

Summary of Discussion
Aquaculture Research Advisory Committee (ARAC) meeting
31 August 2017

ARAC met in Sydney on 31 August 2017. Ian White welcomed everyone to this 31st meeting of ARAC.

- 1 In June this year, ARAC wrote to the Minister for Primary Industries regarding the threat to research in Woollooware Bay to land-bases used for aquaculture. Roads and Maritime (RMS) found the site was contaminated and ordered remediation. This will involve removing everything (including buildings) on site. RMS had given eviction notices to the two permit holders in that area. Woollooware Bay is where the Oyster Industry began 150 years ago and we need to protect and secure the site. NSW DPI conduct research in this area and it is critical to not interrupt that work and continue to have a land-based site.

Oyster farmers have been offered RMS licence agreements to operate over-water sheds while remediation of the land based site is undertaken. This is likely to take 12-14 months. The oyster farmers were to vacate the land based area 9 October 2017 after a ten week extension was offered. DPI and Sydney University are making alternative arrangements to store their cultivation infrastructure. DPI is working with RMS to plan for the long term future of the remediated area as an oyster farming precinct.

- 2 Aquatic Biosecurity provided the Committee with information on:
 - proposed research for White Spot syndrome virus (WSSV). An EOI has been submitted to FRDC, involving collaboration between NSW DPI (EMAI), Australian Animal Health Laboratory (AAHL) and Qld Dept of Agriculture and Fisheries (QDAF). Expected outcomes for industry: improved preparedness for WSSV, understanding of factors leading to disease outbreaks and improved diagnostic techniques for WSSV.
 - an ARC linkage grant for polymicrobial basis of Pacific Oyster Mortality Syndrome (POMS). The grant involves NSW DPI and the University of Technology, Sydney and will commence soon. Expected outcomes for industry: increased understanding of the factors leading to POMS outbreaks.
 - a collaborative project between NSW DPI (EMAI) and WA Fisheries has commenced which aims to improve diagnostic techniques for the mollusc pathogen, *Perkinsus olseni*. Expected outcomes for industry: improved diagnostic techniques for *Perkinsus* and an increased understanding of strain variation between *Perkinsus* isolates.
 - research involving the development of mollusc cell cultures is ongoing at EMAI, with recent success in the establishment of Pacific oyster cells in which OsHV-1 (the causative agent of POMS) has been amplified. Expected outcomes for industry: improved ability to diagnose and understand mollusc diseases.
- 3 Matthew Wassnig advised the NSW RAC (formerly known as the FRAB) had met in June 2017. The RAC discussed and evaluated full project applications resulting from the expressions of interest that were recommended for progression at the previous meeting in March. The RAC sit three times a year and combined RACs meet once a year. Applications for expressions of interest are accepted throughout the year.

- 4 New research update:
- Wayne O'Connor advised the Committee on the progress of:
 - the Food Agility CRC 'Oyster Industry Transformation Project'; an estuarine salinity monitoring program for NSW. The project has 'in principle' approval and FRDC may also provide further funding for additional sites with monitoring equipment. The project will provide real time salinity and temperature to better inform harvest closures following rainfall events.
 - interest from farmers in the production of alternate oyster species; Blacklip oysters. The species has been confirmed in NSW and an experimental run of Blacklip for trial commercial production is being considered.
- the Future Oysters CRC-P (NSW) projects:
- Accelerated Sydney rock oyster breeding research.
 - New technologies to improve Sydney rock oyster breeding and production.
 - Polymicrobial involvement in OsHV outbreaks (and other diseases).
 - Advanced aquatic disease surveillance for known and undefined oyster pathogens.
- 5 Minor Use Permits (MUPs) for the legal use of chemicals for aquaculture remains an unresolved issue. There are still issues with getting approvals and establishing an equitable renewal/holding system for authorisations. This is exacerbated by different legislation between states. There needs to be coordination on a national basis for the approval and renewal process to ensure regulation and an equitable outcome for industry.
- 6 Oysters Australia (OA) update:
- Wayne Hutchinson provided a written update on the seven R&D projects within the Future Oysters CRC-P, four of which have direct benefit to Sydney rock oyster farming in NSW, although others also have benefit to Pacific oyster and Angasi farming.
 - OA is now in the process of developing a communication and extension/adoption plan.
 - OA have joined with NSW agencies to hold a National Shellfish Conference in NSW. The event was due to be held in 2018, however, with reduced production forecast for growers in South Australia and Tasmania (likely making it difficult to attend) it was agreed to postpone until after 2019.
- 7 The NSW Oyster Industry, through a Steering Committee set up at the NSW Shellfish Committee in 2014, initiated a strategic planning study to identify the critical impediments to improved profitability and growth of the NSW Oyster Industry and develop actions to mitigate them. The NSW Oyster Industry Strategy was developed and includes a vision and 12 strategic priorities with a series of short, medium and long term actions to address key priorities. The Group has been holding monthly teleconferences and the Shellfish Committee oversees that the Strategy progresses. The Group has submitted a Progress Report (July 2017) giving an update on what has been achieved by the industry since the development of the Strategic Plan and the inception of the Implementation Group.

- 8 At the April 2016 meeting, concerns were raised about the dispersant clay issue in Wonboyn Lake, due to logging in the catchment.
- This item was referred by ARAC to Shellfish Committee who, after considering the draft reports from the EPA and Forestry Corporation, have written to both organisations recommending:
 - That water quality objectives established by the NSW Government and NSW Oyster Industry should be incorporated into the regulations/best practice guidelines of NSW Forestry (outlined in Table 4 of OISAS); and
 - That the EPA kindly be requested to provide the NSW Shellfish Committee with a final report of the December 2014 incident for consideration when complete.
- 9 The Royal Agriculture Society of NSW (RAS) and NSW DPI are seeking Shellfish Committee and ARAC support for the development of a project that will build on the SRO judging criteria and product standards developed under the RAS Aquaculture Competitions. One the aims of the project is whether SROs can be further differentiated based on the oyster's regional characteristics and taste, thereby growing future consumer appeal and demand.
- 10 The Healthy Estuaries Healthy Oyster Guidelines was launched in August at the NSW Oyster Industry Conference held in Merimbula. The guidelines address land use planning and protection of water quality near oyster harvest areas and can be used as a resource for councils, consultants and industry to promote the protection of estuarine water quality for oyster aquaculture.
- 11 ARAC supported the three highest priorities developed in the Review of Research and Development Needs for Murray Cod Aquaculture in Australia 2016. The Freshwater Native Fish Association coordinated a meeting (5 July 2017) of NSW, Qld and Victorian Murray Cod growers, along with the NSW Aquaculture Association, FRDC and NSW DPI to prioritise the RD&E items. A joint RAC meeting in August reviewed state priorities and funding opportunities. It is the intention of industry to ensure the state RAC's of Qld, NSW, Vic, SA and WA jointly support the priorities identified at the 5 July Murray Cod industry meeting.
- 12 In 2011, research was conducted on 'Analysis of nutrients in aquaculture water' funded from the land-based trust account (\$5,000). Ian Lyall advised how helpful it had been in assessing development applications and having current information relating to nutrient levels in aquaculture waters. Several years have passed since the last testing program and Ian will submit a brief to ARAC, to repeat the program on a number of recirculation and cage based units in irrigation dams, to complement existing information.
- 13 ARAC will send an SMS alert to all Aquaculture Permit holders after each meeting indicating 'ARAC has met' with a link to this Summary of Discussions.