

Summary of Discussion

Aquaculture Research Advisory Committee (ARAC) meeting

4 May 2017

ARAC met in Nundle over 3 and 4 May 2017. The first day was set aside for the RD&E planning meeting. The ARAC RD&E Plan 2012-2017 required updating for 2017-2022 and Mr Peter Dundas-Smith kindly facilitated the meeting. The Committee also visited Arc-en-Ciel Trout Farm at Hanging Rock that afternoon. The following day Ian White welcomed everyone to the 30th meeting of ARAC.

- 1 Industry representatives on ARAC are asked to review the RD&E Strategic Plan each year and revise or update the priorities and discuss submissions from permit holders. The current 2012-2017 plan required a major review for 2017-2022. The Committee agreed to hold a two day event near Tamworth to incorporate a planning meeting and an ARAC meeting. The Committee visited Arc-en-Ciel Trout Farm, to allow occasional meetings in locations relevant to specific industry sectors. Thanks go to Russell Sydenham for hosting the ARAC visit.

- 2 Aquatic Biosecurity provided the Committee with information on proposed White Spot Disease research:
 - Biosecurity NSW is proposing research with the Australian Animal Health Laboratory (AAHL) and Qld Dept of Agriculture and Fisheries (QDAF) to investigate the effects of thermal stress on decapod crustaceans (species to be determined) infected with White Spot Syndrome Virus (WSSV), the causative agent of White Spot Disease (WSD).
 - The experiments will be conducted at Elizabeth Macarthur Agricultural Institute with research aiming to contribute to health screening of prawns prior to translocation for aquaculture, determine species that are susceptible to WSSV and WSD, possible alternative species for aquaculture production and risk based management of WSSV in NSW.

- 3 Matthew Wassnig advised the NSW RAC (formerly known as the FRAB) had met in March 2017. The RAC sit three times a year and combined RACs meet once a year. Applications or expressions of interest are accepted throughout the year, but more commonly, the RAC meet in October each year to rank projects, prioritise and appoint funding.

- 4 New research update:
 - Wayne advised the Committee on the progress of 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. Ian Lyall advised of a major threat to research in Woollooware Bay to land-bases used for aquaculture. Roads and Maritime (RMS) have found the site is contaminated, requiring remediation, and have given eviction notices to the two permit holders in that area. NSW DPI conduct research in this area that is central to breeding research for both Sydney Rock and Pacific oysters.

- 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 NSW DPI has been successful in a bid to establish a Food Agility CRC. The CRC, worth \$50 million over 10 years will address a number of agricultural challenges, including a proposed 2 year program of water quality monitoring on NSW oyster leases.
 - This project aims to assess the potential for the NSW shellfish industry to move from rainfall to salinity based harvest area management.
 - Improving regulatory efficiency by moving to digital and sensor-based harvest management is expected to save the NSW industry \$5.64 million in harvest closures, as well as reducing industry costs for water and meat testing, and creating hundreds of jobs in regional NSW.
- 7 The FRDC Contribution for 2016/17 was reviewed. The money collected from oyster based levies goes to FRDC and, on advice from Oysters Australia, is used to support oyster research in NSW. A small portion of the levy contributes to the running of ARAC and to fund other small research activities. The contribution to FRDC is calculated at 0.25% average gross value of production (AGVP), based on three-year rolling averages. ARAC approved the dispersal of these funds to FRDC.
- 8 Oysters Australia (OA) update:
 - Wayne Hutchinson provided a written update on current OA FRDC R&D projects, other current projects and the CRC-P Future Oysters.
 - OA have joined with NSW agencies to hold a National Shellfish Conference in NSW. The event will be held in August/September 2018.
- 9 Wallis Lake oyster farmers are seeking research on declining oyster growth rates in their estuary. NSW DPI funded an extension of the NSW Oyster Strategy consultancy brief to better understand the productivity decline in Wallis Lake. This was carried out by ACIL Allen and JP Van Moort met with growers in May 2015. The review identified: productivity decline; production systems; marketing and training, access to business support and intra-industry collaboration as key areas that need attention.
 - A working group has been established that includes representatives from NSW DPI, Great Lakes Council, Local Land Services, Office of Environment & Heritage (OEH), Wallis Lake commercial fishers and the Wallis Lake oyster industry.
 - Wallis Lake has been experiencing poor oyster growth since 2011 with production falling by around 40% by 2015.
 - In early April 2016 a trial commenced of alternative farming methods at two poorly performing nursery sites to determine if these methods offer a commercially viable alternative to existing post and rail lease infrastructure.
 - While data is being assessed on oyster performance, growth and survival, it substantiates a decline in production in Wallis Lake compared to Port Stephens and the Clyde. The underlying cause is still unknown at this point.
 - Results of the trial should be available for the next ARAC meeting in August 2017.

- 10 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 will oversee that the Strategy progresses. The Group met on 24 April with the aim of getting a progress report underway and establish a wind-up date for the Committee.
- 11 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.
 - As of 4 May 2017, no response has been received from either party. The Shellfish Committee will follow-up.
- 12 The Freshwater Native Fish Association & NSW Aquaculture Association will meet in July this year prioritise RD&E needs for Murray Cod.
 - The NSW Aquaculture Association hosted a general field day at PSFI on 12 May 2017.
 - The NSW Aquaculture Association is hosting a yabby field day later this year.
- 13 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.
- 14 Russell Sydenham raised the issue of getting the science to the farm, particularly in relation to food nutrition, oxygenation, more production, probiotics etc. He believes we need to develop a set of research questions for prospective fish farmers and regular farm visits would also be helpful. An audit of current farm practices was suggested. Prawn and Barramundi farmers have an Executive Officer who assist with information transfer. Peter advised the RAC and FRDC provide funding for industry members to apply for scholarships to attend conferences.
- 15 ARAC discussed a proposal sent on behalf of Clyde and Shoalhaven oyster farmers seeking an economic evaluation of the benefits of Pacific Oyster culture in NSW. The Committee noted the recent study ‘Social and Economic Evaluation of NSW Coastal Aquaculture’ by Dr Kate Barclay and a Pacific Oyster Benchmarking Study done previously by the Seafood CRC.

- 16 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.