

# **Environmental Management Strategy and Program for the Vegetable Industry**

Richard Mulcahy  
AUSVEG Ltd

Project Number: VG09002



*Horticulture Australia*

## **VG09002**

This report is published by Horticulture Australia Ltd to pass on information concerning horticultural research and development undertaken for the vegetables industry.

The research contained in this report was funded by Horticulture Australia Ltd with the financial support of the vegetables industry.

All expressions of opinion are not to be regarded as expressing the opinion of Horticulture Australia Ltd or any authority of the Australian Government.

The Company and the Australian Government accept no responsibility for any of the opinions or the accuracy of the information contained in this report and readers should rely upon their own enquiries in making decisions concerning their own interests.

ISBN 0 7341 2986 6

Published and distributed by:  
Horticulture Australia Ltd  
Level 7  
179 Elizabeth Street  
Sydney NSW 2000  
Telephone: (02) 8295 2300  
Fax: (02) 8295 2399

© Copyright 2012

# EnviroVeg

program

**VG09002 (28 September 2012)**

Environmental Management Strategy and Program for the Australian  
Vegetable Industry

**Final Report 190**

**Project completion date: 28/09/2012**



## Contents

Summary .....	5
Introduction .....	6
Materials and Methods.....	7
Development of an Environmental Strategy for the Australian vegetable industry .....	7
Progress against the Environmental Strategy.....	8
AUSVEG Environmental Award .....	8
EnviroVeg Surveys.....	8
Building networks for the industry .....	9
Progress towards a verified environmental assurance program.....	10
Communications and Promotions Strategy .....	10
Exhibition attendance .....	11
New EnviroVeg website .....	11
On-farm contact with growers.....	12
EnviroVeg Case Studies and ‘EnviroNews’ .....	13
EnviroVeg information sessions.....	13
Media coverage.....	14
Email communication with members .....	14
External meetings and workshops attended .....	14
EnviroVeg Committee meetings .....	14
Development of Program materials.....	14
Evaluation .....	16
Project outputs .....	16
Membership results.....	16
Implications.....	18
Recommendations .....	19
Appendices.....	20
Appendix 1: Grower meeting schedule and sign ups .....	20
Appendix 2: Summary of media mentions .....	21
Appendix 3: Summary of Regional EnviroVeg Workshops .....	26
Appendix 4: Summaries of ‘EnviroNews’ articles and Case Studies from <i>Vegetables Australia</i> ..	37
Appendix 5: Sample of EnviroVeg Case Study Feature and ‘EnviroNews’ articles in <i>Vegetables Australia</i> .....	43
Appendix 6: External meetings and workshops attended .....	46

Appendix 7: AUSVEG Environment Strategy.....	50
Appendix 8: Email communications to EnviroVeg members.....	55
Appendix 9: EnviroVeg website analytics .....	56
Appendix 10: Communications and Promotional Strategy.....	57
Appendix 11: Grower survey questionnaire .....	69
Appendix 12: Example of an EnviroVeg Regional NRM Guide.....	74
Appendix 13: Example of EnviroVeg information session flyers .....	79

**Project Number:** VG09002

**Project Leader:** Mr Richard Mulcahy, Chief Executive Officer, AUSVEG

ph (03) 9822 0388 e [info@ausveg.com.au](mailto:info@ausveg.com.au)

**Purpose of this report:**

The Final Report for HAL project VG09002 reports on outcomes and results for its entire project period.

The primary purpose of the report is to communicate the activities and outputs which have led to unprecedented growth in the EnviroVeg Program as a model for other industry development and extension programs. AUSVEG has adopted a number of innovative approaches to traditional industry development and extension work and applied these to EnviroVeg with great success. This report is the culmination of three years work, throughout which the Program has performed well beyond expectations.

AUSVEG will further refine these approaches as the project moves into an exciting new period in project VG12008.

**Acknowledgements:**

Funding for this project of \$721,350.00 was provided through industry levies.

This project was facilitated by HAL in partnership with AUSVEG and is funded by the National Vegetable Levy. The Australian Government provides matched funds for all HAL's R&D activities.

**Date of report:** 24 September 2012

*Any recommendations contained in this publication do not necessarily represent current HAL policy. No person should act on the basis of the contents of this publication, whether as to matters of fact or opinion or other content, without first obtaining specific, independent professional advice in respect of the matters set out in this publication.*

## Summary

The EnviroVeg Program was established in 2000 as a Program to assist Australian vegetable growers to implement environmental initiatives on their property and benchmark their performance through self assessments. In response to rising costs of inputs, community concerns, consumer preference and potential regulation it is more important than ever that the vegetable industry has a strong proactive approach to environmental management.

EnviroVeg membership has grown by 200% in the period of this project from 128 to 338 growers, backed by a proactive and highly-effective promotions strategy implemented by AUSVEG. In addition, hectare coverage has grown from 10,000 to over 50,000 since these statistics started to be collected and large commercial operations have joined the program. With a strong environmental program like EnviroVeg in place, the industry has the means to display its environmental credentials in response to a changing social and regulatory environment.

Strong growth has led to retailer interest in the Program, and promising developments in seeing growers provided with a tangible commercial benefit for their environmental performance. AUSVEG has a long-term strategy in place to deliver these benefits to growers through a revamped environmental assurance scheme allowing participating growers to use the Program logo. This will be progressed further in the next project.

Further, this project included the development of a customised database and website to allow for industry-leading data on environmental performance and assist AUSVEG to manage its rapidly growing membership base. Growers now have access to an unprecedented wealth of environmental benchmarking data through the website, allowing comparisons to be made with other growers throughout Australia.

Other key outcomes of this project include greater awareness of the Program with the media and key decision-makers and a proactive media engagement strategy. AUSVEG has been working to build the reputation of the EnviroVeg Program outside of the industry, so that the environmental efforts of Australian growers are rightly acknowledged in the broader community.

The current project period for EnviroVeg has seen success which has far exceeded AUSVEG's initial expectations. Utilising in-house marketing and communications capabilities, AUSVEG has been able to put strategies in place to drive unprecedented growth in membership and area coverage. As custodians of a large proportion of Australia's land mass, farmers will be vital in securing net environmental benefits through land management; EnviroVeg has grown to be a leading environmental program within Australian agriculture. AUSVEG firmly believes EnviroVeg represents a model for other horticulture and broader agricultural programs to emulate, as many of the techniques could be applied with great success.

## Introduction

EnviroVeg project VG09002 has built on previous Program development which was accomplished through the following projects:

- *VG00016: How to demonstrate good environmental performance – a practical mechanism for vegetable growers* and *VG03088: Developing the EnviroVeg program as a national environmental program in the vegetable industry* – initial investments in ideas and scoping for an Environmental Program.
- *VG06015: Implementation of national environmental strategy for the vegetable industry*. To provide the supporting material and structure to enable vegetable growers to demonstrate through self assessment and certification that they are being environmentally responsible both on-farm and to their surrounding environment.
- *VG08110: Building a cooperative partnership between Regional NRM Bodies and the Vegetable Industry – a national approach*. The purpose of this project was to build upon the momentum developed during the Environmental Management System Pathways Project entitled ‘Building a cooperative partnership between Regional NRM Bodies and the Vegetable Industry – a national approach’, as well as to continue the work undertaken through the Healthy Soils for Sustainable Vegetable Farms Project.
- *VG08178: Implementation of national environmental strategy for the vegetable industry - 6 month bridging project*. This project was a six month bridging project following on from the EnviroVeg project, *VG06015: Implementation of national environmental strategy for the vegetable industry*, finished in May 2009. This short-term project was supported by industry and by HAL to ensure the continuity of the EnviroVeg program.

In the VG09002 project period from 13/04/2010 to 28/09/2012, AUSVEG met all key performance indicators set in the original contract, as well as additional activities outlined in the EnviroVeg Environmental Strategy.

Activities and outputs from the Program are at unprecedented levels and have been achieved within the constraints of the original budget. In the current project period, AUSVEG has achieved more with less under solid leadership and with key staff in place.

Testament to this fact is the rapid increase in membership throughout the project from 128 to 338 members. In addition, large commercial growers are now participating in the Program as indicated by land coverage of the Program which has grown to more than 50,000 hectares. AUSVEG is excited to continue building on this momentum in the next EnviroVeg project, delivering continued improvement of environmental practices in our industry.

Key achievements within the current project include overseeing the rapid growth in EnviroVeg membership, delivering an online self assessment and Program website [www.enviroveg.com](http://www.enviroveg.com) and significantly increasing EnviroVeg’s networks within the industry.



In the current project EnviroVeg has reached its potential as one of the largest environmental management schemes in agriculture, which sets a strong base as we move into the next project *VG12008*.

With rising costs of inputs and increasing pressure from regulators and the community, it is essential that the Australian vegetable industry has a proactive strategy in place to continuously improve environmental practices. EnviroVeg is, therefore, a vital scheme in facilitating greater knowledge and capacity for the industry to meet these growing demands. Vegetable growers have shown a willingness to respond to these challenges by signing up to the Program in record numbers and AUSVEG will look to continue developing innovative ways to engage our current membership using assets such as the new EnviroVeg website, which was launched in the current project.

## **Materials and Methods**

The following section outlines the key activities and outputs for project *VG09002*. AUSVEG has completed all outputs required in the project contract, and delivered a number of additional outputs such as development of a Program website, additional information sessions and an extensive series of grower visits around Australia.

### **Development of an Environmental Strategy for the Australian vegetable industry**

The AUSVEG Environmental Strategy was signed-off by the EnviroVeg Committee on 27 September 2010. The Environmental Strategy was developed to set direction for the Program and build EnviroVeg into an asset for the industry in helping more growers monitor their performance and access environmental information. AUSVEG are pleased that this vision has been realised during the period of project *VG09002*, with considerable growth in membership of the Program.

The strategy's vision was to provide for 'a profitable vegetable industry that is based on environmentally sustainable production'. The Environmental Strategy was a foundation for the current success of the Program, in particular, it's recognition of the importance of communicating financial benefits to growers as well as the need to adapt to meet changing consumer demands for more environmentally-friendly products.

Some of the key objectives of the strategy included:

- A modified communications approach with growers which emphasised the financial and other tangible benefits of good environmental practice.
- Communication of the potential benefits from increased consumer preference for environmentally-produced goods.
- Enhanced media presence for the Program, in order to communicate the environmental efforts of growers to the broader community.
- Inclusion of case studies and environmental news features in *Vegetables Australia* magazine.
- Implementation of an online self assessment scheme and new EnviroVeg website.
- A survey to gauge awareness of environmental issues.
- Increased linkages between growers and their regional NRM bodies.
- Exploring opportunities to certify the current EnviroVeg Program to provide recognition for growers who meet a certain standard.

- Collection of information on grower hectares to determine coverage of the Program throughout Australia.
- Development of an Environmental Award to be presented at AUSVEG National Conventions.

This change in communications approach is still used by AUSVEG today with great success, as evidenced by membership growth.

The full Environment Strategy is included in **Appendix 7**.

### **Progress against the Environmental Strategy**

AUSVEG has made significant progress against the key outcomes stated in the Environmental Strategy. On membership, AUSVEG has significantly increased participation in the Program and the number of hectares covered. Collection of data on the Program has also improved with surveys and web analytics used periodically to monitor Program performance. Attendances at workshops and conferences continue to be strong and are presented in the following sections of this report. Throughout project *VG09002*, AUSVEG has also proactively pursued media activities and achieved considerable coverage for EnviroVeg, including a highly-successful launch of the new Program website. Regular news features in *Vegetables Australia* magazine and grower case studies have also helped achieve greater awareness of the Program within the industry.

AUSVEG has far exceeded expectations for EnviroVeg utilising the approach set out in the Environmental Strategy, achieving membership of well over 300 growers and 50,000 hectares. Considerable focus has been given to engaging with regional NRM bodies, culminating in the development of nine Regional Guides for the EnviroVeg Manual, which have received very positive feedback from growers. In the past year, major retailers have become aware of and engaged with the Program, helping achieve one of the key outcomes of the Strategy. EnviroVeg survey results show strong awareness of the Program and its potential as a marketing tool to assist them in their business, while promotion of R&D through EnviroVeg information sessions has helped establish the Program as a conduit for communicating new environmental research to growers.

### **AUSVEG Environmental Award**

As outlined in the AUSVEG Environmental Strategy, an Environmental Award has been established and promoted through the AUSVEG National Conventions of 2011 and 2012. The 2011 winner was Mr Rodney Emerick of Mulgowie Farms in Queensland, who was acknowledged for his innovative use of controlled traffic farming and work promoting environmental practices in the vegetable industry. The 2012 winner was Adelaide hills grower Mr Steve Newman of Hills Fresh whose willingness to work with local Natural Resource Management (NRM) groups and innovative use of compost saw him take home the award. These growers serve as an inspiration to industry, and help to show that environmental management is becoming standard practice in some of Australia's largest and most professional growing operations.

### **EnviroVeg Surveys**

As required by the Environment Strategy, a project evaluation (grower survey) of the EnviroVeg Program was developed in 2011 in partnership with an external consultant. The goal of the survey was to assess the impact that the EnviroVeg Program has had with vegetable growers and set a benchmark for another evaluation in 2012.

The methodology consisted of sending a broad internet survey to the AUSVEG database, followed up with phone interviews. A survey questionnaire was developed with the consultant and is included in **Appendix 11**.

#### *Results of the 2011 Survey*

Awareness of the EnviroVeg Program was high, with 95.9% of respondents indicating that they were aware of the Program. 40.8% of respondents indicated that they were aware of AUSVEG's Environmental Strategy for the vegetable industry and over 75% indicated that environmental management was either of high or very high importance to them.

Communicating the benefits of participation in EnviroVeg and progressing an externally verified scheme was a key priority arising out of the survey, with 66% of growers seeing a marketing opportunity if they could promote the environmental aspects of their business.

Readership of EnviroVeg reports and case studies in *Vegetables Australia* was high, with 66.7% of respondents reading these articles. Awareness of NRM regional bodies was 53.1%, which indicated that there was scope to connect growers with local bodies and support programs.

#### *Results of the 2012 Survey*

Awareness of the EnviroVeg Program was again high, with 100% awareness of the Program from respondents. In the 2012 Survey, 80% of respondents indicated that environmental management was of either high or very high importance.

Similar to 2011, around 50% of respondents recognised a potential marketing opportunity through an environmental management program. This reflects informal feedback received by the Environment Coordinator on site visits, which has seen strong acknowledgement of this potential depending on the size of the operation and markets operated in.

Readership of the *Vegetables Australia* case studies was again high, with around 60% of respondents reading the articles and around 40% of respondents aware of their local NRM body, similar to 2011. The recent release of resources such as the Regional NRM Guides for the EnviroVeg Manual will assist in linking growers with these local bodies, however, the impact of these initiatives may not be discernible until completion of future evaluation.

#### **Building networks for the industry**

With the rising profile of environmental issues within the community and with lawmakers, it has become important for industries like horticulture to be able to demonstrate proactiveness in the area of environmental management. EnviroVeg is a program where the industry can communicate positive action and its willingness to contribute to national environmental debates.

Under the guidance of the AUSVEG Chief Executive Officer, a number of networks with national environmental policy bodies have been established in the current project. This assists in building a greater profile for the Program with decision-makers and in ensuring that the industry's views and concerns are understood.

In July 2012, the Chief Executive Officer of AUSVEG, Mr Richard Mulcahy, and the Environment Coordinator were honoured to meet with the Chairman of Outcomes Australia, former Governor-

General Major General Michael Jeffery AC AO (Mil) CVO MC (Retd). In productive discussions, AUSVEG was able to explore a number of ways to work with Outcomes Australia and their 'Soils for Life' Program, which promotes land management best practices in Australian agriculture. The strong relationships AUSVEG has been able to build with national policy bodies such as Outcomes Australia will assist the horticulture industry in receiving greater attention in national environmental discussions.

Likewise, AUSVEG has been able to achieve strong relationships with a number of political figures through its separate agri-political activities, which have provided opportunities to promote the EnviroVeg Program with key decision-makers. One such example occurred at the 2012 AUSVEG National Convention, where the Environment Coordinator had an opportunity to meet Senator Christine Milne, Leader of the Australian Greens. Another opportunity presented in 2012 during an AUSVEG Board meeting, where the Environment Coordinator was invited to provide an outline of the Program to the Executive Chairman of VISY, Mr Anthony Pratt.

These opportunities are invaluable for increasing the profile of the EnviroVeg Program with key decision-makers and are critical to raising the profile of horticultural issues in broader environmental discussions.

#### **Progress towards a verified environmental assurance program**

An objective of the Environmental Strategy was to encourage industry adoption of audited environmental assurance programs.

Options were explored for auditing EnviroVeg through the Freshcare Program in 2011, however, it was decided in the EnviroVeg Committee meeting of 6 October 2011 that the Program should look into options for independently auditing the current self assessment program. A strategy was then commissioned to look into options for an auditing scheme run through AUSVEG. The strategy is currently in the draft stage and due to be finalised in the next EnviroVeg project *VG12008*.

In 2011, AUSVEG contracted Ms Helena Whitman of Ag Hort Consulting in Victoria to conduct a series of second party audits for the EnviroVeg Program as a pilot as to how the Program would perform when tested as an auditable scheme. Six growers completed second party assessments for the trial, with strong results showing high levels of compliance of above 80% on average.

The strong results of these trials are very positive in that they have shown that growers are beginning to implement environmental practices on their property, and that there are strong prospects for turning EnviroVeg into an auditable scheme.

Over the last year of the project, major retailers have shown interest in the EnviroVeg Program as a means of ensuring the environmental safety of goods they sell to customers. AUSVEG and the EnviroVeg Committee consider this to be a major landmark resulting from the growth of the Program, and will be pursuing options for retail recognition of the Program in order to provide a commercial benefit to participating growers.

#### **Communications and Promotions Strategy**

Following the development of the Environment Strategy, a Communications and Promotions Strategy was developed in early 2011. The findings and objectives led to an increased use of

communications and promotional activities behind EnviroVeg, providing a foundation for significant growth as the project progressed.

The Communications and Promotions Strategy is included in **Appendix 10**.

As the project progressed, the communications approach was altered to account for the preferred approach of subsequent Environment Coordinators. The fundamental strategies set out in the document, however, have been key to AUSVEG's success in growing EnviroVeg into one of the largest environmental management schemes in agriculture. This document will be continuously revised and updated internally to provide structure to AUSVEG communications activities in the next EnviroVeg project.

### **Exhibition attendance**

Since 2010, EnviroVeg has had a tradeshow booth at each AUSVEG National Convention. This represented an enormous opportunity for the Program to gain exposure with growers and industry members alike. The Convention is a significant drawcard for the industry, with over 800 delegates attending in 2012. At the event, the Environment Coordinator and EnviroVeg Committee members have used the booth to increase grower interest in the Program.

AUSVEG has had considerable success with the booth. In 2012, the Environment Coordinator was able to achieve eight new sign-ups and five self assessments at the event. New promotional strategies are constantly being refined, with new approaches like competitions, multimedia displays and paid actors (frog mascot) handing out brochures, all helping to drive traffic to the booth.

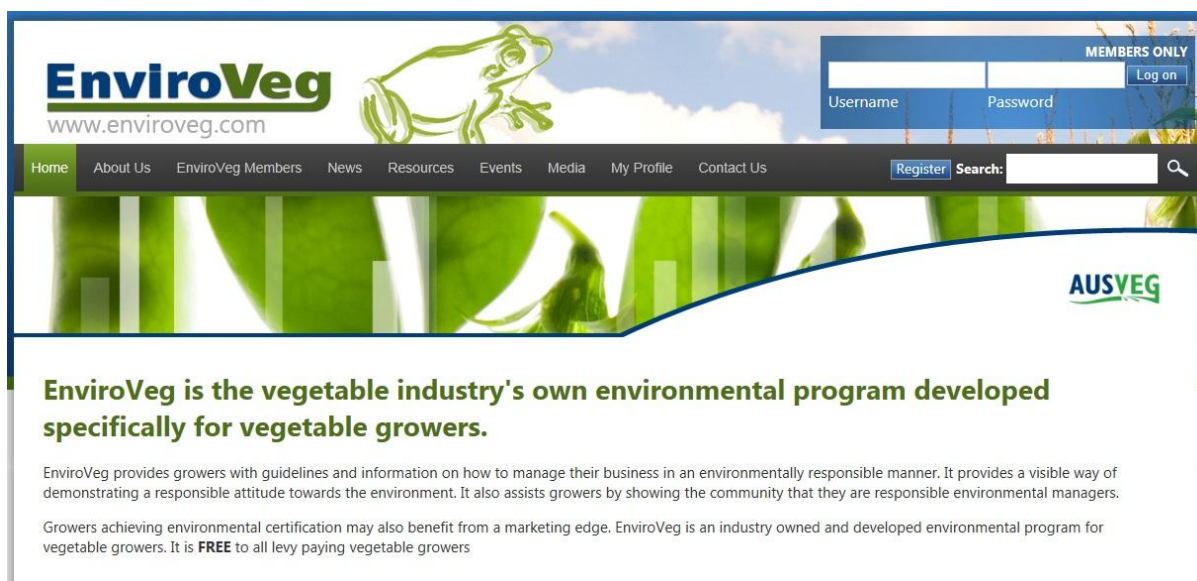
Industry events are important for increasing awareness of the Program. In the current project AUSVEG has used a number of events such as the Convention, Werribee Expo and Hydroponic Farmers' Federation Conference to promote the Program.

### **New EnviroVeg website**

In a significant step for the Program, AUSVEG finalised and launched the new EnviroVeg Program members' website in July 2012. The new site provides EnviroVeg members with the ability to complete their self assessment by computer or smart phone and access innovative new reporting features. In a first for the Program, growers can compare their score by each individual assessment area (e.g Chemical Management or Soil and Nutrition Management) against the total score for the assessment. In addition, growers are now able to compare their scores against national and state averages, with other farms of a similar size or by crop type. The website is a major step forward for the Program as it provides a wealth of new data against which growers can benchmark their operations.

The website was a major undertaking, which required the design and testing of a completely custom-built database and online self assessment form. In addition, moving the current database online has greatly assisted AUSVEG to manage its rapidly growing membership base. The ability to provide news items and Program resources online is also helping to establish the website as a prominent industry source for environmental information, with a number of tertiary institutions and other groups contacting AUSVEG for further information on the Program over the past months.

Figure 1: Screenshot of the EnviroVeg website – [www.enviroveg.com](http://www.enviroveg.com)



The website was formally launched on Friday 6 July 2012 at the New South Wales Farmers' Association Headquarters in Sydney. Mr John Lloyd, Chief Executive Officer of Horticulture Australia Ltd, officially launched the website in front of leading industry figures and the media. The event was well-received and achieved good coverage in the media.

Since its launch, the EnviroVeg website has attracted well over 400 hundred unique visitors (see **Appendix 9.**), attracted three Program sign-ups and assisted greatly in encouraging growers to complete self assessments. In the coming years, AUSVEG plans to develop the website into a key information resource and attract even larger numbers of visitors.

#### **On-farm contact with growers**

Site visits to growers by the Environment Coordinator formed an essential part of AUSVEG's strategy for increasing uptake and participation in the EnviroVeg Program. Growers who have signed up on-farm comprise the majority of new members over the current period of the project.

Since mid-2011, the Environment Coordinator has conducted an intensive series of farm visits which have been largely responsible for the record membership increase of 2012. A list of grower visits conducted since mid 2011 is included in **Appendix 1.**

As a communications technique, AUSVEG has found farm visits to be an extremely effective approach. Meeting time-poor growers in their own environment had the additional benefit of allowing the Environment Coordinator to build relationships with key growers and members of the Program.

This approach, however, requires someone proactive and confident to cold call and make appointments with growers, and who is confident speaking to farmers. In addition, an established reputation, as AUSVEG has within the vegetable industry, is essential in the majority of cases to

ensure growers are open to farm visits. In this regard, this approach would be far less effective if the person approaching the grower for an appointment was considered an 'outsider' or had limited understanding of the industry.

Over the past years the Environment Coordinator has been able to build strong networks with key growers in the industry. AUSVEG receives regular positive feedback and phone calls from growers about the ongoing communication and support EnviroVeg provides in the environmental area of their businesses.

Since mid-2011, well over 100 farm visits have been conducted by the Environment Coordinator.

#### **EnviroVeg Case Studies and 'EnviroNews'**

AUSVEG has written and published an environmental case study in each edition of *Vegetables Australia* since the July/August 2010 edition. *Vegetables Australia* is a bi-monthly magazine distributed to around 6000 vegetable growers and industry members. The magazine is a very important means of promoting the Program and communicating with EnviroVeg members. EnviroVeg case studies highlight the environmental efforts of growers throughout Australia, setting a positive example for the industry and recognising the efforts of exceptional growers.

A full list of article summaries of each 'EnviroNews' section and EnviroVeg Case Study in *Vegetables Australia* is included in **Appendix 4**. A sample of a recent EnviroVeg Case Study and 'EnviroNews' articles are also included in **Appendix 5**.

An additional section called 'EnviroNews' was also incorporated and presented 3-4 environmental articles each edition. The rationale behind these articles is to provide a means for growers without access to email to access hardcopy versions of Program announcements, so they are kept informed of events and other key dates. In addition, opportunities for government grants, national and international environmental news and updates on government policy have been provided to growers through these articles.

#### **EnviroVeg information sessions**

In the current project, a total of 16 EnviroVeg information sessions have been hosted by AUSVEG, far exceeding the nine workshops stipulated in the project contract. A full list of information sessions and summaries is included in **Appendix 3**. Some samples of the email flyers sent out to growers to promote the events are also included in **Appendix 13**.

The benefit of these information sessions is that they allow growers to meet and hear from speakers on a broad range of environmental topics relevant to their operations. AUSVEG has received a strong response to these events, with many workshops attracting around 30 growers or more. AUSVEG was able to use its strong industry networks to attract a number of high-calibre speakers to these events including leading soil researchers, major retailers and leading industry suppliers. As such, participating growers have benefited from the opportunity to learn from some of the foremost experts in Australia.

Topics for the workshops varied, as did the format, with a number of afternoon and dinner formats trialled. AUSVEG has found the dinner format to be most successful, as it allows for growers to finish a full day's work before attending an information session, decreasing the likelihood that on-farm activities will prevent them from attending.

AUSVEG has received strong positive feedback from growers at these events and sees them as a very important facet of the overall approach to engaging growers to participate in EnviroVeg.

### **Media coverage**

With the rising profile of environmental issues in the community, it is essential that the vegetable industry is able to effectively communicate how it is addressing these challenges. As an industry impacted by a wide variety of environmental regulations, it is vital that positive messages and success stories are communicated widely. AUSVEG has had significant success in achieving media coverage for the Program by using its strong reputation in the media as a leading industry group.

Over the past three years, AUSVEG has been able to achieve localised coverage for a number of EnviroVeg workshops along with significant publicity for the EnviroVeg website launch held on Friday 6 July 2012. In the period of this project, AUSVEG has achieved 31 media mentions (articles, interviews) for the Program. A full list of media mentions is included in **Appendix 2**.

### **Email communication with members**

Recognising the potential to communicate with members between *Vegetables Australia* editions, AUSVEG implemented regular email communication with EnviroVeg members in late 2011. These activities were not included in the original contract, however, they have been implemented to ensure a greater level of ongoing contact with a rapidly growing membership base. Short updates on Program announcements and activities, as well as articles and announcements of interest have been regularly provided to members. Feedback from growers has been positive and the Environment Coordinator has received periodic qualitative feedback from growers who have called to say they appreciate the ongoing contact. Regular contact also greatly assists the Environment Coordinator when making calls to members as the relationship is maintained between contact.

An example of an email sent to members is included in **Appendix 8**.

### **External meetings and workshops attended**

AUSVEG has supported the EnviroVeg Program by facilitating a number of meetings with industry suppliers, policy organisations and grower groups in order to promote the Program and consolidate industry support.

Workshops and other industry events also offered professional development opportunities for the Environment Coordinator, strengthening his capacity to manage the Program.

A list of the major meetings conducted throughout this project, as well as key outcomes and benefits is provided in **Appendix 6**.

### **EnviroVeg Committee meetings**

The EnviroVeg Committee met once every six months throughout this project to discuss key issues and set the strategic direction for the Program as required in the VG09002 contract.

### **Development of Program materials**

The EnviroVeg Manual was updated during Milestone 103, with the content reviewed and revised where there was outdated material. Additional material was incorporated on climate change and biosecurity, as well as information on NRM bodies and their relevance to vegetable growers. The update of the Manual involved consultation with growers and industry experts, reaffirming



AUSVEG's commitment that the Manual be a resource which incorporates the latest information and is relevant and easy to understand for growers. The Manual continues to be a key information resource for member growers, complementing the recently released website. With considerable growth in the Program, the EnviroVeg Manual is one of the most widely-used environmental information resources in horticulture.

Printing of 350 copies of the Manual was finalised in Milestone 106 and distributed to existing growers, with sufficient additional copies left over for Program expansion.

### *Regional NRM Guides*

AUSVEG intended for EnviroVeg to be able to be applied to any grower in Australia, which is why the EnviroVeg Program Manual has been tailored to apply to a wide variety of growing situations, including open-field, protected cropping and hydroponic. While this flexibility and adaptability is one of the definitive strengths of the EnviroVeg Program, AUSVEG and the EnviroVeg Committee recognised a need to provide region-specific information on local laws and regulations, as well as information about NRM priorities. AUSVEG engaged a specialist consultant to work with NRM bodies in nine of Australia's prominent vegetable growing regions and prepare regional guides on local legislation, land management priorities and support programs available to growers.

In participating in the Program, Australian growers now have access to relevant regional information, giving them the confidence that when participating in EnviroVeg they are meeting all of their environmental responsibilities. These new resources have been well-received by growers, with existing members providing positive feedback on the new resources.

The regional guides were developed as a hard copy resource which can be inserted into the back of the current EnviroVeg Manual. In addition, web versions of the documents have been made available for download on the Program website.

Regional NRM Guides were developed for the following nine regions, aligned to the key vegetable growing regions around Australia:

- Central West Catchment Management Authority, NSW
- Adelaide Mt Lofty Ranges NRM, SA
- Cradle Coast NRM, TAS
- North Queensland Dry Tropics NRM, QLD
- Perth Region NRM, WA
- Port Phillip and Westernport NRM, VIC
- Rangelands NRM, WA
- South East Queensland Catchments NRM, QLD
- Burnett Wide Bay Region NRM, QLD

Each document is available online through [www.enviroveg.com](http://www.enviroveg.com), or is sent in hard copy format on request. All new sign-ups to the Program will now receive the relevant regional guide when they are sent their Program Manual.

An example of the content of a regional guide is included in **Appendix 12**.

## Evaluation

The following section evaluates AUSVEG's success in both delivering project outputs and in developing the EnviroVeg Program.

### Project outputs

AUSVEG has met all requirements for project outputs as stipulated in the project contract.

Of the outputs in the original project contract:

- The Environment and Communications strategies were developed and signed off as outlined in the contract.
- A surplus of EnviroVeg information sessions was completed, with 16 events held and only nine required in the original contract.
- EnviroVeg content has been developed for each edition of *Vegetables Australia* within the project.
- Five EnviroVeg Committee meetings have been held.
- EnviroVeg Regional NRM Guides have been completed.
- The Environment Coordinator attended 28 key meetings or professional development opportunities to improve performance and build networks in the industry.
- The Program Manual has been revised, printed and distributed to members.

A number of initiatives have also been completed by AUSVEG in addition to the contract requirements as a means of providing superior service to EnviroVeg members and grow the Program. These include:

- Initiation of proactive media activities, including 31 media mentions.
- Development of a new EnviroVeg members' website.
- Implementation of regular email and phone contact with members.
- EnviroVeg presence at the 2010, 2011 and 2012 AUSVEG National Conventions and other prominent industry events.

### Membership results

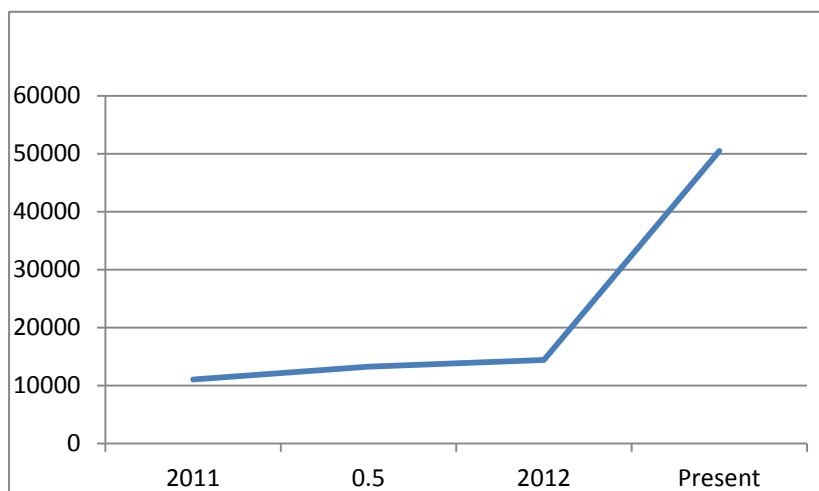
AUSVEG has recognised the important role of face-to-face communication with our growers. The Environment Coordinator has completed an intensive series of farm visits during the project. This has led to unprecedented levels of interest and membership in the Program and has been an integral part of its exceptional performance over the past three years.

**Figure 2:** Cumulative growth in the number of EnviroVeg members since establishment



As the graph above shows, the Program has grown by over 200% since 2010. This indicates that the Program is having an impact with mainstream growers, not just those who are likely to be early adopters of environmental best practices.

**Figure 3:** Cumulative growth in hectare coverage for EnviroVeg from 2011



EnviroVeg has also enjoyed rapid growth in hectare coverage over the past years, growing from around 10,000 ha when hectare information started to be collected in 2011 to over 50,000 ha at present. This is largely due to the fact that the majority of large commercial growers in Australia (1000 ha or more) known to AUSVEG have joined the Program. AUSVEG is now working with each grower to put systems in place to refine their management strategies in areas such as crop protection and put plans in place to improve their performance over the coming years.

The key indicators of success for the recent period involved achieving greater sign-up and participation in the EnviroVeg Program. EnviroVeg has surpassed all of AUSVEG's expectations in recent years and AUSVEG are proud of the on-the-ground results the Program has achieved.

## Implications

On the basis of AUSVEG's experience in successfully delivering the EnviroVeg Program a number of implications for the industry have been identified and are presented below.

### *Opportunities*

There is an enormous opportunity for industry programs to make effective use of grower visits, a highly-successful means of engaging industry participants, and this approach should be considered in other extension projects. The workshop or information session format, while efficient, must be used judiciously as it can at times be a challenge to get growers away from the farm.

As AUSVEG's experience with EnviroVeg shows, the application of marketing and communications principles can be highly-effective in industry development programs. AUSVEG has placed an emphasis on building these capabilities in personnel, training and infrastructure such as databases, which are unique within the industry. There is an opportunity for other projects and organisations to build similar capabilities and apply them with great success to future projects.

A multi-faceted communications approach using multiple channels to reach growers has proven to be very effective in the case of EnviroVeg, however, not all are equal. It is impossible to run an industry program from behind a desk, and these programs need people on the ground.

An investment in database and relationship management capabilities is essential for any industry development/extension program. If you can't effectively identify and segment growers, then it is very difficult to reach them.

### *Challenges*

The main challenge AUSVEG faced with EnviroVeg was managing the rapid growth in the Program. AUSVEG has invested in developing databases, processes and the new website in order to ensure ongoing contact with members throughout the duration of this project. Continuous investment in Program infrastructure and resources will continue to be essential in managing a rapidly growing membership base.

There were also some challenges involved in accessing growers' details for farm visits in some regions. AUSVEG has the benefits of an extensive database which can be used by the Environment Coordinator, however, it is constantly being updated and there are some gaps. In these cases, AUSVEG used its strong connections with state and regional associations, key growers and industry

suppliers to identify growers. A collaborative approach with other groups had the added benefit of providing the Environment Coordinator with an enhanced understanding of local growing conditions and prominent growers to aid in communicating the benefits of the Program.

## Recommendations

As a result of AUSVEG's experience with EnviroVeg in the current project, the following recommendations for similar extension projects can be made:

- Work with the growers on-farm; AUSVEG has found this to be a highly-successful approach which has accounted for the majority of the membership increase for EnviroVeg.
- Expand resources developing databases, websites and other critical communications infrastructure; these resources are essential for targeting growers for site visits or in managing relationships with members.
- Involve the community, decision-makers and other stakeholders; AUSVEG has had success in engaging retailers, leading industry suppliers and other stakeholders to build support for the Program.
- Use the media as a cost-effective means of promotion; recognising the importance of promoting the program with the community, AUSVEG has enjoyed significant success in achieving media coverage for EnviroVeg.

## Appendices

### Appendix 1: Grower meeting schedule and sign ups

In the EnviroVeg Committee meeting on 13 April 2011, it was requested that the EnviroVeg Coordinator undertake more visits to farms to sign-up new growers. This approach has led to significant success, with visits to key regions and increase in sign-ups as outlined in the table below.

Of the increase of 133 members - from 205 to 338 - achieved in 2012, 107 were signed up on visits to farms. This represents around 80% of total sign-ups, with the rest signing up either through the website, EnviroVeg workshops or the AUSVEG National Conventions.

#### Schedule of major grower visits from mid-2011

Date	Region	Number of sign ups
August 2011	North east Tasmania	6
September 2011	Bundaberg Queensland	2
September 2011	Melbourne Region, Victoria	8
October 2011	Darwin, Northern Territory	5
January 2012	Virginia and Adelaide Hills, South Australia	11
February 2012	Mornington Peninsula, Victoria	5
March 2012	Wanneroo and Bunbury, Western Australia	8
March 2012	Bathurst and Cowra, New South Wales	15
March 2012	Bowen, Queensland	9
March 2012	Werribee, Victoria	4
April 2012	Devonport, Launceston and Scottsdale, Tasmania	13
May 2012	East Gippsland, Victoria	16
July 2012	Gatton, Queensland	15
September 2012	Virginia and Adelaide Hills, South Australia	11

## Appendix 2: Summary of media mentions

The following table contains a summary of media coverage achieved for EnviroVeg during project VG09002.

Date	Media	Type	Topic	Number of mentions	Audience (where available)
1 August 2010	Gippsland Farmer VIC	Newspaper	EnviroVeg reaches out to local growers	1	
9 August 2010	ABC Wide Bay (Bundaberg) QLD	Radio	EnviroVeg seminar Bundaberg	2	
12 October 2010	3WM Horsham, Country Today VIC	Radio	Murray Darling Water Plan and EnviroVeg	1	
19 October 2010	Herald Sun VIC	Newspaper	Cranbourne soil health EnviroVeg workshop	1	1,300,000
12 November 2010	Tasmanian Country TAS	Radio	Longford EnviroVeg seminar	1	16,866
12 November 2010	ABC Northern Tasmania TAS	Radio	Longford EnviroVeg seminar	1	
23 November 2010	Toowoomba Chronicle QLD	Newspaper	Gatton EnviroVeg seminar	1	22,644
23 November 2010	4WK Toowoomba QLD	Radio	Gatton EnviroVeg seminar	1	
26 November 2010	4GR Toowoomba QLD	Radio	Gatton EnviroVeg seminar	6	30,500
23 February 2011	Weekly Times VIC	Newspaper	Interview on recent EnviroVeg/Levy Payer meetings	1	70,500
6 July 2012	The Land NSW	Online	EnviroVeg website launch	1	45,119
10 July 2012	ABC Riverland SA	Radio	Interview on EnviroVeg website launch	3	
10 July 2012	ABC News Online	Online	EnviroVeg website launch	1	
10 July 2012	2WG Wagga Wagga NSW	Radio	EnviroVeg website launch	1	

10 July 2012	ABC Gippsland, Sale VIC	Radio	Interview on EnviroVeg website launch	1	
11 July 2012	ABC South East, Mt Gambier SA	Radio	Interview on EnviroVeg website launch	3	
11 July 2012	3WM Horsham, Country Today VIC	Radio	Interview on EnviroVeg website launch	1	
11 July 2012	ABC South East NSW, Bega	Radio	Interview on EnviroVeg website launch	1	
19 July 2012	The Weekly Times, VIC	Newspaper	'On the Grapevine' Column – EnviroVeg website mention	1	
1 August 2012	Good Fruit and Vegetables, National	Magazine	EnviroVeg website launch	1	7,229
16 August	The Land NSW	Newspaper	Interview on EnviroVeg website launch	1	45,119
<b>Total Mentions</b>	<b>31</b>				

## Examples of media coverage

### Radio Coverage

#### A new website has been launched to help vegetable growers re...



[ABC South East SA, Mt Gambier](#) hosted by [Newsreader](#)

11 Jul 2012 7:33 AM

07:30 News - 0 min 48 secs - ID: W00049440868



A new website has been launched to help vegetable growers reduce their environmental footprint. The **EnviroVeg** is operated by **AUSVEG**. Jordan-Brooke Barnett, Environment Coordinator, says growers can use the website to analyse and reduce their energy, water, fuel and fertiliser use. He says growers can fill out self assessments using a SmartPhone.

[Order presentation file or transcript](#)



### Keywords

EnviroVeg (1), AUSVEG (1)

### Interviewees

Jordan-Brooke Barnett, Environment Coordinator, AUSVEG

 N/A ALL

N/A MALE 16+

N/A FEMALE 16+

## AusVeg has released a new website EnviroVeg. Jordan-Brooke B...



[3WM, Horsham](#) hosted by [Sandra Moon](#)

11 Jul 2012 6:53 AM

Country Today - 3 mins 41 secs - ID: W00049438344



**AusVeg** has released a new website **EnviroVeg**. Jordan-Brooke Barnett, Environment Coordinator, **AUSVEG** describes the website that will help growers to monitor the environmental impact of their operations. The website was launched last week at the New South Wales Farmer's Association in Sydney by John Lloyd, CEO of Horticulture Australia. **Ausveg** expects the website will provide a clearer picture of the industry's environmental performance. The **EnviroVeg** website gives **Ausveg** the ability to analyse the environmental performance of growers in areas such as energy management, water use and soil nutrition. Individual growers will have the opportunity to compare their annual score against averages presented on the website.

[Order presentation file or transcript](#)

### Keywords

AusVeg (1), AUSVEG (1), EnviroVeg (2), Ausveg (2)

### Interviewees

Jordan-Brooke Barnett, Environment Coordinator, AUSVEG

 N/A ALL

**Also broadcast from the following 2 stations**

N/A MALE 16+

N/A FEMALE 16+

## A new website has been launched to help vegetable growers re...



[ABC South East SA, Mt Gambier](#) hosted by [Newsreader](#)

11 Jul 2012 6:34 AM

06:30 News - 0 min 52 secs - ID: W00049438494



A new website has been launched to help vegetable growers reduce their environmental footprint. The **EnviroVeg** is operated by **AUSVEG**. Jordan-Brooke Barnett, Environment Coordinator, says growers can use the website to analyse and reduce their energy, water, fuel and fertiliser use. He says growers can fill out self assessments using a Smart

Phone.

[Order presentation file or transcript](#)

---

**Keywords**

EnviroVeg (1), AUSVEG (1)

**Interviewees**

Jordan-Brooke Barnett, Environment Coordinator, AUSVEG

 N/A ALL

N/A MALE 16+

N/A FEMALE 16+

**Press coverage**

<http://theland.farmonline.com.au/news/state/horticulture/vegetables/growers-can-veg-out-online/2612567.aspx>

**Growers can 'veg out' online**

06 Jul, 2012 01:11 PM

AUSVEG has launched a new website to assist vegetable growers to monitor and improve their environmental performance – [www.enviroveg.com](http://www.enviroveg.com).

AUSVEG is the National Peak Industry Body representing Australia's 9,000 vegetable and potato growers.

The new website was launched at the NSW Farmers' Association in Sydney by Mr John Lloyd, chief executive officer of Horticulture Australia Ltd, and will provide AUSVEG with greater insight into the environmental performance of the industry.

AUSVEG Environment Coordinator Mr Jordan Brooke-Barnett said the new website would bring the program into the 21st century and provide greater ability for growers to compare environmental performance against their peers.

“The EnviroVeg website gives AUSVEG the ability to analyse the environmental performance of growers in areas such as energy management, water use and soil nutrition,” said Mr Brooke-Barnett.

The EnviroVeg Program was established in 2000, and provides growers with information and tools to allow them to complete an annual self assessment of their environmental performance across nine key areas of their operations.

“Our new website will collect data from the self assessments and present detailed results showing how participating growers are performing at the national and State levels, or even by crop type and farm size,” said Mr Brooke-Barnett.

“Individual growers can then compare their annual score against these averages and put plans in place to improve their environmental performance.”

The EnviroVeg Program has grown rapidly in recent years to over 300 growers, comprising of almost 50,000 hectares of vegetable growing land.

“With environmental issues becoming increasingly prominent and costs of farm inputs such as energy rising, we expect the strong uptake to continue as growers look to use alternative environmentally-friendly methods to reduce their production costs,” said Mr Brooke-Barnett.

The EnviroVeg Program is funded by Horticulture Australia Limited using the National Vegetable Levy and matched funds from the Australian government.

AUSVEG

Source: <http://www.ausveg.com.au>

<http://www.abc.net.au/news/2012-07-10/enviroveg-program-goes-online/4121144/?site=riverland&microsite=&section=news>

## **EnviroVeg program goes online**

Updated July 10, 2012 13:20:53

Vegetable growers in South Australia's Riverland are being urged to make use of a new website to monitor and improve the environmental impact of their farming practices.

The peak body for vegetable growers, AusVeg, operates the EnviroVeg program but has switched it from a paper-based model to an online one.

The group's environment coordinator, Jordan Brooke-Barnett, says growers can use the website to monitor their energy, water, fertiliser and fuel costs.

"With our growers we're seeing a real willingness to take on the environmental challenges and they consider a lot of these issues, issues to do with water and soil and fuel and energy use as being a vital issue to their businesses," he said.

He says 300 growers use the program to assess the cost and impact of their farm inputs.

"We did have a paper-based application process but now we've made it even easier for growers by allowing them to fill in their self-assessment online and we've also got a great expansion as well where they can even do it on their smart phones ... so they can be walking around their property looking at different aspects of their business and filling in self-assessments," he said.

### Appendix 3: Summary of Regional EnviroVeg Workshops

#### Information Session 1.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'		
<b>Region:</b>	Virginia, South Australia	<b>Venue:</b>	GrowSA Headquarters
<b>Date:</b>	23 July 2010	<b>Attendance:</b>	N/A
<b>Chair:</b>	Mr Mike Redmond, Chief Executive Officer of GrowSA	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Dr Ian Porter, Principal Research Scientist DPI Victoria</li> <li>• Mr Richard Mulcahy, Chief Executive Officer of AUSVEG</li> <li>• Mr Darcy Boyd, Environment Coordinator</li> <li>• Mr Andrew Meurant, Elders Horticulture Segment Manager</li> <li>• Ms Julie Howarth, Department of Immigration and Citizenship</li> <li>• Mr Theo Jacometti, Director, Boomaroo Nurseries.</li> </ul>
<b>Summary</b>			
<p>The information session was held at the GrowSA headquarters in Virginia and had a number of key speakers including the AUSVEG Chief Executive Officer, Dr Ian Porter and representatives of key agribusiness and government groups such as Elders and the Department of Immigration and Citizenship.</p> <p>The topic of the information session was around managing for healthy soils. The objective was to communicate the benefits of treating soil as an asset and testing regularly to ensure the ongoing sustainability of vegetable growing land.</p> <p><i>Event communications</i></p> <p>Promotion of the event consisted of direct-mailout, with a separate translated version for Vietnamese growers. Regular updates were provided through the AUSVEG Weekly Update and a notice was setup on the AUSVEG website.</p>			

#### Information Session 2.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Bundaberg, Queensland.	<b>Venue:</b>	Bundaberg Fruit and Vegetable Growers' Association headquarters.
<b>Date:</b>	9 August 2010	<b>Attendance:</b>	50

<b>Chair:</b>	Mr David DePaoli, President of the Bundaberg Fruit and Vegetable Growers' Association.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Mr John Bagshaw, Senior Extension Horticulturalist DEEDI.</li> <li>• Dr Dennis Persley, Principal Plant Pathologist DEEDI.</li> <li>• Mr Darcy Boyd, Environment Coordinator.</li> <li>• Mr Theo Jacometti, Director of Boomaroo Nurseries.</li> <li>• Mr Sean Richardson, Marketing Manager Syngenta.</li> <li>• Mr Rohan Davies, Research and Product Development Manager, Incitec Pivot</li> </ul>
---------------	--	------------------	--

### Summary

Information session 2 was held in conjunction with the Bundaberg Fruit and Vegetable Growers' Association and attracted a considerable attendance of 50 growers and industry representatives. AUSVEG Environment Coordinator Darcy Boyd presented on the EnviroVeg Program and its benefits of improving efficiencies and productivity on-farm.

In addition to the key speakers from DEEDI, a number of leading industry service providers attended and spoke at the event in their fields of expertise.

#### *Event communications*

Event communications consisted of a mailout and email targeted towards growers in the Bundaberg region, as well as promotion through the AUSVEG Weekly Update. In the lead up to the event the Environment Coordinator conducted interviews with ABC radio in Wide Bay to promote the event.

### Information Session 3.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Cranbourne, Victoria.	<b>Venue:</b>	Amstel Golf Club.
<b>Date:</b>	22 October 2010	<b>Attendance:</b>	35
<b>Chair:</b>	Mr Luis Gazzola, President VGA Victoria.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Dr Ian Porter, Principal Research Scientist Plant Pathology, VIC DPI.</li> <li>• Mr Hugh Tobin, AUSVEG Communications and Public Affairs Manager.</li> <li>• Mr Darcy Boyd, Environment Coordinator.</li> <li>• Mr Theo Jacometti, Director of Boomaroo Nurseries.</li> <li>• Mr Rohan Davies, Research and Product Development Manager, Incitec Pivot</li> </ul>

			<ul style="list-style-type: none"> <li>Mr David Richards, Market Development Manager, DuPont</li> </ul>
<p><b>Summary</b></p> <p>Information session 3 was held at the Amstel Gold Golf Club and was the continuation of the 'Managing for Healthy and Productive Soils' series of workshops. Dr Ian Porter again spoke on the topic of soil management, while the Environment Coordinator gave growers an overview of EnviroVeg. A number of leading industry suppliers were also at the event and spoke to growers.</p>			

#### Information Session 4.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Werribee, Victoria.	<b>Venue:</b>	Italian Sports Club.
<b>Date:</b>	29 October 2010	<b>Attendance:</b>	N/A
<b>Chair:</b>	Mr Luis Gazzola, President VGA Victoria.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>Dr Ian Porter, Principal Research Scientist Plant Pathology, VIC DPI.</li> <li>Mr Hugh Tobin, AUSVEG Communications and Public Affairs Manager.</li> <li>Mr Darcy Boyd, Environment Coordinator.</li> <li>Mr Rohan Davies, Research and Product Development Manager, Incitec Pivot.</li> <li>Mr David Richards, Market Development Manager, DuPont.</li> <li>Mr Theo Jacometti, Director of Boomaroo Nurseries.</li> <li>Ms Julie Howarth, Department of Immigration and Citizenship.</li> </ul>
<p><b>Summary</b></p> <p>Information session 4 was held at the Italian Sports Club in Werribee and was the continuation of the 'Managing for Healthy and Productive Soils' series of workshops. Dr Ian Porter again spoke on the topic of soil management, while the Environment Coordinator gave growers an overview of EnviroVeg. A number of leading industry suppliers and Australian Government representatives also attended the event and spoke to growers.</p>			

### Information Session 5.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Longford, Tasmania	<b>Venue:</b>	Longford R.S.L
<b>Date:</b>	22 November 2010	<b>Attendance:</b>	N/A
<b>Chair:</b>	Mr Andrew Craigie, Chair of the TFGA Vegetable Council.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Dr Ian Porter, Principal Research Scientist Plant Pathology, VIC DPI.</li> <li>• Mr Richard Mulcahy, AUSVEG Chief Executive Officer.</li> <li>• Mr Darcy Boyd, Environment Coordinator.</li> <li>• Mr Sean Richardson, Marketing Manager Syngenta.</li> </ul>
<b>Summary</b>			
<p>For information session 5, AUSVEG took the 'Managing for Healthy and Productive Soils' series of workshops to Tasmania. Dr Ian Porter was again the key speaker, with AUSVEG Chief Executive Officer Mr Richard Mulcahy giving local growers an update on AUSVEG's significant program of activities and recent achievements. The Environment Coordinator also spoke, providing growers with an overview of EnviroVeg and the benefits of participation.</p>			

### Information Session 6.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Gatton, Queensland.	<b>Venue:</b>	University of Queensland, Gatton Campus.
<b>Date:</b>	26 November 2010	<b>Attendance:</b>	N/A
<b>Chair:</b>	N/A	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Mr Stephen Harper, Principal Research Scientist, DEEDI.</li> <li>• Dr Victor Galea, Senior Plant Pathologist, University of Queensland.</li> <li>• Mr Andrew White, Manager- VIDP Communications.</li> <li>• Mr Darcy Boyd, Environment Coordinator.</li> <li>• Ms Margie Milgate, Regional Networks Coordinator at Growcom.</li> <li>• Mr Sean Richardson, Marketing Manager Syngenta.</li> </ul>

### Summary

Information session 6 was held at the University of Queensland Gatton campus. The key speakers were Mr Stephen Harper and Dr Victor Galea. Mr Harper's presentation focussed on nutrient and fertiliser use in the Lockyer Valley and how growers can refine application rates for optimal production. Dr Galea's presentation focussed on the development of a disease forecasting systems for a number of vegetable crops.

In addition to these speakers, Mr Andrew White was in attendance to discuss the Vegetable Industry Development Program and Ms Margie Milgate spoke on Growcom's services available to Queensland growers. The Environment Coordinator also spoke about the benefits of EnviroVeg at the event.

### Information Session 7.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Wanneroo, Western Australia.	<b>Venue:</b>	Wanneroo Tavern.
<b>Date:</b>	23 February 2011	<b>Attendance:</b>	N/A
<b>Chair:</b>	N/A	<b>Speakers:</b>	<ul style="list-style-type: none"><li>• Mr Rohan Prince, Department of Agriculture WA.</li><li>• Mr Darcy Boyd, Environment Coordinator.</li></ul>
<b>Summary</b>			
<p>Information session 7 was held in Wanneroo as part of the AUSVEG 2011 levy payers meetings. The format was changed from an afternoon to a dinner format for this, and all subsequent, meetings. AUSVEG has achieved much greater success in encouraging growers to attend with the dinner format, rather than meetings held in the afternoon.</p> <p>Mr Rohan Prince spoke about water and nitrate use on the Swan Coastal Plain and presented management practices to address issues specific to the region.</p>			

### Information Session 8.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Canarvon, Western Australia	<b>Venue:</b>	Best Western Hospitality Inn
<b>Date:</b>	25 February 2011	<b>Attendance:</b>	N/A
<b>Chair:</b>	N/A	<b>Speakers:</b>	<ul style="list-style-type: none"><li>• Mr Stephen Poole, Agronomist – Landmark.</li><li>• Mr Darcy Boyd, Environment Coordinator.</li></ul>



### Summary

Information session 8 was held in Canarvon WA, with Mr Stephen Poole as key speaker. Mr Poole's presentation covered the components of healthy soils, as well as information on the soil profile of the Canarvon region. Mr Poole also outlined management options to improve soil health.

### Information Session 9.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Werribee, Victoria	<b>Venue:</b>	Brook on Sneydes
<b>Date:</b>	4 March 2011	<b>Attendance:</b>	N/A
<b>Chair:</b>	Mr Luis Gazzola, President VGA Victoria.	<b>Speakers:</b>	<ul style="list-style-type: none"><li>• Dr Robert Premier, Global F.S. Pty Ltd.</li><li>• Mr Darcy Boyd, Environment Coordinator.</li></ul>
<b>Summary</b>			
<p>Information session 9 was held in Werribee Victoria and featured Dr Robert Premier as the key speaker. Dr Premier presented on two projects that had been funded through the National Vegetable Levy. The first was VG7079, <i>Reducing Listeria contamination from salad vegetable farms</i>, where his presentation communicated information on the origins of the Listeria bacteria and how it can get into leafy vegetables. Dr Premier then gave advice on what vegetable growers can do to reduce the risk of contaminated produce, with practical advice including reducing irrigation of crops prior to a wind event. The second project Dr Premier covered was VG09041, <i>Environmental effects of vegetable production on sensitive waterways</i>. The presentation covered the Victorian component of the project, which considered how vegetable growers in the region had influenced the health of Watson's Creek on the Mornington Peninsula.</p> <p>The Environment Coordinator also presented on the EnviroVeg Program and communicated how simple actions such as planting wind breaks could go a long way to reducing environmental issues like soil erosion.</p>			

### Information Session 10.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Bowen, Queensland	<b>Venue:</b>	Castle Motor Lodge
<b>Date:</b>	8 March 2011	<b>Attendance:</b>	N/A
<b>Chair:</b>	Mr Luis Gazzola, President VGA Victoria.	<b>Speakers:</b>	<ul style="list-style-type: none"><li>• Mr Chris Monsour, Prospect Agriculture.</li><li>• Mr Andrew White, Manager- VIDP Communications.</li><li>• Mr Darcy Boyd, Environment Coordinator.</li></ul>

**Summary**

Information session 10 was held in Bowen Queensland on 8 March 2011, with Mr Chris Monsour of Prospect Agriculture the key speaker. Mr Monsour's presentation was titled 'Fending off the 'Famine' – Can healthy soils save our bacon?' The presentation considered challenges and pressures for agricultural production into the future. Mr Monsour examined soil in the context of a rising global population and spoke of the opportunities for Australian farmers to feed a growing world.

**Information Session 11.**

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Boonah, Queensland	<b>Venue:</b>	Boonah Valley Motel
<b>Date:</b>	12 September 2011	<b>Attendance:</b>	14
<b>Chair:</b>	Mr John Brent, Chairman AUSVEG.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Mr Ian Layden B.Sc (Env) Hons, DEEDI.</li> <li>• Mr Rohan Davies, Technical Agronomist, Incitec Pivot.</li> <li>• Mr Greg Leach, Property Systems Manager, SEQ Catchments.</li> <li>• Mr Christian Malins, Environment Coordinator.</li> </ul>

**Summary**

Information session 11 was held in Boonah Queensland on 12 September 2011. Key speakers included Mr Ian Layden who spoke about the environmental benefits of using controlled traffic farming systems and the implementation of cover crops. A representative from Incitec Pivot discussed soil issues and fertiliser use, while a representative from the South East Queensland Catchment Management Authority spoke about regional environmental issues and a representative from the Department of Immigration and Citizenship informed growers about opportunities under the Pacific Seasonal Worker Pilot Scheme.

*Event promotion*

Email invitations were sent to all Queensland growers in the AUSVEG database and all Queensland members of the EnviroVeg Program. In addition, direct calls were made as follow up and regular updates provided through the AUSVEG Weekly Update.

The Environment Coordinator also presented on the EnviroVeg Program and the importance of environmental management in modern growing operations as a means to increase productivity and efficiency.

### Information Session 12.

<b>Topic:</b>	'Managing for Healthy and Productive Soils'.		
<b>Region:</b>	Scottsdale, Tasmania	<b>Venue:</b>	R.S.L. Bowls Club
<b>Date:</b>	23 September 2011	<b>Attendance:</b>	9
<b>Chair:</b>	N/A	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Mr David Gatenby, TFGA Chairman.</li> <li>• Mr Nick Steel, Policy Manager TFGA.</li> <li>• Ms Mel King, TFGA Policy Advisor.</li> <li>• Ms Jan Davis, Chief Executive Officer TFGA.</li> <li>• Mr Christian Malins, Environment Coordinator.</li> </ul>
<b>Summary</b>			
<p>Information session 12 was held in Scottsdale Tasmania on 12 September 2011, in conjunction with a Tasmanian Farmers and Graziers Association Grower Forum.</p> <p>The Environment Coordinator used a speaking slot at the event to speak about the EnviroVeg Program and encourage sign ups with local growers. Other speakers from the TFGA spoke on a range of topics including the TFGA Strategic Plan.</p> <p><i>Event promotion</i></p> <p>The EnviroVeg information session/TFGA Grower Forum was promoted extensively through a number of channels. An email invitation was sent out to all TFGA contacts, the AUSVEG database, as well as Scottsdale contacts which the EnviroVeg Coordinator sourced through local agronomist service provider Serve-Ag. Additionally, an information flyer and regular updates were provided online via the AUSVEG Weekly Update.</p>			

### Information Session 13.

<b>Topic:</b>	'Managing Quality and Environmental Performance: Why it matters to growers in a changing marketplace.		
<b>Region:</b>	Virginia, South Australia.	<b>Venue:</b>	GrowSA Headquarters.
<b>Date:</b>	23 January 2012	<b>Attendance:</b>	30
<b>Chair:</b>	Mr Mike Redmond, Chief Executive Officer of GrowSA.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Ms Jackie Healing, Head of Quality, Policy and Governance, Coles.</li> <li>• Mr Julian Carbone, Business Development and Marketing Manager, Adelaide Produce Markets.</li> <li>• Mr Jordan Brooke-Barnett, Environment Coordinator.</li> </ul>

## Summary

Information session 13 was held in Virginia, South Australia and featured a number of leading industry speakers. AUSVEG was pleased to have Ms Jackie Healing, Head of Quality, Policy and Governance for Coles, speak at the event on why environmental performance is becoming increasingly important to consumers. Likewise, Mr Julian Carbone talked about marketing in the context of the wholesale markets as well as key trends. The event was an opportunity for growers to see that the ultimate buyer of their goods is interested in the positive work they are doing on-farm and the opportunities available if the industry can effectively promote its environmental credentials.

In addition to the above speakers, representatives from key industry suppliers were also on-hand to meet and talk with growers. The Environment Coordinator also spoke on the EnviroVeg Program and its benefits, which helped to encourage four growers to sign up at the event.

The event was extremely well received and attracted around 30 people, with many of the major growers in the region in attendance.

### *Event promotions*

The event was promoted by email to the AUSVEG South Australian database. GrowSA also kindly sent notice to their members. Email was followed up with phone calls to influential growers in the region to ensure local growers were informed of the event.

## Information Session 14.

<b>Topic:</b>	'Precision Agriculture Masterclass'		
<b>Region:</b>	Bathurst, New South Wales	<b>Venue:</b>	Bathurst R.S.L
<b>Date:</b>	23 March 2012	<b>Attendance:</b>	15
<b>Chair:</b>	Mr Jeff McSpedden, Chair of the Vegetables IAC	<b>Speakers:</b>	<ul style="list-style-type: none"><li>• Dr Brett Whelan, Senior Lecturer – Precision Agriculture, University of Sydney.</li><li>• Mr Jordan Brooke-Barnett, Environment Coordinator.</li></ul>

## Summary

Information session 14 was held in Bathurst, New South Wales, and targeted towards sweet corn and pumpkin growers in the region. The topic of the seminar was precision-agriculture and the use of geospatial technology to save fuel and fertiliser use. The keynote speaker was Dr Brett Whelan, one of Australia's foremost precision agriculture specialists. Growers were able to ask questions about how the technology could be applied to their operations as well as the costs of establishing the technology in their operations. The event was very well received with positive feedback from local growers. The Environment Coordinator also took the opportunity to speak about the EnviroVeg Program with the local growers and was able to sign up two new growers at the event.

### *Event promotions*

Event promotions consisted of an email and mailout to growers in the Bathurst/Cowra regions of New South Wales. This was followed up by phone calls to influential local growers to inform other members in their grower groups.

### Information Session 15.

<b>Topic:</b>	'Water management: how sound planning and modern technology can help vegetable growers conserve water and manage crops.'		
<b>Region:</b>	Wanneroo, Western Australia	<b>Venue:</b>	Wanneroo Golf Club
<b>Date:</b>	2 April 2012	<b>Attendance:</b>	30
<b>Chair:</b>	Ms Maureen Dobra, President vegetablesWA	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Mr Rohan Prince, Department of Agriculture WA</li> <li>• Mr Jordan Brooke-Barnett, Environment Coordinator</li> <li>• Mr Doug Zekulich, Agronomist, Landmark</li> </ul>
<p><b>Summary</b></p> <p>Information session 15 was held as a dinner after the AUSVEG levy payer meeting in Wanneroo. The keynote speaker was Mr Rohan Prince, who discussed innovative approaches for growers to manage irrigation and save water. Strategies and technologies were discussed in detail and growers were able to ask questions following the talk.</p> <p>The Environment Coordinator also took the opportunity to speak about the EnviroVeg Program with the local growers and was able to sign up two new growers at the event.</p> <p><i>Event promotions</i></p> <p>Event promotions consisted of a targeted email to Western Australian growers, an article in <i>Vegetables Australia</i> magazine and phone calls to local growers.</p>			

### Information Session 16.

<b>Topic:</b>	'Managing Nitrogen for increased quality in vegetable crops and improved environmental performance.'		
<b>Region:</b>	Devonport, Tasmania	<b>Venue:</b>	Argosy Motor Inn
<b>Date:</b>	4 April 2012	<b>Attendance:</b>	30
<b>Chair:</b>	Mr Andrew Craigie, Chair TFGA Horticulture Committee.	<b>Speakers:</b>	<ul style="list-style-type: none"> <li>• Dr Bill Cotching, University of Tasmania.</li> <li>• Mr Peter Melville, Horticulture Australia.</li> <li>• Mr Jordan Brooke-Barnett, Environmental Coordinator.</li> <li>• Mr Darren Hicks, Technical Manager, Agvita Analytical.</li> </ul>
<p><b>Summary</b></p> <p>Information session 16 was held as a dinner after the AUSVEG levy payer meeting in Devonport Tasmania. The keynote speaker was Dr Bill Cotching, one of Australia's leading soil experts, who discussed how effective use of nitrogen could help increase productivity and environmental outcomes for growers. Also speaking at the event was Mr Peter Melville of HAL, who discussed some recent research into managing greenhouse gas emissions in the vegetable industry.</p>			

In addition, local soil laboratory Agvita Analytical had a representative at the event to talk about effective soil sampling and new tests available to growers.

The Environment Coordinator also gave a short overview of the Program to growers and was able to sign up two growers at the event.

*Event promotions*

An email was sent to growers in the Northern Tasmanian regions, supported by an advertisement in *Vegetables Australia* magazine. In addition, key Tasmanian growers were called and event information was provided through the AUSVEG Weekly Update.

#### Appendix 4: Summaries of 'EnviroNews' articles and Case Studies from *Vegetables Australia*

<b>Edition</b>	July/August 2010
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• New Chairman for EnviroVeg Committee p 44</li> <li>• Upcoming EnviroVeg seminars p 44</li> <li>• New Environment Coordinator p 45</li> </ul>
<b>EnviroVeg feature</b>	<ul style="list-style-type: none"> <li>• EnviroVeg Gaining Momentum pp 42-43</li> </ul>
<p><b>Summary:</b></p> <p>'EnviroNews' articles in this edition announced Mr Jason Huggins of Queensland as the new Chair of the EnviroVeg Committee and provided information about upcoming EnviroVeg information sessions. The focus of this edition was in providing key Program information to growers and keeping them informed.</p> <p>The EnviroVeg feature in this edition provided comprehensive information about the Program, including the information available to growers, self assessment process and reasons they should join. The intent of the feature was to stimulate interest in the Program, by highlighting the benefits of participation.</p>	

<b>Edition</b>	September/October 2010
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• On the road to promote EnviroVeg p 40</li> <li>• Environmental Strategy for the Vegetable Industry p 41</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Ms Maureen Dobra, Loose Leaf Lettuce Co pp 38-39</li> </ul>
<p><b>Summary:</b></p> <p>'EnviroNews' articles in this edition provided a summary of the recent EnviroVeg information sessions in Virginia on 23 July 2010 and Bundaberg on 9 August 2010. In addition, the article focused on some of the key benefits of participating in EnviroVeg to generate interest from growers. An article on the recently release Environmental Strategy for the Vegetable industry outlined the development of the key document and encouraged grower feedback.</p> <p>The EnviroVeg case study profiled Western Australian grower Maureen Dobra and her company, the Loose Leaf Lettuce Co. The article examined a number of initiatives across the operation with particular attention paid to the use of water management and maintenance of irrigation equipment. The benefits of participating in EnviroVeg were also communicated as a way of encouraging other growers to participate in the Program.</p>	

<b>Edition</b>	November/December 2010
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• EnviroVeg connects with growers p 44</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mr Neil Armstrong, Harvest Moon pp 42-43</li> </ul>
<p><b>Summary:</b> The 'EnviroNews' feature in this edition focussed on the recent success of the 'Managing for Healthy and Productive Soils' series of EnviroVeg information sessions. The successes and key insights of the previous seminars were communicated to growers as a way to encourage participation in the upcoming sessions.</p> <p>The EnviroVeg case study feature profiled prominent Tasmanian growing operation Harvest Moon and its Managing Director Mr Neil Armstrong. The article focussed on how techniques like controlled</p>	

traffic farming were assisting in saving energy use throughout the large operation and limiting soil degradation issues such as compaction. The case study served as an example of best practice in large operations and showed the potential for environmental management to be effectively assimilated into everyday business practice.

<b>Edition</b>	January/February 2011
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• Carbon Farming Conference and Expo p 32</li> <li>• EnviroVeg seminars p 33</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mr Anthony Mason pp 30-31</li> </ul>
<p><b>Summary:</b>  ‘EnviroNews’ articles in this edition focused on the attendance of the Environment Coordinator at the Carbon Farming Conference and Expo held 26-29 October 2010 in Dubbo NSW. Key information concerning the Conference was provided as well as potential opportunities for growers through carbon farming.</p> <p>The EnviroVeg case study profiled Werribee grower Anthony Mason and some of the environmental challenges he has had to confront on his property. Key subjects covered were the challenges faced and successes Mr Mason has achieved in using recycled water on his property, as well as the importance of using trained agronomists to regularly check the nutrient levels of his crops.</p>	

<b>Edition</b>	March/April 2011
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• A feast of information p 38</li> <li>• Latest EnviroVeg Manual coming soon p 38</li> <li>• Water woes p 39</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Steve Newman, Hills Fresh pp 36-37</li> </ul>
<p><b>Summary:</b>  The ‘EnviroNews’ articles in this edition included an article informing growers of the impending launch of the new EnviroVeg Manual, as well as a recap of the recent EnviroVeg information sessions which were held in Wanneroo WA, Canarvon WA, Bowen QLD and Werribee VIC. The final article provided an overview of the great debate on the Murray-Darling Basin Authority Plan due to be held at the 2011 AUSVEG National Convention.</p> <p>The EnviroVeg Case study profiled South Australia grower Steve Newman and the unique challenges he faces growing in the Adelaide hills. The article focussed on the unique topography of the hilly region and management of soil degradation and run off into local catchments. The article also outlined the proactive approach Mr Newman has taken in trialling innovative use of compost. Mr Newman’s commitment to environmental management was later recognised with the Environmental Award at the 2012 AUSVEG National Convention.</p>	

<b>Edition</b>	May/June 2011
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• Inaugural Environmental Award winner announced p 38</li> <li>• EnviroVeg a hit at Convention p 39</li> <li>• Carbon tax the topic of conversation p 39</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Ms Deborah Corrigan, Corrigan’s Farm</li> </ul>
<p><b>Summary:</b>  The ‘EnviroNews’ articles featured Mr Rodney Emerick, winner of the inaugural Environmental Award at the 2011 AUSVEG National Convention, as well as the success of the EnviroVeg trade</p>	



booth. The final article examined the proposed introduction of the Carbon Tax and how this may impact environmentally-conscious vegetable growers.

The EnviroVeg Case study profiled Ms Deborah Corrigan of Corrigan Farms in Clyde Victoria. The article focussed on Ms Corrigan's position as a prominent female leader in the industry, as well as the environmental initiatives in place on her property. Integrated Pest Management, chemical management and waste management featured prominently in the article. As a prominent woman in the industry, the case aimed to show the role that women are playing in environmental management and as participants in the broader industry.

<b>Edition</b>	July/August 2011
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>Investing in the environment: Applications for Community Action Grants 2011-2012 are now open p 34</li> <li>World Environment Day: Calls for action to ensure sustainable future for agriculture p 34</li> <li>Rewarding water savings p 35</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>Mr Ed Fagan, Mulyan Pty Ltd</li> </ul>
<p><b>Summary:</b></p> <p>The 'EnviroNews' articles included information for growers to access Community Action Grants under the Australian Government <i>Caring for our Country</i> initiative, while a feature on World Environment Day detailed global calls for more sustainable agricultural practice. The final article featured the 2011 Prime Minister's Water Wise Award, which aims to recognise commercial companies who can demonstrate water savings, with a call to action for growers to apply.</p> <p>The EnviroVeg Case study profiled Ed Fagan, a major grower from Cowra in New South Wales. The article examined implementation of a drainage management plan, use of compost and work with local Catchment Management Authority (NRM) groups. The article provided an important perspective of a grower outside the traditional market garden precincts near major centres to show how an operation in country New South Wales was adapting its practices.</p>	

<b>Edition</b>	September/October 2011
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>New EnviroVeg Manual release p 34</li> <li>EnviroVeg Committee meeting p 34</li> <li>Benefits of on-farm windbreaks and shelterbelts p 35</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>Mr Phil Lamattina</li> </ul>
<p><b>Summary:</b></p> <p>The 'EnviroNews' articles featured the release of the New EnviroVeg Manual and recent EnviroVeg Committee to update growers. An additional article on benefits of on-farm windbreaks and shelterbelts provided practical advice on establishing plants as protection against soil loss among other benefits.</p> <p>The EnviroVeg Case study profiled Wemen-based carrot grower Mr Phil Lamattina. The article examined how planning the crop nutritional requirements from sowing to harvest, helps the Lamattinas to both ensure a quality crop and ensure responsible application of nutrients and chemicals. The article looks at the unique challenges facing growers producing root crops, as well as the specific local conditions in the Murray district of Victoria.</p>	

<b>Edition</b>	November/December 2011
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• EnviroVeg Committee meets to discuss current environmental concerns p 34</li> <li>• New South Wales primary school to start building Bushtucker Garden p 34</li> <li>• Breakthrough sustainable technology to increase energy produced by plants p 35</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mr Glen Favero pp 36-37</li> </ul>
<p><b>Summary:</b>  The ‘EnviroNews’ articles included an update on the recent EnviroVeg Committee meeting held in Devonport Tasmania on 6 October and release of the new EnviroVeg Manual. An article on a sustainability initiative in NSW schools showed how environmentally friendly growing activities are being promoted in education institutions. The final article covered the development of biofuel technology in the US and the potential for growers to turn crop waste into fuel.</p> <p>The EnviroVeg Case Study profiled Cranbourne grower Mr Glen Favero. In particular, the article examined the use of crop rotations and how Mr Favero used EnviroVeg as a tool to assist with business planning.</p>	

<b>Edition</b>	January/February 2012
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• EnviroVeg Update p 34</li> <li>• Water conservation p 34</li> <li>• Saving energy p 35</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mr Peter Schreurs pp 37-39</li> </ul>
<p><b>Summary:</b>  The ‘EnviroNews’ articles included an update on how the EnviroVeg Program can help growers to manage the rising costs of farm inputs, and information about water management on-farm. An article on saving energy also encouraged growers to use EnviroVeg as a tool to regularly review consumption.</p> <p>The EnviroVeg Case study profiled Mornington Peninsula grower Mr Peter Schreurs. The article details multiple environmental initiatives in place on Mr Schreur’s property, with particular focus on his innovative approach to Integrated Pest Management (IPM). This article examined the challenges in implementing IPM in a modern g growing operation and provided insights to growers looking to learn more about the practice.</p>	

<b>Edition</b>	March/April 2012
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• Rooftop farming future for Big Apple p 39</li> <li>• EnviroVeg info session p 39</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mr Graeme Pitchford, Pitchford Produce</li> </ul>
<p><b>Summary:</b>  The ‘EnviroNews’ articles on this edition contained an interesting article from New York, where rooftop, open and hydroponic farming has been proven to have significant potential. Selected to tie in with the fact that this edition was an ‘Innovation Special’, the article provides an interesting vision of what is possible in the near future. The other article provides a recap on recent EnviroVeg information sessions as well as details about upcoming events.</p>	

The EnviroVeg Case study profiled South Australian grower Graeme Pitchford. The article told the story of the challenges Mr Pitchford faced in turning cattle grazing land into a profitable and sustainable vegetable farm. In particular, the article focussed on the importance of soil management and water management in sandy soils, as well as detailing Mr Pitchford's work in restoring biodiversity corridors on the property.

<b>Edition</b>	May/June 2012
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• Report reinforces sustainable standards p 36</li> <li>• Saving fuel on the farm p 36</li> <li>• Tips for completing your annual self assessment p 37</li> <li>• EnviroVeg on the road p 37</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mrs Belinda Adams, Coastal Hydroponics pp 38-39</li> </ul>
<b>Summary:</b>	
<p>'EnviroNews' articles in this edition featured a report by global consultancy firm Ernst and Young, which highlights the importance of environmental performance in modern companies. The article served to inform growers of the increasing market demand for sustainable products and marketing opportunities presented by the rise of environmental consciousness in the business community. An article on saving fuel on the farm contained a number of simple tips for growers to cut fuel use, while an article on the EnviroVeg self assessment reminded growers to submit their assessment for the year. The final article outlined the recent activities and information sessions held as part of the Program.</p> <p>The EnviroVeg Case Study profiled new Queensland EnviroVeg Committee representative Belinda Adams. As a new angle, the article examined environmental management in hydroponic operations and initiatives put in place at Belinda's family operation on the Gold Coast. In particular, the article covered energy management, fertigation management and nutrient use on plants.</p>	

<b>Edition</b>	July/August 2012
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• Israeli scientist wins World Food Prize for drip irrigation research p 36</li> <li>• Era of cheap water over: Deloitte p 36</li> <li>• World Environment Day: spotlight on need for sustainable agriculture p 37</li> <li>• Grower grants to help tame tax p 37</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mrs Tina Lamattina, Lamattina Group pp 38-39</li> </ul>
<b>Summary:</b>	
<p>The 'EnviroNews' articles in this edition focussed on water security as well as the development of new techniques to ensure its efficient use in growing operations. The article about the World Food Prize focussed on the ground breaking research into drip irrigation in Israel as an example to Australian growers of the possibilities of this new technology. The second article used World Environment Day as an opportunity to reflect on the important role growers play as custodians of the land. The article also connects growers with the AUSVEG R&amp;D database as a way to access latest environmental research which can be applied on their properties. The third article outlines a report by global management consultancy Deloitte which predicts global water pressures in the future, reinforcing the need for growers to invest now to grow more with less. The articles were presented</p>	

to show the pressures on modern growing operations and emphasised the need for investment in water management technology to improve the efficient use of this vital resource. The final article informed growers who also process vegetables about energy efficiency grants available under the Australian Government's Food and Foundries Program.

The EnviroVeg Case Study profiled prominent Mornington Peninsula grower Tina Lamattina. The article examined environmental practices within one of Australia's largest and most successful growing operations. The article looks into areas such as equipment management to minimise fuel use and use of green manure crop rotations. As a leader within the industry, the efforts of the Lamattina Group serve as inspiration to other growers.

<b>Edition</b>	September/October 2012
<b>EnviroNews articles</b>	<ul style="list-style-type: none"> <li>• New EnviroVeg website: a guide for growers pp 36-37</li> <li>• New regional guides for EnviroVeg members p 37</li> </ul>
<b>EnviroVeg Case Study</b>	<ul style="list-style-type: none"> <li>• Mr Kim Martin, Frais Farms pp 39-41</li> </ul>
<b>Summary:</b>	
<p>'EnviroNews' articles in this edition focussed on the launch of the EnviroVeg website and recent release of regional EnviroVeg guides for members. The article on the website presented the exciting new features available to growers and encouraged them to sign up and use the site. The article on the regional guides provided a summary of the guides and their benefits to growers to encourage growers to access the new resources.</p> <p>The EnviroVeg Case Study profiled Bairnsdale grower Kim Martin and his business Frais Farms. The article focussed on particular challenges of growing on the Lindenow flats of East Gippsland Victoria and how Mr Martin has overcome them. This case study had a local angle to show growers how leading growers like Frais Farms were innovating and adapting to specific local conditions. The key message was that constant monitoring of the environment allows growers to quickly adapt their practices when issues like water availability change.</p>	

## **EnviroNews**

# Israeli scientist wins World Food Prize for drip irrigation research



Leading Israeli irrigation expert, Daniel Hillel, has been awarded the World Food Prize for pioneering work with 'Micro-Irrigation' technology.

Israeli irrigation expert Dr Daniel Hillel has been granted the World Food Prize for his innovative approach to dry land drip irrigation techniques in emerging nations. Working in a number of arid environments in the Middle East and Africa, Dr Hillel was a pioneer of 'Micro-Irrigation' - a drip irrigation technique which ensures that plants only receive the water they need to survive. The technique allows crops to be grown in environments with limited access to water, and has been revolutionary in contributing towards food security in environments such as sub-Saharan Africa. With Australian growers facing concerns over water access, innovations in drip irrigation have the potential to allow growers to produce more food with less input of water. When announcing the winner, World Food Prize Foundation President

and former US Ambassador to Cambodia, Mr Kenneth M. Quinn, emphasised not only Hillel's scientific achievement, but also his dedication to working across borders to increase food. US Secretary of State, Ms Hillary Clinton, was also on hand to congratulate Dr Hillel on his life-long contribution to agriculture.

The World Food Prize is the foremost international award recognising the achievements of individuals who have advanced human development by improving the quality, quantity or availability of food in the world.

Israel continues to be a global leader in the field of irrigation, especially in arid or semi-arid environments. In recognition of this fact, AUSVEG actively promotes its strong ties with Israel to ensure that Australian growers continue to benefit from knowledge sharing opportunities. This has included

a recent international visit to Israel by AUSVEG's National Marketing Manager, Simon Coburn, where he attended the Agritech Exhibition, met with Israeli dignitaries and promoted the local vegetable industry. In addition, AUSVEG has established a strategic partnership with NETA-FIM - a world leader in water conserving irrigation technology to establish connections and opportunities for Australian growers to pursue water saving technologies. The need to grow more with less is a familiar concept to Australian growers, who share many of the challenges faced by their Israeli counterparts. With access to secure supplies of water an ongoing issue for Australian farmers, the continued innovation in irrigation will be pivotal to ensuring Australia has a sustainable supply of food into the future.

## Era of cheap water over: Deloitte

A new report by Deloitte predicts global competition for water to further drive up prices, emphasising the need for growers to continue to innovate and grow more with less.

In its recent report, *Water Tight 2012*, global consultancy Deloitte argues that global water resources are expected to come under increasing pressure due to predicted population growth. The report predicts that existing resources will come under pressure to the extent where countries will have water trading agreements in place to support their populations. The report includes an estimation by scientists that 50 per cent of globally accessible and renewable water is used each year, with that figure set to increase as the global population rises to an estimated 9.4 billion people by 2050. The report estimates that increased pressure on companies to manage risk will lead to more sophisticated water markets and predicts an increase in the price of water globally over the coming years.

To access the full report, visit: [deloitte.com](http://deloitte.com)



# Growing the Lamattina legacy

With a focus on the long-term sustainability of their land and the winner of the 2012 AUSVEG 'Women in Horticulture' award at the helm, the legacy of the Lamattina family is secure for future generations to come, writes Jordan Brooke-Barnett.

Photographs by James Vincent

Environmental management is playing an essential role in helping to secure the long-term success of the Lamattina Group, so that the land can be passed on through the generations. On visiting the Lamattina farm in Boneo, Victoria, it is clear that the property is home to a thriving and modern business, with contemporary office facilities and neat, hedge-lined paddocks. Farming has evolved into a large-scale business for the Lamattinas, and it is through their skill that they have been able to grow into the 3,600 hectare operation of today.

A true family business, the Lamattina Group is operated and managed by Russell and Tina Lamattina and their six children, Angelo, Dominic, Josephine, Russell Jnr, Robert and Anthony. Tina Lamattina's involvement in the Australian vegetable industry was recently recognised with the 'Women in Horticulture' award at the recent 2012 AUSVEG National Convention, Trade Show and Awards for Excellence.

AUSVEG Chairman John Brent said that the award was in recognition of Tina Lamattina's success in handling the administrative, accounting, quality assurance and environmental aspects of the Lamattina Group, which

produces approximately a million tonnes of fresh produce each year. In her role with the business, Tina Lamattina oversees many of the management functions relating to the business and sees issues relating to environmental sustainability as being significant to the future of the business. Environmental management,

chemicals. Russell Lamattina emphasises the importance of exploring innovative approaches to dealing with pests and diseases.

"When we came here 25 years ago and started gardening, we looked at the industry to see what good wholesome crops we could grow that households use."

“ For us, a key motivation is sustainability. We need to be able to hand this property down to our children and grandchildren. ”

It appears, has been assimilated into the everyday operations of the business. Continuous crop rotations ensure that plants are disease resistant, and use of cover crops and green manures in between plantings help to build organic matter in the soil. Mustards, in particular, are valued for their properties as a biofumigant to protect against nematodes and other pests, minimising reliance on

In growing five to six key lines, the Lamattinas are able to continuously rotate between crops, with an average plant rotating between blocks on two year cycles.

Tina Lamattina is always conscious of the need to ensure that activities not only deliver short-term gains, but contribute to the longer-term sustainability of their land.

"For us, a key motivation

is sustainability. We need to be able to hand this property down to our children and grandchildren, so it is extremely important that we look after the soil and leave it in the best possible condition for them."

Water security is an ongoing concern in ensuring the business is viable into the future, so efficient use is a priority for the Lamattinas. "We use tension meters to make sure we don't overwater any of the crops, because overwatering is of no value," says Tina Lamattina.

In a vegetable property the scale of the Lamattinas', the implementation of sophisticated technology is essential to monitor use across the large volumes of crops.

"We've got a computer program which works out the moisture levels and whether irrigation has been effective or not."

With water such a precious resource, this also extends to recycling water after it has been applied to a crop.

"At both our properties, we recycle all of the water we use and have subsurface drainage to harness any runoff from the water we irrigate with," says Tina Lamattina.

Conscious of the need to be a good neighbour, the Lamattinas



Russell and Tina Lamattina.

## Appendix 6: External meetings and workshops attended

External meetings were important to ensure the ongoing professional development of staff responsible for delivering EnviroVeg, to build networks within the industry and stay informed about current environmental issues. The following table outlines the major meetings and workshops attended by the Environment Coordinator throughout the Program.

No.	Meeting	Date	Benefit
1.	Image Media training <i>Sydney, New South Wales</i>	29-30 June 2010	Ensured Environment Coordinator trained to be a media spokesperson for the Program.
2.	VGA Victoria Industry Development Night <i>Lindenow, Victoria</i>	7 July 2010	Opportunity to build networks with East Gippsland growers.
3.	Australian Quarantine and Inspection Service Workshop on <i>User Requirements for Future Post Entry Quarantine Arrangements.</i> <i>Canberra, Australian Capital Territory</i>	22 September 2010	Information on future quarantine arrangements and possible implications for growers.
4.	Department of Primary Industries Victoria Science Awards <i>Melbourne, Victoria</i>	5 October 2010	Opportunity to network with Victorian R&D experts and source potential speakers for information sessions.
5.	Carbon Farming Conference, hosted by Carbon Farmers Australia. <i>Dubbo, New South Wales</i>	27-28 October 2010	Information gathered on various carbon farming schemes and their potential for horticulture.
6.	The Climate Change Research Strategy for Primary Industries (CCRSPI) Conference. <i>Melbourne, Victoria</i>	15-17 February 2011	Network with leading scientists, policy makers, industry representatives and producers interested in carbon farming.
7.	Meetings with Dr Doris Blaesing of RMCG Consulting (EnviroVeg Committee member). <i>Tasmania</i>	August 2011	Opportunity to gather intelligence on growing conditions and the industry in Tasmania to assist with promoting EnviroVeg.
8.	Meeting with Ms Hannah Sadler, Land Management Coordinator at NRM Cradle Coast. <i>Tasmania</i>	August 2011	The Environment Coordinator was able to determine ways that AUSVEG could work together with the NRM body to improve environmental practices in Tasmania.  The Environment Coordinator was provided with an opportunity to write an article to appear in the Cradle Coast NRM Newsletter.



9.	Meeting with Mr Andrew Craigie, Chair of the TFGA Vegetable Committee.  <i>LaTrobe, Tasmania</i>	August 2011	As a prominent grower, Mr Craigie has provided ongoing support for EnviroVeg and assisted AUSVEG greatly in promoting the Program with Tasmanian Growers.
10.	Meeting with Mr Mark Kable, Agricultural Director at Harvest Moon and Ms Lisa Broaden, Quality Control Manager.  <i>Forth, Tasmania</i>	August 2011	Gathered valuable feedback on the Program from one of Australia's largest growing operations.
11.	Meeting with Mr Michael Ruffels, Agvita Analytical.  <i>Devonport, Tasmania</i>	August 2011	Agvita have been a strong ongoing supporter of EnviroVeg through their networks with agronomists.
12.	Meeting with Mr Graham Palmer, Executive Director of Serv-Ag.  <i>Tasmania</i>	August 2011	Serv-Ag offered to promote the Program through network of agronomists.
13.	Meeting with Ms Tundra Howe, Manager of Training TQA Australia.  <i>Tasmania</i>	August 2011	Offer for TQA Australia to work with growers to implement EnviroVeg on their properties.
14.	Meeting with Ms Helena Whitman, Hort Ag Consultancies.  <i>Victoria</i>	September 2011	Environment Coordinator working with Helena Whitman to conduct 2 <sup>nd</sup> party audits for the EnviroVeg Program.
15.	Meeting with Clinton McGrath, Department of Employment, Economic Development and Innovation.  <i>Gatton, Queensland</i>	September 2011	Developed networks within the Queensland Research and Development sector.
16.	Meeting with Mr Leroy Manskie, Branch Manager at Landmark Bundaberg and Mr Mark Lynch, Sales & Merchandise Manager at Landmark Bundaberg.  <i>Bundaberg, Queensland</i>	September 2011	Developed networks with key industry suppliers to help promote the Program through these channels.
17.	Meeting with Mr Peter Hockings, Acting Chief Executive Officer of the Bundaberg Fruit and Vegetable Growers' Association; Mr John Bagshaw, DEEDI; and Mr Robert Doyle,	September 2011	Developed networks within Bundaberg horticultural sector to assist in promoting EnviroVeg with local vegetable growers.

	Growcom in Bundaberg. <i>Bundaberg, Queensland</i>		
18.	Meeting with Ms Kate Peake, Executive Officer of the Northern Territory Horticultural Association (NTHA). <i>Darwin, Northern Territory</i>	October 2011	Environment Coordinator gained insight into the vegetable industry in the Northern Territory.
19.	Meeting with Mr Stuart Smith, Senior Research Officer, Northern Territory Government. <i>Darwin, Northern Territory</i>	October 2011	Environment Coordinator was introduced to local growers to sign up to EnviroVeg.
20.	Meeting with Mr Peter Johnson, Account Manager at Landmark Darwin. <i>Darwin, Northern Territory</i>	October 2011	Explored opportunities to promote EnviroVeg through local Landmark agronomists.
21.	Meeting with Ms Lauren Cunningham, Merchandise Sales at Elders Darwin. <i>Darwin, Northern Territory</i>	October 2011	Explored opportunities to promote EnviroVeg through local Elders agronomists.
22.	Image Media Training <i>Sydney, New South Wales</i>	12-13 December 2011	Ensured Environment Coordinator trained to be a media spokesperson for the Program.
23.	Meeting with Mr David Anderson, Chairman of the EnviroVeg Committee	12 March 2012	Ensured Chairman was briefed on Program activities as well as key Program milestones.
24.	Attendance at community stablefly event in Western Australia.	12 March 2012	Environment Coordinator kept abreast of local issues regarding grower waste management.
25.	Meeting with Mrs Belinda Adams, newly-appointed Queensland Representative on the EnviroVeg Committee. <i>Gold Coast, Queensland.</i>	29 March 2012	Briefed Mrs Adams on the role of the EnviroVeg Committee, as well as recent discussions.
26.	Meeting with the Chairman of Outcomes Australia, former Governor-General of the Commonwealth of Australia Major General Michael Jeffery AC AO (Mil) CVO MC (Retd). <i>Melbourne, Victoria</i>	4 July 2012	Discussed national land management priorities and provided a horticultural perspective. Facilitated cooperation between Outcomes Australia and AUSVEG on land management issues.
27.	Hydroponic Farmers' Federation Conference 2012 <i>Ballarat, Victoria</i>	18-20 July 2012	Exhibited in the trade show. Met a number of hydroponic growers and suppliers and signed up 4 growers to the Program.

			Other benefit was achieving greater awareness of the Program with hydroponic growers.
<b>28.</b>	HAL Industry Development Forum 2012  <i>Melbourne, Victoria</i>	8-9 August 2012	Opportunity to network with extension professionals from other industries within horticulture.  Professional development opportunity.
<b>29.</b>	Meeting with new South Australian EnviroVeg Committee member Mr Graeme Pitchford.  <i>Currency Creek, South Australia</i>	10 September 2012	Briefed Mr Pitchford on recent events concerning the Program and informed him of arrangements for upcoming meetings.

## **Appendix 7: AUSVEG Environment Strategy**

The AUSVEG Environment Strategy was a strategic planning document prepared to help set the direction for the EnviroVeg Program in the current project period. After significant time spent investing in the Program resources, additional emphasis was placed on effectively communicating with members and promoting the program to encourage greater membership.

AUSVEG has been able to achieve significant growth in the Program by following the direction set out in the Strategy. The full text is included below for reference as an appendix to this report.



## **AUSVEG Environmental Strategy 2010-2012**

### **Overview:**

AUSVEG is the National Peak Industry Body representing the interests of vegetable growers across Australia. A key responsibility for AUSVEG is to provide leadership and direction on issues of importance for the vegetable industry.

Sound environmental management and sustainable vegetable production are very important for growers. In times of drought debates about access to water intensify as a result of declining water quantity and quality and environmental health in many of our agricultural regions. The environment is now legally recognised as a legitimate user of water, and this means that vegetable growers need to continue to manage the impacts of fluctuating water supplies for production, as well as being able to demonstrate the efficient and responsible use of water on-farm. In addition, all regions of Australia are setting targets for environmental outcomes, and the vegetable industry is doing its part through participation in environmental programs such as the EnviroVeg Program.

Other factors such as soil health, vegetation management, waste management and energy use are paramount to vegetable production. The vegetable industry is vulnerable to changes in rainfall and temperature that impact on plant growth, pest and disease risk, product quality and industry location.

Consumers and retailers are more aware than ever before of the impacts agriculture and industry have on the environment. Vegetable growers must be able to maximise their

productivity, yet at the same time continue to demonstrate the sustainable use of the land and water resources on their farms.

The vegetable industry will continue to meet consumer expectations, and the strength of the industry's product is that eating vegetables is good for human health. An increasing number of consumers now want to know that not only are they eating a product that is good for them, but also that the product has been grown sustainably.

AUSVEG's Environment Strategy is set within this context, and aligns with both the *Vegvision 2020 Strategic Plan* and *Horticulture Australia's Environmental Portfolio Strategy* and *Natural Resources Management Strategy*.

### Sustainable Vegetable Production:

Sustainable vegetable production is a competitive and efficient way to produce safe products, while at the same time protecting and improving the natural environment

The key question to be answered is how to optimise and balance the different aspects of sustainable agriculture within a vegetable growing business. This question has guided the development of this Environmental Strategy.

### Environmental Strategy Components:

#### Our Vision:

*A profitable vegetable industry that is based on environmentally sustainable production.*

#### Our Objectives:

#### 1. People - Capable Growers and Thriving Communities

*Vegetable growers provided with opportunities to share knowledge, develop skills and confidence to manage their farming enterprises in a sustainable and environmentally responsible manner, adding value to regions and communities.*

Strategy 1.1: The AUSVEG EnviroVeg Committee and Environmental Coordinator highlight through the media, industry forums and support for the HAL Environment Portfolio, the

value and importance to regional communities of vegetable growers managing their businesses in environmentally sustainable ways.

Strategy 1.2: The EnviroVeg Program provides growers with information and resources about environmentally sustainable management through a range of communication outlets, including workshops, websites, *Vegetables Australia* magazine and other industry publications.

Strategy 1.3: The EnviroVeg Program develops case studies featuring vegetable growers who are managing their businesses in environmentally sustainable ways. These case studies will demonstrate to other vegetable growers and the wider community the ways in which responsible environmental management can be built into a profitable farm business.

Strategy 1.4: The EnviroVeg Program distributes a grower survey to assess the level of awareness amongst the industry about environmental issues and how the EnviroVeg Program can best support growers to improve environmental management on-farm.

Strategy 1.5: The EnviroVeg Program enables vegetable growers to access their self-assessment records on-line so that trends over time can be assessed and acted upon.

Strategy 1.6: The AUSVEG EnviroVeg Committee and Environment Coordinator explore opportunities for vegetable growers to access research about sustainable production issues (e.g. climate variability, soil health, water use efficiency). This may involve developing partnerships and applying for funding through Horticulture Australia Limited (HAL), the Department of Agriculture, Fisheries and Forestry (DAFF), Universities and industry partners.

## 2. Planet - Healthy Environments and Regional Relationships

*Vegetable growers use environmentally sustainable management practices on-farm that facilitate the connections between farm, catchment and region.*

Strategy 2.1: The EnviroVeg Program raises awareness amongst vegetable growers and Natural Resources Management Regional Bodies, about the contents of the EnviroVeg Manual and how it can be used to improve environmental outcomes on-farm.

Strategy 2.2: The EnviroVeg Program supports and promotes the value of vegetable growers becoming EnviroVeg Members and implementing the EnviroVeg Program on-farm.

Strategy 2.3: The EnviroVeg Program assists Natural Resource Management Regional Bodies to work with vegetable growers to formulate plans, targets and incentives that can be implemented on-farm to improve sustainability.

Strategy 2.4: The EnviroVeg Program consolidates relationships with Natural Resource Management Regional Bodies by demonstrating the linkages between the contents of the EnviroVeg Manual and regional targets. Where possible, the EnviroVeg Coordinator will work with Natural Resource Management Regional Bodies in consultation with State/local grower associations to tailor the EnviroVeg Manual's contents so that it directly relates to land, water and vegetation management strategies being used in particular regions.

### 3. Profit - Efficient Production and Loyal Consumers

*Vegetable growers use efficient, innovative and sustainable production approaches to deliver products and services according to consumer expectations.*

Strategy 3.1: AUSVEG EnviroVeg Committee and Environment Coordinator raise awareness about global environmental and market issues, and assist vegetable growers to access new products and services that will enable them to respond to possible demands.

Strategy 3.2: EnviroVeg Committee and Environment Coordinator explore options for certifying EnviroVeg through qualified providers as the certifying body for those vegetable growers who reach the EnviroVeg standard.

Strategy 3.3: The EnviroVeg Program provides information about new research that may assist vegetable growers to become more profitable by improving efficiency and optimising environmental outcomes.

Strategy 3.4: The EnviroVeg Program collaborates with other AUSVEG initiatives that promote to consumers the value of purchasing Australian grown, environmentally sustainable vegetables.

#### **Implementation, Outputs and Outcomes:**

The AUSVEG Environmental Strategy will be implemented over the life of the current phase of the EnviroVeg Program (2010-2012). Key outputs and outcomes that are expected to be achieved through the implementation of the strategy are as follows:

#### Outputs:

- » Increased number of EnviroVeg Members, with attention paid to increasing the overall number of hectares covered under the EnviroVeg Program
- » Increased numbers of growers achieving Environmental Assurance/certification
- » Distribution and collation of data from grower survey on awareness and use of Environmental Strategy and EnviroVeg Program
- » Number of attendees at workshops, conferences, field days and feedback evaluations
- » Use of EnviroVeg as a marketing tool and subject for articles, media opportunities and consumer promotions
- » Acceptance and endorsement by government agencies and other stakeholders such as the supply chain, of the EnviroVeg Program as a useful resource for improving environmental management on vegetable farms
- » Number of products developed and distributed, website 'hits', demand for products and attendance at events.

#### Outcomes:

- » An Environmental Strategy and EnviroVeg Program known and supported by vegetable growers and recognised by consumers, retailers, NRM Regional Bodies and the wider supply chain.
- » A possible marketing edge on exports and imports, and potential access to new markets
- » Vegetable growers are more aware of sustainable environmental management (i.e. climate variability, soil health, water use efficiency, carbon tools etc.)
- »
- » The EnviroVeg Program will have provided a conduit for research and related information generated by HAL and other industry and NRM organisations (review website, workshop content, articles etc.)

#### **Evaluation:**

The Strategy will be reviewed at the end of the project to assess progress against each of the objectives as outlined above, and to enable approaches to be refined and modified if needed.



## Appendix 8: Email communications to EnviroVeg members

AUSVEG implemented regular email communications with EnviroVeg members in late 2011 as a means of achieving greater engagement from member growers and ensuring they are kept up to date with Program announcements.

### Example of email update sent to EnviroVeg members



### New EnviroVeg Member Website

*Fill in your self assessment on line!*

EnviroVeg members can now complete their annual self-assessment online using our new website [www.enviroveg.com](http://www.enviroveg.com)

Please find your **username** and **password** for the site below.

**Username:** xxxxx

**Password:** xxxxxx

Members can enter these details into the site to access the full online features. For security reasons, when you log in for the first time we recommend you change your password.

New reporting features will provide growers with increased information to benchmark their environmental performance each year. Enhanced reports allow growers to compare performance against national and state averages, as well as with farms of a similar size or growers with the same crop type.

As always, I am available to answer any questions you have on 03 9822 0388 and I am happy to run you through the many features of [www.enviroveg.com](http://www.enviroveg.com)

Regards,

**Jordan Brooke-Barnett**

Environment Coordinator



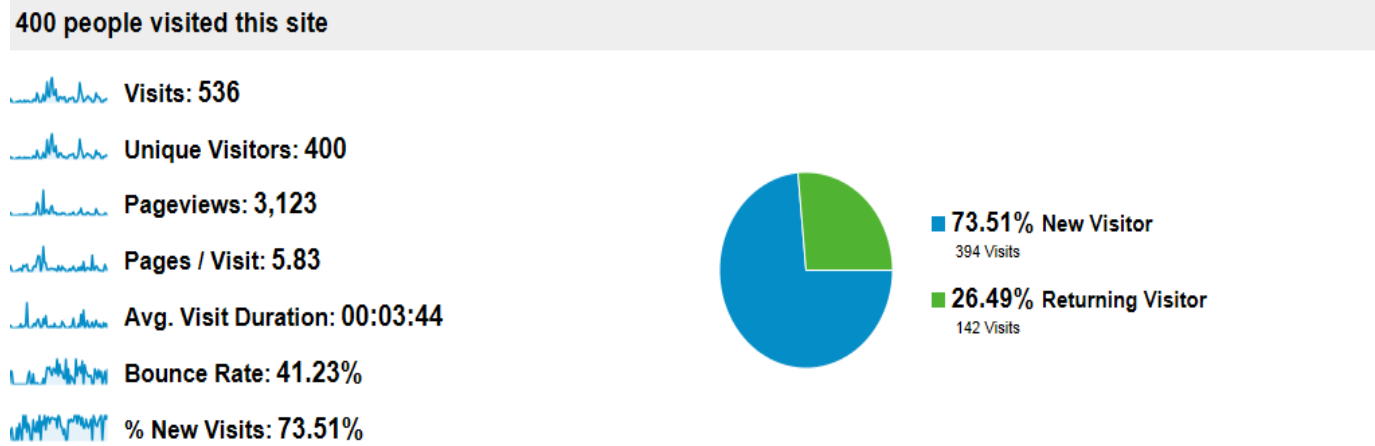
Suite 1, 431 Burke Road, Glen Iris, Vic, 3146 | PO Box 2042, Camberwell West, Vic, 3124

T: 03 9822 0388 | F: 03 9822 0688 | M: 0404 772 308 | E: [jordan.brooke-barnett@ausveg.com.au](mailto:jordan.brooke-barnett@ausveg.com.au)

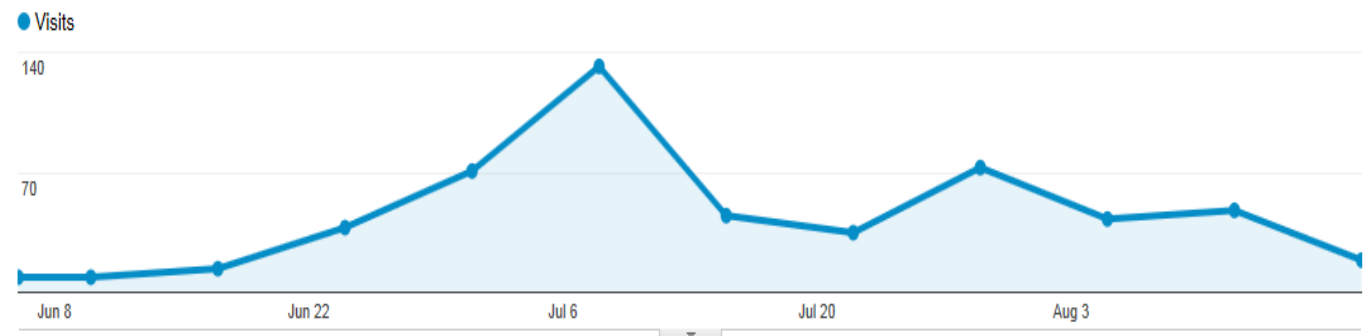
## Appendix 9: EnviroVeg website analytics

The below appendix outlines key website analytics since the launch of the EnviroVeg website.

**Figure 4:** Total number of visitors to [www.enviroveg.com](http://www.enviroveg.com) since launch



**Figure 5:** Website traffic by week since launch



# **EnviroVeg Communication and Promotion Strategy**

Prepared by AUSVEG

---

**April 2011 – September 2012**

## Executive Summary

EnviroVeg is the vegetable industry's own national environmental management program. The program is owned by the industry—funded by the National Vegetable Levy with matched funding from the Australian Government—and is targeted at Australian vegetable growers.

The EnviroVeg Program encourages growers to demonstrate to the community, the consumer, and the broader industry that they are taking a proactive approach in adopting best practices in relation to on-farm environmental management.

Environmental management on vegetable farms is a vital component of sustainable farming and has been shown to aid in profitability. In the next phase of the EnviroVeg Program, opportunities to further enhance the marketing edge available through demonstrating sound environmental management will be considered.

Sound environmental management on-farm has an influence which cuts across a range of key environmental issues including those of: pest and disease prevalence, agricultural chemical use, water use efficiency, soil degradation and soil health, biodiversity, waste/pollution, and energy use, amongst others. These are not only environmental concerns, but are also key concerns for vegetable growing businesses in their everyday operations.

Horticulture Australia Limited's final report under the *Horticulture for Tomorrow* program recommended that a communication strategy to promote the environmental credentials of horticulture to the broader community be developed. While the focus of the EnviroVeg Program is solely on the vegetables sector, the program has been developed on the basis of this core ongoing requirement to promote positive environmental practices within the vegetable industry and assist growers in communicating this to the broader community, including consumers.

There are a number of communications channels which are utilised as part of EnviroVeg to communicate with members of the program, the broader growing community, as well as external stakeholders.

At the core of the EnviroVeg Program is the official EnviroVeg Manual, which acts as a key hard-copy information resource to promote the fundamental principles which underscore the program. The manual includes information on many of the practices required for responsible environmental management and acts as a learning and information resource that growers can use in improving their farms' environmental standing Australia-wide. It is also available to members of the program electronically.

The growers' ultimate success, however, in implementing environmental management principles outlined in the manual, is measured as part of the annual EnviroVeg Self-Assessment, which directly relates to each element of the manual.

To evaluate the effectiveness of the current approach to communications and make sure it is on track, an internet, direct mail and telephone-based survey of vegetable growers and existing members was conducted in February 2011. The results indicated that the communication tools and strategies already being implemented had made a positive difference in creating greater awareness, whilst highlighting further opportunities to expand and increase the uptake of the program.

This EnviroVeg Communication Strategy is a continuation and formalisation of the work already being undertaken that includes email correspondence, industry case studies and good news stories through *Vegetables Australia* magazine, the AUSVEG website, EnviroVeg seminars, external meetings and other presentations and publications. A case study booklet is planned for the end of 2011 and it will feature a number of different growers from locations across Australia discussing the challenges and solutions they have encountered on-farm in regards to the environment.

As stewards of the land, vegetable growers are dependent on the environment for their livelihoods. With a variety of stakeholders and audiences to reach who've each been affected by environmental management in different ways, the EnviroVeg Communication and Promotion Strategy must be clear and concise in order to facilitate, capture and communicate a broad range of different types of environmental knowledge and expertise from within and outside of the Australian vegetable industry.

## **Situation Analysis and Grower Survey Results**

In order to measure and evaluate the success of the EnviroVeg Program in raising awareness about environmental management issues and to assess the general awareness and adoption of the EnviroVeg Program itself, AUSVEG conducted a grower survey in February/March 2011.

This data will be used to further refine the program in the future, and it provides an important evaluation tool. The results show that the communication strategy employed by AUSVEG and formalised in this document, is having a positive influence on the awareness of sound environmental management practices, through published case studies, EnviroVeg seminars, media coverage and more regular communication with members.

The following is a summary of results from the "*Environmental Management in the Vegetable Industry*", distributed to growers via the AUSVEG Weekly Update and by direct mail to all members of the EnviroVeg program in February/March 2011. 50 responses to the survey from around Australia were recorded.

### **Survey**

#### ***Summary of Results***

##### **"Are you aware of programs or initiatives that seek to improve environmental management?"**

- 60% of the survey respondents answered 'yes' to this question while 40% answered 'no.'

##### **"Are you aware of your local Natural Resource Management (NRM) body?"**

- 53.1% of the survey respondents answered 'yes' to this question while 46.9% answered 'no.'

##### **"Are you aware of the plans and priorities of your local NRM body?"**

- 53.8% of the survey respondents answered 'yes' to this question while 46.2% answered 'no.'

##### **"Do you read the EnviroNews section of the *Vegetables Australia* magazine?"**

- 66.7% of the survey respondents answered 'yes' to this question while 27.1% answered 'no'. 6.3% said they were not subscribers to *Vegetables Australia*.

**“What importance do you place on environmental management?”**

- 34.7% of the survey respondents answered that they placed a 'very high' importance on environmental management, while 40.8% answered 'high', 20.4% answered 'moderate' and 4.1% answered 'none'.

**“What are the five most important environmental issues on your farm?”**

- The top five ranked issues on-farm according to survey respondents were as follows:
  - 1) Pest and Disease Management.
  - 2) Chemical & Fertiliser Use.
  - 3) Soil Health Management.
  - Water Quality Management.

*\*\* equal third*

- 5) Access to Water.

**“Were you previously aware of AUSVEG's EnviroVeg Program?”**

- 95.9% of the survey respondents answered 'yes' to this question while 4.1% answered 'no.'

**“Are you currently a member of the EnviroVeg Program?”**

- 89.4% of the survey respondents answered 'yes' to this question while 10.6% answered 'no.'

**“Have you utilised the EnviroVeg annual Self Assessment checklist?”**

- This question was only asked of those respondents who answered that they were a member of the EnviroVeg Program. 71.4% of the survey respondents answered 'yes' to this question while 28.6% answered 'no.'

**“Would you like to be contacted to receive more information about the EnviroVeg Program?”**

- 71.4% of the survey respondents answered 'yes' to this question while 28.6% answered 'no.'

**“Were you previously aware of AUSVEG's Environmental Strategy for the Vegetable Industry?”**

- 40.8% of the survey respondents answered 'yes' to this question while 59.2% answered 'no.'

**“Do you believe that there is a marketing opportunity for growers that can demonstrate to consumers they are growing in an environmentally friendly way?”**

- 66% of the survey respondents answered 'yes' to this question while 34% answered 'no.'

Over 75% of respondents indicated that environmental management was either of high or very high importance to them, indicating that there is indeed a need and requirement for a program such as EnviroVeg.

Respondents also identified that there is significant scope to enhance marketing benefits for those who demonstrate excellent environmental practices, with 66% of respondents answering that they felt there was a marketing opportunity available for growers who could communicate the benefits of good environmental practices to the consumer.

Readership of the EnviroVeg reports and case studies published through *Vegetables Australia* was high, with 66.7% of respondents reading the section. 90% of the respondents were aware of the EnviroVeg Program.

Awareness of NRM regional bodies was 53.1%, indicating that there is significant scope to provide further information about NRM activities

Key areas of interest or concern identified through the reader surveys included:

- Long-term sustainability.
- Costs.
- Demonstrating to the public that growers are conscientious and responsible operators.
- Soil erosion and soil health.
- Need for further on-farm assistance.
- More workshops.

## Target Audiences

### Internal

- AUSVEG EnviroVeg Committee.
- Horticulture Australia Ltd (HAL).
- AUSVEG Board.
- AUSVEG staff.
- State vegetable grower associations (Executive Officers and vegetable committees).

### External

- Members of the EnviroVeg Program.
- Vegetable levy payers.
- Levy-funded research service providers in the area of the environment.
- Local Natural Resource Management bodies.
- Supply-chain.
- Environmental groups.
- Consumers.
- Media.
- Australian Federal Government.
- State governments.

## Problems/Opportunities

While awareness of the EnviroVeg Program is high, as demonstrated by the grower survey, we need to better communicate the benefits and resources available to EnviroVeg Members in order to increase adoption. This will result in better awareness of the practices EnviroVeg is trying to

promote. In due course, it is hoped this will result in direct commercial benefit for those growers who adopt the program, through recognition of the program with retailers and more directly with those consumers who're interested in consuming food that has been grown sustainably and with the best environmental practices front-of-mind.

While other environmental management programs are currently available to growers, a number of these programs are also in their infancy and have relatively low membership uptake, which presents EnviroVeg with a unique opportunity to capture a larger share of the market. As the EnviroVeg Program is credited as the industry's own program and is managed by the National Peak Industry Body, it has the backing and support of growers and the Industry Advisory Committee.

The number of registered members of the EnviroVeg program relative to the overall number of growers we know are active in implementing positive environmental practices within the industry highlights another opportunity to further increase membership of the program and enhance, build and benchmark those practices already being implemented across the broader industry.

There is an opportunity to make the current EnviroVeg resources more easily accessible online and the capacity will shortly be developed to compare self-assessment results across commodity types and regions. The current EnviroVeg website can be greatly improved and this will be beneficial in benchmarking the success of the EnviroVeg Program in improving environmental awareness and practices across Australia.

The consistent implementation and communication of positive environmental management messages concerning practices is important. While the fragmented nature of the vegetable industry represents the largest challenge in terms of implementing a successful communication and promotions strategy, AUSVEG is committed to ensuring a wide variety of communication channels are utilised to communicate the EnviroVeg message to growers, including online, print, through media and through face-to-face communication at seminars and workshops.

There is an opportunity to promote the AUSVEG EnviroVeg Program in conjunction with other ongoing R&D developments and outcomes, industry issues, and professional development opportunities including events, tours, and workshops. Past *Vegetables Australia* reader surveys on the topic of EnviroVeg indicated that further information on the major environmental concerns would be well-received by growers. The planned development of a new quarterly *EnviroVeg Newsletter*, specifically targeted at members, presents an opportunity to achieve this.

## **Goals/Objectives**

### **Internal**

- To improve communication with members of the EnviroVeg Program.

### **External -grower**

- To increase industry awareness of the EnviroVeg Program and promote access to resources enabling improved environmental management across the industry.
- To increase the frequency and quality of the communication that the EnviroVeg Program produces, in order to provide growers with relevant information on environmental matters on a more regular basis.
- To increase the use of the EnviroVeg website, hosted via the AUSVEG website.



### External – Other

- Improve the EnviroVeg Programs public profile and create greater awareness of the program with consumers.
- Improve retailer, NRM body, and government support for the EnviroVeg Program and its goals.
- Gain recognition of the EnviroVeg Program with retailers.

### Key Messages

It is critical that messages about environmental management remain clear and are highly accessible to growers i.e. understandable. The resources available through the EnviroVeg Program, such as the EnviroVeg Manual and the Healthy Soils Ute Guide are currently being re-developed in order to update the existing information available to growers and simplify and further target the key messages for the vegetable growing audience.

The following environmental messages are important:

- The EnviroVeg Program is the industry's own environmental program, and was designed by growers and incorporates growers' feedback from an industry-based committee.
- All vegetable levy payers have the opportunity to provide feedback and input into how they think the EnviroVeg Program can provide benefits to them.
- Excellence in environmental management can result in improved profitability for growers and cost savings due to enhanced practices in areas including soil health, disease management and water use.
- Growers are fantastic stewards of the land and the environment as they rely on the land for their livelihoods. Growers employ responsible and conscientious practices in operating their businesses and consumers can feel confident that the vegetable industry is at the forefront in implementing first-class sustainable farming methods.

### Internal Communication

Strategy	Responsibility	Timing
Distribute all media releases to the EnviroVeg Committee, EnviroVeg Members and AUSVEG staff.	AUSVEG	Ongoing
Establish, clearly define and communicate grower feedback mechanisms for input into the EnviroVeg Program, including: <ul style="list-style-type: none"><li>• Promote EnviroVeg seminars/workshops.</li><li>• Promote and rotate grower representation on the EnviroVeg Committee.</li></ul>	AUSVEG Environment Coordinator	Ongoing
Ensure the EnviroVeg Committee is briefed on the Communication and Promotion Strategy and the broader	AUSVEG Environment	April 2011,

Environmental Strategy and liaise with the committee to progress the key items outlined within these documents in the most appropriate and effective way.	Coordinator	Ongoing
Ensure grower feedback is delivered to the appropriate people/organisations internally, and give feedback to growers regarding how their suggestions were adopted (e.g. through the website, newsletter and magazine).	AUSVEG	Ongoing

## **Corporate Communication**

### **Publications**

<b>Strategy</b>	<b>Responsibility</b>	<b>Timing</b>
<p><i>Vegetables Australia</i> magazine:</p> <ul style="list-style-type: none"> <li>• Continue to publish relevant case studies about environmental management on-farm.</li> <li>• Increase relevance of EnviroNews in relation to novel environmental practices, issues and policy matters, as well as funding opportunities and events.</li> <li>• Incorporate more specific details of practices currently being implemented on other growers' farms so this can be used as a ready resource.</li> <li>• Promote further opportunities for feedback on the EnviroVeg Program and grower involvement.</li> </ul>	AUSVEG Environment Coordinator	Bi-monthly

### **Events**

<b>Strategy</b>	<b>Responsibility</b>	<b>Timing</b>
<p>EnviroVeg Seminars/Workshops</p> <ul style="list-style-type: none"> <li>• Deliver regular themed workshops and seminars in accordance with the Environmental Strategy and EnviroVeg contractual arrangements.</li> <li>• Facilitate keynote presentations by expert speakers on relevant environmental issues, including soil health.</li> </ul>	AUSVEG Environment Coordinator	Ongoing

<ul style="list-style-type: none"> <li>• Increase membership to EnviroVeg Program and communicate the benefits of the program directly to growers.</li> <li>• Provide greater engagement along the supply-chain and with other stakeholders by involving supply-chain partners and state government representatives.</li> </ul>		
<p>National Awards for Excellence</p> <ul style="list-style-type: none"> <li>• Creation of Environment Award to recognise excellence in environmental management.</li> <li>• Promote attendance at awards night as key networking opportunity.</li> <li>• Maintain sponsorship so award is self-funding.</li> <li>• Build awareness of Environment Award within the industry to ensure increasing number of nominations.</li> <li>• Promote Environment Award winner to the industry, EnviroVeg Members, and the broader community via the media and existing EnviroVeg communication channels.</li> </ul>	<p>AUSVEG Environment Coordinator</p>	<p>Annual</p>
<p>AUSVEG Convention – Trade Show</p> <ul style="list-style-type: none"> <li>• EnviroVeg to have a large presence at the trade show.</li> <li>• EnviroVeg resources to be made available to growers and prospective members.</li> <li>• Environment Coordinator present to answer any questions and register new members.</li> <li>• Incorporate innovative ideas to make trade show exhibit eye-catching. E.g. incentives, entertainment or expert information and advice.</li> </ul>	<p>AUSVEG Environment Coordinator</p>	<p>Annual</p>

## Electronic Communication

Strategy	Responsibility	Timing
EnviroVeg website <ul style="list-style-type: none"> <li>• Ensure EnviroVeg website address is promoted on all EnviroVeg communication materials.</li> <li>• Include links to relevant external materials on improving environmental management such as fact sheets and events.</li> </ul>	AUSVEG	Ongoing
<i>EnviroVeg Newsletter</i> <ul style="list-style-type: none"> <li>• Deliver quarterly information and news to members of the program.</li> <li>• Provide access to and promote existing grower case studies.</li> <li>• Promote linkages on the EnviroVeg website.</li> <li>• Summarise current environment related R&amp;D and provide contact details.</li> </ul>	AUSVEG Environment Coordinator	Currently under development – distribution on a quarterly basis

## Market Research

Strategy	Responsibility	Timing
Conduct regular EnviroVeg Grower Survey to gain feedback on the program and opportunities to improve it.	AUSVEG Environment Coordinator	At least annually

## Face to Face Communication

Strategy	Responsibility	Timing
Organise and attend farm visits with members of the program, as well as prospective members.	AUSVEG Environment Coordinator	Ongoing
Attend grower and industry stakeholder meetings relating to environmental management to promote EnviroVeg and obtain information on opportunities and challenges.	AUSVEG Environment Coordinator	Ongoing

## Direct Marketing

Strategy	Responsibility	Timing
Ongoing development and maintenance of EnviroVeg membership database.	AUSVEG Environment Coordinator	Ongoing

## Media

Strategy	Responsibility	Timing
<p>Media resources</p> <ul style="list-style-type: none"> <li>• Creation of media distribution list of specific environment journalists.</li> <li>• Promotion and strategy required to grow EnviroVeg as a 'brand'.</li> <li>• Collection and analysis on EnviroVeg media clippings to improve and enhance future coverage.</li> </ul>	AUSVEG Environment Coordinator	Ongoing
<p>Media liaison</p> <ul style="list-style-type: none"> <li>• Proactive (follow-up media releases, directly pitch story ideas to environment reporters)</li> <li>• Reactive (respond to issues and positive/negative reporting)</li> </ul>	AUSVEG Environment Coordinator	Ongoing
<p>Media releases</p> <ul style="list-style-type: none"> <li>• Write and distribute newsworthy media material as necessary, commenting on issues, opportunities for growers, policy decisions etc.</li> <li>• Contribute news and editorial to industry publications such as <i>Vegetables Australia</i> and the <i>AUSVEG Weekly Update</i>.</li> </ul>	AUSVEG	Ongoing

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>Identify 'good news' story opportunities and distribute to appropriate media.</li> </ul> |  |  |
|---|--|--|

## Communication Tools

Communication tools used to meet this communication strategy will include:

- *Vegetables Australia* magazine.
- Media releases.
- The *EnviroVeg Newsletter* (under development)
- The EnviroVeg website.
- AUSVEG e-newsletter, the *AUSVEG Weekly Update*.

### **Internet**

AUSVEG has recently launched a new website, [www.ausveg.com.au](http://www.ausveg.com.au) as part of the Knowledge Management sub-program within the Vegetable Industry Development Program. The new website includes public and protected sections, and was developed with a key goal of improving grower access to R&D outcomes.

As part of the re-launch, new content has been uploaded to the EnviroVeg website and this has been used to host a range of information about upcoming EnviroVeg seminars and meetings.

The EnviroVeg website has had 2707 visitors since May 2010. Over an 11 month period this equates to an average of 246 visits per month.

In the past year, 99.37% of visitors to the AUSVEG website have been new visitors.

As of 31 March, 2011 there are currently 1,874 users registered to access the grower portal at [www.ausveg.com.au](http://www.ausveg.com.au).

## Evaluation

It is critical that this communication strategy is thoroughly evaluated to ensure the desired outcomes are being achieved for the resources invested. A number of evaluation indicators can be utilised including:

- EnviroVeg Grower Survey.
- Feedback at EnviroVeg seminars and use of attendance lists to track numbers and registration of new members.
- Annual *Vegetables Australia* Magazine readership survey.
- Number of people visiting the EnviroVeg trade show exhibit at the AUSVEG National Convention, Trade Show, and Awards for Excellence.
- Industry support for the national Environment Award.
- Recording number of members of EnviroVeg Program.
- Recording number of hits to EnviroVeg website.

## Appendix 11: Grower survey questionnaire

# Environmental Management in the Australian Vegetable Industry

This survey assesses Australian vegetable growers' attitudes towards environmental management as well as awareness of the EnviroVeg Program and its impacts.

The survey will take approximately 5-10 minutes to complete and is intended for vegetable growers.

The information obtained from this survey will be used to refine the delivery of the program. All personal details given will not be passed onto any third parties.

For more information on the survey please contact:

Environment Coordinator  
PO Box 2042  
Camberwell West VIC 3124  
ph 03 9822 0388  
e [jordan.brooke-barnett@ausveg.com.au](mailto:jordan.brooke-barnett@ausveg.com.au)

## Background Information

### Q1. Grower Information

*Please complete the following details*

<b>Name:</b>	
<b>Company:</b>	
<b>Postcode:</b>	
<b>Email Address:</b>	
<b>Phone Number:</b>	

### Q2. Farm Information

<b>Types of Vegetables grown:</b>	
<b>Size of operation:</b>	

### Current approach to environmental management

**Q3.** Please describe any changes to environmental management you have implemented in the past five years. (For example: improving irrigation efficiency)

**Q4.** Are you aware of programs or initiatives that seek to improve environmental management?

YES: Please go to Q5

NO: Please go to Q6

**Q5.** Please list these programs and initiatives:

**Q6.** Are you aware of your local Natural Resource Management (NRM) body?

YES: Please go to Q7

NO: Please go to Q8

**Q7.** Are you aware of the plans and priorities of your local NRM body?

YES

NO

**Q8.** Do you read the EnviroNews section of the Vegetables Australian magazine?

YES

NO

I do not subscribe to Vegetables Australia

**Q9.** What importance do you place on environmental management?

Very High

High

Moderate

Little

None



**Q10.** What are the five most important environmental issues on your farm? (Please tick)

- Access to water
- Water Quality
- Soil Health Management
- Pest & Disease Management
- Waste Management
- Air Quality Management
- Chemical/Fertiliser Use
- Rainfall Variability
- Biodiversity Management
- Emissions of Greenhouse Gases
- Runoff/Leaching of Chemicals
- Other (Please specify) \_\_\_\_\_

EnviroVeg is the vegetable industry's own environmental management program designed specifically to benefit vegetable growers. The program is free for all growers.

The EnviroVeg Manual outlines the principles and practices required for maintaining or improving environmental management on-farm.

EnviroVeg members are encouraged to undertake a simple self-assessment against the elements in the EnviroVeg Manual. Completion of the self-assessment not only highlights areas where sound practices are already in place, undertaking the assessment also allows for the identification of potential environmental risk.

The results of the assessment are recorded and growers are able to access an annual scorecard online through [www.enviroveg.com](http://www.enviroveg.com) providing detailed feedback on their environmental performance.

**Q11.** Have you utilised the EnviroVeg annual Self-Assessment checklist?

- YES
- NO


What do you see as the benefits of implementing EnviroVeg?

**Q12.** What barriers do you identify that would prevent you from implementing an environmental

management program such as an EnviroVeg?




**Q13.** What motivations do you have for implementing an environmental management program such as EnviroVeg?



**Q14.** Do you believe that there is a marketing opportunity for growers that can demonstrate to consumers they are growing in an environmentally friendly way?

- YES
- NO

**Q15.** What would like to see delivered through the EnviroVeg Program? (For example: more workshops on topics of interest)



**Q16.** Do you have any other comments or feedback?



# NRM

Region specific NRM information



# Perth Region NRM



### **Region specific NRM information for the EnviroVeg Program**

All regions of Australia are setting targets for environmental outcomes, and the vegetable industry is doing its part through participation in environmental programs such as the EnviroVeg Program. An increasing number of consumers now want to know that not only are they eating a product that is good for them, but also that the product has been grown sustainably.

EnviroVeg members are meeting community expectations regarding natural resource management (NRM) and the way in which their food is grown and sold, for example, through the Self Assessment Checklist and the Environmental Action Plans developed and implemented for their property.

Region specific NRM information for the EnviroVeg Program will assist vegetable growers to better understand and work towards meeting all key relevant regulatory requirements and recommended NRM practices for their region.

Specifically, the region specific NRM information will assist growers in achieving the key self assessment practices: "we are aware of the Catchment/Natural Resource Management priorities and targets for our region" and "we have checked our legal requirements in relation to our farming business".

The Perth Region NRM website provides information on the organisation's NRM Plan and support programs. Visit [www.perthregionnrm.com](http://www.perthregionnrm.com). Perth Region NRM staff can provide advice on access to programs and project grants. The Regional Landcare Facilitator is a good start for enquiries phone: 08 9374 3333. For general information email [enquiries@perthregionnrm.com](mailto:enquiries@perthregionnrm.com).



### **Catchment/ NRM priorities for Perth Region Natural Resource Management**

The Perth Region Natural Resource Management (NRM) vision states that the natural resources of the Perth Region will be protected and managed sustainably in their own right and for the enhancement of the quality of life for present and future generations. The organisation works closely with government agencies and other bodies to promote collaboration on key environmental issues. Perth Region NRM aims to improve natural resource management by:

- » Better integration of programs, strategies and statutory processes.
- » Increasing understanding in community, government and industry.
- » Influencing government policy.
- » Linking local catchment activities to regional policies.

### **Regional NRM targets relevant to vegetable growers in the Perth Region NRM area**

The Perth Region Natural Resource Management (NRM) strategy 2011 identifies a number of goals and targets in the areas of:

- » Community engagement.
- » Biodiversity.
- » Water.
- » Marine.

- » Sustainable industry.
- » Sustainable agriculture.
- » Indigenous cultural heritage.

A full list of goals and targets identified as relevant to vegetable growers is included in **Appendix A**.

During the development of the strategy, Perth Region NRM formed a Rural Landuse reference group to work on identifying major issues of concern as a basis for developing the Sustainable Agriculture goals and targets into the future. The major issues identified for rural landuse included:

- » Native vegetation decline.
- » Water asset management.
- » Salinity.
- » Acid sulphate soils.
- » Water-logging.
- » Erosion.
- » Energy efficiency.

As members of AUSVEG and through participation in the EnviroVeg program, all of these issues are considered and managed to minimise their occurrence and impact on farm and at a wider catchment scale.

#### ***Catchment/NRM support programs for Perth Region NRM***

Programs include sustainable agricultural projects, targeted salinity projects, a natural diversity program, and an integrated water management program. There is also a community funding program which supports on ground revegetation and rehabilitation projects.

A significant Perth Region NRM program is sustainable agricultural management. With intensive horticulture a valuable sector in the region, the organisation collaborated with VegetablesWA in the production of the Good Practice Guide. Key management areas addressed include water, nutrient, soil, pest and disease, and biodiversity management practices. Wetland loss through over extraction of groundwater and pollutant export from farming practises are issues for the region.

Recent examples of support programs implemented with vegetable growers in the Perth Region NRM area have focussed on the development of best management practices in the areas of efficient use of water and fertiliser and energy efficiency. The practices were identified through funding on farm trials

and follow-up extension programs aimed at informing growers.

Continued support for vegetable growers in the region will be delivered through implementation of the Fertiliser Action Plan and the Rural Landuse Business Plan.

The following table provides some details of key Commonwealth & Western Australian Government legislation that should be considered in your operations and in assessing environmental impacts on your property.

Be aware that there are many other Acts, not identified here, that may be relevant to vegetable growers. All Commonwealth Acts are available online at: [www.austlii.edu.au](http://www.austlii.edu.au) and Western Australian Legislation is available online at: [www.slp.wa.gov.au/legislation/statutes.nsf/main\\_actsif.html](http://www.slp.wa.gov.au/legislation/statutes.nsf/main_actsif.html) The Department of Agriculture and Food has published Production and Environmental Legislation: a guide for primary producers. To download a copy of the guide go to: [www.agric.wa.gov.au/PC\\_93230.html?s=0](http://www.agric.wa.gov.au/PC_93230.html?s=0)

Act	What does this mean for me?	Further information
<b>Commonwealth</b>		
<b>Environment Protection and Biodiversity Conservation Act 1999</b>	Landholders are required to protect, and manage for, nationally and internationally listed environmentally significant flora, fauna, ecological communities and heritage places on their land. May require modified practices to protect an individual species or an area of remnant vegetation.	<a href="http://www.environment.gov.au/epbc">www.environment.gov.au/epbc</a>
<b>Aboriginal &amp; Torres Strait Islander Heritage Protection Act 1984</b>	Provides for the protection of significant aboriginal areas, cultural sites and objects.	<a href="http://www.environment.gov.au/heritage/laws/indigenous/index.html">www.environment.gov.au/heritage/laws/indigenous/index.html</a>
<b>Western Australia</b>		
<b>Soil and Land Conservation Act 1945</b>	The Act aims to prevent land degradation, promote soil conservation and alleviate the impacts of salinity and erosion. The Department of Agriculture's role is to respond to situations where management threatens or causes land degradation, as well as compliance with drainage regulations, covenants and soil conservation notices. Landholders intending to drain or pump water for salinity management are required to provide notification of the works at least 90 days before work commences.	<a href="http://www.agric.wa.gov.au/PC_93232.html?s=0">www.agric.wa.gov.au/PC_93232.html?s=0</a>
<b>Rights in Water and Irrigation Act 1914</b>	<p>The Act provides the statutory basis for planning and allocation of water in Western Australia. A new Water Services Bill has been introduced to Parliament to reform the current legislation. The current Act provides for the management, sustainable use and development of water resources, and for the protection of their ecosystems and the environment in which water resources are situated.</p> <p>The Department of Water is responsible for the development of water management plans, for both groundwater and surface water, with consideration of ecological, recreational and cultural requirements.</p> <p>In proclaimed ground water management areas (including all of the Swan Coastal Plain), a water licence is required to extract water from a watercourse or groundwater aquifer for commercial use.</p> <p>The Act also has provision for the management and protection of rivers and estuaries to prevent and minimise degradation.</p>	<a href="http://www.water.wa.gov.au/Managing+water/Allocation+planning/default.aspx">www.water.wa.gov.au/Managing+water/Allocation+planning/default.aspx</a>
<b>Wildlife Conservation Act 1950</b>	The Act aims to protect Western Australia's native flora and fauna. Native species are protected under the Wildlife Conservation Act, so that problem species can generally only be destroyed under a Regulation 5, Damage Licence through the Department of Environment and Conservation.	<a href="http://www.dec.wa.gov.au/content/view/full/870/2230/">www.dec.wa.gov.au/content/view/full/870/2230/</a>
<b>Aboriginal Heritage Act 1972</b>	The Act aims to protect all places and objects that are important to Aboriginal people because of connections to their culture, generally referred to as Aboriginal sites.	<a href="http://www.dia.wa.gov.au/en/Heritage-and-Culture/Aboriginal-heritage/Aboriginal-sites/">www.dia.wa.gov.au/en/Heritage-and-Culture/Aboriginal-heritage/Aboriginal-sites/</a>
<b>Environmental Protection Act 1986</b>	<p>The Act is the key legislation for the prevention and control of pollution and environmental harm, and for the conservation, protection, and management of the environment.</p> <p>Under the Act, the clearing of native vegetation is prohibited, unless a clearing permit is granted by the Department of Environment and Conservation, or the clearing is for an exempt purpose.</p>	<a href="http://www.dec.wa.gov.au/content/category/31/751/1572/">www.dec.wa.gov.au/content/category/31/751/1572/</a>
<b>Agriculture and Related Resources Protection Act 1976</b>	Some native animals are declared pests of agriculture under the Act. This allows for a management program for particular species for certain areas of the state. However, native species are also protected under the Wildlife Conservation Act, so that problem species can generally only be destroyed under a Regulation 5, Damage Licence through the Department of Environment and Conservation.	<a href="http://www.dec.wa.gov.au/content/category/43/853/1980/">www.dec.wa.gov.au/content/category/43/853/1980/</a>
<b>Biosecurity and Agriculture Management Act 2007</b>	The main purposes of the Act is to prevent new animal and plant pests, and diseases from entering Western Australia, to manage the impact and limit the spread of those already present in the State, and to safely manage the use of agriculture and veterinary chemicals and ensure agricultural products are not contaminated with chemical residues.	<a href="http://www.agric.wa.gov.au/PC_93122.html">www.agric.wa.gov.au/PC_93122.html</a>

**Appendix A: Goals and targets identified as relevant to vegetable growers in the Perth Region NRM Strategic Plan 2011.**

**COMMUNITY ENGAGEMENT**

**GOAL:** Build regional capacity and engage the community, government and business to promote attitudinal, behavioural and institutional change to achieve sustainable natural resource management outcomes.

**BIODIVERSITY**

**GOAL:** Conserve and enhance the terrestrial and aquatic biodiversity and habitat of all native species in the Perth Region and the functionality of the ecosystems which contain these species.

- » Work towards retaining sufficient habitat for sustainable native species populations including Threatened Species and Threatened Ecological Communities.
- » Control, contain and eradicate invasive species and other biodiversity threatening processes.
- » Monitor, maintain and improve ecosystem functions.

**WATER**

**GOAL:** Ensure environmentally sustainable water resource management that supports sustainable water use, biodiversity and ecological functions in all aquatic systems in the Perth Region.

- » Sustainable surface and groundwater management
- » Water dependent ecosystems and resources are identified as a component of regional biodiversity and are sustainably managed and protected.

**SUSTAINABLE AGRICULTURE**

**GOAL:** Engage agricultural industries and farmers in implementing good management practices and promote attitudinal, behavioural and institutional change to build a sustainable agricultural sector in the region.

- » State and local government policies reflect the need for the long term viability and sustainability of local agriculture.
- » Increase the engagement and participation of the agricultural community in achieving NRM outcomes.
- » Increase the effectiveness and uptake of good management practices by the agricultural community.


**INDIGENOUS CULTURAL HERITAGE**

**GOAL:** Protect, enhance and incorporate aboriginal cultural heritage values within the Perth Region to achieve sustainable natural resource management outcomes.

- » To protect and conserve aboriginal cultural heritage in the Perth Region through Aboriginal Cultural Heritage Management Plans.
- » To incorporate Noongar values into all NRM activities in the Perth Region.





## Appendix 13: Example of EnviroVeg information session flyers



AUSVEG invites Tasmanian vegetable growers to attend a free information session and dinner after the upcoming levy payers meeting in Devonport Tasmania.

# Managing Nitrogen for increased quality in vegetable crops and improved environmental performance.


**EnviroVeg AUSVEG**  

**Location:** Argosy Motor Inn, 221 Tarleton Street Devonport Tasmania  
**Date:** Wednesday 4 April 2012 **Time:** 8:00pm to 9:30pm

AUSVEG invites our Tasmanian growers to attend a free EnviroVeg dinner after the upcoming levy payers meeting in Devonport. Growers will have an opportunity to hear industry speakers and meet their AUSVEG representatives.

**Places are limited so avoid disappointment and register now!**  
Register by getting in touch with our Environment Coordinator Jordan Brooke-Barnett by email at [info@ausveg.com.au](mailto:info@ausveg.com.au) or phone (03) 9822 0388.

**Key Speaker:** **Dr Bill Cotching,**  
University of Tasmania



Join us to hear one of Australia's leading soil experts talk about the effective use of Nitrogen fertilisers in vegetable crops. Hear about the latest research in the field of fertiliser use and explore practical applications for growers to increase the quality of their crops. Balanced Nitrogen use and soil nutrition has the potential to increase pest resistance in crops and lead to improved environmental stewardship of resources such as groundwater and watercourses by limiting run-off. Growers will have the opportunity to hear about the applications of balanced Nitrogen use and the potential to manage fertiliser to get the best results for both their business and the environment.

**Meet your AUSVEG representatives and hear industry leaders**

**And more!** AUSVEG Environment Coordinator Jordan Brooke-Barnett will provide growers with an overview of the EnviroVeg Program, the Australian vegetable industry's leading environmental management program. Jordan will discuss the learning resources and tools that AUSVEG is providing to growers to help them manage their environmental performance.

In addition, a representative from Agvita Analytical will discuss testing and analytical services to assist growers manage their soil and plant nutrition, while a representative from Horticulture Australia will discuss new research into managing greenhouse gas emissions in the vegetable industry.

**REGISTRATION:**

To register via email, please send your details to: [info@ausveg.com.au](mailto:info@ausveg.com.au).  
To register via phone, please contact Jordan Brooke-Barnett on (03) 9822 0388.  
To register via fax, please complete your details below, and fax to (03) 9822 0688.

Name \_\_\_\_\_  
Occupation \_\_\_\_\_  
Email \_\_\_\_\_  
Phone Numbers (Mobile/ Home) \_\_\_\_\_  
Address \_\_\_\_\_

Industry communication is funded by HAL using the National Vegetable Levy with matched funds from the Australian Government.

**FREE**

AUSVEG invites Western Australian vegetable growers to attend a free information session and dinner after the upcoming levy payers meeting in Wanneroo, Western Australia.

## Water management: how sound planning and modern technology can help vegetable growers conserve water and manage crops

**EnviroVeg**

**AUSVEG**



Horticulture Australia

**Location: Wanneroo Golf Club, Cnr Old Yanchep Road & Flynn Drive**

**Date: Monday 2 April 2012 Time: 7:30pm to 9:00pm**

AUSVEG invites our Western Australian growers to attend a free EnviroVeg dinner after the upcoming levy payers meeting. Growers will have an opportunity to hear industry speakers and meet their AUSVEG representatives.

**Places are limited so avoid disappointment and register now!**

Register by getting in touch with our Environment Coordinator Jordan Brooke-Barnett by email at [info@ausveg.com.au](mailto:info@ausveg.com.au) or phone (03) 9822 0388.

**Key Speaker:** **Mr Rohan Prince,**  
Department of Agriculture, Western Australia



Join one of Australia's foremost irrigation specialists as he talks about strategies that growers can put in place to conserve water. Rohan Prince, winner of the 2011 AUSVEG Industry Impact Award, is at the leading edge of irrigation research in Australia. Join us as he discusses practical strategies for vegetable growers to save water through proper equipment calibration and maintenance. Growers will have an opportunity to ask questions and discover new ways to fine tune their irrigation performance.

**And more!**

### Meet your AUSVEG representatives and hear industry leaders

AUSVEG Environment Coordinator Jordan Brooke-Barnett will provide growers with an overview of the EnviroVeg Program, the Australian vegetable industry's leading environmental management program. Jordan will discuss the learning resources and tools that AUSVEG is providing to growers to help them manage their environmental performance.

Representatives for the Department of Immigration and Citizenship will also attend to discuss opportunities for growers to participate in the Pacific Seasonal Worker Pilot Program and alleviate seasonal labour shortages, while Landmark representatives will be available to discuss a range of services available to growers.

### REGISTRATION:

To register via email, please send your details to: [info@ausveg.com.au](mailto:info@ausveg.com.au).  
To register via phone, please contact Jordan Brooke-Barnett on (03) 9822 0388.  
To register via fax, please complete your details below, and fax to (03) 9822 0688.

Name \_\_\_\_\_  
Occupation \_\_\_\_\_  
Email \_\_\_\_\_  
Phone Numbers (Mobile/ Home) \_\_\_\_\_  
Address \_\_\_\_\_

Industry communication is funded by HAL using the National Vegetable Levy with matched funds from the Australian Government.