code or go to <a href="http://www.dwg.org.au">www.dwg.org.au</a> to register for our next event.</p> <p><b>DWG’s Green Card Training is recognized by industry as “best-practice”</b> – you will learn new skills and tactics to make sure your work helps to protect our bushland.</p>
<p><b>Community:</b> <b>Volunteers,</b> <b>Tourists,</b> <b>Recreation,</b> <b>Field workers,</b> <b>NGO’s</b></p>	<p><b>‘Clean-down’ means</b> your equipment, footwear and vehicles are <u>not</u> carrying clods of sand, mud or plant material.</p> <p><b>By keeping to the tracks and practicing good hygiene</b> your work and recreation can make a big difference to prevent spreading Dieback.</p> <p><b>Keep clean! Always practice good hygiene before and after entry</b> - clean thoroughly your shoes, clothing, tools and vehicles.</p> <p><b>Read carefully all signs and strictly follow the instructions.</b> They are your guide to preventing disease introductions in natural areas.</p> <p><b>Use only certified growth media and plants.</b> All soils, mulches and plants shall be free of plant pathogens, pests and weeds.</p> <p><b>Do not transport soil unless necessary because it can carry weeds, pests and diseases</b> into new areas and impact biodiversity.</p>
<p><b>Industry:</b> <b>Mining,</b> <b>Tourism,</b> <b>Recreation,</b> <b>Leave No Trace,</b> <b>Nursery &amp; Landscaping,</b> <b>Forestry,</b> <b>Agriculture,</b> <b>Consulting,</b> <b>Government (Local &amp; State Agencies)</b></p>	<p><b>DWG can help</b> raise the environmental profile of your business when you connect with us.</p> <p><b>What is the risk of your activity to ecosystems and will it be managed with a plan?</b> You can ask an expert on our website for advice.</p> <p><b>Is the Phytophthora occurrence known?</b> If so is the mapping current and completed by a registered Interpreter?</p> <p><b>Are your Staff and Contractors Green Card holders?</b> We can offer you effective training on Phytophthora Dieback so they can manage it properly.</p> <p><b>Can the operation be conducted under dry soil conditions?</b> Ask DWG experts about real options to make things easier for you.</p> <p><b>Use only certified growth media and plants.</b> All soils, mulches and plants shall be free of plant pathogens, pests and weeds.</p> <p><b>Do not transport soil unless necessary because it can carry weeds, pests and diseases</b> into new areas and impact biodiversity.</p> <p><b>Would you like our support to extend your messages</b> – our networks are extensive (e.g. message for Leave No Trace and national / state tourism organisations).</p>

## 6. Monitoring and Evaluation

A simple approach to monitoring DWG's communication activities is given below to initiate the process.

It is recommended that an item titled "Communications" is added to DWG's monthly meeting agenda, incorporating the table in Appendix A to both reinforce the need to consider DWG directions and to record ongoing data and progress on communication actions.

Monitoring data can be recorded on the Communication and Assessment Monitoring sheet in Appendix A. The data can also be used for any year-end evaluation or annual report. Alternatively, monitoring could be recorded by setting up a document/database on a joint cloud or drop-box folder where each person contributes to adding data. Therefore reducing the workload of one person coordinating data input from different sources.

Further sophisticated monitoring design that links to measuring behaviour changes as a result of DWG's activities, could be considered by partnering with other organisations. The work of others may be relevant to DWG in the future such as the State (WA) funded South Coast NRM project to develop and apply principles for accurately measuring behaviour change conducive to effective biodiversity Phytophthora disease management by September 2018. Consideration could also be given to exploring opportunities to create links with organisations such as Leave No Trace Australia Ltd who has a partnership with WEJUGO that is building capabilities in the outdoor recreation, outdoor education, tourism and travel sectors. WEJUGO is a travel technology and data business that connects with outdoor recreation and adventure seekers through personalised adventure experiences created through artificial intelligence, geospatial analytics and Internet of things.

## 7. Review

This Communication Plan may be reviewed at any time by a quorum decision made by the DWG Inc. Executive Committee.

In a DWG workshop 2017, the preferred period of review was two years from the date of this document and that consideration should be given to coincide its review with that given in the Commonwealth *Threat abatement plan for disease in natural ecosystems caused by Phytophthora cinnamomi* that states: *Section 279 of the EPBC Act provides for the review of this TAP at any time and requires that it be reviewed by the Minister at intervals of no longer than five years. During the life of the TAP, the Minister's scientific advisory committee (the Threatened Species Scientific Committee), will be provided with updates of actions taken under this TAP to aid them in advising the Minister on the effectiveness of the TAP in abating the key threatening process.* (Commonwealth of Australia, 2017a).

It is recommended that any review of this Communication Plan evaluates relevant monitoring data, feedback from stakeholders/surveys and the extent to which DWG's communication actions linked successfully or not to its directions and Business Plan. This may highlight opportunities for improvement, growth and to celebrate success!

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## DWG Inc. Communication Assessment and Monitoring

For the period: ...../...../..... to ...../...../.....

### The objects of the Association (linked communication) are:

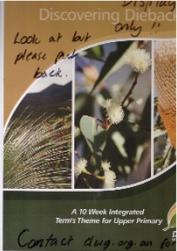
- a) Increase awareness and management *Phytophthora* Dieback by key stakeholders;
- b) Be a source of knowledge and facilitate the development of best management practices for *Phytophthora* Dieback;
- c) Promote best-practice in *Phytophthora* Dieback management by govt., industry, NGOs, utilities and landholders;
- d) Encourage adoption of *Phytophthora* Dieback best practice policy in government, industry, utilities and NGOs; and
- e) Apply for, and coordinate funding applications and facilitate effective partnerships.

What specific communication is proposed?	Which objects of Association apply?	Comment on Resources & Timing: i.e. Who?, When? and Cost?	
1.			
2.			
3.			
4.			
5.			
Monthly Monitoring Items		Number	Comment
No. of communication events completed?			
No. of Green Card events?			
No. of Green Cards issued?			
No. of DWG posts on website / Facebook?			
No. of "likes" on website / Facebook?			
No. of DWG members			
Other...			

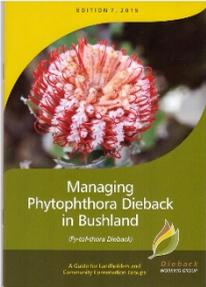
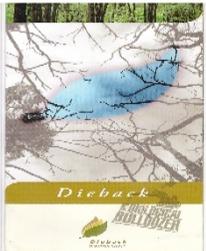
## DWG Inc. Communication Tools @ July 2017

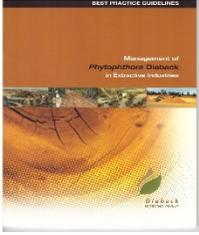
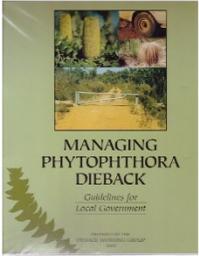
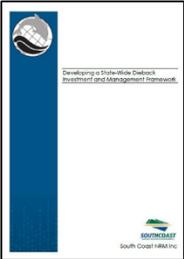
A summary of communications tools developed or used by the Dieback Working Group Inc. (adapted from DWG, 2016)

Tool	Purpose	Format	Comment
<b>ONLINE MEDIA TOOLS</b>			
<b>Website:</b> <a href="http://www.dwg.org.au">www.dwg.org.au</a> . (2016)	Information hub for all stakeholders, platform to promote projects, events, training, tools, volunteers/sponsors, links, etc.	html	Rapidly accessible to stakeholders. Needs maintenance, events calendar and ongoing support.
<b>Facebook:</b> <a href="https://www.facebook.com/biologicalbulldozer/">https://www.facebook.com/biologicalbulldozer/</a> . (2016)	Main portal on social media. Used to share and post events, activities and images.	html	Rapidly accessible to members and stakeholders. Needs maintenance, events calendar and regular updates to gain attention.
<b>Facebook Group – DWG:</b> <a href="https://www.facebook.com/groups/108549732576170/">https://www.facebook.com/groups/108549732576170/</a> . (2016)	Same information as DWG Facebook.	html	
<b>Facebook Group - DIG:</b> <a href="https://www.facebook.com/groups/107922092630324/">https://www.facebook.com/groups/107922092630324/</a> . (2016)	Share DIG-focused news including updates and announcements.	html	Under-utilised resource. Action: Invite all members to Page
<b>Facebook Group – DWG:</b> <a href="https://www.facebook.com/groups/108549732576170/">https://www.facebook.com/groups/108549732576170/</a> . (2016)	Same information as DWG Facebook.	html	
<b>QR Code</b>	Rapid access to DWG website information and events.	Digital Scan	Needs more use, add to Green Card and documentation.

Tool	Purpose	Format	Comment
<b>Twitter</b>	Engage twitter users in <i>Phytophthora</i> Dieback and DWG info and news.	html	Underutilised – need advice and help. *Consider benefits and resources to continue or delete this.
<b>TRAINING &amp; EDUCATION TOOLS</b>			
<b>Green Card Training Program ©</b> 	PowerPoint and Training Documents	.pptx, PDF	Subject to Copyright, only provided to DWG Inc. Registered Trainers under Written Agreement.
<b>Discovering Dieback: A 10 week integrated term's theme for upper primary. (2006)</b> 	10 week education program for year 6 level (approx.) Includes 30 Lesson Plans with Phytophthora Dieback and the environment themes. Plus 1 excursion that DWG officers/volunteers support schools/teachers to deliver and increase awareness and stewardship in future generations.	Folder	No printed copies remaining. Update in progress due 2017 funded by State NRM. A good tool in regional and metropolitan areas. Students are important stakeholders (horse riders, motorbikes, mountain bikes, bushwalking and sharing information with their parents, etc.).
<b>EVENTS</b>			
<b>Dieback Information Group (DIG) Conference</b> 	Annual conference that brings together people from community, Government and Industry keen to share and learn current information, research, technologies and successful management. Attended by members from all stakeholder groups.	Conference	Key event for DWG Inc. and its partners and sponsors attracting national links, participation and funding to support DWG Inc.'s ongoing delivery of services to community and stakeholders.

Tool	Purpose	Format	Comment
<b>DVD &amp; VIDEO</b>			
<b>DVD: Managing Phytophthora Dieback in the South West of Western Australia</b>	Excellent overview of Phytophthora Dieback in WA.	DVD: (physical and digital)	Used as tool in Green Card Training and physical copies are made available at key events. *Shorter versions for sharing could be useful. Limited physical copies remaining; now on YouTube.
<b>DVD: Dieback and the Fitzgerald Biosphere</b>	Overview of Phytophthora Dieback issue in Fitzgerald Biosphere Reserve. Fitz and WA-focused. Well communicated.	DVD: (physical and digital)	Copies given out at event but particularly useful for operators in the South Coast Region where South Coast NRM operates and distributes the videos. Limited physical copies remaining.
<b>YouTube videos from DIG Conference 2015. (2015)</b>	Recorded videos of DIG Presentations for sharing, engaging people and enticing new DIG attendees.	DVD: (digital)	Shared mostly via Facebook page. Some shared widely and viewed numerously, others not. *Need embedded in website.
<b>YouTube videos from DIG Conference 2016: *Production not initiated.</b>	For sharing, engaging people and enticing new DIG attendees.	DVD: (digital)	Need to decide on production or not @ \$150. + GST per speaker)
<b>APPS AND MAPPING TOOLS</b>			
<b>“Dieback Information Delivery Management System” (DIDMS)</b> 	DIDMS GRID is a user registered web based platform for storage, viewing, basic mapping and sharing of spatial Phytophthora dieback information by intermediate level users. DIDMS GRID is developed and hosted by Gaia Resources Pty in association with South Coast NRM.	Online tool – registration required and open to all public	DIDMS provides a spatial data framework to: Report on the status of <i>Phytophthora</i> dieback throughout WA; Manage and share <i>Phytophthora</i> dieback information; Provide a basic spatial platform for landscape and area planning; Create and modify data, upload and store data templates; produce simple automated dieback maps, provide a shared platform for dieback data input and management.

Tool	Purpose	Format	Comment
<b>WEJUGO</b>	The WEJUGO online application brings together maps, trip planning, itinerary management, topography and location tracking. Detailed trip plans can be shared with friends and family and the intuitive search features let users discover their next adventure location.	Online app	Explore opportunity to add information on Phytophthora Dieback / Biosecurity-Hygiene.
<b>PUBLICATIONS, GUIDELINES, DOCUMENTS &amp; NEWSLETTER</b>			
<b>Managing Phytophthora Dieback in Bushland: A guide for landholders and community conservation group. Ed, 7 2015.</b> 	Booklet with current management and general advice for Phytophthora in a number of bushland situations. Includes sampling advice, contacts.	A5 Booklet,	Replaces <i>Dieback the Biological Bulldozer</i> pamphlet and well-received by stakeholders. Uses new style guide for DWG to be replicated in other updated docs.  Several hundred copies available @ July 2017.  *Link current version to website.
<b>Dieback the Biological Bulldozer.</b> <b>(date unknown)</b> 	Pamphlet with basic information and what you (general public) can do about it.	Pamphlet	Relevant to general public but outdated.  *Not worth updating as it's not terribly useful and pamphlets are rarely read or taken – digital media has taken over.

Tool	Purpose	Format	Comment
<p><b>Management of Phytophthora Dieback in Extractive Industries: Best practice guidelines. (2005)</b></p> 	<p>Booklet used in some industries, infrastructure and utilities agencies and local governments (WA).</p>	<p>Booklet</p>	<p>Important document for key industry stakeholders, but not current.</p> <p>*Needs urgent update and to include reference to Green Card Training requirement.</p>
<p><b>Managing Phytophthora Dieback: Guidelines for Local Government. (2000)</b></p> 	<p>Guidelines to help Local Governments to Manage Phytophthora Dieback including checklists and examples.</p>	<p>Folder</p>	<p>Important document for key industry stakeholders, but not current.</p> <p>*Needs urgent update and to include reference to Green Card Training requirement.</p>
<p><b>Dieback State Management and Investment Framework (SMIF) 2014</b></p> 	<p>A framework which identifies Priority Protection Areas (PPAs) vulnerable to Phytophthora Dieback in south-west WA for state level management and investment.</p> <p>It details a logical process and tools to develop area specific management actions to effectively prevent the further spread of Phytophthora Dieback and risk reduction at a landscape scale.</p> <p>Includes a <i>Rapid Appraisal Toolkit</i></p>	<p><a href="http://www.dieback.net.au/about/resources.html">http://www.dieback.net.au/about/resources.html</a></p>	<p>SMIF included a prioritisation process was developed to identify Priority Protection Areas (PPAs) which are representative areas of significant biodiverse ecosystems and communities threatened by <i>Phytophthora cinnamomi</i>.</p> <p>Over 1,288 PPAs were identified. The top 100 are considered “indicative” and further ground truthing is required. <u>The SMIF provides details of the top 100 selected PPAs in both table and map form.</u></p>

Tool	Purpose	Format	Comment
<b>Newsletter of Dieback Working Group</b>	Newsletter with season-specific information and updates on projects and DWG activities distributed to our email list.	PDF	Last issued in 2012 – needs graphic design and resources to continue.  *Mail Chimp is an alternative.
<b>Email Updates</b>	Email about DWG activities, announcements, opportunities and more.	Email	Informally sent with DIG announcement, recently more formalised with header graphic.
<b>Phytophthora Dieback. Mud sticks...Don't Spread It! (Date unknown)</b>  	Bumper sticker to communicate that mud sticks and spreads <i>Phytophthora</i> Dieback.	Bumper sticker	Few printed copies remaining.
<b>Examples of Communication Pathways utilised by DWG</b>  Linking other websites to DWG's incl. <a href="http://www.dieback.net.au">www.dieback.net.au</a> Government agency websites distributing DWG information Universities / Murdoch / CPSM / research links Australian Plant Pathological Society Attending stakeholder meetings/event displays Presentations / displays at conferences and seminars Apps. E.g. DIDMS Partnerships - South Coast NRM, Perth NRM, State NRM Participation on Strategic Groups e.g. National Threat Abatement Plan Implementation Group Roley Bushcare, Birdlife Australia, Busselton DWG, Kwongan Foundation, Other NGO's Leave No Trace Australia Limited, NACC, South West Catchments Council and others			