BUILDING A WATER STEWARDSHIP COMMUNITY IN THE UNESCO WESTERN PORT BIOSPHERE RESERVE VICTORIA AUSTRALIA

OCTOBER 2017
FOREWORD

The Western Port Biosphere Reserve was designated by UNESCO under its Man and the Biosphere Program in 2002. Western Port was chosen because it has outstanding natural values, including a Ramsar wetland of international importance, on the fringe the expanding city of Melbourne.

Our natural environment is not only beautiful it is fundamental to our health and wellbeing. The success of the Building a Water Stewardship Community in Western Port Biosphere project that fosters collaboration between major water users, the community, water agencies, local government and other stakeholders to improve water quality, ecology of local waterways, and water security for water users, highlights the value of adopting a collaborative approach for this project.

From the beginning the project partners Western Port Biosphere and Water Stewardship Australia sought to build partnerships and collaboration, successfully facilitating the establishment of the multi stakeholder Reference Group. The project model builds on work that our regional partners are doing and working with them and other groups to identify landholders, organisations and businesses to adopt the Site Water Stewardship Planning approach on their properties.

The principles of UNESCO’s Man and the Biosphere Program are integral to balancing the ongoing sustainability of our environment with our expectations for the future against the demands we continually make on it to provide our lifestyles. How we manage water is key to that future and working together to promote collaborative partnerships, and identifying opportunities to expand cooperation in the adoption of better water management practices will help us manage water, and our catchments, better.

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An overview report prepared by Dr. Gary Jones, based on (i) review of project materials, plans and progress reports, (ii) visits to two water steward sites, and (iii) discussions and communications with Project Leader, Mr. Lance Lloyd. Mr. Lloyd is thanked for his helpful input and comment in the preparation of this review.

SUMMARY

In less than three years, Water Stewardship Australia and its strategic partner, the Western Port Biosphere Reserve Foundation, have successfully grown a water stewardship community across the UNESCO Western Port Biosphere Reserve region. Working in collaboration with several local project partners, they have achieved an excellent level of stakeholder engagement and organisational commitment, resulting in water stewardship plan development at 28 sites in ten peri-urban river catchments, across the Biosphere region.

Keys to success for the project include: a broad range of collaborative and supportive partners; a highly experienced and knowledgeable project leader and project team; well-researched and well-planned approaches to prospective water steward businesses and organisations; well-structured training for new water stewards; and a well-conceived local recognition program that suited the needs and aspirations of the many small to medium-sized businesses that have committed to the Alliance for Water Stewardship international water stewardship system.

A highlight of the project was the World-first Alliance for Water Stewardship Gold level Water Stewardship certification. This was achieved by Ingham’s Group Limited Somerville site, an early adopter of Water Stewardship and a champion of this project, which was recognised in their Gold level certification.

As in all complex, multi-stakeholder engagement projects, some challenges were encountered: insufficient resources as the geographic scope of the project grew; difficulty finding time and funds for plan development especially for small to medium sized stewardship businesses; and participant fatigue and distractions.

Nevertheless, the project has been, and should continue to be if further funding can be secured, very successful in promoting and securing the adoption of water stewardship and the Alliance for Water Stewardship International Water Stewardship Standard in the Western Port Biosphere Reserve.
ABOUT WATER STEWARDSHIP

Water Stewardship is a site-based system of integrated water management, which aims to achieve four key outcomes across water catchments:

1. Secure and sustainable water use
2. Good water quality
3. Healthy water-dependent ecosystems & cultural sites
4. Good water governance

The Alliance for Water Stewardship (AWS) has been developing the global Water Stewardship system since 2006. The system is based on:

- an International Water Stewardship Standard (AWS Standard), against which participating organisations can be assessed
- a credible verification program for assessing participating companies and organisations
- a brand and recognition system that encourages and rewards participation in improved water management practices.

Water Stewardship is adopted by businesses and public organisations that use water or otherwise impact on a healthy catchment water cycle and environment. It assists businesses and organisations to achieve sustainable water use and to remain, or become, good catchment citizens.

Water Stewardship principles improve understanding of site and catchment water risks, and of the social, environmental and economic benefits water provides to the wider community. Three levels of accreditation are possible: Core, Gold and Platinum.

WESTERN PORT BIOSPHERE WATER STEWARDSHIP PROJECT

Water Stewardship Australia (WSA) represents the Alliance for Water Stewardship in the Asia-Pacific region. Since early 2015, Water Stewardship Australia has been working in partnership with the Western Port Biosphere Reserve Foundation (WPBRF) to jointly plan and implement the “Building a Water Stewardship Community in the Western Port Biosphere” Project. The project began with a three-year funding grant from the Helen McPherson Smith Trust.

In 2002, the United Nations designated the Western Port region a UNESCO biosphere reserve. Biosphere Reserves aim to keep places special by fostering conservation and sustainable development. Western Port was chosen because it has outstanding natural values, including a Ramsar wetland of international importance on the fringe of the expanding city of Melbourne (pop. 4.5 million) (See map). The Biosphere Reserve has a combined area of 2,142 square kilometres and is made up of five local government areas.

PROJECT APPROACH

Engaging Project Participants

As in any catchment-based, multi-stakeholder project, a range of key participants had to be engaged for the Western Port Biosphere Water Stewardship Project, and in a more or less sequential way:

1. Project Funders - Project funding is, self-evidently, a critical pre-condition for success. If the project owners (WSA and WPBRF) are not in a position to fully fund the project, then funding grants have to be sought and secured. For the Western Port Biosphere Water Stewardship Project, generous funding over three years was provided by the Helen McPherson Smith Trust (HMS Trust), one of Australia’s most distinguished charitable trusts.

2. Project Partners - When engaging and working in multi-party governance and management settings – and water catchments are certainly those – the broadest possible suite of project partners is essential. Ideally, the work domain of the project partners should align with or otherwise complement that of the project owners. They may also provide additional cash and in-kind resources to support the project. For the Western Port Biosphere Water Stewardship Project, these core partners included Ingham’s Group Limited (an AWS Gold Certified site in Watson Creek catchment), Mornington Peninsula Shire Council, Melbourne Water, South East Water, Southern Rural Water, Port Philip & Western Port Catchment Management Authority, Parks Victoria and EPA Victoria.

3. Project Team - A knowledgeable, experienced and respected project leader is critical to the success of any project, especially those operating in complex, multi-stakeholder settings as the Western Port Biosphere region. A highly regarded and experienced Australian water consultant, was contracted on a part-time basis to lead the Western Port Biosphere Water Stewardship Project. Supporting the project leader was a small but experienced team of water and catchment specialists and other ‘in-kind’ specialist resources provided by Water Stewardship Australia, Western Port Biosphere Reserve Foundation and a number of the other project partners.

4. Water Stewards – For the project to be properly established and implemented, the broadest possible range of prospective stewards had to be identified and engaged from across the Western Port region. This successfully-achieved objective was to seek commitment from private businesses and public organisations that represented the diversity of commercial, landholder and water-user interests across the region.

WESTERN PORT THEORY OF CHANGE

The theory of change behind the project was that the AWS Standard could provide a framework for water using sites in the various Western Port Biosphere catchments to understand and act on the water challenges facing the region. Furthermore, that if philanthropic, public and private sector funds could be used to build a critical mass of Water Stewards, the project would gain momentum in the region, drawing other sites into the project. And if sufficient rewards could be generated for Water Stewards (e.g. market access, lower costs) then this would lock-in the project as part of how things are done in the catchment, delivering long-term benefits to people, industry and the environment (particularly the Western Port Ramsar wetlands and the Yaringa Marine National Park).
**PROJECT DESIGN**

The project team and partners were guided throughout by the requirements of the AWS Standard and its six stages of development (see figure below). For the three year funding period, the focus was on the first three steps of the standard:

1. Engagement of prospective stewards and commitment from the site manager
2. Gathering and understanding information on site and catchment conditions
3. Development of the Site Water Stewardship Plan

The project team, with support from project partner staff, provided information to stewards on site water quantity, quality and ecological health, about the broader catchment water cycle and environmental condition, and, most importantly, training of water stewards to better equip them to prepare for, and to develop, their Site Water Stewardship Plan.

**ENVIRONMENTAL ISSUES**

Water Scarcity | Water Quality | Ecosystem Health | Social Equality or License to operate

**INPUT**

- Watson Creek Catchment
- Information from: AWS & Western Port Biosphere

**GUIDANCE & ACCREDITATION**

AWS Water Stewardship Standard

**STEP 1**

Commitment of Site Manager to better Water Stewardship

**STEP 2**

Gather and understand information on site conditions

**STEP 3**

Develop Site Water Stewardship Plan

**STEP 4**

Implement

**STEP 5**

Evaluate

**STEP 6**

Certify and communicate your success

**PROJECT OUTCOMES**

**Key Outcomes — Year One: 2015**

- Project commenced in early 2015 – mapping of catchment
- Stakeholders was an important first step to ensure wider support
- Targeted community and stakeholder briefings provided an effective way to reach potential stewardship candidates.
- Ten Site Water Stewardship Plans were undertaken by year’s end.
- Ingham’s had been an early adopter of water stewardship and undertook its first evaluation against the Australian Water Stewardship Standard in 2009. It was a global pilot site for the trial implementation of the AWS International Water Stewardship Standard, and achieved a world-first Gold level Water Stewardship certification (See Case Study below) in 2015.
- Watson Creek catchment ‘Issues and Indicators’ document prepared by the project team and provided to Water Stewards.
- Significant in-kind staffing contributions (>300 hours) provided by project partners.

**Key Outcomes — Year Two: 2016**

- Site Water Stewardship Plan template developed by project team, which all Water Stewards were using. This allowed Water Stewards to complete Plans more easily at each site.
- A mechanism and database for identifying and ranking likely water stewardship candidates was established. This database enabled the project team to identify and assess 173 potential Water Stewards across an additional nine Biosphere catchments. The database also allowed the team to track contacts and outcomes from calls and meetings, and to note any follow-ups required.
- Increasingly important promotion of completed Site Water Stewardship Plans through Industry Associations and with government agencies.
- Catchment ‘Issues and Indicators’ document being prepared for six additional catchments across the Biosphere region.
- Project presentations to the 8th Australian Stream Management Conference, and the Alliance for Water Stewardship featured the project at the 19th International River Symposium in New Delhi and at the AWS Global Water Stewardship Forum in Scotland.

**Key Outcomes — Year Three: 2017 (to September)**

- Extended water stewardship reach to an additional three catchments, making ten catchments in all across the Biosphere region.
- Forty-eight stewardship sites have Plans, or Plans under development.
- Local recognition pathway developed for Water Stewards who have completed a Site Water Stewardship Plan and undertaken a self-verification audit.
- New branding plan developed for the project including signage and logos for Recognised Water Stewards to use (e.g. farm gate or business front door signage).
- Positive communications results from proactive engagement with Industry Associations such as the Nursery and Garden Industry Victoria (NGIV). The NGIV has one third of their membership based in the Biosphere.
- Project staff completed Level 3 of the AWS Water Stewardship training program.

**PROJECT OUTCOMES TO OCTOBER 2017**

**Water Stewards**

- Water Stewards (commitment made and Plans commenced) 28
- Water Stewards (commitment made) 100
- Catchments analysed and reports prepared 10
- Water Stewardship outreach
  - Other tools: brochures for water stewards (generic and catchment-specific)
  - Industry Associations and organisations reached 20
  - Government agencies involved 12
  - People reached 1000+
  - Facebook likes 700
  - Facebook posts (Biosphere Water Stewardship related) 40+
  - Biosphere led events 8
  - Biosphere participated in events 12
  - Media releases 4
  - Water stewardship articles in Council and other publications 6
  - Location-specific material produced such as The Briars Eco Living Display Centre, Landcare groups and FLOW (friends group)
  - Monitoring and evaluation activities 4

Summary Schema for Project Plan (from 2015 Project Report to HMS Trust)
LEARNINGS – SUCCESSES

Critical enabling and supporting role of project partners

The project team and owners, Water Stewardship Australia and Western Port Biosphere Reserve Foundation, engaged several agencies and Water Stewards. Initially stakeholders saw the project as a formal initiative and ‘a bit of a tick’ (UK and France), but it grew to reflect the diversity of private and public water-user interests – agriculture, manufacturing, horticulture, sporting & recreational, tourism, environmental, schools – across the Biosphere region.

Proactive outreach and stakeholder engagement

A well-planned and proactive approach to project partners and prospective Water Stewards, supported by senior management at the Ingham’s Somerville site, was an important foundation for success. Operating over the entire Western Port Biosphere region has also elevated the project in the minds of stakeholders, most of them in year 1 of the project. Each of these organisations held responsibility for different elements of water management across the region, and thus their support and ‘convincing’ power was highly important. These included: the local government authority (Mornington Peninsula Shire Council); three statutory water authorities, each with different but related interests in water supply (Melbourne Water – headworks and bulk water supply), South East Water (retailer sector), and Southern Rural Water Irrigation (includes Port Catchments Management Authority, Parks Victoria (responsible for national & state parks and wetland conservation) and EPA Victoria (responsible for water quality regulation). The team also included Ingham’s Group Limited, an early adopter and champion of water stewardship, both locally and internationally, which hosted early meetings to bring the project partners together.

Valuable key messages communicated to stakeholders

The communications plan developed by the project team, provide three clear messages that have successfully local engaged and project promotion:

1. Water is a vital part of life in the Western Port Biosphere Reserve – let’s work together to ensure we have healthy water-dependent ecosystems.
2. The Biosphere’s Water Stewardship Project is a great opportunity for landholders, businesses, organisations and the broader community to focus on the responsible use and management of water – an increasingly scarce resource – now and into the future.
3. Water stewardship provides win-win-win outcomes: it’s good for business, good for the community and good for the environment.

Early adopters and champions

Early in the project, Ingham’s became the first AWS Gold Certified water stewarding business in the world. Their role as a project champion, inspiring other businesses and organisations to join, and as a support of the overall objectives of the Alliance for Water Stewardship, has been highly significant. Ingham’s has also benefited in their role by being better able to fully meet the AWS Water Stewardship Standard including Advanced Criteria that allowed it to achieve Gold certification.

Organic growth in geographic scope

Having broad aspirations, but a modest beginning was an important tactic adopted at the outset by the project partners and team. Engagement activities started in the Watson Creek catchment, but over the following two years, as awareness and interest grew, stewardship work expanded to cover over 10 catchments across the Biosphere region. Operating over the entire Western Port Biosphere region has also elevated the project in the minds of stakeholders, agencies and Water Stewards. Initially stakeholders saw the project as just being a small local catchment project without much regional relevance. While increasing the scope to multiple catchments has put a strain on resources and delayed the completion of some Plans, it was an important step in increasing the value and relevance of the project across the region.

Diverse range of Stewards

As the project has expanded its geographic scope across multiple catchments, so too the scope of Water Stewards increased. Importantly, over time, it grew to reflect the diversity of private and public water-user interests – agriculture, manufacturing, horticulture, sporting & recreational, tourism, environmental, schools – across the Biosphere region.

Water Stewardship Plan Template

Development of a template for Site Water Stewardship Plans in Year 1 of the project was very important in guiding new Water Stewards through the various steps and stages of Plan development. The Standard is very thorough in its requirements and expectations, but ultimately each step requires data to be acquired, interpretations to be made and actions to be drafted. This requires knowledge and experience that is, necessarily, outside the scope of the Standard itself. The project designed template helped move new Stewards more rapidly through the Plan development process than otherwise would have been the case.

‘Letter of Commitment’ affirmed shared responsibilities

The formal ‘Letter of Commitment’ signed by new Water Stewards was a very important, early governance element in the Western Port Biosphere Water Stewardship Project. It affirmed not only the values and objectives underpinning the AWS Standard (an on-site, action, worker’s rights, catchment stewardship engagement, legal and regulatory compliance, timely disclosure), but also the commitment of the project owners (WSA and WPRP) to provide on-going technical and practical support in the development and implementation of Stewardship Plans, for example, provision of data and information on catchment physical, hydrological and environmental condition, and the Site Water Stewardship Plan template. This specialist knowledge and expertise is beyond that of most small and medium-sized (and many large) businesses who would have in-house, nor could they afford to contract a consultant to acquire it.

Effective communications

Strong internal and external communications have been critical to the success of the project. The Ingham’s case study, and others developed since, have been important for sharing success and building new commitment. Well-conceived and targeted media articles, talks and publications have ensured that many prospective Water Stewards had heard of the project before they were contacted by the project team, or at least had some awareness of it from articles in their local paper or from other local sources. The communications objective has increasingly been to have prospective Water Stewards contact the project team directly. This saves considerable time and effort, and generally leads to a higher likelihood of successful engagement outcomes.

Criticality of key people

In complex, multi-stakeholder, social-technical projects of this nature, key individuals are critical to success. Indeed, without them, the very best funded and well-planned projects often fail due to the implementation phase. These key people – industry champions, project leaders, technical specialists, organisers or just good old fashioned ‘lifers’ – are central in motivating, leading, managing and implementing change. The knowledge and experience of these key people, and their ability to engage, motivate and support others is so fundamentally important that it’s amazing how often it is under valued. Without naming key individuals, it is clear that the success of the Western Port Biosphere Water Stewardship Project to date is a testament to the knowledge, ability and endless efforts of a very small and special group of people, a number of whom have put in volunteer time well beyond that contracted or expected.

Collaboration with other local groups

In any catchment, there will be existing groups with similar or complimentary objectives, even if their implementation approach or motivations are different to a new group of actors. In the Western Port Biosphere Reserve, there were already active Landcare Groups and statutory bodies such as Melbourne Water, South East Water and the Blue Port Philip & Western Port Catchments Management Authority with a strong interest in improved land and water management. Most importantly, the project team made concerted efforts to ensure that the interactions with these groups became collaborative not competitive. This positive outcome has seen information being shared across the region, and Water Stewards being supported in both conservation works and improved water management by other bodies and programs.

Importance of local recognition

Working with Water Stewards, the project team identified the need for the earliest possible recognition of efforts being made by Stewards, and of sharing and promoting individual achievement within the local community. An excellent approach the team developed was the ‘Local Recognition Program’. Once AWS self-verification has been completed according to the Alliance for Water Stewardship requirements, each landholder, business or organisation receives the rights to display distinctive Western Port Biosphere Water Stewardship logos on their website and in publications, or to display signs on their front door or gate. The program has two levels of recognition – one at the ‘Commitment’ stage, and one at the ‘Plan Completed and Verified’ stage (See table below).

BUILDING A BUSINESS CASE

While several Water Stewards are expected to join Ingham’s Group Limited in seeking certification for their sites (and access to the global AWS brand), many operations in the region are quite small and unlikely to see a return from becoming an AWS Certified Water Steward. To provide local recognition for these smaller Stewards, the Western Port Biosphere developed a Local Water Stewardship label. Access to the local label is based on complying with the AWS requirements for self-assessment. Once a Water Steward had completed a self-assessment, the site owner or manager would be able to apply the Western Port Water Stewardship brand to gain recognition in local markets for their services and produce. As the numbers of Western Port Water Stewards increases, the project would promote recognition of the label and the business who had gained the right to apply the label. The project would also discuss with local government and other regulatory authorities benefits in terms of lower rates, rate rebates or similar direct financial benefits. This would reward the public outcomes being achieved, help to lock-in commitment to the Site Water Stewardship Plans and, as the system continues to grow and develop, generate income for the project through licensing fees attached to the Western Port Water Stewardship label. Willingness to pay a license fee is dependent on; (a) the scheme reaching critical mass, (b) proving public benefits to gain financial benefits such as rate rebates and, (c) public recognition that enhances the market position of participants.
LEARNINGS – CHALLENGES

Participant fatigue and distractions

Virtually all longer-term projects requiring stakeholder participation suffer from periods of volunteer fatigue and distractions. Indeed, for people running their own business, time (allocated to Water Stewardship) is money, and it is not always easy to find. For several Water Stewards, periods of strong activity have been interspersed by periods of little or no activity – this is inevitable given the pressures on participants’ time and emotional energy. The project team have done their best in this regard, but it remains a problem that has to be monitored and responded to as and where possible.

Cost:Benefit of adopting the AWS International Water Stewardship Standard

For many private businesses, adoption of an independently benchmarked and verified management standard can be highly valuable, both financially and reputationally. But for many prospective Water Stewardship business, the cost of development and on-going implementation may outweigh the real or perceived value of the stewardship actions undertaken. For both financial and practical reasons, it has been difficult for some, perhaps many, SMEs with comparatively small work forces to consistently commit staff to the Water Stewardship program. Larger companies may be able to more easily justify the costs and make staff available, and be better able to quantify the benefits. But this should not be assumed. In the future, opportunities to secure grants that support individual Stewards, large and small, along their pathway to certification should be identified and promoted with government or charitable foundations.

Limited project funding and resourcing

Despite outstanding efforts by the project leader and extended project team, as the geographic scope has grown, the project has become increasingly under-funded and under resourced. There is no simple solution to this dilemma – indeed, the majority of catchment restoration and protection projects are probably under-funded (or perhaps more realistically, they are over-scope)! Success in Watson Creek catchment in year 1, led to significant interest from prospective Water Stewards living and working in other catchments across the Western Port Biosphere Reserve. It would have been difficult to ignore this demand. In spite of this, the project has been very successful in promoting and securing the adoption of Water Stewardship and the AWS International Water Stewardship Standard across the Western Port Biosphere Reserve, and will continue to be so if sufficient new funding can be secured beyond 2017.
CASE STUDY

INGHAM’S SOMERVILLE, WORLD-FIRST AWS GOLD LEVEL CERTIFICATION

Ingham’s Group Limited is Australia and New Zealand’s largest integrated poultry producer, with 345 facilities and farms across Australia and New Zealand. In 2015, Ingham’s Somerville plant – located within the Watson Creek catchment and the Mornington Peninsula Shire (see map) – was the first site in the world to receive AWS Gold level Water Stewardship certification.

Ingham’s did this by identifying the water related issues on-site and how these may be impacting on the creek and catchment downstream. Their plant implementation activities resulted in 65% of the water used being recycled, consequently making the plant more water efficient and sustainable, reducing local impacts from stormwater discharge, and reducing the impacts of plant operations on the Watson Creek catchment.

Ingham’s are currently working towards new sustainability goals, reusing more water on-site, eliminating the release of nutrients and attaining zero waste discharge. Improvements on their broader site land (with funding assistance from Melbourne Water, Mornington Peninsula Shire, and others), along with other landholders within the catchment, will contribute to stabilisation of the tributary banks, reduction in sediment run-off, water quality improvement in the Watson Creek catchment, and ultimately, an important contribution to protection of the internationally significant Ramsar wetlands and Yaringa Marine National Park in the Western Port.

AUTHOR

ADJUNCT PROFESSOR

GARY JONES

After completing his PhD at the University of Melbourne in 1985, Gary was awarded a Fulbright Fellowship to undertake research on marine microalgae at the Massachusetts Institute of Technology in the USA. He was a Senior Research Fellow at the University of Newcastle Upon Tyne UK for two years from 1987, and returned to Australia to join the CSIRO in 1989 where he built an international reputation studying toxic cyanobacteria.

In 2002, Gary was appointed Chief Executive of the Cooperative Research Centre for Freshwater Ecology and in 2005, of eWater CRC. In 2012, Gary led the transition of eWater CRC to an independent, not-for-profit river basin management and modelling company. In 2015, Australia’s Department of Foreign Affairs and Trade established the ‘Australian Water Partnership’, with Gary appointed as inaugural CEO. The mission of the Australian Water Partnership was to catalyse the sharing of knowledge in water science, policy and management between Australian organisations and counterparts in developing countries in the Asia-Pacific region.

After guiding AWP through its establishment and early operating period, Gary resigned from eWater and AWP in early 2017. He now works as a director and part-time consultant and advisor.

Since 2012, Gary has held honorary university positions: as Adjunct Professor with the University of Canberra, Institute of Applied Ecology; and, from 2014, as Visiting Professional Fellow with the University of New South Wales, Faculty of Engineering.

Gary is a Director of the International Water Resources Association, and Chair of the Policy Committee for the Asia Water Council. He was Chair of the International RiverFoundation from 2011-13, a charitable organisation that awards the Thiess International Riverprize for organisations leading in the restoration and protection of the world’s rivers.