OYSTERS – AN 'APHRODISIAC' FOR ENGAGING INDUSTRY AND COASTAL COMMUNITIES IN SUSTAINABLE ESTUARY MANAGEMENT

Gietzelt A¹, Keating J², Davies H³

¹South East Local Land Services (LLS) Wollongong, NSW, ²South East LLS, Batemans Bay, NSW, ³South East LLS, Bega, NSW

Abstract

Oyster farmers have an intimate understanding of the estuarine environment, and depend on its health and productivity for their livelihood. South East Local Land Services (LLS) recognises that oyster farmers are a unique resource for managing these systems.

Over the past ten years South East LLS (formerly Southern Rivers Catchment Management Authority) has developed a strong working relationship with the NSW south coast oyster industry and other partners to improve the sustainability and profitability within industry and address catchment-based threats that impact on estuarine water quality.

Inspired by the Clyde River oyster farmers who developed the industry's first estuary-wide Environmental Management System (EMS), South East LLS assisted the other major oyster groups on the south coast to follow suit, so all eight now operate under an EMS.

EMS is not only the tool that identifies best practice management within industry, but is also a foundation for growers and South East LLS to actively engage other industries, stakeholders, government agencies, landholders and local communities on catchment issues that impact on oyster production and estuary health.

This paper outlines South East LLS' initiatives in developing and implementing EMS, including facilitating works on oyster farms and within the catchment to improve estuary water quality; building the capacity of growers to be more profitable and sustainable; helping position oyster businesses to capture the competitive advantage of their green credentials; engaging local communities and increasing landholder and public awareness of oyster production and estuary health issues; and creating sustainable oyster farmers of the future through school-based education and apprenticeship programs.

Introduction

Oysters are the 'Canaries of our Coastal Catchments' – being a filter feeder they are the highly sensitive receiving point for upstream inputs and practices and can thus provide a good indication of catchment condition. Moreover, oyster farmers themselves intimately understand the river and estuarine environment, as their livelihood depends on estuary health and productivity.

South East Local Land Services (LLS) (formerly Southern Rivers Catchment Management Authority) realised this critical link and the industry's position as a unique resource for managing catchments. Seizing this opportunity, South East LLS established its innovative

Oyster Partnerships Program (OPP) – a comprehensive, multi-stakeholder program with oysters as the novel focal point, which has achieved significant improvements to estuary health, coastal catchment condition, and the sustainability and profitability of the NSW South Coast Oyster Industry.

This paper explores the partnerships and initiatives which have underpinned the OPP over the past decade, with a focus on those that have occurred in the past 4 years.

Initiating partnerships – 'courting the industry'

When South East LLS first engaged with the oyster industry in 2003, they were frustrated with their lack of influence over processes and practices threatening their industry. When issues, such as sewage spills, unfenced stock and sediment from poorly maintained roads, caused the temporary closure of oyster harvesting, their response was generally reactionary and they didn't have a loud and collective voice when expressing their concerns to government and the community.

Between 2003 and 2006, South East LLS started facilitating conversations between oyster growers and other catchment stakeholders, such as local councils and Shoalhaven dairy farmers, and individual projects were implemented which benefited water quality in several south coast estuaries.

However a comprehensive approach to engaging and supporting the South Coast oyster industry did not gain momentum until 2006 when dedicated South East LLS Coast and Marine Officers met with oyster growing groups in each of the eight main oyster-producing estuaries to gain a better understanding of their priorities and issues. In response, South East LLS invested a small amount of federal funding to begin addressing these and the OPP was created.

The discussions across the region highlighted a diversity of views within the industry. Some grower groups saw developing a plan or derelict infrastructure clean-ups as the best course of action, whilst others identified pollution hotspots that South East LLS could target by working with landholders or others to improve water quality. Grower groups were also at very different stages in terms of their awareness of impacts from their industry, the type of cultivation infrastructure they were using, levels of group cohesion and the severity of catchment impacts on water quality in each estuary.

South East LLS realised a comprehensive strategic approach was required within and across estuary groups to address the disparities and get the industry moving forward together on such issues, and that this approach would take time.

EMS development – 'committing to the relationship'

The Clyde River Environmental Management System (EMS) developed by the Clyde growers in 2006 was a key foundational activity under the OPP. It was the first estuary-wide EMS for the NSW oyster industry and was facilitated by South East LLS, in partnership with OceanWatch Australia and Dr Ana Rubio, after encouraging the Clyde growers to form a collective.

Estuary-wide EMSs provide far-reaching benefits for oyster farmers. They are a strategic tool whereby farmers: identify internal and external risks to their business and associated mitigation actions; commit to the uptake of integrated environmental sustainability and best practice in all aspects of their operations; establish a platform for engaging with other stakeholders and the community; and capitalise on having a sound environmental strategy by leveraging funds for sustainability initiatives and marketing their product on their green credentials.

Inspired by the Clyde River growers' achievement, South East LLS secured funds and worked with partners from 2007 to 2012 to sell the virtues of EMS and develop seven more with the other south coast grower groups.

In 2013 South East LLS organised public EMS launches for the final three estuaries. It was a unique and significant industry milestone as it marked the point from which growers across all major oyster producing estuaries on the south coast operated more sustainably under a formal EMS. No other Australian region, and possibly the worldwide, can claim this.

Partnerships – 'walking hand in hand'

With healthy oysters as the focal point, the OPP has created a unique and cooperative partnership approach to catchment management and industry sustainability.

Since its inception the broad and flexible nature of the OPP was useful for tailoring projects to suit the needs of individual oyster groups and estuaries, and encouraging integrated projects involving a wide range of partners, including other industries (e.g. dairy farmers, graziers), Local Aboriginal Lands Councils, Non-Government Organisations (e.g. Oceanwatch Australia, Sapphire Coast Marine Discovery Centre), government agencies (e.g. Department of Primary Industries (Fisheries NSW), Marine Park Estate Authority), industry regulators (e.g. NSW Food Authority), regional training organisations, schools, universities and other research bodies, community groups and private landholders.

This approach has enhanced outcomes through collective efforts of multiple stakeholders and enabled the industry to develop some robust and collaborative partnerships.

These partnerships have also been critical for leveraging additional funds. Over the past decade more than\$1.5M of State and Federal funding has been invested through the OPP in activities which have supported the uptake of on-ground catchment works, best-management practices for industry and community engagement activities.

Catchment works – 'cleaning up the house!'

A healthy catchment and good estuarine water quality are fundamental to producing healthy oysters. Over the past decade, South East LLS has worked cooperatively with other partners to implement a suite of on-ground rehabilitation works which have enhanced catchment condition in oyster producing areas.

Between 2006 and 2010 targeted riparian protection works in the Shoalhaven, Clyde River and Wapengo Lake catchments led to significant improvements in estuarine water quality,

including an upgrade in the oyster harvest area classification of one key growing area in the Shoalhaven River. During this period, South East LLS also worked with road management agencies to improve water quality in three oyster-producing catchments (Clyde, Wapengo and Pambula) by upgrading drainage and/ or sealing high priority roads. These early initiatives are described in detail in Davies et al (2007) and Keating & Davies (2010).

Since 2011 a range of catchment works have been implemented directly through the OPP:

Pambula Water Quality Protection and Rehabilitation Project

Designed to address water hotspots in the Pambula catchment and raise community awareness of healthy estuaries, this project achieved the following outcomes between 2011 and 2013:

- completion of the Pambula River Rehabilitation Plan which identified water quality hotspots and priority reaches for targeted repair through vegetation cover mapping and assessment; and completion of the Pambula Roads and Tracks Survey, which determined priority roads where sediment run-off was an issue;
- fencing and revegetation works along waterways by 30 land managers which resulted in the rehabilitation of 4.5km of streambank, protection of 23ha of riparian native vegetation, and planting of 1 ha of riparian vegetation;
- planning and sediment control works at two high priority sites, including drainage improvements on a public waterway crossing, and sediment and erosion control planning on a commercial site on Pambula Lake foreshore; and
- two successful community planting days.

Devolved grants for environmental improvement works

South East LLS used an expression of interest process in 2012 to devolve \$258,000 of Australian Government funding to landholders and land managers who undertook environmental improvement works in oyster producing estuaries and their catchments. Priority hotspot criteria and mapping were used to identify locations where works would deliver the greatest benefits for biodiversity conservation, ecosystem health and water quality. Specific outcomes included:

- 4.2km of stock-proof fencing and 3 off-stream watering points were installed;
- 52ha of native vegetation enhanced including 35ha of endangered ecological communities;
- old tar-coated and treated timber growing gear that can leach toxins into waterways were removed from 27ha of lease area and replaced with greener products eg. recycled plastic floating baskets that improve seagrass recovery and aesthetics;
- 230 tonnes of land-based waste was removed from oyster depots; and
- toilet facilities were upgraded in public areas adjacent to waterways.

Marine debris clean-ups

Marine debris hotspot mapping undertaken by South East LLS in partnership with the Sapphire Coast Marine Discovery Centre (SCMDC), Bega Valley Shire Council's 'Love Our Lakes' Program and DPI (Fisheries NSW) formed the basis of several 2012 clean-ups:

- Eden Local Aboriginal Land Council (LALC)'s Koori Work Crew clean-up in from areas between Twofold and Disaster Bays which were logistically difficult to access.
 4.5 cubic metres of rubbish was removed
- 'Love Our Lakes' clean-up involving 25 school children and the SCMDC who helped reduce the impact of litter such as plastic, foam and rope on their local beaches and bays.

Direct industry assistance – 'providing love and support'

Supporting business operations and EMS implementation

Production technology upgrades

Between 2011 and 2013, 54 growers received over \$337,000 in grants from South East LLS and OceanWatch Australia to remove tar-coated and treated timber oyster production infrastructure (e.g. sticks, trays, rack and rail) from 79 hectares of lease area, and replace it with more environmentally friendly products such as recycled plastic posts and floating baskets.

In terms of environmental benefits, these baskets promote healthier estuaries by allowing greater sunlight penetration which improves seagrass growth and recovery. They also improve public amenity as they have a lower visual impact, and economically, they increase oyster production efficiency through labor decreases.

Infrastructure upgrade funding was allocated through two separate rounds of devolved grants using an expression of interest process. Weighted selection criteria were developed based on budget and value, amount and area of infrastructure converted, environmental benefits and industry and community benefits.

There was no initial cap on the amount each business could apply for in round one, which later created a perception amongst some growers that the process was inequitable. This issue was a valuable learning for South East LLS and changes were made to the second round funding process including a \$8k cap per business to encourage a more even spread of money. An independent evaluation concluded in part that there was improved confidence and greater satisfaction from growers following this.

Derelict infrastructure management

Over 230 tonnes of land-based waste has been removed from oyster depots during major clean-ups funded by South East LLS and OceanWatch Australia. The funding assisted

with the cost of transporting and dumping waste at EPA-approved waste management facilities.

Derelict water-based leases have also been cleaned up, including many in Batemans Marine Park. This has not only assisted in returning these areas to their natural state, but has also improved water and nutrient flow to adjacent leases, with several farmers reporting unprecedented oyster growth rates following these clean-ups.

Pacific Oyster Control

When significant outbreaks of wild Pacific Oysters – a recognised aquatic pest which can breed prolifically compared to native oysters – were detected in three south coast estuaries, South East LLS lead a rapid and co-operative management intervention.

Control efforts in the Clyde, Wagonga and Pambula estuaries initially involved working bees or 'smash-up' days, where local oyster growers, volunteers, government agencies and LALC Koori Work Crews removed Pacifics from foreshore areas and dived for those on the estuary bed. In some estuaries, critical follow-up survey and control work by growers and the Koori Work Crews had the greatest impact. Over a 4 year-period more than 50,000 Pacific Oysters were removed from these systems and by removing many of the large breeders, spawning capacity and the potential for future outbreaks was significantly reduced.

The Pacific Oyster Control project has not only protected the local estuarine ecology through reducing the impact of a highly invasive on sensitive estuarine environments, but it has provided training and employment opportunities for the local Koori community to continue their work as coastal custodians; and improved the productivity of the south coast oyster industry by reducing costs associated with removing Pacifics from farmed stock and infrastructure.

More detailed information on this project is contained in Keating et al (2010).

EMS Implementation Officers

South East LLS sourced funds to employ two industry-based EMS Implementation Officers who extend the delivery of EMS implementation services to south coast farmers. Their activities include:

- regular face-to-face meetings with growers to keep them up-to-date on environmental and marketing issues and best management practices;
- reviewing the EMSs and performance against their sustainability targets and updating estuary EMS priorities;
- preparing newsletters and reports to share information between farmers;
- maintaining business systems that help with EMS implementation; and
- education and awareness raising activities in schools and at community events.

Each officer is guided by a Steering Committee including a farmer representative from each estuary group and South East LLS. Employing the EMS Officers "enabled smooth implementation...of EMSs and assisted growers to make full use of their EMS's in building

the partnerships necessary to ensure the long term sustainability of the...industry" (DPI 2014).

Knowledge and capacity building

Workshops

Two South East LLS travelling workshop series were held in 2012 and 2014 along the NSW South Coast to enhance oyster businesses and improve farmers' knowledge of the links between oysters and their natural environment.

Over 100 farmers got hands-on experience with oysters and aquatic organisms under the microscope. They also talked face-to-face with experts on wealth creation; best practice in floating baskets; marketing; alternate species; oyster breeding and performance; enhancing larvae catch; and the role of phytoplankton, seagrass and seaweeds as not only oyster food, but as critical components of healthy estuaries. The workshops were a great opportunity to exchange information in a friendly learning environment and have the experts field probing questions from growers.

Holistic management

This year, South East LLS facilitated and hosted the first ever Holistic Management course tailored to the NSW oyster industry, in partnership with TAFE Western and Brian Wehlburg of Inside Outside Management. Subsidies were provided by TAFE Western and South East LLS through the NSW Government's Catchment Action NSW to make the course very affordable for farmers.

The course applied Allan Savory's holistic management concepts to aquaculture production in estuarine environments, and oyster researcher Dr Ana Rubio was employed to develop new complementary course material on the role of oysters in estuarine ecosystem processes. Holistic management uses a practical approach that focuses on healthy farm management and meeting the personal goals of farming families. Farmers learned how to improve their decision-making, develop and use financial business plans, understand environmental factors affecting oyster production, and enhance their marketing and communication skills to better compete in the market place.

Oyster farmers from five estuaries completed the course and gained a Statement of Attainment in Holistic Management. Participating growers reported that the course provided an exciting opportunity to explore avenues for improving their business operations and gain a clear vision on future directions for their oyster production and farming practices.

Regional branding and marketing

Facilitating full regional EMS coverage armed the industry with a powerfully marketing advantage in terms of sustainability. Two high profile regional brands and bodies have subsequently emerged – Australia's Oyster Coast and Sapphire Coast Wilderness Oysters (formerly Bega Coast Oysters).

Australia's Oyster Coast

Australia's Oyster Coast (AOC) is the bold regional brand that reinvigorates the industry's image and profile; a destination that councils, tourism operators and bodies are promoting to bring gourmet produce-based tourism to the region; and the first regional umbrella body for growers covering the whole south coast.

South East LLS provided the seeds that formed AOC by:

- facilitating individual EMSs which identified the need for regional branding;
- facilitating complete region-wide EMS coverage the lynch pin on which AOC is based; and
- gaining funds to employ two EMS Officers, who were tasked with working with growers to progress regional branding and marketing. Their efforts brought the AOC to fruition.

South East LLS understood the potential value of AOC when it formed and showed leadership by securing AOC's start-up budget, funding promotional materials (banners, brochures, marquee, logo, website) and tailoring its acclaimed industry promotional video to form a centrepiece of AOC promotions.

Supporting AOC increases:

- national and international awareness of the industry;
- industry clout and capacity to negotiate more effectively with external stakeholders;
- industry motivation to continue its sustainability actions as the AOC's strength is based on industry's environmental performance;
- recognition of the region as a gourmet produce-based tourism destination; and
- opportunities to capture the competitive advantage of their green credentials at national and international scales.

Sapphire Coast Wilderness Oysters

Sapphire Coast Wilderness Oysters (SCWO – formerly Bega Coast Oysters) is the new name for the local oyster industry association representing farmers of the Bega Valley Shire – a distinct sub-region with the AOC. It includes growers from Wonboyn, Pambula, Merimbula and Wapengo estuaries who formed to have a united voice on common industry issues such as protection of water quality and estuary health. The new name better reflects their association with the well-known Sapphire Coast tourist destination on the far south coast. Motivated by the success of Bega Cheese in producing a quality product and supporting its suppliers, SCWO was the first collective of south coast growing groups to form a regional body.

South East LSS has provided funding assistance for SCWO marketing and branding initiatives including brochures, banners and a marquee; attendance at local events such as the Pambula Show and Merimbula EAT Festival; and promotion of the environmental and EMS credentials of their regional industry.

South Coast industry website

A brand new south coast oyster growers' website and newsletter was developed and launched by South East LLS in October 2014 on behalf of the growers, with information on their industry and its programs and partners.

The website includes all the estuary-wide EMSs; the south coast oyster industry promotional and educational videos; and information about the EMS Implementation Officers, SOAP, traineeships and school student education programs. There is also a Farmers Forum – a space for farmers to communicate and exchange information and ideas on oyster production and farm management issues.

Visit www.southcoastoysterindustry.org.au for more information.

Community engagement, awareness and participation – 'sharing the love'

By using the shared vision of healthy estuaries, South East LLS has cultivated strong connections between the south coast oyster industry, its direct stakeholders including rural landholders and land managers, and the broader community, to improve estuary and catchment health. The OPP has used a range of public awareness, education and engagement strategies to achieve this.

Stakeholder meetings, field days and working bees

Throughout the years, South East LLS has facilitated discussions and fostered partnerships between oyster growers, other industries (e.g. dairy farmers) and rural land holders through field days, on-site meetings and working bees where growers have assisted property owners to erect stock-proof fences and revegetate their riverbanks. By creating a relaxed environment for constructive dialogue and knowledge sharing to occur, all parties have gained a greater awareness and appreciation of the impacts of certain practices on the livelihoods of others.

In recognition of their role as a key stakeholder, South East LLS have also provided growers with a seat at the table of various working groups and catchment stakeholder meetings. These have provided another forum for growers to raise their issues, particularly with government agencies, as well as to help drive catchment priorities and rehabilitation efforts.

Catchment tours and stalls at public events

Catchment tours have been held in Shoalhaven River, Clyde River, Wagonga Inlet, Wapengo Lake and Pambula Lake. Targeting rural land holders and public land managers with estuary frontage, these guided tours of lease areas and catchment issue 'hotspots' have not only enabled participants to learn more about oyster farming from the growers themselves, but have also provided the opportunity to enlist their support in addressing

issues which affect oyster production and catchment health. A number of on-ground projects have been instigated through this avenue.

South East LLS stalls have also been set up at numerous public events such as the Narooma Oyster Festival, Shoalhaven River Festival and Eden Whale Festival to promote industry sustainability initiatives. The use of catchment models to demonstrate the impacts of upstream activities on oyster production at the end of river systems has been particularly useful to engage the general public on these issues.

Documentary and promotional videos

In 2013, South East LLS commissioned and directed four acclaimed documentary and promotional videos to engage and educate external stakeholders on the OPP and industry sustainability initiatives. These have since been screened in cinemas across the south coast, in tandem with Q&A sessions, and 'virtual tours' where growers guide participants through the daily operation of an oyster farm and the journey of an oyster from 'farm gate to plate'.

Catchment signage, EMS brochures and posters

Estuary-specific signage, EMS brochures and posters have been another useful tool for raising broader community awareness and knowledge of this important local industry.

Love Our Lakes Program

The 'Love Our Lakes' (LOL) Program was developed by Bega Valley Shire Council and South East LLS in partnership with local oyster farmers to protect and raise awareness of the value of Bega Valley Shire estuaries. Between 2011 and 2013 a dedicated Project Officer worked with local schools and businesses to:

- complete seven school visits reaching 400 children, run a school stencil competition and develop a 'Love Our Lakes' wall calendar;
- develop a catchment model to enhance school visits and field days;
- complete 35 business audits with local enterprises to raise awareness of storm-water impacts on local estuaries;
- conduct a marine debris clean up with 25 school children;
- support seven groups including oyster farmers, a local wetland group, residents association and steering committees; and
- develop a range of awareness-raising materials, including media releases, the LOL logo, stickers, landholder brochures and new signage targeting estuary users.

Science and information – 'adapting the relationship'

Monitoring Oyster Performance and Estuary Health

South East LLS has worked collaboratively on an innovative applied research initiative to monitor and improve oyster performance (growth and mortality) and estuary health. In 2011 a pilot Oyster Monitoring Program (now called the 'Sustainable Oyster Assessment Program' - SOAP) was established to gather information on the productive capacity of oyster growing areas, help monitor catchment health and assist growers to forecast their profitability.

SOAP is the only program of its type within Australia and applies Dr Ana Rubio's pilot research in alternative use of an existing industry technology (automated grading machines) as a performance monitoring tool.

During 2013, Stage 1 of this region-wide program was finalized and the baseline dataset has enabled growers to adjust operations and maximise profitability accordingly. A dedicated SOAP Coordinator supports growers to interpret the results of each grading and adapt their production in response to oyster growth, mortality and local environmental variables such as water quality (temperature and salinity) and food availability (phytoplankton).

SOAP was recently broadened by expanding the number of estuaries (7) and sites (28) covered, and creating stronger connections with researchers and other agencies to further investigations e.g. a 'library' of samples has been created to identify potential links between oyster performance and disease prevalence. The current program is also using a unique batch of oysters with the same genetic, environmental and husbandry background so growers can benchmark performance against neighbouring estuaries. Direct comparisons of the performance of wild-caught and hatchery Sydney Rock Oysters are also now informing both hatchery and local farm operations.

In terms of estuary health monitoring, SOAP is continuing to integrate and add value to environmental data collected by growers and agencies, thereby providing critical links and guiding the management of major south coast estuaries.

Oyster Information Portal

South East LLS was a partner in the University of Wollongong pilot project that developed a web-based spatial information portal during 2011-12 to assist the Australian oyster industry and catchment managers to make informed decisions in adapting to climate change.

The project sourced and reviewed existing spatially referenced data relevant to the oyster industry and its response to NRM and climate change. The portal was then built with information layers including base maps, water quality data from major monitoring programs, industry-related data (e.g. Shellfish Quality Assurance Program data), catchment-related data, and spatial data on aquatic vegetation and oyster leases.

The oyster industry was engaged in developing the content, style and delivery of the portal's natural resource and industry information. Workshops were held across NSW and oyster growers from the Shoalhaven River and Pambula Lake trialled and provided feedback on the portal to improve its content, ease of use and relevance to the industry.

Completed in 2012, this project delivered the portal and also demonstrated its value, explored technology development options and provided a strategy to expand the portal to a national scale.

Creating aquatic farmers of the future – 'family planning'

Two inter-related programs have been developed to create aquatic farmers of the future – the 'Grow Your Own Oysters' program, which gives primary and high school students a taste of life as an oyster farmer, and the 'Oyster Industry Traineeship Program' which provides a pathway for school students and farm workers to enter a career in aquaculture.

Grow Your Own Oysters

'Grow Your Own Oysters' (GYOO) is a highly successful educational initiative which has been operating on the NSW south coast since 2011, when oyster farmers from Pambula and Merimbula lakes, the Sapphire Coast Marine Discovery Centre (SCMDC) and South East LLS formed a partnership to develop a structured educational program for local schools.

GYOO engages primary and secondary school students to understand the importance of the oyster industry to their local estuaries, catchments, community and economy through a series of classroom visits and field-based excursions to observe and practically experience oyster farming operations first hand. Students are also educated about the importance of good catchment management and how human interactions with the environment can affect local livelihoods.

The program is delivered by a marine science educator from the SCMDC who liaises with local schools and oyster farmers from nearby estuaries to organise the field and classroom sessions and to develop supplementary educational material. Oyster farmers are also actively involved and generously donate their time, knowledge and resources to educate students about this important local industry.

GYOO was initially funded by the Australian Government's Caring For Our Country Program and Oceanwatch Australia, and more recently by South East LLS. The funding allows the classes involved to participate in the program at no cost to the students or school.

Oyster industry traineeship program

This year, South East LLS partnered with oyster farmers, North Coast TAFE and NSW State Training Services to provide the first ever oyster industry traineeship program in NSW.

School based traineeships are available for Year 11 and 12 students in 2015 to complete part-time paid work on an oyster farm and formal off-the-job training to gain a Certificate II in Aquaculture, as part of their HSC studies. Oyster businesses may also be eligible for part-time or full-time traineeships for their workers to complete a Certificate III in Aquaculture. The course will be delivered through a mix of online training with North Coast TAFE for core units and on the job training with south coast businesses for specialist aquaculture units, following a structured program developed by North Coast TAFE in consultation with south coast growers and South East LLS. Boat handling units will be taught at local TAFE Illawarra campuses.

In 2014 South East LLS also provided funds and support for several growers to complete their Certificate IV in Training and Assessment and/or Certificate II in Aquaculture so they can perform the necessary workplace assessments under this program.

This program not only benefits oyster growing businesses, but also encourages the next generation of farmers to enter the industry and provides local employment opportunities in south coast communities.

For more information visit www.southcoastoysterindustry.org.au/traineeships

Conclusion – 'and a little surprise'

The south coast oyster industry is well positioned to prosper and grow as a result of the productive partnerships, collaboration and multi-faceted actions delivered through the OPP. The sustainability credentials achieved through OPP places south coast growers at the forefront of their industry, both nationally and internationally, and positions their sustainable product lines to be the preferred choice of consumers.

South East LLS received pleasant recognition for the success of its OPP by winning a Green Globe Award in October 2014 in the Public Sector Sustainability category. The Green Globes are the NSW Government's leading environment awards, recognising environmental excellence, leadership and innovation.

References

Davies, H., Keating, J., Perry M., Fraser, M., McPhee, D. & Presland, C. (2007) SPAT: Southern producers achieving together. Paper presented at the NSW Coastal Conference 2007. http://www.coastalconference.com/papers.asp

Nash, C., Rubio, A., Davies, H., Gietzelt, A. & Keating, J. (2013) Monitoring the canaries of our catchment: a cooperative and innovative monitoring program quantifying oyster performance and relationships with estuarine health: Prepared for Southern Rivers Catchment Management Authority.

Keating, J. & Davies, H. (2010) SPAT: Southern producers achieving together: initiatives for sustainable oyster farming on the NSW South Coast. Paper presented at the Coast to

Coast Conference 2010. http://www.coast2coastaustralia.com/wp-content/uploads/Keating-Jillian_-SPAT-Southern-Producers-Achieving-Together.pdf

Keating, J., Maidment, D., MacCallum, M., Christensen, R., Mason, V., Davies, H., Carter, G. & Proctor, M. (2010) Smash it up! Partnership project to control Pacific pests. Paper presented at the NSW Coastal Conference 2010. http://www.coastalconference.com/papers.asp

NSW Department of Primary Industries. (2014). NSW Oyster Industry Sustainable Aquaculture Strategy 2014. Retrieved from http://www.dpi.nsw.gov.au/fisheries/aquaculture/publications/oysters/industry/industry-strategy