

# **Every Journey Starts with a Single Step: Yarra Valley Water's Journey Towards Environmental Sustainability**

Francis Pamminger<sup>1</sup> & Julian Crawford<sup>2</sup>

<sup>1</sup>Yarra Valley Water, AUS

<sup>2</sup>EcoSTEPS, AUS

**This Paper discusses the innovative and pioneering activities undertaken over the last three years by Yarra Valley Water (YVW) to make it a more environmentally sustainable organisation. YVW recognises that both the well-being of our community and the strength of our business depend on the health of our environment. This means we must provide our water and sewerage services in an environmentally sustainable way ‘within the carrying capacity of nature’. Three years after starting, the organisation asked the question: “What do we do now to progress further?” EcoSTEPS were engaged to help and did this by delivering a training program to all employees in April 2006. This paper focuses on the key learnings from the process and is applicable to all organisations and communities. Topics addressed include:**

- **Behavioural and cultural change processes and impacts;**
- **Challenges we are now working with;**
- **Innovative Education for Sustainability techniques employed.**

## **Introduction**

**Y**arra Valley Water is committed to environmental sustainability. We recognise that the well being of our community and the strength of our economy are dependent on the health of our environment and accordingly strive to provide water and sewerage services within the carrying capacity of nature.

This paper has been written to summarise our progress to date and present the challenges we are now dealing with. We are proud of our achievements to date and equally recognise that we are not yet sustainable. We also recognise that our goal to be environmentally sustainable is arguably fruitless on our own. For example, will we experience any environmental benefit if we achieve our objective to have no net greenhouse gas emissions if no one else also does anything? We accordingly share our learning equally for others to learn, and in the hope that there may also be people who can help us.

## **Behavioural and cultural changes processes and impacts**

**W**e are proud of what we have achieved to date. We have a clear and bold commitment to achieve environmental sustainability. It is articulated in a business policy, endorsed by our Board, it is integrated into day to day business activities, and monitored monthly by our Executive through a Balanced Scorecard reporting process. We have done this by clearly articulating what

environmental sustainability means in the following way. To provide our services within the carrying capacity of nature we will:

- Reduce greenhouse gas emissions to below 10,500 tonnes CO<sub>2</sub>-e by 2008, which is 50% of our 1990 total.
- Reduce average water consumption to below 306 litres per person per day by 2010, which is 80% of our 1990's total.
- Reduce the amount of waste to landfill to below 10% of the total waste by 2010.
- Establish quantifiable targets for nutrients discharged from our sewage treatment plants by 2006.

To get to this stage however was in itself quite a journey. Reflecting on the major steps the organization had to face and solve, four are identified. Organizational *buy-in* was required, a *definition* of sustainability was required, *awareness* to the challenges was required, and a means of moving from the *philosophical to pragmatic* was required.

## **Buy-in**

The seed for change was first recognized at a business planning workshop towards the end of 2002, which was attended by the businesses management team. They had gathered to initiate the planning process for the coming financial year. To gain clarity of focus a facilitator using a 'fish-bowl' process asked three questions of three different groups. The first group was asked to identify the purpose of the business ten years ago. The second group was asked to identify present drivers, and the third group was asked to identify what future drivers should be.

Reflecting back on the answers, the first group was very clear on the past drivers. They quickly came to agreement and could not be challenged by the facilitator. The second group struggled. Not out of effort, but rather that a lot of work was being done for a lot of different drivers. The experience left people tired and arguably reflecting where the organization was at. While the third group, similarly to the first, quickly agreed that an opportunity existed to improve our environmental performance and that is where we should point the company.

Not only was this a very powerful process to gain *buy-in*, it was further expanded through the company. Coinciding with the engagement of a new Managing Director in 2003, a number of 'world café's' were conducted throughout the business including all employees. The objective was to explore what individuals perceived the business should do to become an environmental leader. The collective outcome of this work was captured on a mosaic that was produced and hung around the business in prominent positions.

We monitor employee opinion of our commitment to environmental sustainability through four questions included in our employee opinion survey conducted every two years. This records an average 25% increase over the last survey period, hence a high level of employee 'buy-in' to the change process.



Figure 1 Mosaic compiled from individual thoughts and desires for environmental improvement

## **Definition**

Having established a collective business agreement that we needed to do something, the next step was to determine what this should be. We chose The Natural Step process to help us with this. This was chosen because of the perceived fit that this had with the business's predominant paradigm, which is one built on the reductionist scientific principles. The predominant professions employed at Yarra Valley Water are engineers and accountants. We liked the scientific robust definition it provided for sustainability.

The Natural Step defines sustainability in the following way. In the sustainable society, nature is not subject to systematically increasing:

1. concentrations of substances extracted from the earth's crust.
2. concentrations of substances produced by society.
3. degradation by physical means, and, in that society
4. human needs are met worldwide.

## **Awareness**

All employees had exposure one way or another to the Natural Step principles and in this way we created a common business definition for sustainability, which is to provide our services within the carrying capacity of nature. It started first with the Management team, who through an environmental audit against the Natural Step principles, explored our existing performance. This consisted of three half day workshops. Through to those with less involvement in sustainability receiving only a one hour training workshop where we only explained the general concepts.

A major component of the training was raising everyone's awareness of the need to change. The most significant contributing element to this was the Ecological Footprint concept developed by Mathis Wackernagel and Bill Rees, as described in Wackernagel et al (2000). This was later reinforced with a visit by Mathis to Yarra Valley Water in February 2004. The Ecological Footprint taught us all that if everyone lived the lives we did we would need three planet earths to support us. Mathis humorously explains, given that he has delivered a scientific paper that was peer reviewed and approved, that proves that we do not have this available to us.

## **Philosophical to pragmatic**

Having buy-in, a clear definition, and awareness, only brought us so far in our journey. There was no denying that many employees were enthusiastically engaged, however, having reached this, there was still uncertainty as to 'what we should do on Monday', so to speak.

We now had before us many different concepts, for example, The Natural Step, Ecological Footprint, Environmental Management Systems, the waste hierarchy, and we were confused as to how they all fitted together. The paper by Robert et al. (undated) provided the theoretical framework for us to understand this, and we consequently incorporated this thinking into the development of our environmental strategy.

It is very important to bridge the gap between the philosophical and the pragmatic as this is a major stumbling block for some people. So much so that it im-

pedes their engagement with any action. Another way that we have addressed this is to use a metaphorical description.

It is true that sustainability by definition is unachievable. Taken to its absolute definition, and maybe philosophical, the planet earth only has a life of about 4.5 billion years. Arguably also, we as individuals also are not sustainable; we also have a limited life. But against this, there are still actions we can take ‘on Monday’, to move from the philosophical to pragmatic. Commonly cited and easily available indicators for human health are blood pressure, cholesterol, and weight. And equally, when we think of the environment, we must also identify the key variables that we need to focus on. It is those that we need to target ‘next Monday’.

## **Challenges we are now working with**

**T**hree and a half years after starting on our journey to become environmentally sustainable we asked ourselves: “What do we now have to do to further improve?” Surprisingly, for everything we had done, employees were of the opinion that we were: ‘talking the talk but not walking the walk.’ Faced with that, we set about designing a training program to take the next steps on our journey. It is this program that EcoSTEPS has helped us with.

It was our primary goal to move from the self talk ‘that expected the business to do something’ to achieving individual ownership where employees could say ‘this is what we are doing to make Yarra Valley Water more sustainable’. Fundamental to this was the recognition that the decisions we make are based on the knowledge we have and the opinions we have.

When we look at how decisions have changed with regard to drink driving, sun exposure, seat belts, hosing driveways and recycling water and so on over the last twenty years, this becomes more transparent. As knowledge has changed, we have changed our responses. Equally, we now need to look forward and ask how we incorporate knowledge and opinions on environmental sustainability.

## **Innovation education for sustainability techniques employed**

**I**t is against that background that we specifically asked EcoSTEPS to design our environmental training program for all employees of the business. Given that we find it easier to change the opinions of others rather than change our own, the training program had to find a way to address this issue. We chose an experiential process where people could see how others made decisions, and arguably how an individual may use a different process when considering decisions either at home, in their work group, or how the business makes decisions may highlight the processes. Alternatively, they would see it how others made decisions, and then hopefully extrapolate this into how they also made decisions.

The Overall Aims of the Training Program were articulated at three levels, namely:

1. Personally - What does Environmental Sustainability mean to ME (and my family) personally?
2. Organisationally - What does Environmental Sustainability mean to US collectively as an organisation?

### 3. My Job - In terms of my role/job/team at YVW, what does Environmental Sustainability mean?

The Outline Contents of each training session were:

- Environmental Sustainability – What is it?
- What are the big issues for us as individuals?
- Sustainability Approaches
- What's YVW been doing as an organisation?
- What more can we do? Case Studies
- Progressing Sustainability
- Reflections & Next steps...

Over 300 staff and contractors attended the training program. There was a formal evaluation process based on the Dept of Environment & Conservation (NSW)'s 'Does your Project Make a Difference – Guide to Evaluating Environmental Education Projects and Programs'. The Overall Aims of the Program were largely achieved and set an platform for the next steps on our journey.

## Conclusions

**Y**arra Valley Water is proud of its achievements to date with regard to achieving environmental sustainability. However, as we are not yet there yet, we can say that our progress is like a journey of many steps. We start by taking one step at a time. Each step represents a challenge and consequently requires a solution before we can progress to the next. Our steps to date have included achieving buy-in from employees that we needed to do something. Then we had to get collective agreement on a common definition of sustainability. This was followed by instilling an awareness that 'sustainability' is important and that we all need to change. Then we had to develop a framework to allow us to move from the philosophical to the pragmatic facilitating a move to action. Most recently we have addressed how to address the challenge that the values that individuals have may be the next barrier for us to progress to the next stage. EcoSTEPS were used to develop a specific training program to help with this.

## References

- Dept of Environment & Conservation (NSW) (2004). *Does your Project Make a Difference – Guide to Evaluating Environmental Education Projects and Programs*.
- EcoSTEPS website, [www.ecosteps.com.au](http://www.ecosteps.com.au) (Accessed 1 October 2006).
- Mathis Wackernagel; Chambers, Nicky; Simmons, Craig (2000). *Sharing Natures Interest. Ecological Footprints as an indicator of sustainability*. Earthscan. London.
- Robert, Karl-Henrik; Schmidt-Blek, Bio; Aloisi de Larderel, Jacqueline; Basile, George; Jansen, J. Leo; Kuehr, Ruediger; Price Thomas, Peter; Suzuki, Motoyuki; Wackernagel, Mathis: *Strategic sustainable development – Selection, design and synergies of applied tools*. Journal of Cleaner Production 10 (2002) 197–214.
- Yarra Valley Water (undated). *Towards environmental sustainability - Our journey*. [www.yvw.com.au/NR/rdonlyres/BA195021-D98F-4B19-BEC9-F94DB275D2CF/0/OurJourney.pdf](http://www.yvw.com.au/NR/rdonlyres/BA195021-D98F-4B19-BEC9-F94DB275D2CF/0/OurJourney.pdf) (Accessed 1 October 2006).