

**Working on the Water:  
a careers promotion program for  
marine-based sectors**

*Emily Ogier, Kevin Redd, Sam Ibbott & James Garde*



**Australian Government**  

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*Working on the Water: a careers promotion program for marine-based sectors.*  
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In addition, a number of organisations provided financial support to the Tasmanian Working on Water Program (or WoW Program) in 2008 and 2009 which contributed indirectly but nonetheless significantly to the outcomes of this project. Those organisations were as follows:

Guaranteeing Futures, Department of Education (Tasmania)  
Seafood Training Tasmania  
Tasmanian Seafood Industry Council  
University of Tasmania  
Australian Maritime College  
Colony 47 (Partnership Brokers)  
Launceston Workplace Learning  
Tassal Pty Ltd  
Regional Area Consultative Committee, Northern Tasmania

There were also a number of organisations who provided in kind support without which this program would not have been possible, and their contribution is equally valuable

The author's particularly wish to acknowledge the support provided to the program and this project by a number of people who contributed their time, expertise and passion. These people include: Mark Godfrey, Lynne Hanlon, Linda Goss, Martin Stalker, Tony Ibbott, Christian Ellston, Vijah Hughes, Matthew Berne, John Purser, Martin Binns, and Dan Haley.

## 1. NON-TECHNICAL SUMMARY

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### **OBJECTIVES:**

- 1 Evaluate the processes, knowledge and outcomes of the Tasmanian 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program and determine the benefits to the seafood industry; and
- 2 Pending the identification of substantial benefits arising from the Tasmanian 'Working on Water: from Aquaculture to Zoology' Program, develop a model and resources to support a Working on Water Careers Promotion Program to be piloted in States and regions outside Tasmania

### **NON TECHNICAL SUMMARY:**

#### **OUTCOMES ACHIEVED TO DATE**

Evaluation of the Tasmanian 'Working on the Water: from Aquaculture to Zoology' Careers Promotion Program by partners and beneficiaries in the local seafood industry and education and training sectors has demonstrated the benefits of the program to the local seafood industry, and identified strategies to increase its sustainability. The Tasmanian WoW Program has been found to result in the following benefits:

1. Creation of strong partnerships and networks between the local seafood industry, schools, training and careers promotion sectors;
2. Increases engagement and commitment to careers promotion by the local seafood industry by giving it ownership over the messages communicated to students;
3. Raises the profile of the local seafood industry amongst High School students and demonstrates marine-based training and careers pathways available to them, and may contribute to an increase in the number of young entrants into these pathways;
4. Demonstrates to students and the local seafood industry the linkages between and transferability of marine-based skills and qualifications across the range of marine-based careers (including seafood industry careers);

5. Raises awareness of diversity of jobs and training opportunities available within the local seafood industry for teachers and career advisors.

In addition, evaluation of the Tasmanian WoW Program found that the program offers a successful careers promotion program model for implementation in other regions of Australia. A further outcome of the project has been the documenting of corporate knowledge, processes and resources required to develop and implement a local WoW Program. The *Guide to 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program* is a resource which has been developed for seafood industry organisations across Australia which outlines the WoW Program model.

The project was developed to address the broad need of the Australian seafood industry to develop people who will help the fishing industry to meet its future needs. In the context of skilled and unskilled labour shortages which the seafood industry has been experiencing, specific needs which the project addresses included:

- foster stronger relationships between education and training sectors and local seafood industries;
- generate positive exposure through direct experience of seafood industry career pathways; and
- increase uptake of industry jobs and related training by young entrants.

Tasmania's 'Working on the Water: from Aquaculture to Zoology' is an industry-based careers promotion program which provides Year 9 and 10 students with insight into a range of marine industries. Students from over thirty schools are provided with hands-on experience over three days and multiple locations. They are exposed to potential career and training pathways in: marine research, wild catch fisheries, marine tourism, aquaculture, and seafood processing.

The Tasmanian WoW Program has been built and resourced through partnership between industry, and education and training organisations. It operated as a pilot in the southern region of Tasmania in 2008 and in 2009 was run successfully run in both the southern and northern regions of the state.

The WoW Program presented a potential national model for marine careers promotion at the local and regional level. The Tasmanian WoW Program organising group recognised the uncertain availability of people and their corporate knowledge in developing and running this minimally-funded and highly collaborative program. Therefore, a project concept was developed to address both the sustainability of the WoW Program locally and its application nationally.

The objectives of the project were to firstly evaluate the processes, knowledge and outcomes of the Tasmanian WoW Careers Promotion Program and determine the benefits to the local seafood industry; and, secondly - pending the identification of substantial benefits arising from the Tasmanian WoW Program - develop a model and resources to support a WoW Program to be piloted in States and regions outside Tasmania.

As a result of the project, it has been found that the Tasmanian WoW Program has provided significant benefits to the local seafood industry. Strategies to ensure the sustainability of the program in terms of financial and human resources have been identified.

A review of existing careers promotion programs for the Australian seafood industry also found that no dedicated careers promotion programs are currently available to the seafood industry which successfully engage High School students in positive experiences of the training and career pathways offered by their local seafood industry, target specific needs of local seafood industries, and enhance partnerships between the local seafood industry and the education and training sectors.

Furthermore, the program was recognized by industry as a pivotal tool in raising the awareness of the marine sector and potential careers within this sector at the State Seafood awards, with the WoW program winning the "industry promotion" category at the state awards and being a national finalist in this division.

On this basis, the *Guide to 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program* is a resource which has been developed for seafood industry organisations across Australia which outlines the WoW Program model. Lessons learned from the evaluation of the Tasmanian WoW Program have been incorporated into the Guide. One of the major conclusions of the project has been that systems to monitor the impact of the program on the training and career pathway choices of participating students should be incorporated into the WoW Program model.

Prior to the distribution and dissemination of the Guide to seafood industry organisations across Australia it has not been possible to assess whether all planned outcomes of the project have been achieved.

**KEYWORDS:**        **Careers promotion, training, workforce, education.**

## 2. BACKGROUND

Tasmania's 'Working on the Water: from Aquaculture to Zoology' is an industry-based careers promotion program which provides Year 9 and 10 students with insight into a range of marine industries. Students from over sixty schools are provided with hands-on experience over three days and multiple locations. They are exposed to potential career and training pathways in: marine research, wild catch fisheries, marine tourism, aquaculture, and seafood processing.

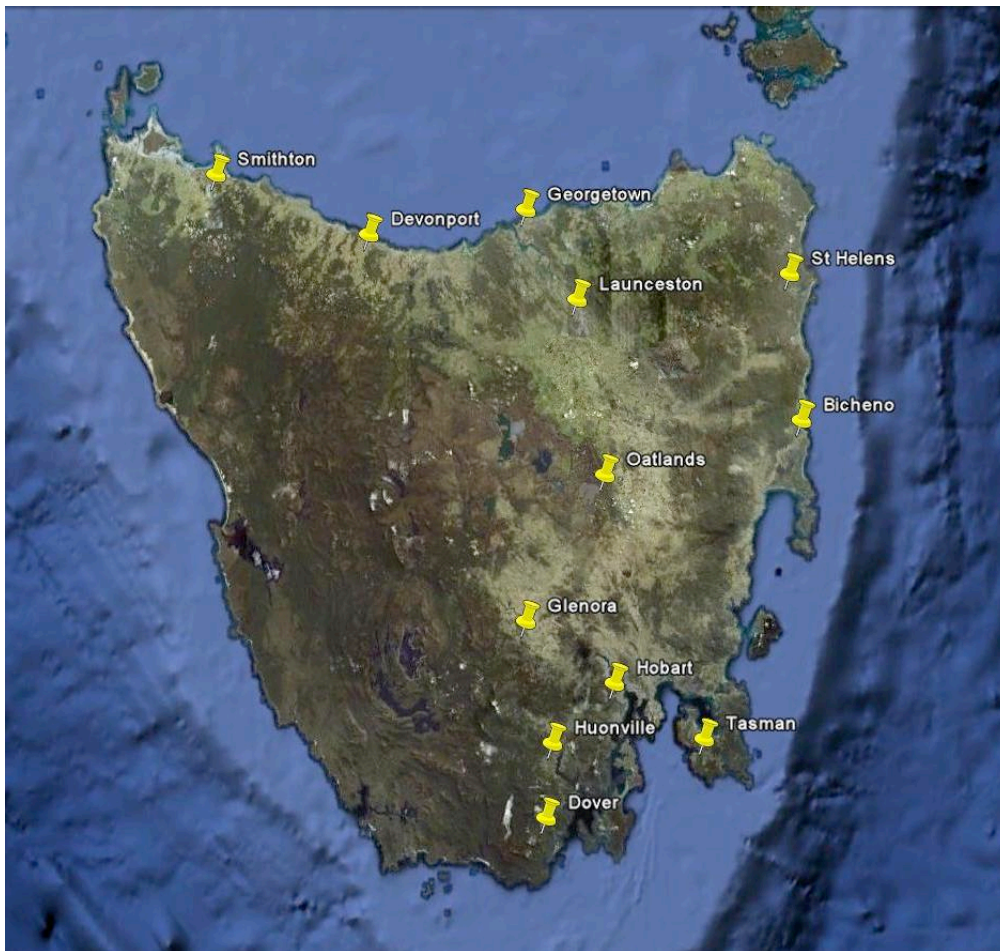
Objectives of the Tasmanian WoW Program are to:

1. Provide Year 9 and 10 students with the opportunity to experience and learn of the possible training and career pathways in Tasmania's seafood industry and allied marine industries;
2. Expand the career promotion programs available to school education and careers promotion sectors to include Tasmania's seafood industry and allied marine industries;
3. Develop strategic partnerships between Tasmania's seafood industry and allied marine industries, vocational education and training (VET), tertiary education, school education and careers promotion sectors; and
4. Contribute to an increase in the numbers of Tasmanian students entering marine-based industry sectors and/or undertaking marine-based VET or tertiary training.

The Tasmanian Working on Water (WoW) Program was created in 2008 to introduce students to a wide range of career opportunities in the marine sector. Within Tasmania excellent access was available to marine research facilities and institutes, varied aquaculture operations, thriving wild catch fisheries, an exemplary training centre, and a vibrant tourism sector. All of these vital components of the marine industries were readily accessible from the population bases of both Southern and Northern Tasmania where schools were located and from which the participants were drawn. Additionally, the intimate nature of the Tasmanian community made the networks between all aspects of the marine sector both strong and accessible.

The Tasmanian Working on Water Program (or, WoW Program) has been built and resourced through partnership between industry, and education and training organisations. It operated as a pilot in the southern region of Tasmania in 2008 and in 2009 was run successfully in both the southern and northern regions of the state. In 2009 the program was available to 9,225 Year 9 and 10 students from over 60 schools in Tasmania. In 2008 in the Southern Tasmania 41 students took part in the program. In 2009 this number rose to 47 in the South, while 32 students participated in the Northern Program. Students who successfully applied to participate in the Tasmanian Working on Water Program came from a range of urban, regional and rural areas of Tasmania (see Figure 1).





**Figure 1. Origins of Student Participants in the Tasmanian Working on the Water program in 2008 and 2009.**

The WoW Program presents a potential national model for marine careers promotion at the local and regional level. The Tasmanian WoW Program organising group recognised the uncertain availability of people and their corporate knowledge in developing and running this minimally-funded and highly collaborative program. Therefore, a project concept was developed to address both the sustainability of the WoW Program locally and its application nationally.

The following education and training organisations were directly involved in the development and running of the Tasmanian WoW Program in 2008 and 2009:

- Tasmanian Seafood Industry Council
- Seafood Training Tasmania
- Australian Maritime College
- Launceston Workplace Learning
- Guaranteeing Futures Department of Education
- SCOPE Local Community Partnership, Southern Tasmania

- University of Tasmania (Tasmanian Aquaculture and Fisheries Institute, and the School of Zoology)
- Australian Antarctic Division

At the Tasmanian WoW Program review meeting in November 2009 all program partners agreed to the following actions:

- Document the process of developing and running the Tasmanian WoW Program;
- Develop a strategic plan to address issues of the Tasmanian WoW Program's sustainability; and
- Develop a WoW Program model to enable the program to be standardised and more easily delivered, and enable organisations in other regions to develop and implement a local WoW Program.

In addition, the following industry organisations participated in the Tasmanian WoW Program in 2008 and 2009 and indicated their support for its continuation as a standing program:

- Tasmanian Rock Lobster Fishermen's Association
- Tasmanian Abalone Council
- Tasmanian Salmonid Growers Association
- Tasmanian Shellfish Executive Council

The proposal to develop the WoW Program model and make resources available for other regions and sectors to run the program locally was supported at or by the following:

- FRDC's Seafood Industry Workforce Development Summit, Adelaide (October 2008)
- Tasmanian Seafood Industry Council's People Development Working Group 2008-2009
- FRDC's People Development Advisory Group (Meetings October 2008 & May 2009)
- FRDC's Careers Workshop (Melbourne 2009)
- FRDC's People Development Program Managers, Jo-Anne Ruscoe & Neil Garbutt (2008-2010)

The FRDC's People Development Advisory Group and People Development Program managers requested that in addition to the proposed actions, the project include a review of lessons learned by other successful seafood career initiatives, such as the Australian Fisheries Academy's Targeting Skills Needs in Regions (TSNR) program and the Primary Industry Centre for Science Education (PICSE) and include these as part of the project's final analysis.



**Figure 2. Tassal salmon farm tour, Tasmanian WoW Program (South) 2009.**

### 3. NEED

At the national level, the need to build workforce capacity by supporting the development and promotion of career information for seafood industries has been identified as a high priority goal (*FRDC People Development Program 2008-2013: 1*). Nationally, there is a need for careers promotion initiatives and resources which can help meet the workforce needs of the seafood industry. This was acknowledged at the FRDC's Seafood Industry Workforce Development Summit in Adelaide in 2008.

At a regional level the Tasmanian seafood industry has a long history of low investment in human capital. This has resulted in a diminished profile of the industry amongst the young and those promoting career pathways. The effect has been a severe State-wide skill shortage, restricting the seafood industry's development.

In 2008 the Tasmanian Seafood Industry Council's People Development Working Group identified the need to:

- foster stronger relationships between education and training sectors and local seafood industries;
- generate positive exposure through direct experience of seafood industry career pathways; and
- increase uptake of industry jobs and related training by young entrants.

The Tasmanian WoW Program was developed to meet these needs. However without formal evaluation of the program's outcomes in light of its objectives, it has not been possible to determine whether the Tasmanian WoW Program has successfully met these needs. Similarly, without developing strategies to ensure sustainability of the program's funding and human resources, it has not been possible to promote the WoW Program as a viable careers promotion initiative for the seafood industry. Finally, the lack of documentation and standardisation of the Tasmanian WoW Program has also prevented the development of the WoW Program model for application in other regions of Australia.

As such, this project was instigated to:

- evaluate the outcomes of the Tasmanian WoW Program and document corporate knowledge;
- develop strategies to ensure sustainability of the program's funding and human resources; and
- pending the finding that the Tasmanian Wow Program is both sustainable and able to meet the need for careers promotion initiatives for the seafood industry, develop a WoW Program model and resources to support the piloting of WoW Programs in other regions of Australia.

#### 4. OBJECTIVES

The objectives of the project were to:

1. Evaluate the processes, knowledge and outcomes of the Tasmanian WoW Careers Promotion Program and determine the benefits to the seafood industry; and
2. Pending the identification of substantial benefits arising from the Tasmanian WoW Program, develop a model and resources to support a WoW Program to be piloted in States and regions outside Tasmania.

Both objectives were achieved. The first objective was achieved through the evaluation process undertaken, which included surveys and an evaluation workshop with key beneficiaries and program partners (see Section 6. Methods). The evaluation process determined that the Tasmanian WoW Program was of significant value to the seafood industry, and that development of a WoW Program model for piloting in other regions nationally was warranted.

The second objective was achieved by the drafting of the *Guide to 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program* (see Appendix 4). This resource included a review of other seafood industry careers promotion programs, a case study of the Tasmanian WoW Program, and a framework for developing a local WoW Program.

## **5. METHODS**

Methods used to achieve the first project objective, which was to evaluate the processes, knowledge and outcomes of the Tasmanian WoW Careers Promotion Program and determine the benefits to the seafood industry, included the following:

### **5.1 Analysis of student feedback**

Student Feedback Forms were completed on Day 3 of the Tasmanian WoW Program by students who participated in 2008 and 2009 in the northern and southern regions. Students were asked to identify: highlights of the program; its value; whether they intended to pursue a career/education/training in the marine field; areas where they sought more information or experience; and, suggestions for improvements.

Responses to the survey questions were summarised and grouped by frequency to identify the most common responses. Results were then provided to the program organising group and participants in the Evaluation and Strategic Planning Workshop for discussion.

### **5.2 Survey of program partners and industry contributors**

A phone survey was designed to gather feedback on the Tasmanian WoW Program from organisations and individuals who had contributed to the program and who were identified as key beneficiaries. Respondents were asked to identify whether the program had met its four objectives (see 2. Background) and were invited to provide further comments. Ten surveys were completed and the results were then provided to the program organising group and participants in the Evaluation and Strategic Planning Workshop for discussion.

### **5.3 Evaluation and Strategic Planning Workshop**

Program partners and key beneficiaries were invited to participate in an evaluation and strategic planning exercise, which was held as part of a workshop in Campbelltown, Tasmania, on Friday June 25<sup>th</sup> 2010. Objectives of the workshop were to:

1. Determine whether the Tasmanian WoW Program meets the needs of the seafood industry and allied sectors; and
2. Develop strategies to ensure the improvement, sustainability and ongoing resourcing of the Tasmanian WoW Program.

The workshop was facilitated by Tony Ibbott, Marine Solutions. A list of attendees and a summary of the outcomes is provided (see Appendix 3).

Methods used to achieve the second project objective, which was to develop a model and resources to support a WoW Program to be piloted in States and regions outside

Tasmania (pending the identification of substantial benefits arising from the Tasmanian WoW Program), included the steps detailed below.

#### **5.4 Review of existing careers promotion programs for the Australian seafood industry**

To undertake a review of existing careers promotion program to identify lessons and gaps, a desktop survey of existing programs was conducted and background literature was obtained. In addition, a presentation of the Tasmanian WoW Program case study was delivered at the Aqua Ed 2010 Conference in Launceston in April. Conference delegates were asked to identify existing careers promotion programs for inclusion in the review. A matrix was developed and used to analyse the findings.

#### **5.5 Case study of the Tasmanian WoW Program**

Historical material developed for the Tasmanian WoW Program in 2008 and 2009 was collated and used to compile a case study of the program.

#### **5.6 Development of a WoW Program model and resources**

The results of the methods listed above were collated and used to compile the *Guide to the 'Working on Water: from aquaculture to zoology' careers promotion program*, which uses the Tasmanian WoW Program as a case study to outline the WoW Program model. Lessons learnt from other careers promotion programs and from the evaluation of the Tasmanian WoW Program were also incorporated into the resources contained within the Guide. The Guide was made available for review by program partners prior to being finalised.



**Figure 3. Evaluation and Strategic Planning Workshop, 25 June 2010.**

## **6. RESULTS & DISCUSSION**

### **6.1 Review of existing careers promotion programs for the Australian seafood industry**

The review found that a number of programs existed which partially or entirely targeted careers promotion for the seafood industry (see Table 1.). However, none of the programs reviewed addressed the specific and regionally-based needs identified and met by the Tasmanian WoW Program, which were to: foster stronger relationships between education-training sector and the local seafood industry; generate positive exposure through direct experience of local seafood industry career pathways; and increase uptake of industry jobs by young entrants.

The review identified a number of lessons relevant to the development and implementation of careers promotion programs targeting the Australian seafood industry. These included the following characteristics which were identified as critical to the success of any such program:

- Needs-driven;
- Built on strong partnerships between the seafood industry and education and training providers; and
- Resources and activities are developed to target specific audiences.

### **6.2 Evaluation of the Tasmanian WoW Program**

The major finding of the evaluation surveys and workshop was to establish that the Tasmanian WoW Program had largely achieved its objectives of meeting the need for a careers promotion program for the Tasmanian seafood and allied marine industries, and had resulted in tangible benefits to the Tasmanian seafood industry and program partners. Results of the workshop are provided in Appendix 3.

Achievements of the Tasmanian WoW Program were identified and prioritised. The main achievements of the program were as follows:

- Participating students learn about the wide range of training and career pathways associated with the seafood industry, and the links between study, training and employment;
- Participating students are able to make informed study and career choices;
- Creates networks between the seafood industry, schools and the training sector;
- Achieves high level of engagement and commitment to the program by the local seafood industry;
- Achieves high level of interest in and engagement from participating students;
- Caters for a breadth of student needs (academic to vocational);
- Value continues to be recognised by partners and stakeholders;



- Offers a 'lighthouse' model for careers promotion programs in other regions and States; and
- Enables the local seafood industry to identify and articulate possible training and career pathways and options to students.

Areas where the Tasmanian WoW Program could be improved were identified and prioritised as follows:

- Sustainability (funding and human resources);
- Level of 'hands on' activities;
- Promotion to schools and pathway planners/careers advisors;
- Provision of support materials and formalized follow-on opportunities for students post-program;
- Involvement of previous student participants in promoting and running the program;
- Identification of a 'Host' organization for the program's website and potentially for the program (noting that depending on the hosting arrangements this may compromise the flexible and cross-cutting nature of the Program and may not be the preferred option);
- Promotion to the local seafood industry and other stakeholders; and
- Responsiveness to changing demand for specific jobs/skills within the local seafood industry.

### **6.3 Development of a WoW Program model and resources**

The results of the evaluation of the Tasmanian WoW Program supported the development of a WoW Program model and resources to enable the piloting of the program in other regions. The *Guide to the 'Working on Water: from aquaculture to zoology' careers promotion program* is provided in Appendix 4. The Tasmanian WoW Program was presented as a case study to support the careers promotion program model outlined in the Guide. It was important to incorporate the critical success factors of the Tasmanian WoW Program which were identified through the evaluation process. They were as follows:

- Ability to offer real, unique and varied experiences that are fun, memorable and relevant for students;
- Visible passion and energy of partners, stakeholders, contributors and students;
- Strong networks and collaboration between program partners; and
- Driven by purpose and need, not by funding availability.

**Table 1. Review of Seafood Industry Careers Promotion Programs**

<b>Program &amp; Organisation</b>	<b>Funding</b>	<b>Scale</b>	<b>Link with Seafood Industry</b>	<b>Objective/s</b>	<b>Target Group</b>	<b>Main Activities</b>	<b>Comments</b>
<b>Primary Industries Education Foundation</b> (PIEF)	Primary industry groups  (not seafood industry as yet)	Australia-wide	Indirect (one of a number of primary industries)	Provide information about primary industries career paths for school advisors	K – 12 Students & Educators	<ul style="list-style-type: none"> <li>• None as yet</li> </ul>	<ul style="list-style-type: none"> <li>• In early implementation stage</li> <li>• Seafood industry not currently a member</li> <li>• Providing information on careers pathways only 1 of 6 key activity areas</li> </ul>
<b>Seafood Industry Skills Acquisition Program</b>  Seafood Training Centre of Excellence, & the Australian Fisheries Academy (SA)	Targeting Skills Needs in Regions program, DEEWR (C'wealth) & DFEEST (SA)	Regional (Port Lincoln, SA)	Direct	<ul style="list-style-type: none"> <li>• Target skills needs in regions</li> <li>• Address lack of uptake of aquaculture traineeships</li> </ul>	Indigenous & Non-Indigenous 16-25 year olds	<ul style="list-style-type: none"> <li>• Developed, promoted &amp; ran a Certificate 2 in Aquaculture as a bridge to entry into marine farming traineeship</li> </ul>	<ul style="list-style-type: none"> <li>• Not a dedicated careers promotion program</li> <li>• Successful, targeted, needs-based regional program</li> <li>• Good example of linking industry and VET sectors</li> </ul>
<b>Primary Industry Centre for Science Education</b> (PICSE)	FRDC has provided \$ for services to seafood industry	Australia-wide	Indirect (one of a number of primary industries)	Promote a supply chain of tertiary-bound young people for science careers in primary industries	K – 12 Students & Science Educators	<ul style="list-style-type: none"> <li>• Science Camps for Grade 10 students</li> <li>• Develop teaching resources</li> <li>• In-class activities</li> </ul>	<ul style="list-style-type: none"> <li>• Not dedicated a careers promotion program as such</li> <li>• Limited to science-based career pathway</li> </ul>

Program & Organisation	Funding	Scale	Link with Seafood Industry	Objective/s	Target Group	Main Activities	Comments
<b>'A Life' Interactive DVD series &amp; Website</b> Australian Seafood CRC	Industry, FRDC & C'wealth Government	Australia-wide	Direct	Make accessible positive information about seafood industry career paths to a wide audience	All ages of students and workforce	<ul style="list-style-type: none"> <li>• Web-based (<a href="http://www.aLife.net.au">www.aLife.net.au</a>) careers information source, including interviews of people working in various jobs in the seafood industry &amp; Fact Sheets on careers pathways</li> <li>• Resources circulated to schools, TAFES, universities</li> </ul>	<ul style="list-style-type: none"> <li>• Offers non-direct experience of seafood industry career pathways only</li> <li>• Use of internet and DVD means promotion reaches a very wide audience</li> <li>• Resources developed could be used as part of other careers promotion programs</li> </ul>
<b>Regional Schools Initiative – the Huon Lower Channel Alliance</b> Colony 47 (Partnership Brokers)	Pending	Tasmanian & Regional (Huon & Lower Channel, Southern Tas)	Indirect (one of a number of primary industries)	Expand educational programs	Years 7-10 students	<ul style="list-style-type: none"> <li>• Offer specialist trade/theme programs to students from all schools, including 'Marine Science' &amp; 'Aquaculture'</li> <li>• Use specialist teachers &amp; facilities at each location</li> </ul>	<ul style="list-style-type: none"> <li>• In development stage</li> <li>• Potential for strong links with Tasmanian WoW Program</li> </ul>
<b>Seafood Industry Partnerships in Schools</b> OceanWatch – SeaNet	FRDC	Australia-wide, based in Hobart, Tasmania	Direct	Pilot collaborative educational program between seafood industry & educators	Years K-10 Students	<ul style="list-style-type: none"> <li>• Classes adopt a marine farm or commercial fisherman</li> <li>• Program facilitates ongoing relationship between farm/fisher and class</li> </ul>	<ul style="list-style-type: none"> <li>• In implementation stage</li> <li>• Not a dedicated careers promotion program</li> <li>• Potential for strong links with WoW Program (Tasmanian &amp; national)</li> </ul>

## 7. BENEFITS & ADOPTION

The project has benefited those organisations and sectors who are partners and beneficiaries of the Tasmanian WoW Program, including the local seafood industry, by evaluating the program against its objectives and by undertaking strategic planning. The results of these processes have demonstrated the high value of the program to partners and beneficiaries and will in turn contribute to the program's sustainability and increased success. A number of recommendations arising from the evaluation process have been adopted by the program organising group and will be incorporated into the planning process for the Tasmanian WoW Program in 2010.

The primary benefit to the Australian seafood industry as a whole resulting from this project is the development of a proven careers promotion program model – the 'Working on Water: from aquaculture to zoology' Careers Promotion Program - which, where implemented, delivers the following benefits to local seafood industries:

1. Creation of strong partnerships and networks between the local seafood industry, schools, training and careers promotion sectors.
2. Increases engagement and commitment to careers promotion by the local seafood industry;
3. Raises the profile of the local seafood industry amongst High School students and demonstrates marine-based training and careers pathways available to them, and may contribute to an increase in the number of young entrants into these pathways;
4. Gives the local seafood industry ownership over the messages communicated to students;
5. Demonstrates to students and the local seafood industry the linkages between and transferability of marine-based skills and qualifications across the range of marine-based careers (including seafood industry careers);
6. Targets and highlights skills and labour shortages in the local seafood industry to future workforce;
7. Provides operators from the local seafood industry an opportunity to examine how they present themselves to students and the wider community; and
8. Raises awareness of diversity of jobs and training opportunities with the local seafood industry for teachers and career advisors.

The level of adoption of the WoW Program model by seafood industry organisations in other States and regions will be assessable pending the distribution of the *Guide to the 'Working on the Water: from Aquaculture to Zoology' Careers Promotion Program*.

Additional benefits to arise from the review of existing careers promotion programs for the seafood industry include the identification of the lack of programs which specifically target careers promotion for the local seafood industry at the regional level.

## 8. FURTHER DEVELOPMENT

Recommended actions or steps that may be taken to further develop and disseminate the results of the project include the following:

- Advertise and make available the *Guide to the 'Working on the Water: from Aquaculture to Zoology' Careers Promotion Program* on the websites of seafood industry organisations including Seafood Services Australia and the Australian Seafood CRC;
- Promote the WoW Program model and Guide through a project to coordinate seafood industry careers promotion and workforce development activities nationally; and
- Investigate the feasibility of incorporating the WoW Program model into an expanded Seafood Industry Partnerships with Schools Program.

## 9. PLANNED OUTCOMES

Outputs of the project were as follows:

1. Review of existing careers promotion programs for the seafood industry;
2. Evaluation of the Tasmanian WoW Program by program partners and beneficiaries to review outcomes, assess value and document process;
3. Agreed future vision of the Tasmanian WoW Program in 2015 and strategies to achieve that vision;
4. Case study report of the Tasmanian WoW Program;
5. Presentation and discussion of Tasmanian WoW Program case study at the AquaEd Conference 2010;
6. *Guide to the 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program* (to be published in hard copy, on CD and on-line and distributed to all seafood industry peak bodies, training organisations and through the Careers Advise Australia networks).

Planned outcomes of the project were as follows:

1. Sustainability of the Tasmanian WoW Program in terms of on-going funding and human resources due to the capacity to clearly demonstrate the value of the program and to document the corporate knowledge required to run the program.
2. Expansion of the WoW Program model into other States and coastal regions of Australia through the provision of a Guide and case study of the Tasmanian WoW Program model.
3. Increased linkages between education and training sectors and seafood industries in other States and regions through the running of the WoW Program which is highly collaborative.
4. Increased uptake of seafood industry career pathways by post secondary students and young entrants through positive exposure to seafood industries, people and education and training opportunities.

Description of how the project's outputs will contribute to the planned outcomes and which planned outcomes have been achieved to date is provided in Table 2.

**Table 2. Achievement of project outputs and planned outcomes**

Planned Outcome	Achieved/ Not Achieved	Relevant Outputs	Role of Outputs in achieving Outcomes
<p><b>Increased sustainability of the Tasmanian WoW Program</b></p>	<p><i>Partially achieved</i></p> <p>It is not possible to assess yet whether this outcome has been fully achieved.</p>	<ul style="list-style-type: none"> <li>• Evaluation of the Tasmanian WoW Program</li> <li>• Agreed vision and strategies for the Tasmanian WoW Program</li> <li>• Case study of the Tasmanian WoW Program</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation process demonstrated high value of the Tasmanian WoW Program to partners and beneficiaries, increasing their ongoing support and commitment</li> <li>• Evaluation process identified areas requiring improvement which have been addressed for future programs</li> <li>• Agreed vision confirmed the intention to continue the program</li> <li>• Strategies included specific actions to secure longer term financial and human resource support which have been taken</li> <li>• Case study captured corporate knowledge and made it available for future programs</li> </ul>
<p><b>Expansion of the WoW Program model into other States and coastal regions of Australia through the provision of a Guide</b></p>	<p><i>Partially achieved</i></p> <p>Provision of the Guide as a resource to enable the expansion of the WoW Program model into other regions has been achieved. However it has not been possible to assess whether uptake of the model has been achieved.</p>	<ul style="list-style-type: none"> <li>• Case study of the Tasmanian WoW Program</li> <li>• Presentation and discussion of Tasmanian WoW Program case study at the AquaEd Conference 2010;</li> <li>• <i>Guide to the 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program</i></li> </ul>	<ul style="list-style-type: none"> <li>• Case study offers a proven example of the development and implementation of the WoW Program</li> <li>• Presentation at AquaEd increased national awareness and likely uptake by promoting the program</li> <li>• Guide has provided a resource which outlines the steps, processes and resources required to develop and deliver a WoW Program in other regions</li> </ul>

Planned Outcome	Achieved/ Not Achieved	Relevant Outputs	Role of Outputs in achieving Outcomes
<b>Increased linkages between education and training sectors and seafood industries in other States and regions due to uptake of the WoW Program model</b>	<i>Unknown</i>  It has not been possible to assess whether uptake of the model has been achieved.	<ul style="list-style-type: none"> <li>• <i>Guide to the 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program</i></li> </ul>	<ul style="list-style-type: none"> <li>• Guide has provided a resource which outlines the steps, processes and resources required to develop and deliver a WoW Program in other regions</li> </ul>
<b>Increased uptake of seafood industry career pathways by post secondary students and young entrants</b>	<i>Unknown</i>  It has not been possible to assess whether uptake of the model has been achieved.	<ul style="list-style-type: none"> <li>• Evaluation of the Tasmanian WoW Program</li> <li>• Case study of the Tasmanian WoW Program</li> <li>• <i>Guide to the 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program</i></li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation process determined that one of the areas of the WoW Program which required improvement was the monitoring of the impact of the program on participants future training and career pathway choices</li> <li>• Case study of the Tasmanian WoW Program found that systems to monitor the impact of the program on participants future training and career pathway choices had not been implemented</li> <li>• Guide has recommended the development and implementation of systems to monitor the impact of the program on participants future training and career pathway choices</li> </ul>



## 10. CONCLUSION

The objectives of the project were to: firstly, evaluate the processes, knowledge and outcomes of the Tasmanian WoW Careers Promotion Program and determine the benefits to the seafood industry; and, secondly, develop a model and resources to support a WoW Program to be piloted in States and regions outside Tasmania (pending the identification of substantial benefits arising from the Tasmanian WoW Program).

Both objectives were achieved. The first objective was achieved by undertaking surveys and an evaluation workshop with key beneficiaries and program partners. The evaluation process determined that the Tasmanian WoW Program was of significant value to the local seafood industry, and that development of a WoW Program model for piloting in other regions nationally was warranted.

The second objective was achieved by the development of the *Guide to 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program*. This resource included a review of other seafood industry careers promotion programs, a case study of the Tasmanian WoW Program, and a framework for developing a local WoW Program.

Outcomes of the Tasmanian WoW Program have been demonstrated by the evaluation and case study undertaken as part of this project. It is therefore anticipated that outcomes of the WoW Program model when implemented in other regions and States outside of Tasmania will include the following:

1. Creation of strong partnerships and networks between the local seafood industry, schools, training and careers promotion sectors;
2. Increases engagement and commitment to careers promotion by the local seafood industry;
3. Raises the profile of the local seafood industry amongst High School students and demonstrates marine-based training and careers pathways available to them, and may contribute to an increase in the number of young entrants into these pathways;
4. Gives the local seafood industry ownership over the messages communicated to students;
5. Demonstrates to students and the local seafood industry the linkages between and transferability of marine-based skills and qualifications across the range of marine-based careers (including seafood industry careers);
6. Targets and highlights skills and labour shortages in the local seafood industry to future workforce;
7. Provides operators from the local seafood industry an opportunity to examine how they present themselves to students and the wider community; and
8. Raises awareness of diversity of jobs and training opportunities with the local seafood industry for teachers and career advisors.

The inclusion of systems to monitor the impact of the WoW Program on the training and career pathway choices of student participants has been identified as a critical strategy for the Tasmanian WoW Program to ensure its sustainability, and has been incorporated into the WoW Program model outlined in the Guide.

## **APPENDIX 1: INTELLECTUAL PROPERTY**

This Final Report and the *Guide to the 'Working on Water Program: from Aquaculture to Zoology' Careers Promotion Program* – which is an output of the project - are the shared intellectual property of the FRDC and Marine Solutions (as per part 6, section 23.1 of the Project Agreement).

## **APPENDIX 2: STAFF**

Project staff:

1. Sam Ibbott Marine Solutions
2. Kevin Redd Marine Solutions
3. Emily Ogier Marine Solutions
4. James Garde Seafood Training Tasmania

## APPENDIX 3: EVALUATION & STRATEGIC DIRECTION WORKSHOP

# 'Working on Water: from Aquaculture to Zoology' Careers Promotion Program

## SUMMARY OF WORKSHOP OUTCOMES

Friday 25<sup>th</sup> June 2010, 10:30am

Red Bridge Café & Providore, 137 High St, Campbelltown

### 1. WORKSHOP PARTICIPANTS

NAME	ORGANISATION	SECTOR
1. Tony Ibbott	Marine Solutions	Facilitator
2. John Purser	Australian Maritime College	Training
3. Mark Godfrey	Department of Education	Schools
4. Vija Hughes	Colony 47	Careers Promotion/Extension
5. Sarah Reinhart	Tasmanian Seafood Industry Council	Seafood Industry
6. Kevin Redd	University of Tasmania	Training
7. Martin Binns	Department of Education	Schools
8. Martin Stalker	Department of Education	Schools
9. Linda Goss	Department of Education	Schools
10. Lynne Hanlon	Department of Education	Schools
11. Dan Haley	2009 student participant	Schools
12. Fiona Ewing	SeaNet / Ocean Watch	Careers Promotion/Extension
13. Emily Ogier	University of Tasmania Tasmanian Seafood Industry, & Marine Solutions	Seafood Industry
14. Sam Ibbott	Seafood Training Tasmania & Marine Solutions	Training

### APOLOGIES

- Tim Hunt (Tassal)
- Ben Stockwinn (Primary Industries Education Foundation)
- James Garde (Seafood Training Tasmania)
- Pam Elliott (Woodbridge Marine Discovery Centre)
- Matt Berne (Colony 47)

### 2. WELCOME & OVERVIEW

Sam Ibbott welcomed participants and provided an overview of the objectives of Working on the Water (WoW) Careers Promotion Program, the FRDC-funded project, and the Workshop.

The WoW Program has run in 2008 & 2009 in both the north & south of the State. It has been recognised by the Fisheries Research & Development Corporation (FRDC) as a potential model for other States & regions to promote careers in the seafood & allied marine sectors.

The objectives of the Workshop were to:

1. Determine whether the Program meets the needs of the seafood industry and allied sectors. Should this be the case, the objective will then be to document the processes, knowledge and outcomes of the Program to enable the development of a Guide to assist in the implementation of a similar program in areas outside of Tasmania; and
2. Develop strategies to ensure the improvement, sustainability and ongoing resourcing of the WoW Program in Tasmania.

Tony Ibbott was then introduced as the Workshop facilitator.

### **3. *WoW PROGRAM'S ACHIEVEMENTS***

Achievements of the WoW Program thus far were identified and prioritised. The main achievements of the Program were as follows:

1. Participating students learn about the wide range of training & career pathways associated with the seafood industry, and the links between study, training & employment;
2. Participating students are able to make informed study and career choices;
3. Networks have been created between the seafood industry, schools and the training sector;
4. High level of engagement and commitment to the Program by the seafood industry;
5. High level of interest in and engagement from participating students;
6. Caters for a breadth of student needs (academic to vocational);
7. Value continues to be recognised by partners and stakeholders;
8. Demonstrated 'lighthouse' model for careers promotion programs in other regions/states; and
9. Enabling the local seafood industry to identify and articulate possible training & career pathways and options to students.

### **4. *SUCCESSFUL FEATURES & AREAS REQUIRING IMPROVEMENT***

Successful features of the Program were identified and prioritised as follows:

- Genuineness, authenticity and enthusiasm of people involved in the Program;
- Diversity and intensity of Program's content and format, which provides a broad array of experiences and yet demonstrates linkages;
- Selection process ensures students who participate are interested and draws from a variety of different schools and backgrounds;
- Gives students access to "real" marine/seafood operators & experts, not just teachers;
- Incentives & opportunities provided to students through the assignment process and post-Program;
- Equity of access to the Program provided to students in regional/rural areas by meeting accommodation, travel and meal costs; and

- Multiple funding sources and lack of ownership of the Program by anyone sector or organisation.

Areas where the Program could be improved were identified and prioritised as follows:

- Sustainability of the Program (funding & human resources);
- Level of 'hands on' activities within the Program;
- Promotion of the Program to schools and pathway planners/careers advisors;
- Provision of support materials and formalized follow-on opportunities for students post-Program;
- Involvement of previous student participants in promoting and running the Program;
- Identification of a 'Host' organization for the Program's website and potentially for the Program (noting that depending on the hosting arrangements this may compromise the flexible and cross-cutting nature of the Program and may not be the preferred option);
- Promotion of the Program to the seafood industry and other stakeholders; and
- Responsiveness to changing demand for specific jobs/skills within the seafood industry.

## **5. BENEFITS OF THE PROGRAM**

The benefits of the Program to the different sectors were identified and prioritised as follows:

### *Seafood Industry*

- Raises the profile of the local seafood industry;
- Local seafood industry has ownership over the messages communicated to students;
- Targets and highlights skills and labour shortages in the seafood industry to future workforce;
- Provides operators from the seafood industry an opportunity to examine how they present themselves to students and the wider community; and
- Raises awareness of diversity of jobs and training opportunities with the seafood industry for teachers and career advisors.

### *Student participants*

- Students are able to make informed choices about training and career pathways based on direct experience;
- Students become more motivated in studies because they have directly experienced links between study, training and careers;
- Provides students with authentic, 'real world' and out-of-classroom experiences;
- Program length and format provides students with a broad array of training and career pathways right across the seafood and allied marine sectors; and
- Provides students with access to excellent marine research and training facilities.

### *Schools*

- Raises awareness of diversity of jobs and training opportunities with the seafood industry for teachers and career advisors;
- Students become more motivated in studies because they have directly experienced links between study, training and careers; and
- Links curriculum (science) to real-world outcomes.

### *Training (VET & tertiary)*

- Adds to Tasmania's profile as a "marine hub";
- Provides students with access to excellent marine and maritime research and training facilities;
- Raises the profile of the training organisations; and
- Students are able to make informed choices about training and career pathways based on direct experience.

## **6. EVALUATION OF THE WoW PROGRAM AGAINST PROGRAM OBJECTIVES**

The performance of the Program in 2008 and 2009 was evaluated against the four Program objectives.

**Objective 1:** *Provide students with the opportunity to experience and learn of the possible training and career pathways in Tasmania's seafood industry & allied marine industries.*

FULLY

ACHIEVED

Comments from representatives of the wild-catch commercial fishing industry included that the experiences offered of their sector could be improved and expanded.

**Objective 2:** *Expand the career promotion programs available to school education and careers promotion sectors to include Tasmania's seafood industry and allied marine industries.*

ACHIEVED

Comments from the schools and careers promotion sector included the note that further promotion of the Program to schools would enhance its performance against this objective.

**Objective 3:** *Develop strategic partnerships between Tasmania's seafood industry and allied marine industries, VET, tertiary education, school education and careers promotion sectors.*

ACHIEVED

Comments included the need for the Program to undertake the following in order to better achieve this objective:

- move from being based on personality-driven to formalized and strategic networks and partnerships;
- develop partnerships with non-government school sector; and
- expand the activities on which the partnership between industry, schools and training sectors is based beyond the current Program to a continuous program of incremental activity and relationships.

**Objective 4:** *Contribute to an increase in the numbers of Tasmanian students entering marine-based industry sectors and/or undertaking marine-based VET or tertiary training.*

PARTIALLY ACHIEVED / NOT ASSESSABLE

Comments included the following:



- the Program's 2 year time span of activity is not sufficient to assess its impact on students entering the seafood industry and/or marine-based training, especially tertiary training;
- mechanisms need to be developed to track the subsequent training and career pathway choices of students who have participated in the Program;
- the value of the non-quantifiable impact of the Program shouldn't be underestimated (ie. peer group influence exerted by student participants); and
- objective of the school and careers promotion sectors is in fact for students to make informed choices about future training and career pathways, and this may not necessarily mean entry into the seafood and allied marine industries.

## **7. STAKEHOLDERS' NEEDS & FEARS**

The following needs and fears were identified on a shared and sector-specific basis.

### NEEDS

Shared:

- Students are provided with real experiences of training and career opportunities in the seafood and allied marine industries, which enable them to make informed study, training and career choices;
- Support for Program partners, contributors and stakeholders and coordination of activities;
- Provision of accurate and positive information regarding study, training and career opportunities in the seafood and allied marine industries, and in the post-secondary training sectors; and
- Opportunities to build networks and partnerships between industry, schools and the training sector.

Sector-specific:

- Opportunity to raise profile and increase awareness of the industry amongst the community and amongst potential workforce through positive exposure (*Seafood industry*);
- Opportunity for members to do something different than operational activities and to justify social licence to utilise common pool marine resources by giving back to the community (*Seafood industry*);
- Industry contributors are good communicators (*Careers promotion & Extension*);
- Support materials provided to students to convey the range of pathways and contacts for those pathways (*Schools*);
- Regional focus maintained (*Schools*); and
- Supply of fee-paying students to continue offering marine-based courses (*Training*);
- Increase post-secondary education & training qualifications of Tasmanian students (*Training*).

### FEARS

Shared:

- Investment (human resources, cash funding, goodwill) in the Program does not result in objectives being met;

- Students who wish to further explore training or career pathways within the seafood and allied marine industries are not provided with opportunities or support beyond the 3-day program;
- Lack of sustainability without coordination and support in the form of dedicated human resources and cash funding; and
- Inaccurate information provided to students and resultant loss of credibility for the Program.

Sector-specific:

- Goodwill of participating businesses, operators, individuals and organisations will be exhausted (*Seafood industry*);
- Risk of injury to student and associated bad publicity (*Seafood industry*);
- Industry contributors failing to communicate well with students (*Careers promotion & Extension*);
- Lack of funding for assisting regional and rural students to attend (*Schools*); and
- Loss of students to other sectors or other training providers (*Training*).

## **8. CRITICAL SUCCESS FACTORS**

The following factors were identified as critical to the success of the Program in its current model:

- Offers real and unique experiences that are memorable and relevant for students, which in turn leads to informed choices and enthusiasm for chosen pathways;
- Visible passion and energy of partners, stakeholders, contributors and students;
- Ability of industry contributors to communicate effectively with students;
- High fun factor for students;
- Strong networks and collaboration between Program partners;
- Comprehensive Program format that covers a range of varied experiences; and
- Driven by purpose and need, not by funding availability.

## **9. FUTURE VISION FOR THE WoW PROGRAM IN 2015**

In the first instance, all sectors agreed that the Program should continue beyond 2010. Characteristics of the Program in 2015 common to the vision communicated by all sectors included the following:

- Sustainable in terms of funding, people, management and relationships;
- Existing Program is the core of an expanded and articulated careers promotion program;
- Program has a positive and high profile amongst schools, industry, training organisations & community because it meets the needs of each of these sectors;
- Stays relevant in terms of content, activities and technologies to the changing needs and contexts of industry, schools and training sectors; and
- Remains accessible to a range of students (academic to vocationally-focused), especially those from regional & rural areas.

## **10. PRIORITISED STRATEGIES TO ACHIEVE 2015 VISION**

Strategies to achieve the 2015 vision were recommended and prioritised. They included the following (listed in order of priority):

1. Secure strategic and sustainable sources of funding;

2. Collate data from Program to demonstrate value of outputs and outcomes;
3. Appoint a Project Officer/Coordinator;
4. Develop an agreed time frame for current and proposed Program with schools, training organisations and industry partners;
5. Identify and involve past student participants;
6. Identify potential additional activities to be part of an expanded Program;
7. Form a Program Steering Group to formalize networks and communication between industry, schools, and training partners;
8. Find “champions” and “patrons” of the Program within the industry and education sectors; and
9. Standardise the Program by developing a framework which can implemented in other regions/states/countries by any organization.

**APPENDIX 4: GUIDE TO THE 'WORKING ON WATER PROGRAM: FROM  
AQUACULTURE TO ZOOLOGY' CAREERS PROMOTION PROGRAM**  
(see accompanying report)

MARINE SOLUTIONS

# GUIDE TO 'Working on Water: from Aquaculture to Zoology'

CAREERS PROMOTION PROGRAM

Emily Ogier, Kevin Redd, Sam Ibbott & James Garde

September 2010



Australian Government  
Fisheries Research and  
Development Corporation



## **ACKNOWLEDGEMENTS**

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In addition, a number of organisations provided financial support to the Tasmanian Working on Water Program (or WoW Program) in 2008 and 2009 which contributed indirectly but nonetheless significantly to the outcomes of this project. Those organisations were as follows:

- Guaranteeing Futures, Education Department of Tasmania
- Seafood Training Tasmania
- Tasmanian Seafood Industry Council
- University of Tasmania
- Australian Maritime College
- Colony 47 (Partnership Brokers)
- Launceston Workplace Learning
- Tassal Pty Ltd
- Regional Area Consultative Committee, Northern Tasmania

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# **1. INTRODUCTION**

## **1.1. Overview of the Tasmanian WoW Program**

The Tasmanian Working on Water (WoW) Program was created in 2008 to introduce students from Years 9 and 10 to a wide range of career opportunities in the marine sector. Within Tasmania excellent access was available to marine research facilities and institutes, varied aquaculture operations, thriving wild catch fisheries, an exemplary training centre, and a vibrant tourism sector. All of these vital components of the marine industries were readily accessible from the population bases of both Southern and Northern Tasmania where schools are located and from which the participants were drawn. Additionally, the intimate nature of the Tasmanian community made the networks between all aspects of the marine sector both strong and accessible.

## **1.2. How the concept was developed**

The conceptual development of the Tasmanian WoW program came from several individuals working in a range of roles in the marine research and education sectors. Quite often these individuals were asked to provide public outreach and *ad hoc* 'programs' to visiting school groups and other occasional visitors to the University and local research institute. These *ad hoc* 'programs' were increasing in frequency and scope over time and as a result of networking with other sectors of the seafood, aquaculture and marine industries an idea to develop a specific career based program was developed.

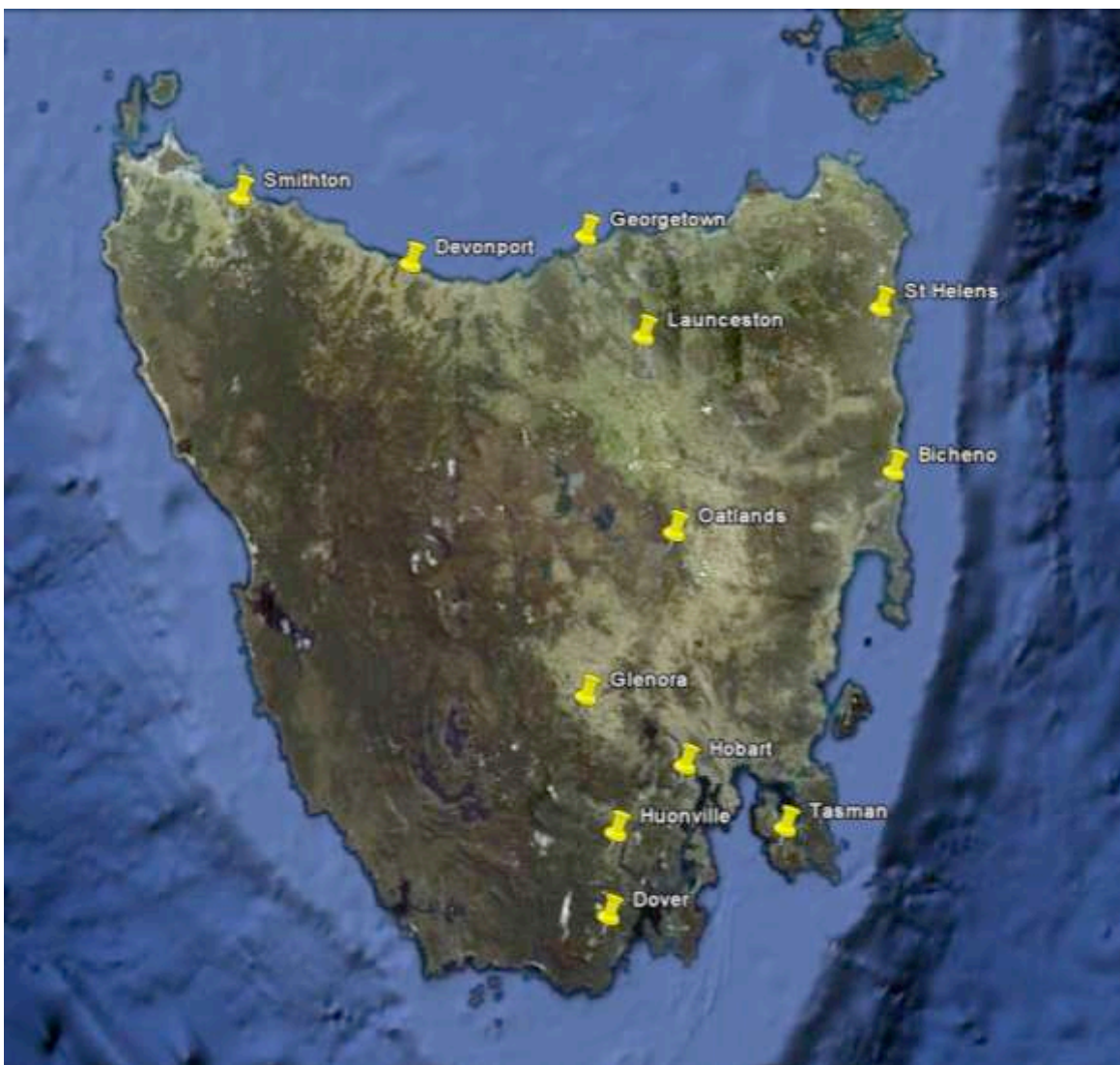
As a response to a State Government review of the length of the post secondary educational year, an opportunity arose to create a more structured program for students in Years 9 and 10 in Tasmania. The individuals who developed the concept of the Tasmanian WoW Program used this review process as a chance to formalize the relationships and activities which had been used in previous *ad hoc* 'programs' and to create a template for future education and career development in the marine sector. The initial outline of this draft program was selected by the Department of Education for a pilot project in 2008, and the first Tasmanian WoW Program was delivered in that year to schools in Southern Tasmania.

## **1.3. What the Tasmanian WoW Program achieved**

The Tasmanian seafood industry has a long history of not investing in human capital and therefore has suffered due to a diminished profile amongst the young and those

promoting career pathways. The effect has been a severe State-wide skill shortage, restricting the seafood industry's development.

The Tasmanian WoW Program was able to offer a three day program which introduced students to the available opportunities for training and careers in Tasmania's vibrant seafood industry and allied marine sectors. In 2009 the program was available to 9,225 Year 9 and 10 students from over 60 schools in Tasmania. In 2008 in the Southern Tasmanian program 41 students took part, while this number rose to 47 in the South and 32 students participated in the Northern Program during 2009. Students who successfully applied to participate in the Tasmanian Working on Water Program came from a range of urban, regional and rural areas of Tasmania (see Figure 1).



**Figure 1. Origins of Student Participants in the Tasmanian Working on the Water program in 2008 and 2009.**

A workshop was held in June 2010 in order to evaluate the outcomes of the Tasmanian WoW Program and determine what it had achieved. Input was sought from local seafood industry representatives and operators, and people working in school education, careers promotion, marine-based VET and tertiary education and training sectors.

The Tasmanian WoW Program 2008-2009 achieved the following:

1. Delivery of a Program in which:
  - A wide range of student needs (academic to vocational) were met;
  - Interest in and engagement with the Program by participating students was high;
  - Participating students learned about the wide range of training and career pathways associated with the seafood industry, and the links between study, training & employment; and
  - Participating students were able to make informed study and career choices as a result of the Program.
2. Creation of strong partnerships and networks between the local seafood industry, schools, training and careers promotion sectors, which continue to be recognised and valued.
3. Development of a mechanism which has facilitated a high level of engagement and commitment to careers promotion by the local seafood industry.
4. Demonstration of a 'lighthouse' model for regional careers promotion programs in other regions/States.
5. Opportunities for further development were provided, such as vocational qualifications, or work experience.

Benefits of the Tasmanian WoW Program 2008-2009 to the different sectors included:

#### *Seafood Industry*

- Raises the profile of the local seafood industry;
- Local seafood industry has ownership over the messages communicated to students;
- Targets and highlights skills and labour shortages in the seafood industry to future workforce;
- Provides operators from the seafood industry an opportunity to examine how they present themselves to students and the wider community; and

- Raises awareness of diversity of jobs and training opportunities with the seafood industry for teachers and career advisors.

#### *Student participants*

- Students are able to make informed choices about training and career pathways based on direct experience;
- Students become more motivated in studies because they have directly experienced links between study, training and careers;
- Provides students with authentic, 'real world' and out-of-classroom experiences;
- Program length and format provides students with a broad array of training and career pathways right across the seafood and allied marine sectors; and
- Provides students with access to excellent marine research and training facilities.

#### *Schools*

- Raises awareness of teachers and career advisors of diversity of jobs and training opportunities with the seafood industry; and
- Links curriculum (science) to real-world outcomes.
- Provides pathway planners with an opportunity to become informed about the strong marine sector

#### *Training (VET & tertiary)*

- Adds to Tasmania's profile as a "marine hub";
- Provides students with access to and experiences of excellent marine and maritime research and training facilities; and
- Raises the profile of the training organisations.

### **1.4. Developing a Local Program**

The development of the Tasmanian WoW Program offers a model which you can use to develop a local WoW Program. The *Guide to 'Working on the Water: from Aquaculture to Zoology' Careers Promotion Program* has been developed to:

1. Showcase the processes and resources used to develop the Tasmanian WoW Program; and
2. Highlight the general principles behind developing and running a regional careers promotion program which provides school students with hands-on experience of training and career pathways within the local seafood industry.

***Use this Guide and the case study of the Tasmanian WoW Program as a resource to help you develop a WoW Program in your region which meets the specific needs of your local seafood industry.***

### **1.5. Articulation with other programs**

The Tasmanian WoW Program was developed to address the need for exposure and positive promotion of training and career opportunities within the seafood and marine-based industries to local High School students.

The project organising group first undertook a review to find out if other programs existed which could be adopted to meet this need in Tasmania. The review identified a number of related programs Australia-wide but found that none specifically targeted this age group nor promoted the range of training and career pathways across the seafood industry (see Table 1). It was therefore concluded that there was a need to develop a unique new program and that lessons, resources and partnerships could be drawn from and developed with people and organisations operating related programs.

***Are there any programs in your region which aim to create partnerships to promote training and career opportunities within your local seafood and marine-based industries to local students? Or, which aim to achieve similar outcomes for related sectors?***

***In developing and implementing the WoW Program opportunities exist to:***

- 1. draw upon the lessons learned from these programs;***
- 2. utilise resources developed by these programs; and***
- 3. articulate with related programs within your region, especially where they target primary school students or post-secondary students.***

**Table 1. Review of Seafood Industry Careers Promotion Programs**

<b>Program &amp; Organisation</b>	<b>Funding</b>	<b>Scale</b>	<b>Link with Seafood Industry</b>	<b>Objective/s</b>	<b>Target Group</b>	<b>Main Activities</b>	<b>Comments</b>
<b>Primary Industries Education Foundation</b> (PIEF)	Primary industry groups (not seafood industry as yet)	Australia-wide	Indirect (one of a number of primary industries)	Provide information about primary industries career paths for school advisors	K – 12 Students & Educators	<ul style="list-style-type: none"> <li>• None as yet</li> </ul>	<ul style="list-style-type: none"> <li>• In early implementation stage</li> <li>• Seafood industry not currently a member</li> <li>• Providing information on careers pathways only 1 of 6 key activity areas</li> </ul>
<b>Seafood Industry Skills Acquisition Program</b> Seafood Training Centre of Excellence, & the Australian Fisheries Academy (SA)	Targeting Skills Needs in Regions program, DEEWR (C'wealth) & DFEEST (SA)	Regional (Port Lincoln, SA)	Direct	<ul style="list-style-type: none"> <li>• Target skills needs in regions</li> <li>• Address lack of uptake of aquaculture traineeships</li> </ul>	Indigenous & Non-Indigenous 16-25 year olds	<ul style="list-style-type: none"> <li>• Developed, promoted &amp; ran a Certificate 2 in Aquaculture as a bridge to entry into marine farming traineeship</li> </ul>	<ul style="list-style-type: none"> <li>• Not a dedicated careers promotion program</li> <li>• Successful, targeted, needs-based regional program</li> <li>• Good example of linking industry and VET sectors</li> </ul>
<b>Primary Industry Centre for Science Education</b> (PICSE)	FRDC has provided \$ for services to seafood industry	Australia-wide	Indirect (one of a number of primary industries)	Promote a supply chain of tertiary-bound young people for science careers in primary industries	K – 12 Students & Science Educators	<ul style="list-style-type: none"> <li>• Science Camps for Grade 10 students</li> <li>• Develop teaching resources</li> <li>• In-class activities</li> </ul>	<ul style="list-style-type: none"> <li>• Not dedicated a careers promotion program as such</li> <li>• Limited to science-based career pathway</li> </ul>

Program & Organisation	Funding	Scale	Link with Seafood Industry	Objective/s	Target Group	Main Activities	Comments
<b>'A Life' Interactive DVD series &amp; Website</b> Australian Seafood CRC	Industry, FRDC & C'wealth Government	Australia-wide	Direct	Make accessible positive information about seafood industry career paths to a wide audience	All ages of students and workforce	<ul style="list-style-type: none"> <li>• Web-based (<a href="http://www.aLife.net.au">www.aLife.net.au</a>) careers information source, including interviews of people working in various jobs in the seafood industry &amp; Fact Sheets on careers pathways</li> <li>• Resources circulated to schools, TAFES, universities</li> </ul>	<ul style="list-style-type: none"> <li>• Offers non-direct experience of seafood industry career pathways only</li> <li>• Use of internet and DVD means promotion reaches a very wide audience</li> <li>• Resources developed could be used as part of other careers promotion programs</li> </ul>
<b>Regional Schools Initiative – the Huon Lower Channel Alliance</b> Colony 47 (Partnership Brokers)	Pending	Tasmanian & Regional (Huon & Lower Channel, Southern Tas)	Indirect (one of a number of primary industries)	Expand educational programs	Years 7-10 students	<ul style="list-style-type: none"> <li>• Offer specialist trade/theme programs to students from all schools, including 'Marine Science' &amp; 'Aquaculture'</li> <li>• Use specialist teachers &amp; facilities at each location</li> </ul>	<ul style="list-style-type: none"> <li>• In development stage</li> <li>• Potential for strong links with Tasmanian WoW Program</li> </ul>
<b>Seafood Industry Partnerships in Schools</b> OceanWatch – SeaNet	FRDC	Australia-wide, based in Hobart, Tasmania	Direct	Pilot collaborative educational program between seafood industry & educators	Years K-10 Students	<ul style="list-style-type: none"> <li>• Classes adopt a marine farm or commercial fisherman</li> <li>• Program facilitates ongoing relationship between farm/fisher and class</li> </ul>	<ul style="list-style-type: none"> <li>• In implementation stage</li> <li>• Not a dedicated careers promotion program</li> <li>• Potential for strong links with WoW Program (Tasmanian &amp; national)</li> </ul>

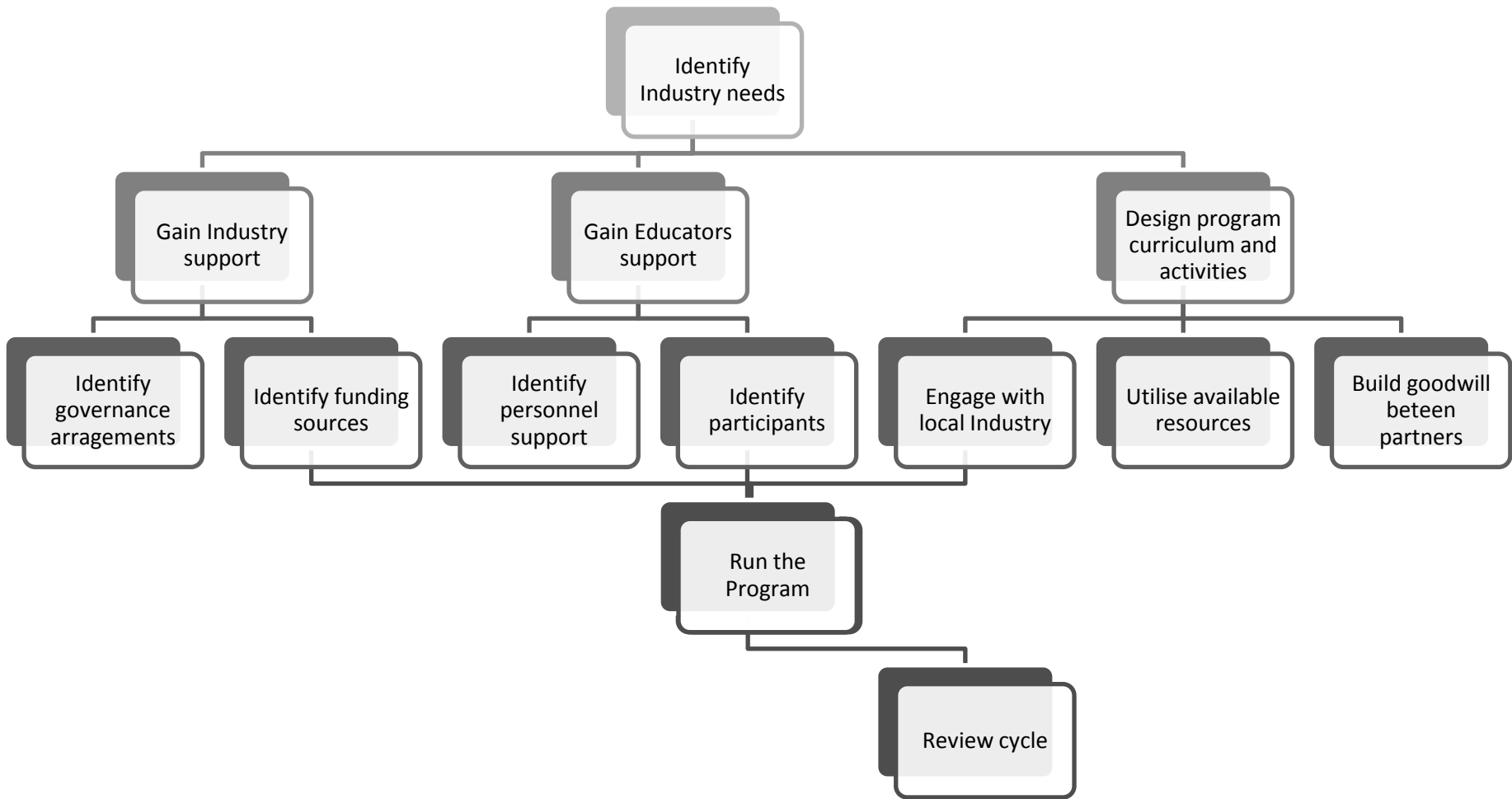


Figure 2. Process Map for the WoW Program



**Table 2. Checklist for planning and running your local WoW Program**

Completed?	Action	More detail?
<input type="checkbox"/>	Identify careers promotion needs and wants	Section 2.1 & 2.2
<input type="checkbox"/>	Confirm industry support	Section 3.1, 3.2, 4.1, 4.2 & 4.5
<input type="checkbox"/>	Identify messages and activities to be included and available	Section 2.3, 5.1 & 5.2
<input type="checkbox"/>	Contact schools education sector to bring them aboard	Section 3.1 & 4.3
<input type="checkbox"/>	Contact potential partners and sponsors – where are resources coming from?	Sections 3 & 4
<input type="checkbox"/>	Confirm dates and program outline	Section 5
<input type="checkbox"/>	Contact local industry operators to confirm activities	Section 6.1 & 6.2
<input type="checkbox"/>	Advertise amongst the schools	Section 5.3
<input type="checkbox"/>	Collate and assess applications	Section 5.4
<input type="checkbox"/>	Inform successful applicants and provide them with program information	Section 5.4
<input type="checkbox"/>	Go for it – get industry involved and get the students excited!	Section 6
<input type="checkbox"/>	Follow up on student reports, prizes and feedback, and talk & write about the program	Section 7
<input type="checkbox"/>	Take on board the comments from industry, partners and participants	Section 8
<input type="checkbox"/>	Fine-tune the program to provide a quality experience for all	Section 9

# ***Presenter Profile***

**DAVE WYATT**

**Commercial Cray fisherman  
& Adventure Charter  
Boat Operator**



**CAREER PATH:**

I grew up being really familiar with the marine environment and with boats. My parents had sailing boats and so being on the water and fishing recreationally was part of my upbringing. While I was in Grade 9 at school I did a 2 week work experience trip on a cray fishing boat on the West Coast of Tasmania. After that I knew I wanted to become a fisherman. I left school in Grade 10 and straight away went fishing as a deckhand on a cray boat at age 16. The next year I went to college then to the Australian Maritime College and did a course in fisheries technology. I then returned to sea to build up my sea time, and got my Master Class V boat driving ticket at the age of 19. By then I wanted to travel a bit so I went overseas for a year. When I got back to Tasmania I started running a small cray fishing boat as the skipper for 6 years. In that time I got married and my wife came out with me as my crew and we fished together for 3 years. Since then I have changed boats but always fished for crays. Recently I have expanded what I do to include adventure chartering, where I take surf trips and charters to Maatsuyker Island and other remote locations.

**WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

I was able to welcome students aboard while I was tied up at Vic Dock. I showed them the workings of a real cray fishing boat and the gear we use to catch crays. I was also able to describe to them a “day in the life” of a cray fisherman or an adventure charter boat operator, and answer questions.

**CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Yes, I quite often take people out for a ‘tucker run’ (when you do a fishing trip and work on deck to gain experience in exchange for food but not pay). It would be good if anyone who wants to come out does a 2-day Elements of Shipboard Safety Course so that I know that they know how to be safe on my boat at sea.

## **2. CAREERS PROMOTION NEEDS**

### **2.1. Identifying Needs**

The need which the Tasmanian WoW Program primarily addressed was the promotion of the local seafood industry and allied marine sectors to the emerging work force as a viable, lucrative and sustainable career option. The local seafood industry is competing with a number of other sectors for motivated, skilled and engaged employees.

Needs were identified through a number of means, which included:

1. Review of local seafood industry strategic plans
2. Discussions and meetings with seafood industry representatives and people working in the school education, careers promotion, marine-based VET and tertiary education and training sectors.

Specific needs of the Tasmanian seafood industry included:

- Opportunities to raise the profile and increase awareness of the industry amongst the community and amongst potential workforce through positive exposure;
- Removal of myths and poor pre-conceptions of the local seafood industry as a place to work (i.e. only hard unskilled labour); and
- Opportunities for members to justify their social licence to utilise common-pool marine resources by giving back to the community.

In developing the WoW Program the needs of other sectors and sections of the Tasmanian community were identified. These other sectors and sections of the community included: year 9 & 10 students; school educators; careers advice and promotion organisations; marine-based VET providers; marine-based tertiary training providers; and the broader Tasmanian community.

The following needs were identified as needs shared by all sectors and sections of the Tasmanian community involved in the WoW Program:

- Students are provided with real experiences of training and career opportunities in the seafood and allied marine industries, which enable them to make informed study, training and career choices;
- Provision of accurate and positive information to students and schools regarding study, training and career opportunities in the seafood and allied marine industries, and in the post-secondary training sectors; and
- Opportunities to build networks and partnerships between industry, schools and the VET and tertiary training sectors.

***What are the specific needs of your local seafood industry sectors?***

***Needs can be identified through a number of means, including:***

***1. Review of local seafood industry strategic plans***

***2. Discussions and meetings with seafood industry representatives and people working in the school education, careers promotion, marine-based VET and tertiary education and training sectors.***

## **2.2. Developing Aim and Objectives**

The aim of the Tasmanian WoW Program was to start the process of building a positive profile for the local seafood industry in the labour market and education sector. By providing positive exposure of training and career opportunities within the seafood industry to students, the Program aimed to raise the profile of industry not just to participants, but to whole schools and families as the learning is passed on in an informal environment.

To meet this aim, the Tasmanian WoW Program needed to develop strategic partnerships with the school education sector, as well as other sectors including post-secondary VET, tertiary education and training, and careers promotion sectors.

Objectives of the Tasmanian WoW Program were to:

1. Provide Year 9 and 10 students with the opportunity to experience and learn of the possible training and career pathways in Tasmania's seafood industry & allied marine industries;
2. Expand the career promotion programs available to school education and careers promotion sectors to include Tasmania's seafood industry and allied marine industries;
3. Develop strategic partnerships between Tasmania's seafood industry and allied marine industries, VET, tertiary education, school education and careers promotion sectors; and
4. Contribute to an increase in the numbers of Tasmanian students entering marine-based industry sectors and/or undertaking marine-based VET or tertiary training.

***Adapt the broad aims of the WoW Program to the needs of your region and industry.***

***Aim of the WoW Program:***

**Build a positive profile for the local seafood industry in the labour market and education sector.**

***Objectives of the WoW Program:***

***1. Provide school students with the opportunity to experience and learn of the possible training and career pathways in your local seafood industry & allied marine industries;***

***2. Expand the career promotion programs available to school education and careers promotion sectors to include your local seafood industry and allied marine industries;***

***3. Develop strategic partnerships between your local seafood industry and allied marine industries, VET, tertiary education, school education and careers promotion sectors; and***

***4. Contribute to an increase in the numbers of local students entering marine-based industry sectors and/or undertaking marine-based VET or tertiary training.***

### **2.3. Identifying Key Messages**

In order to build and convey a positive profile of working in the Tasmanian seafood industry, it was important to identify the key messages the Tasmanian WoW Program needed to communicate to students, schools and the wider community.

The key messages which the Tasmanian WoW Program aimed to communicate to students and schools were as follows:

- A wide range of career and training pathways and opportunities exist for students who want to work on the water in Tasmania;
- Gaining the skills and qualifications necessary to work on the water gives students access to an array of jobs on the water, as these skills and qualifications are easily transferable;

- The Tasmanian seafood industry has lots to offer its workforce: great lifestyle, something different and varied, and the work is hands on and real;
- There are training providers and industry organisations that will offer advice, contacts and opportunities to assist you in pursuing your marine-based training or career pathway.

The real strength in these messages lay in the inclusion of allied marine sectors, such as: marine-based research, tourism, construction and policing; alongside the seafood industry. By identifying the array of opportunities across all of these sectors and the ease with which skills and qualifications could be transferred, the overall profile of the local seafood industry was expanded and enhanced, and could appeal to a wider range of students.

These messages were identified during the process of establishing the needs of local seafood industry operators and organisations, and people working within the school and training sectors, with regard to careers promotion. The program of activities was then designed to deliver and continually reinforce these messages. Presenters were encouraged to describe their experiences in all sorts of marine-based careers and their application of core skills and qualifications (such as boat driving tickets) in a variety of jobs.

***Adapt the broad messages of the WoW Program to the specific needs of your region and industry, and plan how they will be communicated.***

***Key messages the WoW Program aims to deliver are:***

- ***A wide range of career and training pathways and opportunities exist for students who want to work on the water;***
- ***Gaining the skills and qualifications necessary to work on the water gives students access to an array of jobs on the water, as these skills and qualifications are easily transferable;***
- ***The Australian seafood industry has lots to offer its workforce: great lifestyle, something different and varied, and the work is hands on and real;***
- ***There are training providers and industry organisations that will offer advice, contacts and opportunities to assist you in pursuing your marine-based training or career pathway.***

# ***Presenter Profile***

**JESS MELBOURNE-THOMAS**

**University of Tasmania  
Institute of Marine and Antarctic  
Studies**

**PhD Candidate and Researcher**



## **CAREER PATH:**

I have a background in ecology and have been involved with research relating to a range of marine systems, from temperate to tropical reefs, and from local to regional scales. I'm born and bred Tasmanian, with a Bachelor of Science from the University of Tasmania, and Honours in Marine Ecology. I was a Rhodes Scholar at the University of Oxford from 2003 – 2005 and have recently submitted my PhD thesis under the UTAS/CSIRO Quantitative Marine Science program. My main research interests relate to the development of simulation models to understand and predict changes in the marine environment.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

As a postgraduate researcher at the University of Tasmania, I was able to talk to students about my experiences in marine research, and the range of exciting opportunities for travel that my career path has provided. Having worked as a Dive Master and in SCUBA diving retail for over five years, I was also able to provide students with an insight into some of the advantages of attaining SCUBA diving certification.

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Not currently.

## **3. RESOURCES**

### **3.1 People**

The people involved in the Tasmanian WoW Program can be broadly divided across four main sectors of the industry:

- Aquaculture and wild fisheries operators
- Education and VET providers and agents
- Research and tertiary educational institutes
- Tourism operators

Each of these sectors provided critical human components to the Tasmanian WoW Program and gave the participants an opportunity to engage directly with professionals in each area.

It was also critical to have local educational organizations involved in the promotion and implementation of the program. The Vocational Education and Learning Development Officers (VELDOs) and the Pathway Planning Officers, all from Guaranteeing Futures, SCOPE staff, and local teachers provided the access to schools, students and added legitimacy to the program.

For the initial Tasmanian WoW Program delivered in 2008, the presenters from each sector were hand selected based upon several criteria:

- Genuine experience and credentials in the marine industries.
- Ability to communicate and articulate their role in the marine sector to a public audience.
- Enthusiasm and willingness to participate in a career development program.

To further illustrate the people involved in this program there are a series of profiles throughout this report. Several of the individuals involved in the Tasmanian WoW Program were asked to describe their contribution to the program as well as the way in which they arrived at their present role within the marine sector.



***The success of the WoW Program model can be directly attributed to the people involved and their enthusiastic contributions to the daily activities. In order to develop a similar program in other regions, it is important to develop a network of dynamic and exemplary people in each of the relevant local sectors.***

***People's roles may include the following:***

- Program instigators and organisers***
- Staff from seafood industry organisations, Department of Education programs, and training organisations (program partners)***
- Presenters and staff of businesses and facilities offering tours and activities (program contributors)***

### **3.2 Funding and In-kind Contributions**

Support for the WoW Program can come in a number of forms, including direct cash funding and in-kind contributions. Cash funding can take either of the following forms:

1. Sponsorship
2. Agreement to meet specific Program expenses

In-kind contributions are those contributions which provide a something to the WoW Program at no or lower cost. They can take a number of forms, which include:

1. People's time to run an activity (a talk, a tour, or help organise the Program)
2. Venues for Program activities, including: marine farms, commercial fishing boats, research and training facilities or ship building facilities
3. Bus or boat transport
4. Meals and seafood tastings
5. Opportunities for work experience placements or training courses to offer to selected students as awards and incentives

In the case of the Tasmanian WoW Program it was important to involve many organisations in the Program. This enabled the Program to operate without constraints associated with major sponsorship and enabled an array of organisations to participate as partners in the Program. Organisations were approached six months prior to the Program's commencement. Background information about the Program and – where

and when available – feedback and documentation from previous Programs were also supplied to potential contributing organisations.

The Tasmanian WoW Program was supported by cash funding and in-kind contributions from a number of organisations (see Table 3. and 4.).

**Table 3. Cash Funding for the Tasmanian WoW Program 2009**

<b>ORGANISATION</b>	<b>FUNDING</b>
Regional Development Consultative Committee, Tasmania	\$500
Guaranteeing Futures North (Dept. Of Education)	\$500
Tassal Operations Pty Ltd	\$1,000
Tasmanian Seafood Industry Council	\$500
Guaranteeing Futures South (Dept. Of Education)	\$500
Colony 47 (SCOPE)	\$2,000 (transport costs)
Seafood Training Tasmania	\$1,500
<b>Total</b>	<b>\$6,500</b>

**Table 4. In-kind Contributions to the Tasmanian WoW Program 2009**

<b>ORGANISATION</b>	<b>Planning &amp; Admin</b>	<b>Staffing</b>	<b>Venues</b>	<b>Activities</b>	<b>Opportunities &amp; Awards</b>	<b>Sponsorship /Specific Expenses</b>
Seafood Training Tasmania	✓	✓	✓	✓	✓	Elements of Shipboard Safety Courses
University of Tasmania	✓	✓	✓	✓	✓	Bus hire
Tasmanian Seafood Industry Council	✓	✓		✓		
Colony 47 (SCOPE)	✓	✓				Bus hire
Bruny Island Boat Tours				✓		Boat charter at cost
Launceston Workplace Learning	✓	✓				Student accommodation
Australian Maritime College & NMCRS	✓	✓	✓	✓	✓	Bus hire & catering at cost
Marine Solutions	✓	✓		✓	✓	
Guaranteeing Futures North & South (Dept. Of Education)	✓	✓				Transport costs for regional students
Tassal Operations Pty Ltd				✓		
Get Shucked Oysters				✓		Product tasting
Mures Pty Ltd				✓		Catering at cost
Roaring 40 Kayak Tours				✓		
Tasmanian Marine Police				✓		
Australian Antarctic Division				✓		
TasPorts, Bell Bay				✓		
Van Diemen Aquaculture				✓		
Springfield Hatchery				✓		
Barnett's Shipbuilding				✓		
Underwater Centre				✓		

***Securing sustainable sources of support for your local WoW Program is critical. Allow at least six months lead time to secure both the in-kind and cash contributions which will resource your Program.***

***The first step is to determine what expenses you will face (see 3.3 below) and what expenses can be met by in-kind contributions. The second step is to secure cash funding to meet remaining expenses.***

***There are two approaches you can take to attracting and securing cash funding. The first approach is to attract small contributions of funding and in-kind contributions from an array of organisations. This approach has a number of advantages, which include:***

- Sponsoring organisations can have their contribution linked directly to specific expenses (ie. bus hire);***
- A greater number of potential sponsors or sources of funding can be tapped. Small to medium size organisations can afford to contribute and participate in the Program on an annual basis;***
- Smaller amounts of cash funding tend to incur for Program organisers fewer if any obligations to promote sponsoring organisations; and***
- A wide range of sponsoring organisations are therefore partners in the Program but no one organisation owns the Program.***

***A second approach is to seek a major sponsor or source of ongoing funding. This approach has the advantage of reducing the time required to seek and secure funding from a number of potential sponsors and contributors on an annual basis. However, it is important that other smaller organisations are not excluded from partnering in the Program.***

### **3.3 Expenses**

Expenses for the WoW Program will depend upon the level of sponsorship and in-kind contributions received. The Tasmanian WoW Program was developed as a low-cost program supported by significant in-kind contributions.

**Table 5. Expenses for the Tasmanian WoW Program 2009**

<b>EXPENSE</b>	<b>COST</b>
Project organising group & partners meeting costs (teleconferencing & catering)	\$139.04
Student entry fees for Seahorse World Pty Ltd	\$204.55
Student entry fees for Woodbridge Marine Discovery Centre	\$181.82
Student Fish N'Chip lunches	\$795.46
Fuel costs for Bruny Island Boat Tours	\$2,000
Accommodation for out of towners	\$1,000
Travel and Accommodation costs for organisers	\$1500.00
<b>Total</b>	<b>\$5820.87</b>

***Keep expenses to a minimum by partnering with a range of local organisations and operators who are able to provide a number of services in-kind. It is important to keep a record of all in-kind contributions to your program.***

***Expenses fall into two categories:***

- Pre and Post Program planning costs; and,***
- Program operating costs.***

***Pre and Post Program planning costs include:***

- Printing of fliers, certificates and programs (administration costs)***
- Organisers' communication and meeting costs***
- People's time required to develop and finalise the WoW Program***

***Program operating costs include:***

- People's time to staff the Program***
- Teleconference call costs***
- Student transport costs***
- Student catering costs***
- Student accommodation costs (if assisting students from regional/remote areas to attend)***
- Venue entry fees***
- Activity costs***

# ***Presenter Profile***

**JOE BENNETT**

**Get Shucked Oysters**

**Owner & Manager**



## **CAREER PATH:**

I grew up on beautiful Bruny Island where I spent a lot of time in and on the water surfing, fishing and diving. I finished school at the end of year 11 where I took part in an Aquaculture course. From there I began work on an oyster farm at Bruny Island and after two years became the manager of the farm operations. I spent another two years there and then, after some travel to mainland Australia and Indonesia I started Get Shucked. Although tough in the first years I loved the work, being on Bruny and also running my own business.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

I allow the students to visit my working oyster farm at Great Bay, Bruny Island. I meet the crew on the water and demonstrate the collection of oyster modules and then talk and answer any questions related to oyster farming. Also the crew can taste the oysters fresh out of the water. I hope that I can provide inspiration to the younger generation to achieve their goals and help them see that they can do anything if they put their mind to it.

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Yes. I already do a class work placement day with students from a local high school where they attend the farm and perform everyday tasks of the oyster farm. I welcome anyone who is keen to learn and have a go.

## 4. PARTNERSHIPS

The WoW Program concept is based on a strong regional partnership between people within the local seafood industry; allied marine sectors; education (school, vocational and tertiary); careers advice and promotion; and regional development. Developing a local WoW Program relies on identifying and building working relationships with organisations and key people in each of these sectors.

The Tasmanian WoW Program worked in partnership with a range of sectors, organisations and people. One of the Program's objectives was to

“Develop strategic partnerships between local seafood industry and allied marine industries, VET, tertiary education, school education and careers promotion sectors”.

The strength of the partnerships was seen as a critical feature of the Tasmanian WoW Program's success.

***In identifying and developing partnerships as part of your local WoW***

***Program, it is important to ask:***

- Which partnerships will enable your WoW Program to meet its objectives?***
- Who are potential partners?***
- What are the needs of potential partners and how can a local WoW Program meet their needs?***

### 4.1 Seafood Industry

The Tasmanian WoW Program worked with a range of organisations within the local seafood industry. These included: seafood industry councils and associations; marine farm operators; and post harvest processors and seafood retailers.

Each of these organisations had identified a need for advocacy and promotional opportunities on behalf of the seafood industry and/or their operation to the Tasmanian community as a whole and to potential entrants into the seafood industry workforce in particular. These organisations were able to offer insight into skills and workforce shortages and potential career pathways; as well as some cash funding; and in-kind support in the form of activities, tours and meals at cost.

***Potential partners within your local seafood industry can come from a wide range of interests and sectors within the industry.***

***Broadly defined, the Australian seafood industry encompasses the following sectors:***

- Commercial, charter, recreational and indigenous fishers and organisations;***
- Marine farm or aquaculture operators and organisations;***
- Post harvest processors and seafood retailers;***
- Fisheries managers and management agencies; and***
- Allied sectors, including marine-based training providers and fisheries (see 4.2).***

***Those sectors with a strong interest in addressing skills and labour shortages, and in promoting their sector to the wider community, will benefit the most from partnership with your local WoW Program.***

## **4.2 Allied Marine-based Sectors**

The Tasmanian WoW Program recognised that there was great value in partnering with allied marine-based sectors. Reasons included:

- Allied sectors, such as marine-based research, training, ship building and engineering, directly support and service the local seafood industry;
- These sectors are also seeking to promote training and career pathways within their industries to students;
- Marine-based skills and qualifications are transferable across both the seafood industry and these allied sectors; and
- Highlighting the broad range of marine-based work opportunities increases the appeal of entering the seafood industry.

Partnerships were formed with local operators within allied marine-based sectors. This enabled the Tasmanian WoW Program to offer students activities including tours of: local ship building and marine engineering operations and training facilities; marine-based tourism operations; local Marine Discovery Centres; Tasmanian Marine Police vessels; and research and technical support facilities at the Australian Antarctic Division and the Tasmanian Aquaculture and Fisheries Institute.



***The seafood industry is supported and surrounded by a number of allied sectors which are marine-based. These sectors have an aligned need to promote marine-based training and career pathways to students.***

***Highlighting the transferability of marine-based skills and qualifications across a wide range of sectors can increase the appeal to students of entering your local seafood industry.***

***Allied marine-based sectors with which you may choose to partner and develop activities include:***

- Maritime engineering and ship building***
- Marine-based tourism and eco tourism***
- Marine-based education and extension***
- Marine policing; and***
- Marine infrastructure sectors.***

### **4.3 School Education**

Partnership with schools and the education sector is essential to the WoW Program. The Tasmanian WoW Program was developed in collaboration with key staff from Guaranteeing Futures, Department of Education from the outset. They were able to offer a means to reach and engage interested Year 9 & 10 students and Pathway Planning Officers at local public schools. In addition, Guaranteeing Futures staff were able to:

- provide advice on meeting student and school needs;
- coordinate the advertising, application, consent and permissions processes with regard to student participants;
- provide Department of Education staff and presence during program activities; and
- coordinate the extended student projects and assignment process.

This partnership also addressed the need to provide ways for students, schools and Pathways Planning Officers to engage with the local seafood industry. Previously, schools and Pathways Planning Officers lacked opportunities and ways to access and provide information and experiences about training and career pathways in the local seafood industry to interested students. Their needs were for well-organised, regular, and engaging programs which offered a range of hands-on experiences of the local

seafood industry to students whose interest ranged from vocational through to academic. Schools were also seeking programs which made helped students to associate study and training with real careers.

***Identify and talk to the people within your State's Department of Education who coordinate careers advice and work experience programs in your region. The schools education sector needs well-organised, regular, and engaging careers promotion programs which offer a range of hands-on experiences to students whose interest ranged from vocational through to academic.***

***Partnership with the schools education sector is essential to ensure your WoW Program can meet its objectives effectively. Important factors in this partnership include recognising and working with:***

- School year calendars;***
- Department of Education programs, policies and procedures;***
- Department of Education networks and communication systems; and***
- Student needs for hands-on activities and engaging presenters.***

#### **4.4 Vocational Education**

Vocational and education and training (VET) is mandatory for a number of jobs within the local seafood industry and allied sectors. However, the profile of VET has historically been low and its perceived role limited to the provision of training to meet mandatory licensing requirements. Partnership with the VET sector was critical in order to inform students about training and related career pathways within the local seafood industry. The needs of the VET sector were closely aligned with the needs of the local seafood industry – that is, to attract new entrants and trainees. To do this the VET sector also needed to link training pathways with real-world jobs. Furthermore, the VET training organisations often provide legislated training to many other sectors including the professional research sectors and the tourism sector.

The Tasmanian WoW Program was strongly supported by the local VET provider – Seafood Training Tasmania – from the commencement of the program. In 2009 the Australian Maritime College became a partner to deliver the Northern Tasmanian WoW

Program. Students learned about the variety of VET opportunities and pathways available. This message was then reinforced through activities and presentations by those working on the water (marine farmers, fishermen, and tourist boat skippers) who described the training they had undertaken to along their career paths and the transferability of their marine-based qualifications across a variety of occupations.

***Identify and talk with your local marine-based VET providers. It is important to know what VET opportunities are available to students locally, and then convey what training and career pathways they can lead to.***

***The needs of the VET sector are closely aligned with the needs of your local seafood industry – that is, to attract new entrants and trainees by linking training pathways with real-world jobs. Plan activities and presentations which show how VET qualifications are useful and necessary throughout the seafood industry – from marine farm hands to marine researchers – and can be easily transferred between jobs.***

#### **4.5 Tertiary Education**

The Southern Tasmanian WoW Program was primarily based at the University of Tasmania. This research and educational institute has a very strong focus in Antarctic and near shore marine ecology and aquaculture with large undergraduate and postgraduate student enrolments. Additional excursions included site visits and tours to a Commonwealth Government research organization and a State Government research institute. In 2009 the Northern Program worked closely with the Australian Maritime College.

***Developing strong partnerships with local universities and tertiary education institutes has a number of benefits, which include the following:***

- Access to lecture rooms and research facilities;***
- Showcasing marine research equipment and personnel;***
- Articulating career pathways through tertiary education;***
- Promotion of local marine research;***
- Raising awareness of the local research opportunities; and***
- Increasing the understanding of Government research capacity and objectives.***

#### **4.6 Careers Promotion**

Careers promotion organisations offered important expertise and support in designing and running the Tasmanian WoW Program. The Tasmanian WoW Program developed a partnership with SCOPE, a local partnerships program operated by Colony 47 and funded by the Commonwealth Government, whose role was to coordinate Careers Advice Australia services in the Hobart region. In 2009 the Launceston Workplace Learning Centre became a partner in the Northern Tasmanian WoW Program. The needs of SCOPE and the Launceston Workplace Learning Centre were similar to the schools education sector, that is, to partner with the local seafood industry in order to offer interested students access, information and experiences about training and career pathways in the local seafood industry. Previously, the lack of partnerships had prevented the careers promotion sector from actively promoting training and career pathways in the local seafood industry.

SCOPE and the Launceston Workplace Learning Centre provided substantial support to the Tasmanian WoW Program. Forms of support included:

- Linking the WoW Program with the independent school sector to enable student participation;
- Cash funding to meet student transport and accommodation expenses, and
- Considerable staffing resources during the program, for collecting student feedback and issuing certificates and coordinating the extended student projects and activities.

***Careers promotion organisations offer important expertise and support in designing and running your local WoW Program. Find out which organisations service your local region and talk to them about forming a partnership.***

# ***Presenter Profile***

**PAM ELLIOTT**

**Woodbridge Marine Discovery  
Centre**

**Marine Educator**



## **CAREER PATH:**

During my undergrad time at UTAS (BSc zoology and botany major) I always loved the pracs and field excursions. After completing a postgrad Dip Ed I taught Maths/Science for 10 years in a variety of schools and then moved to the CSIRO Science Education Centre in Hobart. As the Double Helix Officer I enjoyed the chance to develop exciting hands-on educational activities that allowed kids to experience current research (we worked closely with CSIRO Marine researchers) outside the normal classroom. I enjoy teaching, love working with animals and have always loved the sea so when I was asked to apply for my current position teaching in a hands-on interactive environment that involved spending lots of time with marine animals and on a research vessel it seemed and has turned out to be perfect.

Currently, I coordinate the Secondary Program at the Woodbridge Marine Discovery Centre. This means I am responsible for developing and teaching education programs for secondary and senior secondary students based around the marine environment in the Centre, on the foreshore and out on the water using our 13.5m research vessel *Penghana*.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

Most students would think of research, aquaculture or technology when thinking of a marine career. By being part of the program I can show them the exciting opportunities in marine/environmental education. For example, this job not only means I am in the field a lot of the time and working with animals, I get to share my workplace with sharks, dolphins and even whales occasionally. Through it I have travelled to conferences all around Australia as well as in the United States and Copenhagen and I have had the opportunity to work as a research assistant on a marine science voyage to Antarctica!

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Yes we have a number of Work Experience placements each year. Students usually spend 1 -2 weeks at the Centre learning new skills such as aquaria maintenance, animal feeding, working with school students from Kinder – Gr 12, or as a deckhand on *RV Penghana*.

## 5. DESIGNING A LOCAL PROGRAM

### 5.1. Activities

The development of a WoW Program in your region will necessitate a series of activities both on and off the water. The geography of Tasmania made many interesting site visits possible, as there are numerous marine based facilities within 50 kms of the two major population centres. Activities for the Southern Tasmanian WoW Program are described below. Activities for the Northern Tasmanian WoW Program are outlined in Figure 5 (Appendix 1).

#### **Day 1: Marine Research, Tertiary Education and Government Science.**

This day began with introductions from the major organizers and key staff and personnel and then participants were given short 15 minute lectures by dynamic early career marine researchers from the University. Each lecturer illustrated the career path taken as well as current and past research opportunities. An additional lecture was provided by the University's Science and Engineer Faculty to illustrate the educational pathways and options available for tertiary study in marine science and aquaculture. A site tour was then given of the University's boating, diving and research facilities.

Students were next transported by bus to the Tasmanian Aquaculture and Fisheries Institute (TAFI) a State Government funded marine and aquaculture research facility. At TAFI several tours were provided of aquaculture research laboratories, boating facilities, underwater robotics equipment and live animals were available to view.

Finally the students were transported by bus to the Australian Antarctic Division where they were given a tour of the live krill laboratory, boating and ice resources, gear storage areas and fabrication workshops.

#### **Day 2: Aquaculture, Tourism and 'hands on' Marine Discovery Centre.**

This day was primarily based on the water with a local tourism operator providing a fast boat normally used for ecotourism operations and local aquaculture operators hosting informative site visits at their facilities. The participants were taken to an offshore salmon farm for a guided tour and feeding session and then taken to a deep water oyster lease to view this aquaculture operation and to meet the dynamic oyster farmer at his site.

After both tours, the participants were returned to a nearby harbour for a tour of a sea kayaking and ecotourism operation. The final destination for the day was a "Marine Discovery Centre" where students were shown a wide range of local fish and invertebrate species and numerous touch tanks and 'hands on' activities were available for self exploration.

### **Day 3: Wild Fisheries, Marine Enforcement, Seafood retail and VET Training.**

This day revolved around the working port and harbour and was facilitated by the Tasmanian Seafood Industry Council (TSIC) and hosted by Seafood Training Tasmania (STT). Students were shown the vocational educational pathways by skilled trainers at STT and their classrooms were used as a base for the remaining activities.

Participants were given a tour of a state of the art Marine Police enforcement vessel and shown a video while aboard to describe the role of police in rescue and fisheries enforcement operations. Next the students were able to tour numerous wild fisheries vessels in the harbour including; rock lobster (potting gear), shark and finfish (longline gear) and abalone (diving gear) in order to meet the operators and to better their understanding of the wild catch sector. Next a tour of a large seafood retail operation was arranged and included in this component of the day was a 'fish and chips' style lunch- highlighting the 'paddock to plate' concept of where seafood eventually is consumed.

The final wrap up component of the day took place at STT where students were presented with additional opportunities for follow up placements and feedback on the program was solicited.

***Including 'Hands on' style activities is a really important strategy to ensure that students are offered lots of memorable and authentic experiences.***

## **5.2. Logistics**

For the Tasmanian WoW Program the main logistical bases were the University of Tasmania (Southern Program) and the Australian Maritime College (Northern Program) where lecture theatres, car parking and research facilities were readily available. Additional 'field' days occurred in the nearby marine environment where participants were able to meet aquaculture operators, tourism professionals and fishers in the wild catch sector. Another day was included in the port area to provide participants with access to the VET training sector as well as marine enforcement and retail seafood operations.

The initial logistics for the Tasmanian WoW Program were handled by the primary organizers based at the University of Tasmania, Marine Solutions, the Tasmanian Seafood Industry Council, and at Seafood Training Tasmania. An example of the logistics arrangements for the Southern Program is provided below.

### **Day 1: Marine Research, Tertiary Education and Government Science.**



Students were asked to meet at a designated area on the morning of Day 1. Program staff then guided students to the various venues. Lecture rooms and transportation were both funded and booked through the University. All academic researchers and government lecturers were provided 'free of charge' by their institutions. The University of Tasmania provided buses to transport students to the various facilities. The Commonwealth Government research organization provided a free tour and site visit by contacting the public relations officers at the Australian Antarctic Division.

### **Day 2: Aquaculture, Tourism and 'hands on' Marine Discovery Centre.**

Students met at the same designated area as on Day 1. A privately-hired bus then transported them to the wharf at Kettering where a boat was boarded. All aquaculture operators and tourism providers were contacted directly and approached to be a part of the WoW Program. These professionals were known to the local TSIC and STT staff and were therefore receptive to participating in this program. The tourism operator who provided the boat for this day of activities was paid for the cost of petrol and staffing of the vessel. This meant that the tourism operation did not generate a profit while being used in the WoW Program, but it did mean that the operator was not 'out of pocket' for participating in the program. The aquaculture operators and shore based ecotourism facility provided free site visits and staff to give tours.

### **Day 3: Wild Fisheries, Marine Enforcement, Seafood retail and VET Training.**

Students met at Seafood Training Tasmania at the start of Day 3. After activities there they then walked across to Victoria Dock where the boat tours took place. All commercial fishing boat operators and enforcement agencies were contacted directly and approached to be a part of the WoW Program. These professionals were known to the local TSIC and STT staff and were therefore receptive to participating in this program. STT provided free use of classrooms and facilities and all wild fisheries operators and enforcement agencies delivered tours and boat visits free of charge. The seafood retail operation additionally donated the 'fish and chip' meal for all participants.

***Plan and book tours, transport (bus, boat or on foot), and venues for presentations to both minimise cost and maximise interest. Use boat transport wherever possible as this gives students a real experience of working on the water.***

***Ensure that information given to schools and students includes meeting points for the start and end of each day of the program.***

### **5.3. Advertising**

Getting information about the WoW Program out to schools, pathway planning officers, and students is a really important step to raise awareness, interest, enthusiasm, support and ultimately bookings for the Program. Partnerships with people and organisations closely linked to the network of schools in your region are critical to achieving this. School-based Pathways Planning Officers and Careers Advisors are the key people to engage in this process.

For the Tasmanian WoW Program this was achieved by putting together information fliers and circulating these through the networks of Department of Education staff and careers promotion organisations, who in turn provided these to students of local public and independent schools. A two page flier and application form which outlined the WoW Program was developed and sent out at least six weeks prior to the first program (see Figure 3, Appendix 1). Recipients included: Department of Education staff, careers promotion organisations, parents and students.

***Work with your partners in the schools and careers promotion sectors to develop a flier and circulate this as widely as possible to key people in the schools you wish to target. Make sure the flier contains the following essential information:***

- Brief outline of purpose your WoW Program***
- Date/s***
- Location/s***
- Application process***
- Cost/s***
- Contacts***

### **5.4. Applications & Bookings**

In the case of the Tasmanian WoW Program, twenty five places were available on each Program, noting that the Program was run twice in the Southern region in both 2008 and 2009 and in the Northern region in 2009. To apply students were asked to describe in 250 words their reasons for wanting to participate and the type of marine-based training or careers pathways in which they were interested.

Staff from Guaranteeing Futures, Department of Education collated all the applications from the school-based Pathway Planning Officers and Career Advisors. The program organising group then met to review and assess applications. The selection process aimed to achieve:

- participation by students with a high level of interest in marine-based training and careers
- inclusion of students from as many schools as possible
- inclusion of students interested in both vocational and professional marine-based training and careers

Selected students were then invited to participate by their school-based Pathway Planning Officer or staff from the Guaranteeing Futures Program. A letter plus a full program was provided to students at this stage (see Figure 4 and 5, Appendix 1). Department of Education staff also ensured that completed forms were acquired for each student participant regarding parental consent, important medical information, and use of photographic images.

***Partnerships with people and organisations closely linked to the network of schools in your region are critical to gaining student interest in your local WoW Program. School-based Pathways Planning Officers and Careers Advisors are key people to have engaged in this stage. Appointing one person to coordinate applications and bookings across schools is advised.***

***Possible approaches to determining student participation in your local WoW Program include:***

- ***Accept all interested students into the Program;***
- ***Require interested students to apply in writing by describing their reasons for wanting to participate, and then select students on the basis of their level of expressed interest; and***
- ***Ask school-based Pathway Planning Officers and Career Advisors to recommend students.***

***The approach selected will depend on the availability of resources and places in your local WoW Program.***

## 5.5. Extended Projects & Activities

Students who participated in the Tasmanian WoW Program were asked to complete an assignment or presentation within two weeks of being part of the program (see Figure 6, Appendix 1). The assignment or presentation could be one of the following;

- School newsletter article about the WoW Program
- Detailed pathway for the student's identified or desired career area
- PowerPoint or Storyboard presentation designed for a school audience
- In-depth investigation into one aspect of the program that the student found particularly interesting

Assignments were submitted directly to one of the partner organisations, where they were collated for assessment by the program organising group. Examples of awards and opportunities offered through the Tasmanian WoW Program included:

- A free Elements of Shipboard Safety course with the local seafood training provider;
- A boat tour courtesy of a local tourist boat operator;
- A cost price open water dive course with the university instructor
- An experience as a deck hand with another local tourist boat operator; and
- An experience as a research field assistant with local marine science researchers.

***Ways to engage students beyond the 3 days of the WoW Program include student projects, assignments or presentations, and awards. These help to reinforce for students the exposure and knowledge of marine-based training and career pathways gained during the Program itself, and provide incentives to students to actively pursue marine-based work experience and training opportunities after the Program.***

***It is important to plan for extended projects and activities prior to running the WoW Program. Considerations include:***

- What type of extended activity will students be asked to complete?***
- How and when will students be advised of this activity***
- Who will follow up with students to ensure they complete the activity?***
- How will completed projects be assessed and awards allocated?***
- What awards and opportunities can Program partners provide to students?***

# ***Presenter Profile***

**SIMON TALBOT**

**University of Tasmania  
Institute of Marine and Antarctic Studies**

**University Diving Officer**



## **CAREER PATH:**

I briefly studied Marine at the University of Tasmania, before accepting a 'better offer' to become a Technical Officer with the then Tasmanian Department of Sea Fisheries (now part of IMAS). While at University I completed an open water SCUBA course – and my life's direction was set! I worked with Sea Fisheries for a decade, mainly conducting research on abalone. At the end of that period, I moved to Canberra to take up a position with the Australian Fisheries Management Authority (AFMA) as a Logbook Officer - ultimately ending up as a Senior Fisheries Management Officer in the southeast non-trawl fishery. In 1998 I moved back to Tasmania to take up my current position with the University of Tasmania, and have been here ever since. Since then, apart from my role as the UTAS Diving Officer, I have been involved in formulating national diving standards for occupational diving, and setting up the nationally recognised scientific diving training course which UTAS runs through the Australian Diver Accreditation Scheme (ADAS). More recently I've spent a fair bit of time trying to get a national scientific diving association up and running. In my spare time I run the occasional open water diving course for UTAS students, and play underwater hockey.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

I have taken a lot of underwater photographs over the years, and I think that showing some of these gives the students a good look at the type of environments visited, and the range of tasks performed by occupational divers in Australia. As well as that, by background in occupational diving management means I have a very good idea of what information the students will need to know should they wish to pursue a career in diving – whether it be as a recreational diving instructor, or all the way through to an offshore oilfield diver.

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Yes, easily. I have regularly organized for work experience students to participate on UTAS field operations.

## 6. RUNNING THE PROGRAM

### 6.1 Pre-Program Checklist

Running the Tasmanian WoW Program was achieved by identifying tasks and due dates and then allocating responsibility for achieving those tasks to members of the program organising group.

*Once you have fixed the dates for your local WoW Program, work with your program organising group and program partners to identify a timetable of tasks and determine who is responsible for achieving them. An example Pre-Program Checklist of Actions is provided below.*

#### **12 weeks before...**

- *Identify careers promotion needs*
- *Identify potential resources, partnerships and related programs*
- *Form a program organising group*
- *Meet with program partners to plan dates, identify activities and draft program*
- *Meet with project partners to determine sources of cash funding*
- *Meet with project partners to determine sources of in-kind contributions*

#### **10 weeks before...**

- *Finalise preliminary program of activities*
- *Determine funding arrangements for accommodation, catering and transport expenses for regional & remote students*

#### **8 weeks before...**

- *Confirm cash funding/sponsorship agreements*
- *Confirm in-kind contributions*
- *Finalise budget*
- *Finalise & circulate your WoW Program Flier & Application Form to schools and students*
- *Book tours, activities & presenters*

**- Book venues for program activities**

**- Book bus & boat transport**

**6 weeks before...**

**- Approach program partners for student opportunities for training and work experience Post-Program**

**- Book accommodation venue, catering and transport arrangements for regional & remote students**

**- Collate student applications and select students for your WoW Program**

**4 weeks before...**

**- Notify students & school of selection for your WoW Program**

**- Gain required consent & permissions for student participants**

**- Determine requirements and roles for staff to run the WoW Program with program partners**

**2 weeks before...**

**- Confirm tour bookings, activities & availability of presenters**

**- Confirm venue bookings**

**- Confirm bus & boat transport bookings**

**- Confirm accommodation venue, catering and transport arrangements for regional & remote students**

**- Confirm staffing arrangements and roles for program with project partners**

**- Confirm student numbers and names**

## **6.2 Managing Activities**

Staff running the Tasmanian WoW Program took on a number of roles to ensure that program activities were managed and the Program itself ran smoothly. At least two staff were present at all times, including at least one Department of Education staff member. In addition to providing general supervision, roles included:

- Checking student attendance daily
- Keeping a photographic record of activities
- Time keeping



- Bus driving
- Circulating Student Assignment Fliers
- Circulating and collecting completed Student Feedback Forms

***Determine what roles need to be filled and whether there are requirements for staffing your local WoW Program. Discuss who will fill these roles in the weeks leading up to running the program.***

***During your WoW Program:***

- ***Confirm student attendance***
- ***Advise students of Student Assignments and Presentations***
- ***Collect student feedback using Student Feedback Form***
- ***Issue students with Certificates for participating in your WoW Program***
- ***Implement a system to follow up students Post-Program and monitor impacts on training and career pathways choices***

### **6.3 Gathering Student Feedback**

A Student Feedback Form (see Figure 7, Appendix 1) was developed and provided to students during the Tasmanian WoW Program in order to assess whether the program had achieved two of its objectives, which were to provide students with the opportunity to experience and learn of the possible training and career pathways in Tasmania's seafood industry and allied marine industries (objective 1); and contribute to an increase in the numbers of Tasmanian students entering marine-based industry sectors and/or undertaking marine-based VET or tertiary training (objective 4). The form also asked students to identify whether they wanted to participate in any work experience in marine-based occupations post-program. Completed forms were collected at the end of Day 3, and results were collated by staff at SCOPE and Guaranteeing Futures.

***Establish a consistent method to collect student feedback during the program which will enable you to monitor and evaluate whether your WoW Program was able to meet its objectives.***

# ***Presenter Profile***

**JOEY MCKIBBEN**

**Tasmanian Abalone Diver**



## **CAREER PATH:**

I grew up in Geeveston and spent time as a teenager working as a deckhand during the school holidays for my Dad, Scott McKibben, who was an abalone diver, to do this I obtain a coxswains restricted boat license. After finishing Year 12 interstate, I came home to work as a abalone deckhand for six months before heading off to Queensland where I worked as a builder for four and a half years.

In 2006 I came back to Tasmania and worked as an abalone deck hand for one year to gain experience and knowledge, before entering the water myself in 2007. To become an abalone diver I did a one week dive course, which involved open water diving, deep sea diving, search and recovery, navigation and operation of hooker. I also undertook the Tasmanian Abalone Code of Practice course. I've been working as an abalone diver ever since. I currently use a 6m Tristar runabout for day trips, as well as 4.6m dinghy for working off mother boats.

I recently graduated from the National Seafood Industry Leadership Program, which has helped me develop in my role as Diver Chair on the Tasmanian Abalone Council. As well as sitting on the Tasmanian Abalone Council board, I am also a representative on the Fisheries Research Advisory Group, Abalone Fishery Advisory Committee, Abalone Research Advisory Group and the Abalone Stock Assessment Group.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

I work on and in the water all year, and as I am 26 years old, it wasn't that long ago that I was at school making the sorts of choices the students on the program will be making. I can talk to them about what it means to make a career of fishing, and what sort of skills and lifestyle it involves.

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

No, given the strict rules and regulations that govern our industry I would not be able to take work experience students with me. However I would be more than happy to assist by talking and providing students with information regarding my role as an abalone diver

## 7. WRAPPING UP

### 7.1 Post-Program Checklist

The program organising group for the Tasmanian WoW Program met four weeks after the completion of the programs to undertake a number of important tasks in order to wrap up the program. Key tasks included:

- Finalise the budget and expenses
- Assess student assignments and allocate awards and opportunities to students
- Review student feedback; and
- Plan for next year on the basis of a group evaluation of the recent program

***Arrange a time for a wrap-up meeting with your program organising group.***

***An example Post-Program Checklist is provided below.***

***2 weeks after...***

- ***Collate photos taken of WoW Program activities***
- ***Collate Student Assignments***
- ***Confirm availability of student awards and opportunities for training and work experience***

***4 -6 weeks after...***

- ***Assess Student Assignments and allocate awards and opportunities***
- ***Finalise budget and expenses***
- ***Collate results of Student Feedback Forms***
- ***Communicate the success your WoW Program through media exposure***
- ***Send Thank you letters to all cash and in-kind sponsors/contributors and to all partner organisations***
- ***Hold a Post-Program meeting with program partners and organising group to review and evaluate your WoW Program and plan for next year***
- ***Follow up to ensure students are able to undertake training and work experience as agreed.***

## **7.2 Students' Extended Activities & Awards**

The program organising group reviewed all the student assignments and presentations completed for the Tasmanian WoW Program. Assignments and presentations were collated by staff from SCOPE and Guaranteeing Futures They were assessed on the level of interest and engagement with particular marine-based training pathways or careers, and the level of effort put into the assignment or presentation. An example assignment is provided below (see Figure 8, Appendix 1). Awards and opportunities were then allocated to students on this basis (see section 5.5). Where students had indicated a strong interest in a particular career pathway as a result of the program, effort was made to provide them with the opportunity for informal work experience in their area of interest over the school holidays.

***How will student projects be assessed?***

***Can student projects be displayed and shared with other students, project partners and the wider community?***

***How will awards and opportunities be allocated?***

***Are there opportunities and resources to offer informal work experience placements to students interested in particular marine-based careers?***

## **7.3 Acknowledging Partners and Contributors**

People and organisations who partnered in the Tasmanian WoW Program were sent a thank-you letter by the program organising group. This was considered a very important action given the high level of cash funding and in-kind support the program received from an array of contributors. Moreover, the program organising group recognised that without strong partnerships the sustainability and success of the Tasmanian WoW Program was not achievable. A contacts list which included postal addresses of all program partners and contributors was maintained and used for this purpose.

***Maintaining the strong partnerships which underpin your WoW Program calls for full recognition and acknowledgement of what partners contribute.***

# ***Presenter Profile***

**KEVIN REDD**

**University of Tasmania  
Institute of Marine and  
Antarctic Studies**

**PhD Candidate and  
Researcher**



## **CAREER PATH:**

My career path began while I was studying Marine Science at the University of California in Santa Cruz (UCSC), in the United States. I learned to SCUBA dive and became interested in kelp forest ecology and wild fisheries throughout my undergraduate years. After graduating from UCSC I began working in Alaska in numerous marine related jobs in the Bering Sea, Gulf of Alaska and Aleutian Islands. Seeing an opportunity to travel and to further develop my career in marine science, I moved to Australia and commenced a PhD at the University of Tasmania. I am currently here working on a project to further our understanding of the role of rock lobsters in temperate marine environments.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

As a postgraduate researcher at our local University, I was able to provide this program with numerous young, interesting marine researchers who are passionate about their areas of study. I helped to organize a timetable for the visits to our local marine research laboratories (where I conduct experiments) and to other national research facilities with which I have extensive contact. I was also able to personally provide an 'international' perspective on how a career in the marine field could take you to different continents and to see amazing scenery and animals.

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Yes, quite easily. In fact, several students from the program have gone in the field with our research group- capturing rock lobsters and using small boats in coastal areas. I have also provided laboratory placements for those students interested in biochemistry and molecular biology.

## 8 EVALUATION

### 8.1 Students

Feedback from students was important to the Tasmanian WoW Program for the following reasons:

- Activities and presentations could be evaluated against whether students considered them preferred, informative, and valuable;
- Levels of student interest in different marine-based training and career pathways could be measured;
- Areas needing improvement were highlighted; and
- Students were able to indicate whether they sought further work experience opportunities.

Results of the Student Feedback Forms (see section 6.3 and Figure 7, Appendix 1) were collated and discussed at the Post-Program wrap-up meeting. Students who participated in the Tasmanian WoW Program in both 2008 and 2009 indicated they had gained insight into marine-based training and career pathways and opportunities as a result of the program. Activities which were “hands-on” were preferred, informative and valuable. Examples of preferred activities included boat trips, visits to marine farms, tours of research facilities and fishing boats. The majority of students who participated indicated they were considering future training and careers in marine-based fields. Marine science and boat-based jobs in aquaculture, fishing and tourism were the fields which attracted the strongest interest. Areas identified as needing improvement included offering fewer lengthy formal presentations and offering more hands on and extended activities such as trips on commercial fishing boats.

On the basis evaluating feedback from students, the program organising group concluded that the Tasmanian WoW Program in both 2008 and 2009 had meet its first objective, and had made some progress towards meeting its fourth objective. It was noted that methods to accurately measure whether student participants were choosing marine-based training and career pathways post-program had not been implemented. In 2009 the number and length of formal presentations was substantially reduced and the number of hands-on activities increased in response to the suggestions for improvement.

***Use the Student Feedback Form to determine whether your WoW Program is meeting the needs of students and meeting your objectives. Note the finding of the Tasmanian WoW Program that students need hands-on activities of marine-based careers to stay engaged in the program. Moreover, these types of activities are more informative for students because they are reinforced by real experiences.***

***Consider implementing means to measure or semi-quantify student outcomes of your WoW Program. This may include developing a system to monitor the impact of your program on the choices student participants make regarding marine-based training and career pathways post-program.***

***Discuss areas needing improvement and suggested changes with your program organising group.***

## **8.2 Program Partners & Contributors**

Feedback from program partners and contributors was important to the Tasmanian WoW Program for the following reasons:

- Failure or success in meeting the needs of program partners and contributors were identified;
- Failure or success in meeting the objectives of the program were determined; and
- Areas needing improvement were highlighted.

In particular, feedback was required to determine whether the Tasmanian WoW Program had met its second and third objectives, which were to:

2. Expand the career promotion programs available to school education and careers promotion sectors to include Tasmania's seafood industry and allied marine industries; and
3. Develop strategic partnerships between Tasmania's seafood industry and allied marine industries, VET, tertiary education, school education and careers promotion sectors.

An evaluation survey was emailed to program partners and contributors. Respondents were asked to identify whether the Tasmanian WoW Program had met its aims and objectives, and to provide additional feedback. In some cases respondents completed

the survey and emailed it back, while in other cases the answers were provided over the telephone using questionnaire techniques. The survey was undertaken in conjunction with a workshop to evaluate the performance of the Tasmanian WoW Program and develop a strategy plan for its continuance (see section 9.1). Ten completed surveys were received and the results were presented to workshop participants. All respondents indicated that they felt that the Tasmanian WoW Program had either partially or fully met its aim and its second and third objectives.

The Tasmanian WoW Program's 'Evaluation and Strategic Direction Workshop' was held in June 2010. Workshop participants included representatives from the seafood industry as well as partner organisations from the schools education, careers promotion and extension, and post-secondary training sectors (see Appendix 2).

The major outcome of the workshop was to establish that the Tasmanian WoW Program 2008 and 2009 had largely achieved its objectives of meeting the need for a careers promotion program for the Tasmanian seafood and allied marine industries, and had resulted in tangible benefits to the Tasmanian seafood industry and program partners. Areas of the program requiring improvement were also established.

Critical success factors of the Tasmanian WoW Program were identified and included the following:

- Ability to offer real, unique and varied experiences that are fun, memorable and relevant for students;
- Visible passion and energy of partners, stakeholders, contributors and students;
- Strong networks and collaboration between program partners; and
- Driven by purpose and need, not by funding availability.

Areas where the Tasmanian WoW Program could be improved were identified and prioritised as follows:

- Sustainability of the program (funding and human resources);
- Level of 'hands on' activities within the program;
- Promotion of the program directly to schools and pathway planning officers;
- Provision of support materials and formalized follow-on opportunities for students post-program;
- Promotion of the program to the seafood industry and other stakeholders; and
- Responsiveness to changing demand for specific jobs and skills within the seafood industry.



***Provide a means for program partners and contributors to review and evaluate your WoW Program. Consider using a survey, a meeting or workshop. Use this means to determine whether your program has met its aims and objectives, and whether the need of partners have been met. This process will strengthen the partnerships your WoW program has fostered, and will contribute to continual improvement.***

# ***Presenter Profile***

**BRYAN DENNY**

**Tasmanian Abalone Diver, Rock Lobster Fisherman and Commercial Diver**



**CAREER PATH:**

I grew up in Dover and the day I finished Year 10 I jumped on a crayfishing boat at the Dover Wharf to work as a deckhand. I was aged 15. I'd known I wanted to go fishing for years before this and had spent some of my school holidays working as a deckhand on abalone boats. From age 16-19 I spent three months each year at the Australian Maritime College at the end of which I combined with my sea time and got my Master Class V skippers ticket. I then worked for 6 years on cray fishing boats. Then I changed course and worked with Tassal and Huon Aquaculture Company (salmon farmers) in their early years, skippering boats and doing just about everything around the fish farms. But then I went back crayfishing and then in 1996 started working as a deckhand on an abalone boat. During that time I also skippered boats for Marine Constructions and then with Mures for a while. Then I started to dive for periwinkles and sea urchins using a boat I leased. I moved to Queensland for a few years and worked as First Mate on a shark boat off the Gulf of Carpentaria. When I came back in 2003 I worked again on abalone boats and then got my own boat. I now dive for abalone, as well as periwinkles and sea urchins, and I pot for crayfish too.

**WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

I've worked in a lot of different jobs across the fishing and aquaculture industry and I can share this experience with the students who come to see my fishing boat and learn about my operation. My qualification as a skipper has meant I could work on the water in all sorts of sectors (fishing, aquaculture, construction). I can tell them about the kind of skills they'll need and experiences they'll have if they want to fish, dive or dive boats. I didn't go down the path of formal education after high school and I think it is important to share with students all the opportunities that are there if you have passion, get yourself some boating or diving tickets, and want to work on the water.

**CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

I can look into it. I can take extra crew out for a 'tucker run' when I am cray fishing. There would be some OH&S and insurance issues to address through for coming on diving trips.

## 9 PLANNING FOR NEXT YEAR

### 9.1 Sustainability

In developing and running the Tasmanian WoW Program for the first time in 2008 the program organising group took a number of actions to ensure the program was sustainable in the short term and could be run again in 2009. Those actions included:

- Gaining the agreement with program partners to continue after the pilot program, and confirming their continued partnership;
- Advising organisations that provided cash funding as well as presenters and contributors of the intention to continue the program in the following year;
- Retaining all program documents (for example, fliers and forms); and
- Using the post-program review and evaluation process to increase efficiencies and reduce human resourcing needs to operate the program.

The key planning issue raised at the Tasmanian WoW Program's Evaluation and Strategic Direction Workshop in June 2010 was the long term sustainability of the program in terms of people, partnerships and funding. Program partners agreed that the current model for the program was not sustainable in the long term due to the lack of funding to employ dedicated staff to manage the program, and the extreme reliance on the energy and goodwill of a few volunteers.

It was agreed that to be sustainable in the long term, the Tasmanian WoW Program and the program organising group needed to:

- Continue to meet the changing needs of program partners;
- House the program with an existing organisation; and
- Appoint a part-time project officer to coordinate and manage the program annually.

Strategies to achieve a sustainable Tasmanian WoW Program were developed as part of a strategic planning exercise at the Evaluation and Strategic Direction Workshop (see section 9.2).

***Having developed and run your WoW Program for the first time as a pilot program, consider the short term and long term sustainability of your program. Sustainability in terms of the WoW Program model refers to people, partnerships and resourcing.***

***For next year's program consider the following actions to improve the short term sustainability of your program:***

- Use your program organising group to begin a dialogue with program partners and organisations which provided cash funding about next year's program and what they need from it to maintain their involvement and investment;***
- Identify efficiencies which will reduce the workload and cost of re-running the program; and***
- Retain all program templates to reduce workloads.***

***To achieve sustainability of your WoW Program in the longer term, it will important to review your program's hosting, funding and staffing arrangements, as well the ability of your program to continue to meet the needs of program partners to ensure the longevity of those critical partnerships.***

## **9.2 Strategic Planning**

At the Tasmanian WoW Program's Evaluation and Strategic Direction Workshop in June 2010 participants from all sectors agreed that the Tasmanian WoW Program should continue in 2010 and beyond. A future vision for the program in 2015 was developed and included the following characteristics:

- Sustainable in terms of funding, people, management and relationships;
- Offers an expanded and articulated careers promotion program including follow-up work experience placements, traineeships and accredited training in addition to the existing three-day WoW Program model;
- Has a positive and high profile amongst schools, industry, training organisations & community because it meets the needs of each of these sectors;

- Stays relevant in terms of content, activities and technologies to the changing needs and contexts of industry, schools and training sectors; and
- Remains accessible to a range of students (academic to vocationally-focused), especially those from regional & rural areas.

Strategies to achieve the 2015 vision were recommended. They included the following:

1. Standardise the program by developing a framework which can be implemented in other regions/states/countries by any organisation;
2. Secure strategic and sustainable sources of funding;
3. Collate data from program to demonstrate value of outputs and outcomes;
4. Appoint a Project Officer/Coordinator;
5. Develop an agreed time frame for current and proposed program with schools, training organisations and industry partners;
6. Identify and involve past student participants;
7. Identify potential additional activities to be part of an expanded program;
8. Formalise the program organising group to maintain and enhance networks and communication between industry, schools, and training partners;
9. Find “champions” and “patrons” of the program within the industry and education sectors; and
10. Identify a host organisation or broader program for the Tasmanian WoW Program.

The strategy to standardise the WoW Program model and make it available nationally has been addressed. The *Guide to ‘Working on the Water: from Aquaculture to Zoology’ Careers Promotion Program* has been developed as a resource to inform and assist the development of a WoW Program in other regions.

Beyond this, the 2015 vision and the strategies proposed for the Tasmanian WoW Program are being reviewed and considered further by the program organising group and program partners.

***Consider developing a longer term plan and the strategies which will realise that plan for your local WoW program. The challenge is to maintain the energy invested in the pilot program and to maintain relevance as partner organisations, programs and the industry itself changes.***

# ***Presenter Profile***

**EMILY OGIER**

**Tasmanian Seafood Industry Council (2007-2009) & University of Tasmania (2009+)**

**Project Officer and Researcher**



## **CAREER PATH:**

While I was studying for a Bachelor of Arts at the University of Tasmania I worked as an eco-tour guide on the Freycinet Peninsular, and this involved a lot of boat activity, snorkelling and fishing – I was hooked by the marine environment! For my PhD I moved to the University of Western Australia where I researched the management of marine resources and the marine tourism industry at the Abrolhos Islands. While there I met my future husband, who was a fisherman. We returned to Tasmania and I worked for 1 ½ years as the Project Officer for the Tasmanian Seafood Industry Council, where my job involved working directly with commercial fishermen and marine farmers, in the field and in terms of management and representation. Last year I started working at the University of Tasmania as a researcher in the areas of fisheries economics and wild-capture fisheries, where I am today. My husband currently runs a commercial rock lobster fishing boat, so I also have the job of helping him manage a fishing operation.

## **WHAT YOU PROVIDE TO A PROGRAM LIKE 'WORKING ON WATER A-Z:**

As a one-time project officer for the State seafood industry's peak body, and as someone involved directly in a professional fishing operation, I was able to provide this program with numerous commercial fishermen, and oyster farmers, who were really passionate about their industry and about providing opportunities for young people to enter. I helped to organize tours of rock lobster and abalone boats run by the fishermen themselves, and tours of oyster farms by the farmers themselves. I was also able to provide a personal account on being a member of the seafood industry and how a career in marine research can lead to a wide variety of work.

## **CAN YOU TAKE PLACEMENTS/STUDENTS IN YOUR CURRENT ROLE?**

Yes. I can link interested students up with researchers working in the areas of fisheries management and biology, and fisheries economics.

**APPENDIX 1:  
Tasmanian WoW Program 2008 & 2009 - Documentation**



# Working on the Water Marine Careers from Aquaculture to Zoology

An excellent opportunity for Grade 9/10 students who are interested in marine careers such as aquaculture, commercial fishing, marine science, Antarctic research, University studies and fisheries management to gain an insight into career paths, training and educational programs in the marine industries including salmon and shellfish aquaculture, marine science research, eco-tourism and the commercial fishing industry.

## What

A three day course designed to give students both an overview of the industries and an opportunity to gain specific information from a wide range of marine research organisations, aquaculture businesses and maritime educational providers.

## When/Where

### Two programs:

1. Monday 12/10/2009 until Wednesday 14/10/2009
  2. Monday 19/10/2009 until Wednesday 21/10/2009
- 8:45am—4:30pm each day

### Where:

University of Tasmania, Sandy Bay Campus

With field trips to various locations including Bruny Island, the Tasmanian Aquaculture and Fisheries Institute Marine Research Laboratories, Australian Antarctic Division and Fishing vessels in the Port of Hobart.



Meet at the University @ 8.45am on Monday. Students are responsible for their own travel arrangements to the University, and a bus will be provided for visits to other locations.

Meet here @ 8:45am  
University of Tasmania  
School of Zoology  
T.T.Flynn Street Entrance  
Sandy Bay

## Requirements

**Clothing** Students will engage in light physical activity during the three days.

They should wear warm casual clothing and sturdy water resistant shoes. Warm and weatherproof jackets are highly recommended as several of the activities will involve being outside and aboard boats in coastal conditions.

**Lunch** Students to bring their own lunch unless told otherwise.







## **Careers on the Water: From Aquaculture to Zoology Program Two – Schools LS South**

Dear \_\_\_\_\_,

Congratulations you have been selected to participate in the exciting **Careers on the Water** Program being conducted by the University of Tasmania, Guaranteeing Futures, numerous seafood industry organisations and supported by SCOPE.

You are in **Program One, Monday October 27** until **Wednesday October 29, 8.45am – 4.30pm** each day, finish time on Wednesday will be **4.00pm**..

### **Requirements:**

#### *Clothes*

During the program you will be out and about in marine environments. You should wear warm casual clothing and sturdy water resistant shoes. Warm and waterproof jackets are highly recommended as several activities will involve being outside and aboard boats in coastal conditions.

#### *Lunch*

Very, very important!!!! You will need to bring your lunch on Monday, there will not be time to visit a shop. Lunch on Tuesday will be provided by Tassal and Get Shucked Oysters and on Wednesday by Mures..

### **Where to Meet and or be Collected:**

#### *Monday and Tuesday*

Meeting and departing at the UTAS School of Zoology. Turn off Churchill Avenue into T.T. Flynn Street and follow the road curving to the right. After about 400m you should arrive at the statue of two large elephant seals Well done, this is the meeting site.

#### *Wednesday*

We will be meeting on this day at the Seafood Training Tasmania headquarters in Gladstone Street, Salamanca. It will be easiest if we meet as a group on the corner of Gladstone Street and Salamanca Place, outside Irish Murphy's.

**Please see the Pathway planner at your school if you require more detailed information regarding the program.**

**Figure 4. Letter to successful applicants**



## Working on the Water Marine Careers

Department of Education  
GUARANTEEING FUTURES NORTHERN TEAM  
Linda Goss  
VEL Development Officer  
Mobile: 0409 334 459

### 2009 Program

#### Monday 1<sup>st</sup> October – AMC Newman

**9.45 - Please meet near the flag poles in front of Building 10 (refer to attached map)**

- 10.00am – 11:00am Welcome by organisers and short talk on career opportunities in the marine environment
- 11.00am – 11.30am NCMEH Tours of tow tank and model test basin  
(25 students per group; 15 minutes per location; swap over and repeat tour)
- 11.30am – 12.30pm NCPS Tours of the ship simulator and survival centre  
(25 students per group; 30 minutes per location; swap over and repeat tour)
- 12.30pm – 1.30 pm LUNCH provided for students at AMC Cafeteria
- 1.30pm - 4.30 pm NCMCRS Hands-on activities in Science Building and Aquaculture Centre  
(25 students per group; 1.5 hours per location; swap over and repeat activity)

**You will be notified on Day 1 if you are travelling to the East or West Tamar on Day 2**

#### Tuesday 1<sup>3<sup>th</sup></sup> October

**8.45 - Please meet near the flag poles at AMC in front of Building 10**

##### *Group 1 – EAST TAMAR ACTIVITIES*

- 8.45am – 10:00am Travel to Bridport
- 10:00am – 11:00am Barnett Shipbuilding Tour, Bridport
- 11:00am – 12noon Tours and talks with commercial fishermen, Bridport Wharf
- 12noon – 12.30pm LUNCH (Fish N' Chips) provided for students at Bridport
- 12.30pm - 1:30pm Travel to Scottsdale
- 1:30pm - 2:30pm Springfield Hatchery Tour, Scottsdale
- 2:30pm – 3.30pm Travel to AMC Newman
- 3:30pm – 4:00pm Wrap up & discussion of assignments at AMC, Newman

##### *Group 2 – WEST TAMAR ACTIVITIES*

- 8.45am – 10:00am Travel to Beauty Point
- 10:00am – 11:00am Van Diemen Aquaculture Tour
- 11:00am – 12noon Underwater Centre Tour
- 12noon - 1:00pm LUNCH (students to BYO)
- 1:00pm – 2:00pm Seahorse World Tour
- 2:00pm – 3:00pm AMC, Blue Fin, Tour
- 3:00pm - 4:00pm Tasmania Police vessel tour
- 4:00pm - 4:30pm Travel to AMC Newman

#### Wednesday 1<sup>4<sup>th</sup></sup> October

Reverse of day 2

Day 3 will end at 3pm to allow for return travel for North West and East Coast Students

**Important Information:**

Meet at the AMC @ 9.45am on Monday. Students are responsible for their own travel arrangements to and from the AMC, and a bus will be provided for visits to other locations. For students who are staying at the Olde Tudor Motor Inn transport will be arranged for you each day.

**MONEY:** Please remember to bring your \$5.00 participation fee. You may bring extra money for drinks and snacks.

**CLOTHING:** Students will engage in light physical activity during the three days. They should wear warm, casual clothing and sturdy water resistant shoes. Warm and weatherproof jackets are highly recommended as several of the activities will involve being outside and aboard boats in coastal conditions.

**LUNCH:** Lunch will be provided on Monday at the AMC and the day you visit Bridport. The day you travel to Beauty Point you will need to bring your own or there will be the opportunity to purchase at the local shop.

**ACCOMMODATION:** Accommodation will be shared facilities, 2 bedroom apartments with 3-4 students,  
Olde Tudor Motor Inn  
229 Westbury Road  
Prospect 7250  
Phone: 6344 5044

At the accommodation of a night, students are expected to -

- Keep noise to an acceptable level
- Keep their room tidy
- Follow instructions at all times
- Not use inappropriate language
- Follow curfews and not leave the accommodation venue at any time
- Not to enter any licensed or prohibited area of accommodation venue without teacher supervision
- Respect the physical environment and other guests

**EXPENSES**

All travel, accommodation and meals are covered for participants of the Working on the Water Program. Students may wish to bring a small amount of money to purchase incidental items (snacks etc) with the permission of the supervisors.

Swim wear and towel (optional) as the accommodation has a pool.

**Running late, can't find the meeting place or away ill on the day!  
Please phone Linda Goss 0409 334 459**



Figure 5. Tasmanian WoW Program (North) 2009



# Marine Careers from Aquaculture to Zoology



## Student Assignment/Presentation

To reflect on what you have seen, heard and learnt during the Working on Water program there is an expectation that you complete a post program assignment or presentation. Not only will this exercise help you reflect on your participation, it also gives you a chance to win a number of fantastic opportunities such as **A free Elements of Shipboard Safety course with Seafood Training Tasmania, a trip courtesy of Navigator Cruises or an experience as a deck hand with Bruny Island charters.**



The assignment/presentation can be one of the following:



- **A school newsletter article about the program.** Please submit your article and if possible a copy of your school newsletter that the article appears in.



- **A detailed pathway for your identified or desired career area.** Include details such as subjects to be studied at Y11/12 level, courses or qualifications you may need to undertake at Seafood Training Tasmania, how many TCE points you may need for university entry, what degree course you may need to undertake.



- **Powerpoint or Storyboard presentation** designed for a school audience, i.e. your Grade group or Science class.
- **An in-depth investigation** into one aspect of the program that you found particularly interesting, E.g. Striped Trumpter research, Southern Ocean research, oyster farming, marine tourism careers etc.



## Submitting Assignments

Assignments are to be emailed to Aaron Cullenward, SCOPE [aaronc@colony47.com.au](mailto:aaronc@colony47.com.au)



LOCAL COMMUNITY PARTNERSHIPS

## Closing Dates:

Working on Water Program 1  
Working on Water Program 2

Due date **Friday October 30**  
Due date **Friday November 6**

## Assessment

A panel of program representatives will assess the assignments to determine who receives the opportunity. It is recommended that you also submit your completed assignment to your school staff for possible assessment in literacy and science.

## Notification

Students will be notified by email by Friday November 13 as to who has won the opportunity.



Australian Government  
Department of the  
Environment and Heritage  
Australian Antarctic Division



Figure 6. Student Assignment Flier

# Working on the Water Vocational Program 2009

## Student Feedback Form

**Name:** \_\_\_\_\_ (optional)

**Contact Details:** \_\_\_\_\_



The best part of the program was...



The most informative part for me was....



I found the program valuable/ not valuable in terms of my future career path because.....



Having done the program I intend to pursue a career/education/training in the marine field.

**Yes**

**No**

(please circle)



If you answered **Yes** to the last question, what do you hope to pursue?



I would like more information on, or an experience in the following.....



Can you offer suggestions for future forums/workshops?



Any other comments.

**Figure 7. Student Feedback Form**

## Working on Water Program by Amiel Nubaha Grade 9

I arrived in Tasmania from Zimbabwe on the 6<sup>th</sup> of August this year and started at Rose Bay High School as a Grade Nine student a week later. Three weeks later I was lucky enough to be accepted to participate in the Working on Water Program at UTAS that was offered to all Grade 9/10 students in the Hobart area. This course changed my life in many ways. It changed the way I think and feel about things in life and basically changed my whole understanding of the wider world. When I was a child in Africa I always said that I wanted to be a Meteorologist Captain and when I was involved in this program I realised that my dream to do this job was actually possible if I studied hard at school.

On the first day we learnt a lot about Marine Science, Zoology, Antarctic Science and Aquaculture and the career paths you must follow to be able to do these. After hearing all this information it was clear to me that I wanted to study Antarctic Science at the University in Hobart. After lunch we visited the Australian Antarctica Division to see and learn how the scientists work. It was a privilege and a great chance to see how wonderful these scientists are. I was amazed about how much knowledge they have and it gave me great inspiration to achieve my own goals. On this day I saw a crayfish for the very first time. I didn't realise that you could eat crayfish so I was surprised when they told us that it is an edible fish. It is a nice looking fish too.

The second day was a wonderful day and I learnt a lot of new things. On this day we visited TASSEL to see how they ran their business of farming Antarctic Salmon fish. When we arrived we went to visit a pond in a boat and I was very excited because it was the first time in my life that I had ever been on a boat. At the pond we learnt how these fish grow, how they behave and they interact with other fish in the water.

After this we visited a beautiful place called Bruny Island at Adams Bay. At this place we saw oysters and learnt about them. I was very excited because it was my first time to ever see oysters. After lunch we went to visit the Marine Discovery Centre at Woodbridge. I saw fantastic invertebrate fish. For example, zig-zag sea star fish, cabestan snails and queen scallops. In my entire life I had never seen anything like this before so it was a great privilege and a wonderful opportunity for me. At this beautiful place I also saw strange fish like stripey trumpeter and white spotted dog sharks. This was a wonderful day for me



because it taught me a lot and I saw lots of fish that I had never seen in my life.

Day 3 was a really wonderful day for me because I spoke with Fisherman, police rescuers and Captains. We learnt a lot about how boats work and I found this very interesting. This day was very important to me because I had the opportunity to ask a lot of questions because as you know, I want to be a captain when I grow up. They were able to answer all of my questions so I was happy about this. They told me that this work is very enjoyable because you see lots of interesting things in the water and you learn to problem solve.

After this we went to Mures to eat lunch with everyone. We ate delicious seafood and I sat with my friends who I had met during the program. We were sad to say goodbye to each other because we had become almost like one big family. We all got along with each other very well and we were hoping that we would see one another again. After lunch we were given certificates.

Being part of this 3 day program was a wonderful experience for me and I hope that other students can have this same opportunity. It gave me the chance to clear the way for my career pathway. I now know what I want to do and I will now work extremely hard to achieve my dream. I feel very lucky to be living here in Hobart. The people are friendly and it is a truly beautiful place. I hope that one day I will be able to become a successful Meteorologist Captain and to be able to help Tasmania develop towards a good future.

**Figure 8. Student Assignment (example), Tasmanian WoW Program 2009**



**APPENDIX 2:  
Working on the Water Program Evaluation and Strategic Planning  
Workshop - Summary**

## **Evaluation & Strategic Direction Workshop**

‘WORKING ON WATER: FROM AQUACULTURE TO ZOOLOGY’  
CAREERS PROMOTION PROGRAM

*Friday 25<sup>th</sup> June 2010, 10:30am  
Red Bridge Café & Providore, 137 High St, Campbelltown*

### **SUMMARY OF WORKSHOP OUTCOMES**

#### **1. WORKSHOP PARTICIPANTS**

NAME	ORGANISATION	SECTOR
1. Tony Ibbott	Marine Solutions	Facilitator
2. John Purser	Australian Maritime College	Training
3. Mark Godfrey	Department of Education	Schools
4. Vija Hughes	Colony 47	Careers Promotion/Extension
5. Sarah Reinhart	Tasmanian Seafood Industry Council	Seafood Industry
6. Kevin Redd	University of Tasmania	Training
7. Martin Binns	Department of Education	Schools
8. Martin Stalker	Department of Education	Schools
9. Linda Goss	Department of Education	Schools
10. Lynne Hanlon	Department of Education	Schools
11. Dan Haley	2009 student participant	Schools
12. Fiona Ewing	SeaNet / Ocean Watch	Careers Promotion/Extension
13. Emily Ogier	University of Tasmania Tasmanian Seafood Industry, & Marine Solutions	Seafood Industry
14. Sam Ibbott	Seafood Training Tasmania & Marine Solutions	Training

#### **APOLOGIES**

- Tim Hunt (Tassal)
- Ben Stockwinn (Primary Industries Education Foundation)
- James Garde (Seafood Training Tasmania)
- Pam Elliott (Woodbridge Marine Discovery Centre)
- Matt Berne (Colony 47)

## **2. WELCOME & OVERVIEW**

Sam Ibbott welcomed participants and provided an overview of the objectives of Working on the Water (WoW) Careers Promotion Program, the FRDC-funded project, and the Workshop.

The WoW Program has run in 2008 & 2009 in both the north & south of the State. It has been recognised by the Fisheries Research & Development Corporation (FRDC) as a potential model for other States & regions to promote careers in the seafood & allied marine sectors.

The objectives of the Workshop were to:

1. Determine whether the Program meets the needs of the seafood industry and allied sectors. Should this be the case, the objective will then be to document the processes, knowledge and outcomes of the Program to enable the development of a Guide to assist in the implementation of a similar program in areas outside of Tasmania; and
2. Develop strategies to ensure the improvement, sustainability and ongoing resourcing of the WoW Program in Tasmania.

Tony Ibbott was then introduced as the Workshop facilitator.

## **3. WoW PROGRAM'S ACHIEVEMENTS**

Achievements of the WoW Program thus far were identified and prioritised. The main achievements of the Program were as follows:

1. Participating students learn about the wide range of training & career pathways associated with the seafood industry, and the links between study, training & employment;
2. Participating students are able to make informed study and career choices;
3. Networks have been created between the seafood industry, schools and the training sector;
4. High level of engagement and commitment to the Program by the seafood industry;
5. High level of interest in and engagement from participating students;
6. Caters for a breadth of student needs (academic to vocational);
7. Value continues to be recognised by partners and stakeholders;
8. Demonstrated 'lighthouse' model for careers promotion programs in other regions/states; and
9. Enabling the local seafood industry to identify and articulate possible training & career pathways and options to students.

## **4. SUCCESSFUL FEATURES & AREAS REQUIRING IMPROVEMENT**

Successful features of the Program were identified and prioritised as follows:

- Genuineness, authenticity and enthusiasm of people involved in the Program;
- Diversity and intensity of Program’s content and format, which provides a broad array of experiences and yet demonstrates linkages;
- Selection process ensures students who participate are interested and draws from a variety of different schools and backgrounds;
- Gives students access to “real” marine/seafood operators & experts, not just teachers;
- Incentives & opportunities provided to students through the assignment process and post-Program;
- Equity of access to the Program provided to students in regional/rural areas by meeting accommodation, travel and meal costs; and
- Multiple funding sources and lack of ownership of the Program by anyone sector or organisation.

Areas where the Program could be improved were identified and prioritised as follows:

- Sustainability of the Program (funding & human resources);
- Level of ‘hands on’ activities within the Program;
- Promotion of the Program to schools and pathway planners/careers advisors;
- Provision of support materials and formalized follow-on opportunities for students post-Program;
- Involvement of previous student participants in promoting and running the Program;
- Identification of a ‘Host’ organization for the Program’s website and potentially for the Program (noting that depending on the hosting arrangements this may compromise the flexible and cross-cutting nature of the Program and may not be the preferred option);
- Promotion of the Program to the seafood industry and other stakeholders; and
- Responsiveness to changing demand for specific jobs/skills within the seafood industry.

## **5. BENEFITS OF THE PROGRAM**

The benefits of the Program to the different sectors were identified and prioritised as follows:

### *Seafood Industry*

- Raises the profile of the local seafood industry;
- Local seafood industry has ownership over the messages communicated to students;
- Targets and highlights skills and labour shortages in the seafood industry to future workforce;
- Provides operators from the seafood industry an opportunity to examine how they present themselves to students and the wider community; and
- Raises awareness of diversity of jobs and training opportunities with the seafood industry for teachers and career advisors.

### *Student participants*

- Students are able to make informed choices about training and career pathways based on direct experience;
- Students become more motivated in studies because they have directly experienced links between study, training and careers;
- Provides students with authentic, 'real world' and out-of-classroom experiences;
- Program length and format provides students with a broad array of training and career pathways right across the seafood and allied marine sectors; and
- Provides students with access to excellent marine research and training facilities.

### *Schools*

- Raises awareness of diversity of jobs and training opportunities with the seafood industry for teachers and career advisors;
- Students become more motivated in studies because they have directly experienced links between study, training and careers; and
- Links curriculum (science) to real-world outcomes.

### *Training (VET & tertiary)*

- Adds to Tasmania's profile as a "marine hub";
- Provides students with access to excellent marine and maritime research and training facilities;
- Raises the profile of the training organisations; and
- Students are able to make informed choices about training and career pathways based on direct experience.

## **6. EVALUATION OF THE WoW PROGRAM AGAINST PROGRAM OBJECTIVES**

The performance of the Program in 2008 and 2009 was evaluated against the four Program objectives.

***Objective 1:*** *Provide students with the opportunity to experience and learn of the possible training and career pathways in Tasmania's seafood industry & allied marine industries.*

FULLY ACHIEVED

Comments from representatives of the wild-catch commercial fishing industry included that the experiences offered of their sector could be improved and expanded.

***Objective 2:*** *Expand the career promotion programs available to school education and careers promotion sectors to include Tasmania's seafood industry and allied marine industries.*

ACHIEVED

Comments from the schools and careers promotion sector included the note that further promotion of the Program to schools would enhance its performance against this objective.

**Objective 3:** *Develop strategic partnerships between Tasmania's seafood industry and allied marine industries, VET, tertiary education, school education and careers promotion sectors.*

ACHIEVED

Comments included the need for the Program to undertake the following in order to better achieve this objective:

- move from being based on personality-driven to formalized and strategic networks and partnerships;
- develop partnerships with non-government school sector; and
- expand the activities on which the partnership between industry, schools and training sectors is based beyond the current Program to a continuous program of incremental activity and relationships.

**Objective 4:** *Contribute to an increase in the numbers of Tasmanian students entering marine-based industry sectors and/or undertaking marine-based VET or tertiary training.*

PARTIALLY ACHIEVED / NOT ASSESSABLE

Comments included the following:

- the Program's 2 year time span of activity is not sufficient to assess its impact on students entering the seafood industry and/or marine-based training, especially tertiary training;
- mechanisms need to be developed to track the subsequent training and career pathway choices of students who have participated in the Program;
- the value of the non-quantifiable impact of the Program shouldn't be underestimated (ie. peer group influence exerted by student participants); and
- objective of the school and careers promotion sectors is in fact for students to make informed choices about future training and career pathways, and this may not necessarily mean entry into the seafood and allied marine industries.

## **7. STAKEHOLDERS' NEEDS & FEARS**

The following needs and fears were identified on a shared and sector-specific basis.

NEEDS

Shared:

- Students are provided with real experiences of training and career opportunities in the seafood and allied marine industries, which enable them to make informed study, training and career choices;
- Support for Program partners, contributors and stakeholders and coordination of activities;
- Provision of accurate and positive information regarding study, training and career opportunities in the seafood and allied marine industries, and in the post-secondary training sectors; and

- Opportunities to build networks and partnerships between industry, schools and the training sector.

Sector-specific:

- Opportunity to raise profile and increase awareness of the industry amongst the community and amongst potential workforce through positive exposure (*Seafood industry*);
- Opportunity for members to do something different than operational activities and to justify social licence to utilise common pool marine resources by giving back to the community (*Seafood industry*);
- Industry contributors are good communicators (*Careers promotion & Extension*);
- Support materials provided to students to convey the range of pathways and contacts for those pathways (*Schools*);
- Regional focus maintained (*Schools*); and
- Supply of fee-paying students to continue offering marine-based courses (*Training*);
- Increase post-secondary education & training qualifications of Tasmanian students (*Training*).

FEARS

Shared:

- Investment (human resources, cash funding, goodwill) in the Program does not result in objectives being met;
- Students who wish to further explore training or career pathways within the seafood and allied marine industries are not provided with opportunities or support beyond the 3-day program;
- Lack of sustainability without coordination and support in the form of dedicated human resources and cash funding; and
- Inaccurate information provided to students and resultant loss of credibility for the Program.

Sector-specific:

- Goodwill of participating businesses, operators, individuals and organisations will be exhausted (*Seafood industry*);
- Risk of injury to student and associated bad publicity (*Seafood industry*);
- Industry contributors failing to communicate well with students (*Careers promotion & Extension*);
- Lack of funding for assisting regional and rural students to attend (*Schools*); and
- Loss of students to other sectors or other training providers (*Training*).

## **8. CRITICAL SUCCESS FACTORS**

The following factors were identified as critical to the success of the Program in its current model:

- Offers real and unique experiences that are memorable and relevant for students, which in turn leads to informed choices and enthusiasm for chosen pathways;
- Visible passion and energy of partners, stakeholders, contributors and students;
- Ability of industry contributors to communicate effectively with students;
- High fun factor for students;
- Strong networks and collaboration between Program partners;
- Comprehensive Program format that covers a range of varied experiences; and
- Driven by purpose and need, not by funding availability.

## **9. FUTURE VISION FOR THE WoW PROGRAM IN 2015**

In the first instance, all sectors agreed that the Program should continue beyond 2010. Characteristics of the Program in 2015 common to the vision communicated by all sectors included the following:

- Sustainable in terms of funding, people, management and relationships;
- Existing Program is the core of an expanded and articulated careers promotion program;
- Program has a positive and high profile amongst schools, industry, training organisations & community because it meets the needs of each of these sectors;
- Stays relevant in terms of content, activities and technologies to the changing needs and contexts of industry, schools and training sectors; and
- Remains accessible to a range of students (academic to vocationally-focused), especially those from regional & rural areas.

## **10. PRIORITISED STRATEGIES TO ACHIEVE 2015 VISION**

Strategies to achieve the 2015 vision were recommended and prioritised. They included the following (listed in order of priority):

1. Secure strategic and sustainable sources of funding;
2. Collate data from Program to demonstrate value of outputs and outcomes;
3. Appoint a Project Officer/Coordinator;
4. Develop an agreed time frame for current and proposed Program with schools, training organisations and industry partners;
5. Identify and involve past student participants;
6. Identify potential additional activities to be part of an expanded Program;
7. Form a Program Steering Group to formalize networks and communication between industry, schools, and training partners;
8. Find “champions” and “patrons” of the Program within the industry and education sectors; and
9. Standardise the Program by developing a framework which can be implemented in other regions/states/countries by any organization.