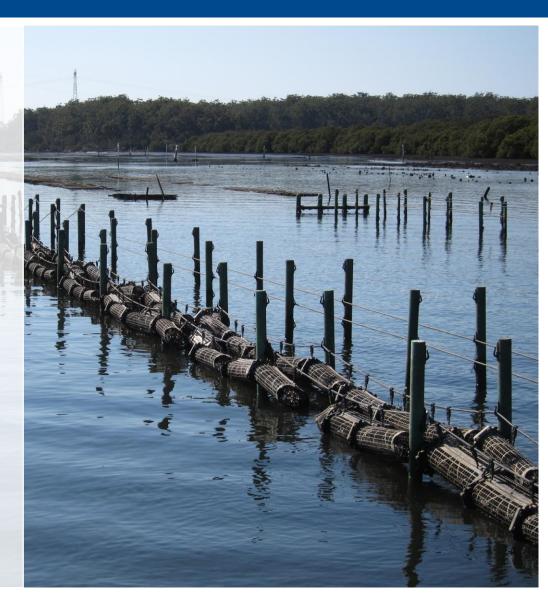
## **Clyde River Oyster Farmers**

# 2014 Environmental Update





In 2012, Clyde River oyster farmers reviewed and updated their Environmental Management System (EMS). This EMS was created to highlight industry's environmental priorities and to guide appropriate improvements in the estuary and surrounding catchment.

Since the review in 2012, oyster farmers and other stakeholders have worked hard to make many of the improvements identified in the plan. Oyster farmers have been working to lift their own environmental performance and have been engaging with land managers, the community and other organisations to drive enhancements in the catchment. This update looks back at the EMS and highlights what progress has been made in the last two years.

Any comments or questions about this report should be directed to Kevin McAsh via mcash@bigpond.com

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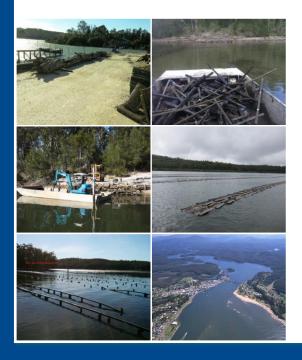
### INFORMATION COLLECTION

Information contained in this update has been provided by local oyster farmers and recorded by OceanWatch Australia. There are currently 21 oyster farming businesses operating in the Clyde River, 15 of which contributed data towards this report. The majority of information however was collected from eight businesses, and hence the data presented under-represents industry achievements.

It is also important to recognise that an EMS is based on the philosophy of continual improvement, and that some actions are long-term and ongoing.

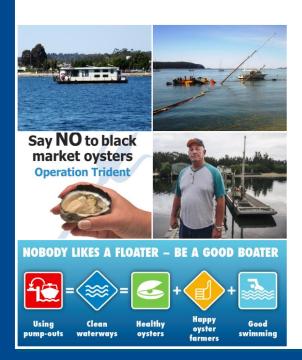


### **KEY ACHIEVEMENTS**



- Removal of 410 tonnes of old tarred and treated timber infrastructure from the Clyde River estuary
- 65 ha of oyster lease subject to environmental improvements, with most of this area being brought back into production under best-practice cultivation
- Construction of toilet facilities on Budd Island
- Ongoing engagement with key stakeholders including: Eurobodalla Shire Council, Roads & Maritime Services, NSW Department of Primary Industries, South East Local Land Services and many others

### **ONGOING CHALLENGES**



- Inadequate / inappropriate facilities for recreational waterway users resulting in inappropriate management of effluent and other waste
- Theft of oysters and damage to infrastructure by other waterway users
- Potential for waterway contamination from upstream settlements that aren't connected to a reticulated sewerage system
- Inefficient emergency response from authorities to on-water incidents – there is a potential to utilise oyster farmers location, on-water experience and equipment to enable a quick and effective response

### **ORIGINAL EMS RISKS & ACTIONS**

INTERNAL RISKS:  Risks that arise as a result of oyster farming practices,  as well as issues of disease						
Consequence						
		Minor	Severe	Major		
	Rare	H, M, R, I, S, T	E, O, F, G, Q	P, D, U		
Likelihood	Possible		C, K, L, N, J			
	Likely	V	В	Α		
Likelihood	Possible		C, K, L, N, J			

	Fuel, fire and ch	emical management
A.	Fuel storage areas pose a fire risk	<ul> <li>Investigate options for a centralised fuel storage area equipped with a fuel containment kit</li> <li>Circulate and implement the fire policy</li> <li>Identify and establish buffer zones</li> </ul>
B.	Tar leaching from application area and infrastructure in the water	Continue phase out of tar in the estuary
C.	Treated timber infrastructure in estuary leaching toxic chemicals	Continue phase out of treated timber in the estuary
D.	Water based fuel / oil spills from oyster punts	Purchase a fuel containment kit
E.	Leaking chemicals from shed sites through poor storage or adverse conditions	Store chlorine as suggested by manufacturers and stored with Safety Data Sheet
F.	Land based fuel / oil spills	Purchase a fuel containment kit
G.	Pest control chemicals leaking into environment	None
Н.	Tarred / treated timber removed from derelict leases is stored at land-base	Maintain commitment to phase out tarred and treated timber products
l.	Boat antifouling chemicals that leak into the environment	None
J.	Inefficient motors resulting in emissions, fuel use and water pollution	Upgrade to EPA approved outboards when replacing     Use grant opportunities to help phase out
	Sedimentation &	runoff management
K.	Unsealed common loading area	Contact relevant authorities, neighbours and farmers to discuss solutions Identify funding to upgrade site to accommodate industry needs and improve public access
L.	Shed site erosion (increased through machinery operation)	<ul> <li>Investigate funding to manage shed site erosion (possible regrading or sealing)</li> </ul>
M.	Vehicle access along Lattas Point Road – potential for erosion	Work with engineers, natural resource managers and others to progress erosion control works     Ongoing maintenance
	Management	of natural environment
N.	Hydrological changes due to infrastructure (sediment build up around lease)	Continue moving towards cultivation systems with a small physical footprint
0.	Lease establishment leading to habitat, seagrass or substrate damage	Work with researchers to learn more about the relationship between oysters, seagrass and infrastructure type
	Effluent &	waste management
P.	Lack of appropriate toilet facilities	<ul> <li>Construct Budd Isl. composting toilet utilising approved funding</li> <li>Investigate options &amp; funding opportunities to upgrade toilet facilities at Lattas Pt.</li> <li>Continue ongoing maintenance of facilities</li> </ul>
Q.	Waste that is not recycled / not recyclable	None
R.	Grey water discharge (including that used to wash equipment / oysters)	<ul> <li>Increase uptake of greywater reuse</li> <li>Examine potential of grants to offset rainwater tank installation</li> </ul>
S.	Waste shells	Investigate options to dispose or sell oyster shells (potential income from a waste product)     Establish a centralised storage area for waste shell
T.	Single use packaging used for transport of shucked product	None
	W	/ildlife
U.	Threatened species hit by oyster punt	Threatened species ID guides and handling manuals distributed to growers
		ocial licence
٧.	Noise	Follow NSW DPI guideline as outlined in OISAS

### Risks that arise from other people's activities, or from natural events such as extreme weather conditions Consequence Minor Severe Major Rare L J, K D, G Possible I, H, F, E C Likely A, B

	Waterway users				
Α.	House-boats discharging effluent through poorly located	Continue talking to council on monitoring houseboat discharges     Work with NSW Maritime & NSW Food Authority on pump-out awareness signage     Continue working with local council, NSW Maritime & others to			
	pump-out & lack of awareness	scope additional facilities for houseboats and recreational waterway users  • Potential to work with ET to educate waterway users			
В.	Water based fuel / oil spills from recreational vessels	Purchase a fuel containment kit			
C.	Inadequate toilet facilities upriver	Work with key stakeholders (NPWS, council, LLS etc.) to identify key sites and investigate options to mitigate the risk of contamination			
	Management of	natural environment			
D.	Development and agriculture causing erosion, run-off and vegetation loss	<ul> <li>Contribute to on-ground works and projects in the catchment</li> <li>Promote farmers profile in monitoring water quality</li> <li>Investigate options to subsidise cost of local QAP</li> <li>Engage and educate community</li> </ul>			
E.	Riparian vegetation loss through clearing and poor cattle fencing upriver	<ul> <li>Work with farmers and South East LLS to improve fencing upriver</li> <li>Contribute to on-ground works and projects within the catchment</li> <li>Investigate options to stabilise banks with stone</li> </ul>			
F.	Reduction in natural environmental flows through water extraction	• None			
G.	Sensitive migratory bird habitat close to oyster operations	Workshop to educate growers on proper handling techniques			
H.	Wild Pacific oysters overcatch and competition for resources	• None			
		Theft			
I.	Increasing public access to lease areas (oyster theft and damage to infrastructure)	<ul> <li>Report any occurrence of theft through Operation Trident</li> <li>Work with stakeholders to establish educational signage</li> <li>Improve lease marker signage</li> </ul>			
	Si	ocial licence			
J.	Community unhappy with look of leases through lack of understanding and respect	<ul> <li>Keep all leases tidy and uniform (as outlined in OISAS)</li> <li>Distribute EMS</li> <li>Promote history of oyster farming on the river and contribution to local economy</li> <li>Involvement in awareness raising events and education</li> </ul>			
	Farm in	frastructure			
K.	Navigational issues could cause boating accidents	<ul> <li>Maintain clearly marked lease boundaries</li> <li>Look at more stickers to attach to leases</li> </ul>			
L.	Oyster jetty overcrowding during peak periods	Following installation of floating jetty, secure oyster jetty with gate			

### **DETAILED REPORTING**

### **INTERNAL RISKS**

### FUEL, FIRE AND CHEMICAL MANAGEMENT

Risl	<	Action	Progress	Action to progress
		Investigate options for a centralised fuel storage area equipped with fuel containment kit	Not actioned. No longer a priority as only small volumes of fuel and oil located on site	Seek advice from authorities on how to store fuel, and appropriate action should an incident occur
Α.	Fuel storage areas pose a fire risk		Fire policy not formally developed / implemented, but work undertaken to reduce risk	Fire policies detailing response procedures should be developed by individual businesses
	pose a пге risk	Circulate and implement the fire policy	Informal agreement with neighbour giving oyster farmers access to dam water in the event of a bush fire	Maintain relationship and agreement
	Dead vegetation and old infrastructure removed from shed sites and surrounds	infrastructure removed from	Ongoing maintenance	
		Identify & establish buffer zones	Fire breaks are in place with neighbouring properties	Monitor and maintain fire breaks
В.	Tar leaching from application area and infrastructure in the water	Continue phase out of tar in the estuary	410 tonnes of old tarred and treated timber infrastructure removed from the estuary during reporting period	Ongoing phase out
C.	Treated timber infrastructure in estuary leaching toxic chemicals	Continue phase out of treated timber in the estuary	410 tonnes of old tarred and treated timber infrastructure removed from the estuary during reporting period	Ongoing phase out
D.	Water based fuel / oil spills from oyster punts	Purchase a fuel containment kit	Not actioned	Rather than purchasing equipment, contact Fire & Rescue NSW regarding storage of emergency response equipment on site and cooperation with authorities
E.	Leaking chemicals from shed sites through poor storage or adverse conditions	Store chlorine as suggested by manufactures and stored with Safety Data Sheet	Only a small proportion of farmers use chlorine, however of these, very few have <i>Safety Data Sheets</i> stored with the chemical	Farmers to locate Safety Data Sheets, follow guidelines and store with chemicals
F.	Land based fuel / oil spills	Purchase a fuel containment kit	Not yet actioned	See D (pg. 6) and consider secondary containment

G.	Pest control chemicals leaking into environment	None	None	Remove risk when EMS reviewed
н.	Tarred / treated timber removed from derelict leases is stored at land-base	Maintain commitment to phase out tarred and treated timber products	5 derelict leases (3.81 ha) have been remediated in the Clyde River	Continue engaging with NSW DPI and South East LLS regarding remediation of 4 remaining derelict leases in the estuary
I.	Boat antifouling chemicals that leak into the environment	None	No antifouling chemicals used on oyster punts	Remove risk when EMS reviewed
J.	Inefficient motors resulting in emissions, fuel	Upgrade to EPA approved outboards when replacing	2-stroke outboards are being progressively phased out and replaced with 4-strokes	Ongoing
	use and water pollution	Use grant opportunities to help phase out	Funding opportunities during this period excluded the upgrade of outboard engines	Opportunistic use of grants contingent on funding conditions

- A. Only small amounts of fuel are retained onsite at any given time (60-80 litres), and a centralised storage location may be impractical. Many farmers are also moving away from 2-stroke outboards, so there is little oil on site to mix with fuel. Sheds have been de-cluttered.
- B. Oyster farmers in the Clyde River are committed to the ongoing removal and eventual phase out of all tarred and unsheathed treated timber oyster infrastructure. In the past two years, 14 of the 21 oyster farming entities on the Clyde River have obtained incentive funding in the form of grants to make improvements to their farming methods and gear. These grants have been administered by OceanWatch Australia and South East Local Land Services.
- D. It may be more appropriate for oyster farmers to commit to work with response authorities, and store equipment on site, rather than purchasing and maintaining gear.
- E. A Safety Data Sheet, previously called a Material Safety Data Sheet, provides information on hazardous chemicals and how they affect health and safety in the workplace. A Safety Data Sheet includes information on the identity of a chemical; health & physiochemical hazards; safe handling & storage procedures; emergency procedures & disposal considerations. The manufacturer must prepare a Safety Data Sheet for all hazardous chemicals and must provide this on first supply to a workplace and upon request. See <a href="https://www.safeworkaustralia.gov.au">www.safeworkaustralia.gov.au</a>.
- F. Secondary containment (e.g. bunding) is an effective way to limit the spread and potential impacts of an accidental spill.
- H. Five derelict leases with a combined area of 3.81 ha have been remediated in the Clyde River. This work was undertaken by an oyster farmer in partnership with a Koori work crew. Funding was provided by South East Local Land Services and NSW DPI.
- J. Government and industry began work on Australian emissions standards in 2006. Public consultation was held in 2010, but since then the process has stalled. In early 2014, there was a call from both Federal & State Environment Ministers for the Department of the Environment to complete its impact statement and recommendations on potential emission control options.

### **SEDIMENTATION & RUNOFF MANAGEMENT**

Ris	k	Action	Progress	Action to progress
		Contact relevant authorities, neighbours and	Survey conducted to establish boundary constraints of the common loading area but not in farmers' possession	Track down survey and continue discussions with stakeholders (esp. Dept. of Lands)
K.	Unsealed common loading area	farmers to discuss solutions	Foundation materials (concrete blocks) sourced for loading area	Design sediment traps (utilising shell) to prevent silt run-off
	arca	Identify funding to upgrade site to accommodate industry needs and improve public access	No suitable funding identified	(utilising shell) to prevent silt
L.	Shed site erosion (increased through machinery operation)	Investigate funding to manage shed site erosion (possible regrading or sealing)	No funding identified, however works are continually being undertaken to manage and reduce erosion at shed sites	Ongoing
M.	Vehicle access along Lattas Point Road – potential for erosion	Work with engineers, natural resource managers and others to progress erosion control works	Ongoing discussion	Ongoing
		Ongoing maintenance	Ad-hoc repairs to road surface undertaken	Sumps need to be lifted and cleaned and guttering cleared of vegetation

- K. Priority is to establish boundaries of the common loading area (locate survey) and continue to talk with the Department of Lands. Option of acquiring an additional 3-4 metres of land to the west, however this needs to formalised through ongoing engagement.
- L. Works are continually undertaken to improve erosion control at oyster shed sites. This includes improving the surface condition of driveways and repairs to erosion control structures (rockwork) on the creek's bank.

### MANAGEMENT OF NATURAL ENVIRONMENT

Ris	sk	Action	Progress	Action to progress
N.	Hydrological change due to infrastructure (sediment build up around lease)	Continue moving towards cultivation systems with a small physical footprint	A total of 64.5 hectares of oyster lease were converted over to long line system during the reporting period	Ongoing conversion of appropriate leases
		Work with	Many oyster farmers participated in educational workshops organised by South East LLS in 2012	
О.	Lease establishment leading to habitat, seagrass or substrate damage	researchers to learn more about the relationship between oysters, seagrass and infrastructure type	Some farmers also attended the NSW Oyster Industry Field Day in 2012, where a Newcastle University researcher presented his findings on the impact of different oyster infrastructure on seagrass	Active participation in workshops and educational activities

- N. Oyster farmers are reducing the build up of silt around lease areas by reducing the footprint of their cultivation infrastructure. Long-line systems are becoming increasingly popular, and compared to the traditional rack and rail set-up, do not impede the flow of water past the lease. There is approximately 180 hectares of the Clyde River designated as priority oyster lease areas, and about a third of this has been converted to long-line systems in recent years. In general, oyster farmers on the Clyde River report a noticeable reduction in siltation.
- O. In 2012 South East Local Land Services organised a series of educational workshops for industry. The topics discussed included seagrass, phytoplankton identification, oyster dissection, spat settlement and the oyster monitoring program.
  - Some Clyde River oyster farmers also attended the NSW Oyster Industry Field Day in 2012, where a Newcastle University researcher presented his findings on the impact of different oyster infrastructure on seagrass. His thesis can be viewed and downloaded at: <a href="https://www.oceanwatch.org.au/wp-content/uploads/2015/01/Thesis-Mitch-Burrows.pdf">www.oceanwatch.org.au/wp-content/uploads/2015/01/Thesis-Mitch-Burrows.pdf</a>



### **EFFLUENT & WASTE MANAGEMENT**

Ris	sk	Action	Progress	Action to progress
		Construct Budd Island composting toilet utilising approved funding	Toilet constructed	Remove action when EMS reviewed
P.	Lack of appropriate toilet facilities	Investigate options & funding opportunities to upgrade toilet facilities at Lattas Pt.	Agreement between farmers to either maintain own toilets or contribute to the maintenance of communal facilities	Monitor adequacy of arrangement  Ongoing
			No funding identified / needed	
		Continue ongoing maintenance of facilities	Facilities maintained	Ongoing
Q.	Waste that is not recycled / not recyclable	None	Farmers have adopted principles of reuse / recycle where possible	Remove risk when EMS reviewed
R.	Grey water discharge	Increase uptake of grey water reuse	Not progressed	
	(including that used to wash oysters & equip.)	Examine potential of grants to offset rainwater tank installation	Most farmers already have rainwater tanks installed	Consider removing risk when EMS reviewed
S.	Masta shalls	Investigate options to dispose or sell oyster shells	Few financially viable solutions currently exist	Ongoing investigation – esp. conversion of shell
3.	Waste shells	Establish a centralised storage area for waste shells	Centralised shell storage established	into a crop fertiliser substitute
T.	Single use packaging used for transport of shucked product	None	None	Monitor emergence of biodegradable corn-based bioplastics and their potential use

- P. Toilet facilities have been constructed on Budd Island, with part-funding obtained through a grant from OceanWatch. Both Lattas Pt & Budd Isl. toilets are reported to be in good condition.
- Q. Recognising the value of resources, oyster farmers readily adopt the principles of reuse and recycle. Where no environmental harm results, farmers reuse and recycle rather than the costly and wasteful act of disposing materials at waste management depots.
- R. Almost all oyster farmers already have rainwater tanks installed at their shed sites.
- S. A centralised shell storage area has been established at Lattas Point. Farmers typically use shell to mitigate erosion, fill pot-holes and to contribute to the road base. One farmer has been undertaking his own research into the use of ground oyster shell as a crop fertiliser substitute.
- T. Many farmers use single-use foam trays, or plastic containers to transport product. There are few cost-effective alternatives, however new products are becoming available such as biodegradable, corn-based bioplastics. Similar products are also being developed from sugarcane.

### **WILDLIFE**

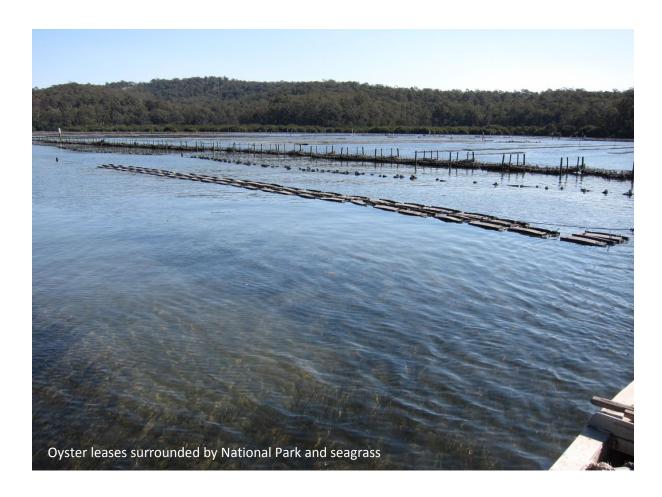
Risk	Action	Progress	Action to progress
	Threatened species	Not progressed	
U. Threatened species hit by oyster punts	identification guides and handling manuals distributed to growers	No reported incidents of any wildlife being struck by oyster punts	Threatened and protected species ID guides located and distributed to growers

### **SOCIAL LICENCE**

Risk	Action	Progress	Action to progress
V. Noise	Follow NSW DPI guidelines as outlined in OISAS	No noise complaints received	Minimise on-water activities before 7 am or after 6 pm

### **Further information:**

V. The NSW Oyster Industry Sustainable Aquaculture Strategy (OISAS) outlines that lease construction and noisy operations should only be conducted between 7 am & 6 pm within 200 metres of private residence. Emergency repairs and emergency stock management are exempt from this restriction. The vast majority of oyster cultivation in the Clyde River occurs adjacent to National Park rather than residential areas.



### **EXTERNAL RISKS**

### **WATERWAY USERS**

Ris	k	Action	Progress	Action to progress
		Continue talking to council on monitoring	Houseboat hire businesses well serviced by pump-out truck	Maintain good relationships and engagement with operators
		houseboat discharges	Focus has been on establishing additional pumpout facilities	Ongoing
			Draft signage awaiting RMS & council approval	Installation at signs at every public boat ramp
Α.	Houseboats discharging	Work with NSW Maritime & NSW Food Authority on pump-out	Letters written and sent to all local boat-licence holders about the local oyster industry and water quality	Ongoing  Installation at signs at every public boat ramp  Retain electronic copy for future reprinting  Further distribution of leaflets  Retain electronic copy for future reprinting  Ongoing  Explore different approach through development of oyster trail  Engage recreational fishing groups  Rather than purchasing equipment, contact Fire & Rescue NSW regarding storage of emergency response equipment on site and cooperation with
	effluent through poorly located	awareness signage	Educational leaflets regarding the environmental aspects of	Further distribution of leaflets
	pump-outs & lack of awareness		oyster farming distributed to waterway users	Retain electronic copy for future reprinting
		Continue working		Ongoing
		with local council, NSW Maritime & others to scope additional facilities for houseboats and recreational waterways users	Funding for additional facilities secured through RMS, but responsibility for ongoing maintenance still under negotiation with council	Explore different approach through development of oyster trail
		Potential to work with ET to educate waterway users	ET concept not progressed, but other recreational fishing groups identified	Engage recreational fishing groups
В.	Water based fuel / oil spills from recreational vessels	Purchase a fuel containment kit	Not progressed	Rather than purchasing equipment, contact Fire & Rescue NSW regarding storage of emergency response equipment on site and cooperation with authorities
C.	Inadequate toilet facilities upriver	Work with key stakeholders to identify key sites and options to mitigate the risk of contamination	Not actioned, however toilet facilities now installed in Clyde River National Park	Update proposed boat ramp signage to include maps of toilets and pump-outs

### **Further information:**

A. Current pump-out at Batemans Bay Marina is dangerous for houseboats to access, and is therefore rarely used. Funding for additional facilities at Fishermen's Jetty have been secured through RMS, however there is ongoing negotiation with council regarding maintenance. Council is seeking funding to cover maintenance costs, despite the two main commercial operators on the river offering to contribute. Working through the Australian Oyster Coast, it may be worth pursuing from a different angle. If high-level support for an oyster trail can be secured, then improvements can be directed from the top-down.

Prior to Christmas 2013, a letter was written and sent to all registered local boat owners highlighting the river as an oyster producing estuary. A number of leaflets have also been published, the latest of which needs to be distributed to waterway users.

Large-scale signage has also been drafted and is awaiting approval from council & RMS before installation at public boat ramps.

B. It may be more appropriate for farmers to commit to work with authorities, rather than maintaining their own fuel containment kit. During past incidents on the river, emergency crews have not have the appropriate equipment on hand to respond in the best possible way. Oyster farmers have the on-water skills and boats in the water ready to assist in such an event. The industry also has capacity to store emergency equipment on site, allowing easy and timely access.



### MANAGEMENT OF NATURAL ENVIRONMENT

Risk		Action	Progress	Action to progress	
D.	Development and agriculture causing erosion, run off and vegetation loss	Contribute to onground works & projects	None during reporting period	Ongoing engagement with South East LLS to advise and assist with projects	
		Promote farmers profile in monitoring water quality	Promoted through industry websites and publications	Ongoing promotion	
			Farmers participated in a 'Meet Our Oyster Farmers' event		
		Investigate options to subsidise cost of QAP program	Not progressed	Develop list of stakeholders and approach to support QAP program	
		Engage and educate community	Yes (see details below)	Ongoing	
				Develop opportunity to engage with landholders further up in the catchment	
E.	Riparian vegetation loss through clearing & poor cattle fencing upriver	Work with farmers & South East Local Land Services for improved fencing upriver	None during reporting period	Ongoing engagement with South East LLS to advise and assist with projects	
		Contribute to onground works & projects	None during reporting period	Ongoing engagement with South East LLS to advise and assist with projects	
		Investigate options to stabilise banks with stone	Not progressed	Ongoing engagement with NRM groups	
F.	Reduction in natural environmental flows through water extraction	None	None	To be vigilant to changes in the volume of water extracted	
G.	Sensitive migratory bird habitat close to oyster operations	Workshop to educate growers on proper handling techniques	Not yet actioned	Ongoing	
н.	Wild pacific oysters overcatch and competition for resources	None	Farmers continuously monitor and cull wild Pacific oysters that settle as overcatch on stock	Ongoing	

### **Further information:**

D. Clyde River oyster farmers have worked closely with the South East Local Land Services to advise and assist in natural resource management projects. This includes erosion control works, road maintenance and upgrades, riparian protection works and marine pest culling days.

Industry's role in monitoring water quality has been promoted through numerous online & print channels. The South Coast Oyster Industry website (<a href="www.southcoastoysterindustry.org.au">www.southcoastoysterindustry.org.au</a>) discusses the Quality Assurance Program, as do various leaflets published by Australia's Oyster Coast and the South East LLS.

Oyster farmers have taken almost every opportunity to educate the community about landwater interactions and oyster farming practices with a large number of points of contact made. Engagement has been made through attendance at events, including oyster festivals, Rotary, Chamber of Commerce, community events and ad hoc face to face contact, including farm gate sales.

It has been recognised that some landholders further up in the catchment undertake natural resource management projects and are interested in the oyster industry downstream – there is interest in a networking event to connect these industries.

- F. Water extraction is thought to be beyond the scope of the local oyster industry. Unless an appropriate engagement opportunity presents itself, oyster farmers will focus their efforts on other issues.
- H. Since the reviewed EMS was published in 2012, the Clyde River has been approved for the cultivation of reproductively sterile, triploid Pacific oysters. As this approval only extends to triploid Pacific oysters, those diploid Pacifics caught as overcatch still need to be culled in order to control the breeding, wild population of this species.

### **THEFT**

Risk	Action	Progress	Action to progress
	Report any occurrence of theft through Operation Trident	11 reported incidents during the period, 4 official reports to Operation Trident	Ongoing
Increasing public     access to lease		Installation of CCTV on some leases prone to theft	Approach council to install cameras at boat ramps to photograph licence plates
areas (oyster theft & damage to infrastructure)	Work with stakeholders to establish educational signage	Boat ramp signage drafted and awaiting approval at council & RMS	Installation of sign at every public boat ramp
	Improve lease marker signage	All oyster farmers have made improvements to lease markers	Approach RMS regarding funding of night lights on lease boundary markers

### **Further information:**

I. The incidence of theft is likely to be higher than officially reported. CCTV has been installed on leases prone to theft and it is suggested that a cooperative approach with local council for the installation of CCTV on public boat ramps could assist with identifying thieves.

### **SOCIAL LICENCE**

Ris	k	Action	Progress	Action to progress
	Community unhappy with look of leases through lack of understanding & respect	Keep all leases tidy and uniform, as outlined in OISAS	Estimated 80% of leases adhering to best practice standards	Continue to work towards best practice standards
J.		Distribute EMS	Hardcopy sent to key stakeholders and softcopy available from multiple sources online	Maintain websites
		Promote history of oyster farming and contribution to local economy	Discussions held with the local museum regarding a permanent display about the industry	Progress discussions and seek funding for exhibit development
		Involvement in awareness raising events and education	Yes (see details below)	Ongoing

### **Further information:**

J. It is estimated approximately 80% of leases in the Clyde River currently adhere to best practice standards outlined in OISAS.

The Clyde River Oyster Farmers EMS is available from numerous online sources. These include: OceanWatch EMS database (<a href="www.oceanwatch.org.au/our-work/ems-nsw-oysters/ems-database">www.oceanwatch.org.au/our-work/ems-nsw-oysters/ems-database</a>) and South Coast Oyster Industry website (<a href="www.southcoastoysterindustry.org.au">www.southcoastoysterindustry.org.au</a>).

Oyster farmers have taken almost every opportunity to educate the community about land - water interactions and oyster farming practices with a large number of points of contact made. Engagement has been made through attendance at events, including oyster festivals, Rotary, Chamber of Commerce, community events and ad hoc face to face contact, including farm gate sales.



### **FARM INFRASTRUCTURE**

Ris	k	Action	Progress	Action to progress
K.	Navigational issues could cause boating accidents	Maintain clearly marked lease boundaries	All oyster farmers have made improvements to lease markers	Ongoing  Approach RMS regarding funding of night lights on lease boundary markers
		Look at more stickers to attach to leases	Approached through development of educational materials: leaflets and large scale signage	Contact NSW DPI about availability of lease stickers
L.	Oyster jetty overcrowding during peak periods with rec. fishers	Following installation of floating jetty, secure oyster jetty with gate	Gate installed – action complete	Monitor & maintain for access / public liability

### **Further information:**

K. In the past, NSW DPI has printed stickers to attach to lease markers advising waterway users not to tie-up to marker posts or other oyster infrastructure. Some farmers are interested in obtaining more copies.







This project is supported by Clyde River oyster farmers, South East Local Land Services & OceanWatch Australia. OceanWatch Australia is the national marine NRM organisation recognised & supported by the Australian Government.





