PIRSA FISHERIES & AQUACULTURE

COST RECOVERY PROGRAM

2014-15

BLUE CRAB FISHERY
## SUMMARY TABLE - BLUE CRAB FISHERY

<table>
<thead>
<tr>
<th></th>
<th>2013-14</th>
<th>PROGRAM AREA</th>
<th>2014-15</th>
<th>COMMENTS</th>
<th>DAYS</th>
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</thead>
<tbody>
<tr>
<td><strong>RESEARCH COSTS</strong></td>
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<tr>
<td></td>
<td>$</td>
<td></td>
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</tr>
<tr>
<td>Stock Assessment and Monitoring</td>
<td>144,106</td>
<td>169,248</td>
<td>One year program, as per SARDI project scope. Costs include collection of funds for additional survey in Gulf St Vincent, as per management plan.</td>
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<tr>
<td>Economic Assessment</td>
<td>5,162</td>
<td>6,133</td>
<td>Contract for services finalised with supplier for 2014-15</td>
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<tr>
<td>Other Research</td>
<td>308</td>
<td>355</td>
<td>Contribution towards Threatened and Endangered Species</td>
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<tr>
<td><strong>PIRSA RELATED COSTS</strong></td>
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<td></td>
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<tr>
<td>Policy and Management</td>
<td>34,789</td>
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<td>Same level of service as previous year</td>
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<td>Legislation</td>
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<td>Licensing</td>
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<td>7,502</td>
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<td>Directorate</td>
<td>3,930</td>
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<td>Compliance</td>
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<td>Quota monitoring</td>
<td>15,184</td>
<td>16,349</td>
<td>Same level of service as previous year</td>
<td>26</td>
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<td><strong>OTHER COSTS</strong></td>
<td></td>
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<td>Industry Request: No FRDC contribution for 2014-15</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>$287,466</td>
<td><strong>TOTAL</strong></td>
<td><strong>$318,628</strong></td>
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**Licence Fees 2014-15**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Base Fee</td>
<td>$2,934</td>
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<tr>
<td>Unit Fee (Blue Crab Pot)</td>
<td>$26.90</td>
</tr>
<tr>
<td>Unit Fee (MSF Net)</td>
<td>$29.35</td>
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**Licence Fees 2013-14**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Base Fee</td>
<td>$2,815</td>
</tr>
<tr>
<td>Unit Fee (Blue Crab Pot)</td>
<td>$24.10</td>
</tr>
<tr>
<td>Unit Fee (MSF Net)</td>
<td>$26.50</td>
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</table>
INTRODUCTION

Wild catch commercial fisheries in South Australia will continue to be managed in accordance with the previously established cost recovery policy. This policy requires commercial fishery licence fees to fund services related to commercial fisheries management costs. PIRSA Fisheries & Aquaculture will continue to manage the process of consulting with service providers and relevant industry associations to establish fishery based management programs which will form the basis of annual licence fees.

For each fishery, the program required to manage the fishery has the following components:

- Assessment and Research Services;
- Fisheries Policy and Management Services;
- Compliance Services including communication, enforcement and monitoring activities;
- Support Services including Legislation, Licensing and Business Services (Directorate).

This documentation provides a framework for discussions to assist in the establishment of appropriate research, policy, compliance and support services to manage a fishery.
## BLUE CRAB FISHERY MANAGEMENT OBJECTIVES 2013/14 TO 2015/16

<table>
<thead>
<tr>
<th>Fishery</th>
<th>Long term objectives</th>
<th>Outcomes 2013/14 to 2015/16</th>
<th>Policy and Management</th>
<th>Compliance</th>
<th>Assessment and Research</th>
<th>Systems and Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Crab Fishery</td>
<td>Ensure the Blue Swimmer Crab resource is harvested within ecologically sustainable limits</td>
<td>Implementation of management plan under <em>Fisheries Management Act 2007</em></td>
<td>Implement plan, including TACC setting and harvest strategy protocols Consider future refinements to harvest strategy</td>
<td>Implement compliance program, informed by risk assessment. Ensure integrity of quota system.</td>
<td>Conduct FIS dependent upon rules of biennial surveys Produce FIS and stock assessment reports to assess fishery performance, in accordance with management plan Participate in the FCSA harvest strategy review</td>
<td>Provide ongoing support for licensing, quota and transfer queries</td>
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<tr>
<td></td>
<td>Allocate access to Blue Swimmer Crab resources to achieve optimum utilisation and equitable distribution to the benefit of the community</td>
<td>Stock maintenance</td>
<td>Progress consideration of further requests regarding further area changes by industry and recreational sector</td>
<td>Implement compliance programs for commercial and recreational fisheries, informed by risk assessment.</td>
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<tr>
<td></td>
<td>Minimise impacts on the ecosystem</td>
<td>Progress DotE recommendations under EPBC Act accreditation</td>
<td>Continue implementation and management of existing programs and reporting</td>
<td></td>
<td>Produce Overall TEPS report (all fisheries)</td>
<td></td>
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<td></td>
<td>Cost effective and participative management of the fishery</td>
<td>Effective engagement with industry in accordance with agreed co-management arrangements and communication strategy</td>
<td>Follow communication strategy and timelines Progress outcomes from management evaluations strategy workshop Implement Rules Review outcomes</td>
<td>Support industry by following communication strategy for Blue Crab Fishery</td>
<td>Support industry by following communication strategy for Blue Crab Fishery</td>
<td>Provide ongoing support for licensing, quota and transfer queries</td>
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</table>
PROGRAM: FISHERIES POLICY AND MANAGEMENT

BRIEF DESCRIPTION OF FUNCTION
The Fisheries Policy and Management Unit of PIRSA Fisheries & Aquaculture undertakes activities such as day-to-day management, long-term planning and policy development for South Australian commercial, recreational and Aboriginal traditional fisheries.

The Fisheries Policy and Management unit has the following core functions:
- Administer the *Fisheries Management Act 2007* and regulations.
- Day-to-day management of fisheries resources, to ensure catch and effort levels are commensurate with resource sustainability.
- Develop and implement management plans, including harvest strategy development and ESD risk assessment, in accordance with the *Fisheries Management Act 2007*.
- Provide advice to the Minister for Agriculture, Food and Fisheries, Chief Executive and Executive Director on matters relating to fisheries.
- Represent the Executive Director on committees and other forums on matters related to the administration of the *Fisheries Management Act 2007*.
- Develop over-arching policy frameworks to support fisheries management.
- Build and maintain relationships with key stakeholders, with a particular focus on the commercial and recreational fishing sectors.
- Provide support and advice on fisheries management issues to the Fisheries Council of South Australia.
- Progress Australian Government recommendations under EPBC Act assessment.

OUTPUTS AND ACTIVITIES
Day-to-day fisheries management includes:
- Participation in inter and intra-departmental meetings and workshops on issues relevant to fisheries management.
- Liaison within the Fisheries and Aquaculture Division, with SARDI Aquatic Sciences, other parts of PIRSA and other State and Commonwealth agencies on matters relevant to fisheries management.
- Liaison within PIRSA, with other government agencies and with industry representatives in implementing decisions relevant to fisheries management.
- Conducting regular assessment or review of existing management arrangements for fisheries management, including analysis of statistical information on fisheries and interactions with threatened, endangered and protected species.
- Coordinating consultation with fishery stakeholders through established co-management processes.
- Participation in industry liaison in the field and on vessels to strengthen fishery management knowledge and understanding, and develop rapport with licence holders.
- Participation in industry development initiatives related to fisheries management.
- Attending to general correspondence and enquiries relevant to fisheries.
- Provision of advice to Minister in relation to the management of fisheries and Ministerial correspondence.
- Communication of fisheries management issues to key stakeholder groups and the broader community.
Key deliverables of the Fisheries Policy and Management Unit are:

- Development and implementation of management plans for commercial and recreational fisheries, including harvest strategy development and ESD risk assessment
- Development and implementation of Aboriginal traditional fishing management plans, in accordance with Indigenous Land Use Agreements
- Day-to-day preparation of necessary legislative instruments and/or advice required for the management of fisheries (regulations, closure notices, licence conditions, Ministerial exemptions etc).
- Day-to-day provision of advice to the Minister or his/her delegate on setting total allowable commercial catch and effort levels
- Preparation of other policies to support fisheries management
- Preparation of submissions to enable regular assessment of commercial fisheries under the EPBC Act
- Preparation of annual report to the Australian Government on EPBC Act requirements for all SA fisheries
- Preparation of regular fisheries status reports
- Delivery of Fisheries Council projects
- Day-to-day development and maintenance of productive working relationships and outcomes through cooperative management and collaboration with stakeholders

PERFORMANCE INDICATORS:

1. Strong industry and government involvement in co-management relationship and adherence to formally agreed co-management arrangements.
2. Develop and implement management plans in accordance with Fisheries Council schedules and statutory consultative processes. Management plans to include harvest strategies that protect sustainability of the fishery based on ESD risk assessment processes.

Program Contact Officer:
Keith Rowling, Manager Fisheries Policy and Management Unit
08 8226 2369
Keith.rowling@sa.gov.au
PROGRAM: LEGAL SERVICES

BRIEF DESCRIPTION OF FUNCTION

The Legislation Unit of PIRSA Fisheries & Aquaculture provides legal services to the Executive Director and the Director, Aquaculture and Fisheries and to all other members of the Division on an as needs basis. Among other things these services include problem solving and the provision of advice, in consultation with the Crown Solicitor’s Office where necessary, regarding any legal issues involving the implementation or administration of fisheries management arrangements through existing legislative framework and licence conditions.

OUTPUTS AND ACTIVITIES

These activities include:

1. Co-ordination of the introduction, amendment or revocation of Fisheries and Aquaculture legislation i.e. Act or regulation amendments, the introduction of new regulations and drafting of other legislative and administrative instruments such as delegation, permit or exemption instruments as required under the *Fisheries Management Act 2007*. New regulations or amendments involve the drafting of Cabinet submissions, including the preparation of drafting instructions, for consideration by government to provide for the necessary legislative framework to implement approved fishery management policy. This service includes co-ordinating Divisional liaison with the Office of Parliamentary Counsel and the Crown Solicitor’s Office to ensure that regulations and proposed activities of the Division are accurately and effectively drafted and or implemented.

2. Maintenance and review of licensing arrangements required to appropriately implement approved fishery management policy and measures within the limitations of the *Fisheries Management Act 2007*. The service includes working with the Licensing program (part of Systems and Information) to set up efficient administrative systems and finalise forms and instruments that are legally sound.

3. Problem solving together with the provision and co-ordination of legal advisory services in liaison with the Crown Solicitor's office relating to the implementation and administration of the *Fisheries Management Act 2007*, Regulations and fisheries management policies, and the defence of those policies and arrangements in litigation.

4. Responsible for the coordination of applications for Ministerial exemptions and Permits under Part 7 Division 2 of the *Fisheries Management Act 2007*.

5. To safeguard the ongoing sustainability of a fishery may require additional legal services in any particular year, depending on positive or negative scientific indicators, to implement new fisheries management arrangements (for example the introduction or variation of a quota system) or new administrative arrangements (for example, changes to licensing processes, conditions, introduction of closures).

Program Contact Officer:
Lambertus Lopez, Manager, Legal and Legislative Programs
08 8226 0266
Lambertus.Lopez@sa.gov.au
PROGRAM: LEASING AND LICENSING

BRIEF DESCRIPTION OF FUNCTION

The Fisheries Leasing & Licensing Section of PIRSA Fisheries & Aquaculture is responsible for the management of Licensing, Quota Monitoring and VMS services.

This business unit provides a range of services related to the timely processing and management of information leading to the issue of licences and other reporting services.

The unit administers a licensing call centre for licence inquiries and other administrative services. The success of these functions is based on maintaining the Primary Industries Information Management System (PIIMS) database.

OUTPUTS AND ACTIVITIES

Services to directly support the fishery:

1. Renew and maintain fishery licences.
2. Database management for licence renewal.
3. Collect licence fees and associated payments.
5. Record and track unpaid renewals.
7. Draft and issue notices to Fishers.
8. Process requests for information from fishers who make such inquiries over the counter, through the call centre, via facsimile or e-mail. For example, helping fishers to process information relevant to licence renewal forms, application for licence transfers, boat changes, gear enquiries and fishing regulations.
9. Regularly update information about licence holders.
10. Research and prepare documents for public record.
11. Liaise with government stakeholders to verify the credentials of fishers.
12. Liaise with PIRSA Fisheries & Aquaculture, SARDI Aquatic Sciences, Crown Solicitors and other state and local agencies on matters relevant to the fishery.
13. Draft and update licence conditions over the duration of the licensing year as determined by the Executive Director, Fisheries and Aquaculture and the Director, Fisheries and Aquaculture Policy.
14. Provide information to licence holders relating to the requirements pursuant to licence administration.
15. Manage calls from fishers regarding late payment notices, fees and general enquiries about their licences.
16. Provide support regarding an increased frequency of last minute administrative enquiries from fishers. e.g., master changes and quota transfers, as well as provide advice and support to fishers on licence information, to complete the required forms.
Services to support fisheries management:

1. Participate in inter and intra departmental meetings and workshops on issues relevant to the fishing industry.
2. Liaise with relevant staff within PIRSA Aquaculture and Fisheries in implementing decisions relevant to the fishery.
3. Interrogate the PIIMS database to extract information for other stakeholders to use in preparing reports.
4. Prepare reports requested by internal and external customers including maintenance of a public register of licence holders.
5. Liaise with information technology providers to maintain PIIMS and administer licensing requests.
6. Generate quota management reports to update stakeholders on varying Total Allowable Commercial Catch (TACC) returns and end of season quota holdings.

PERFORMANCE INDICATORS

1. Issue of licences to licence holders in an accurate and timely manner.
2. Provision of accurate and timely information related to licences.
3. Quarterly activity report as required within one month at the end of each quarter.

Program Contact Officer:
Kim Terry, Manager Leasing & Licensing
08 8204 1374
Kim.Terry@sa.gov.au
BRIEF DESCRIPTION OF FUNCTION

Business Services, within Directorate of PIRSA Fisheries & Aquaculture, provides a range of services to support fisheries management. These include coordinating the cost recovery process and establishing agreements with service providers; coordinating program provider reports; administering external contracts and agreements; and providing audit, financial and human resource functions.

OUTPUTS AND ACTIVITIES

Business Services provides support services to government and industry as well as advice and facilitation of corporate related policy and management issues:

1. Coordinate and facilitate cost recovery processes and program agreements, including liaising with program providers, managers and financial services as required.
2. Attend meetings relating to cost recovery, licence setting and related policy issues.
3. Develop and review cost recovery policy, processes and program agreements.
4. Manage major service providers’ service level agreements.
5. Project manage and administer external contractual services and agreements – including liaising with PIRSA Accredited Purchasing Unit, preparing acquisition plans and selecting evaluation criteria, managing tender processes, drafting purchase recommendations and liaising with the Crown Solicitor’s office to develop contractual agreements.
6. Provide advice on procurement and invoicing requirements.
7. Consult with the Executive Director, Fisheries and Aquaculture, Director, Fisheries and Aquaculture Policy Management, Director, Operations, PIRSA fisheries managers, and the Office of the Minister and other parties as needed.
8. Management of industry funds and services.

PERFORMANCE INDICATORS

1. Plan, coordinate and facilitate the cost recovery process with industry associations and program providers in a timely and efficient manner.
2. Ongoing review, development and documentation of the cost recovery model, framework, processes and roles.
3. Meet agreed timeframes on management and administration of external contractual services
4. Appropriate management of industry funds and services.

Program Contact Officer:
Benn Gramola, Business Manager
08 8226 2317
Benn.Gramola@sa.gov.au
PROGRAM: FISHERIES COMPLIANCE OPERATIONS

BRIEF DESCRIPTION OF FUNCTION

The Fisheries & Aquaculture Operations Group is comprised of the Regional Operations teams, Offshore Patrol Operations and the Intelligence & Strategic Support teams. The complementary teams undertake compliance activities to educate fishers, deter opportunistic and financially motivated fishery related crimes, and enforce rules and regulations.

Each Fishery has a dedicated coordination team assigned consisting of a State Coordinator, Regional Coordinators, Policy Manager, and the SARDI Program leader for the fishery. The coordination team is also supported by timely and accurate intelligence briefings form the Intelligence & Strategic Support Team.

In consultation with the fishery industry representatives a dedicated Compliance Plan has been developed for each fishery. Each Compliance Plan is developed to ensure compliance activities with the fishery are intelligence driven, cost effective and efficient and outcome focussed. The three core strategies in order of priority (Education and Awareness, Effective Deterrence and Appropriate Enforcement) are directed at increasing voluntary compliance and maximising effective deterrence.

Following the consultation process and a detailed analysis of all intelligence and information to hand the major risks have been identified, prioritised and rated for each fishery specific plan. The resulting plan itemises a series of strategies, actions, and initiatives aimed at achieving the targeted outcomes. In addition, any other risks will be addressed outside of the planned program as the need arises. The risks and strategies to address them are constantly reviewed and assessed for relevance. Contingency plans are in place to address any immerging trend or issues where intelligence received or changes in circumstances within the fishery require attention in addition to monitoring all the rules and requirements of each fishery.

The level of effort required to deliver the compliance program in accordance with the dedicated plan is also reviewed annually taking into account;

- previous effort required to deliver established programs developed over last 10 years
- the identified risks to the fishery and any associated changes
- shifts or changes to the fishery management
- changes to fishing practices
- additional pressures or influences on fishers or the fishery
- intelligence holdings
- trends or change behaviours that required monitoring and/or investigation
- cost effectiveness and identified efficiencies
- any other relevant information required to deliver an effective compliance program to monitor and enforce the rules and regulations for each fishery

Activity, effort and outcomes are collated and reported against each of the identified fishery specific risks and strategies.
ACTIVITIES
- Monitoring of all fishery management and quota systems for compliance
- Offence identification and response
- Operational and Investigation Planning and Surveillance
- Risk assessments, trend and threat analysis
- Master Operational Planning Process
- Legislative review for efficacy and relevance
- Prosecution system maintenance and development
- Prosecution Steering Committee coordination and assessment
- Industry liaison and education

OUTPUTS
- Delivery of Actions and Initiatives against Compliance Plan
- Educational material
- Induction & Pre-season information packages
- Intelligence driven operations and investigations
- On land and at sea inspections
- Engagement with fishers and attendance at industry meetings
- Cautions, Expiations and Prosecutions
- Intelligence briefings and target packages
- Consultative Industry initiatives and planning
- Engagement and participation in Rules & Gear Reviews
- Continued development of cost effective and efficient fishery specific compliance plans
- Quarterly or bi-annual compliance activity reports
- Annual fishery compliance outcomes and scorecard

PERFORMANCE INDICATORS
- Increased voluntary compliance
- Continued development of effective deterrence strategies
- Accurate intelligence and risk predictions
- Successful court outcomes for serious offences
- Development of efficient and cost effective compliance strategies
- Continued development of stakeholder engagement programs
- Reduced incidence of reported illegal activity
- Reduced incidence of documentation errors and inconsistencies
- Increased integrity in fishery management systems and/or quota systems
- Increased positive interactions & collaboration with stakeholders

The dedicated Fishery Compliance Plan for this fishery outlining each of the risks and strategies, actions and initiatives to address those risks is attached hereto.

Program Contact Officer:
Peter Dietman, Director, Operations
08 8226 2873
Peter.Dietman@sa.gov.au
Fishery Management Plan Goals:

1. Ensure the Blue Swimmer Crab resource is harvested within ecologically sustainable limits.
2. Allocate access to Blue Swimmer Crab resources to achieve optimum utilisation and equitable distribution to the benefit of the community
4. Cost effective and participative management of the fishery

Compliance Risk Summary:

1. Quota Management System Integrity – PIRSA Risk Rating: MODERATE (Likelihood 5: Consequence 2: Score 10)

A robust and manageable Quota Management System is an integral component to the effective management of a quota fishery. It is noted that weighing upon landing with ice is no longer an industry practice, reducing the risk. It is also noted that there is not a standard size bin recognised however Industry have committed to putting an accurate un-iced weight at landing on the current Catch and Disposal Record (CDR).

Other elements that have a direct impact on the overall effectiveness and integrity of the Quota Management System include:

- Errors and or omissions on CDR’s – noted as low
- Provision to not deliver to registered premises directly

2. Quota Evasion - PIRSA Risk Rating: MODERATE (Likelihood 4: Consequence 2: Score 8)

The risk “Quota Evasion” has direct links to the risk “Quota Management System Integrity” Where the Quota Management System lacks effective checks and balances, the potential for quota evasion is heightened and the likelihood of detection is reduced. The consequences of Quota Evasion (intentionally exceeding quota), can lead to overfishing and localised stock depletion. With the stock assessment report being positive in Spencer Gulf this season the risk to the stock is reduced (but not to the system), however Gulf St.Vincent stock assessment is not as favourable. Overall, it is believed that there is a reduction in this risk.

In addition to weighing of catch, many of the elements listed under the risk “Quota Management System Integrity” invariably link to the risk “Quota Evasion”.
3. **Take Protected / Non-Permitted Species - PIRSA Risk Rating LOW** (including females carrying eggs) **Likelihood 1: Consequence 2: Score 2**

Small amounts of undersized crabs have been detected on interstate markets. Intelligence continues to be received in relation to the take of non-permitted, namely Snapper, when Crab fishing.

With the Crab stock assessment report being positive in Spencer Gulf this season, and with little current intelligence in this area, the risk rating has been reviewed. It should be noted that the Gulf St.Vincent stock assessment is not as favourable, and so the risk of taking undersize and females carrying eggs remains, but it is believed overall that there is a reduction in this risk.

**Elements of taking protected / non – permitted species can include**

- Taking protected species – females with eggs
- Take of undersize
- Taking non permitted species – species not listed on the authority

4. **Other Compliance risks identified within the fishery that may occur will be addressed as they are detected. They include the following:**

- Fishing in closed areas
- Biosecurity response
- Fishing with a vessel not endorsed on a licence
- Fishing with illegal gear
- Fishing with excess gear
- Gear interference
- Failure to lodge SARDI catch and effort returns
- Inaccurate or misleading reporting of catch location and volume on SARDI Returns
- Assist/provide services to other agencies (i.e. SAPOL, threats at sea amongst Industry)
## Risk Likelihood & Consequence Analysis:

<table>
<thead>
<tr>
<th>LIKELIHOOD</th>
<th>NEGLIGIBLE</th>
<th>MINOR</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>MAJOR</th>
<th>CATASTROPHIC</th>
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<tr>
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<tr>
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<tr>
<td>LIKELY</td>
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### Likelihood Definitions

- **Likely**: It is expected to occur
- **Occasional**: May occur
- **Unlikely**: Uncommon, but has been known to occur elsewhere
- **Rare**: May occur in exceptional circumstances
- **Remote**: Never heard of but not impossible

### Consequence Definitions

- **Negligible**: Insignificant impacts to population. Unlikely to be measurable against background variability
- **Low**: Possibly detectable, but minimal impact on population size and none on dynamics
- **Moderate**: Full exploitation rate, but long term recruitment / dynamics not adversely impacted
- **High**: Affecting recruitment levels of stocks / or their capacity to increase
- **Catastrophic**: Local extinctions are imminent / immediate

### Risk Rating

- **Negligible**
- **Low**
- **Moderate**
- **High**
- **Extreme**
**Strategies:**

The following strategies have been developed to address each of the risks:

1. **Education & Awareness**
   - All interested parties understand their respective obligations
   - Develop Industry communication & relationship program

2. **Deterrence**
   - All aspects of Quota Management System are fully monitored
   - Enforcement Plan Communication Strategy
   - Enforcement Outcomes Communication Strategy
   - All aspects of fishing activity monitored

3. **Enforcement**
   - Maximise successful prosecutions Outcomes
   - Identify participants & methodology of Quota Evasions
   - Reduce ability to evade Quota Management System

**Target Outcomes:**

The following target outcomes have been identified:

- Quota Management System integrity maintained
- Minimise quota evasion
- Reduce / minimise take of protected and non-permitted species
<table>
<thead>
<tr>
<th>Risks Addressed</th>
<th>Strategies</th>
<th>Initiative</th>
<th>Actions</th>
<th>Who</th>
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<tr>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 on 1 interactions</td>
<td>Update and distribute Fishery User Guide</td>
<td>SC</td>
<td>Pre Season</td>
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<td></td>
<td>Have 1 on 1 interactions with LH’s, RM’s and Fish Processors throughout the season; ensure all remain clear on the rules and their obligations</td>
<td>Central</td>
<td>Season</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Industry Days</td>
<td>Regions</td>
<td>Season</td>
</tr>
<tr>
<td>1 2 3</td>
<td></td>
<td>Established liaison &amp; contact with Industry</td>
<td>Have regular contact with SARDI, Policy, Industry Representatives and Stakeholders</td>
<td>Ops Mgr, SC</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Attend Industry meetings when invited. Communicate Industry performance. Raise Compliance issues with Fishery Policy Manager</td>
<td>Ops Mgr, SC</td>
<td>As required</td>
</tr>
<tr>
<td>1 2 3</td>
<td></td>
<td>Audit</td>
<td>Audits to include but not limited to:</td>
<td>Central</td>
<td>Season</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Identification of CDR irregularities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Monitor quota balance for exceeding catch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risks Addressed</td>
<td>Strategies</td>
<td>Initiative</td>
<td>Actions</td>
<td>Who</td>
<td>When</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------</td>
<td>------------</td>
<td>---------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>x</td>
<td>1</td>
<td>Field based inspections</td>
<td>Inspections at sea, landing, transit and at Fish Processor. Ensure non-permitted species and protected species are not taken, gear is compliant &amp; gear interference is not occurring between commercial / recreational fishers</td>
<td>Central</td>
<td>Season</td>
</tr>
<tr>
<td>x</td>
<td>2</td>
<td>Regulatory review and revision</td>
<td>Contribute to amendment of legislation and policy where appropriate</td>
<td>Central</td>
<td>As required</td>
</tr>
<tr>
<td>x</td>
<td>3</td>
<td>Media</td>
<td>Utilise media to update on successful prosecution outcomes</td>
<td>Ops Mgrs, SC, PIRSA Comms</td>
<td>As required</td>
</tr>
<tr>
<td>x</td>
<td>1</td>
<td>Intelligence</td>
<td>Collate and analyse information received through FISHWATCH and Stakeholders</td>
<td>Regions, Intel Analyst</td>
<td>Ongoing</td>
</tr>
<tr>
<td>x</td>
<td>2</td>
<td>Intelligence driven operations</td>
<td>Develop investigations and carry out targeted operations in line with the Serious Offence Plan</td>
<td>Regions, SOG</td>
<td>As required</td>
</tr>
<tr>
<td>x</td>
<td>3</td>
<td>Address non-compliance</td>
<td>Investigate instances of non-compliance. Take enforcement action including issue of Caution, Expiation and Brief</td>
<td>FO’s</td>
<td>As required</td>
</tr>
<tr>
<td>x</td>
<td>1</td>
<td>Brief Quality Assurance</td>
<td>Briefs of evidence meet evidentiary requirements and are vetted to ensure quality assurance</td>
<td>FO’s, Ops Mgrs, PSC</td>
<td>As required</td>
</tr>
</tbody>
</table>

Abbreviations: FO (Fisheries Officer); SC (State Coordinator); SOG (Special Operations Group – PIRSA internal); PSC (Prosecution Steering Committee – PIRSA internal), Intel Analyst (Intelligence Analyst – PIRSA internal); PIRSA Comms (PIRSA Communications – PIRSA internal)
PROGRAM: STOCK ASSESSMENT AND MONITORING

SCHEDULE 1 - RESEARCH PROJECT SCOPE

1. PROJECT DETAIL

1.1 Title
BLUE CRAB FISHERY

1.2 Client Contact Details
Name: PIRSA FISHERIES AND AQUACULTURE
Address: GPO Box 1625, Adelaide, SA 5001
Attention: Sean Sloan
Email: Sean.Sloan@sa.gov.au
Telephone: 8226 2318
Facsimile: 8226 0434

1.3 Principal Investigator
Name: Dr Craig Noell
Position: A/Senior Research Scientist, Inshore Crustaceans
Address: SARDI Aquatic Sciences
2 Hamra Ave, West Beach, SA 5024
Email: Craig.Noell@sa.gov.au
Telephone: 8207 5428
Facsimile: 8207 5406

1.4 Timeframe
Commencement Date: 1 July 2014
Completion Date: 30 June 2015

1.5 Summary
This scope of work will provide PIRSA Fisheries and Aquaculture with the information required for the ecologically sustainable management of the Blue Crab Fishery in South Australia. The primary output is a stock assessment report that will be provided to PIRSA by 31 March 2015.

2. PROJECT DESCRIPTION

2.1 BACKGROUND
The blue swimmer crab Portunus armatus is widely distributed in tropical coastal margins of Australia but also occurs in isolated populations in the temperate gulf waters of South Australia and on the West Coast. Historically, blue swimmer crabs have been taken as a by-product of prawn fishing, however since the early 1980’s targeted commercial potting of crabs has been undertaken in three regional fishing zones in South Australia (West Coast,
Spencer Gulf, Gulf St Vincent). Research primarily focuses on the pot fishing sectors in Spencer Gulf and Gulf St Vincent, which collectively harvest ~99% of the TACC.

Since 2002, fishery independent surveys have been conducted annually in each gulf. In late 2010 it was agreed to reduce the frequency of surveys in each gulf to biannually (one each year ongoing) provided indices of recruitment for each fishery (as measured during surveys) were above pre-determined, acceptable levels. It should be noted that surveys will be conducted in both gulfs in 2014, as the last survey in Spencer Gulf was conducted in 2012, and for Gulf St Vincent, recruitment indices from the 2013 survey were below acceptable levels. Therefore two surveys will be conducted in 2014 (both gulfs), and this is reflected in the current scope.

2.2 NEED
The provision of accurate information on blue swimmer crab stocks is critical to ongoing management strategies for the sustainable harvesting of the resource. Data obtained from this annual assessment will provide PIRSA with the capacity to monitor the ongoing performance of the fishery and initiate, where necessary, adaptive management strategies in a timely manner.

2.3 OBJECTIVES
2.3.1 To provide PIRSA with a stock assessment report of historical blue swimmer crab catches and associated fishing effort in South Australia;
2.3.2 To assess the current status of the blue swimmer crab resource in South Australia;
2.3.3 To provide PIRSA with ongoing and ad hoc advice.

2.4 METHODS
2.4.1 Collect, collate and analyse fishery-dependent data (catch and effort) data;
2.4.2 Collect, collate and analyse fishery-independent survey data;
2.4.3 Collect, collate and analyse fishery-dependent pot sampling data

3. DELIVERABLES
3.1 Service Provided:
Update SA fisheries status report as required

3.1.1 Collection of Basic Fisheries Statistics
- Manage a comprehensive fishing logbook program.
- Collate fishing logbook returns and provide an in-confidence service
- Validate returns including consultation with fishers to correct returns
- Enter data and maintain storage in a secure location
- Ongoing database administration, maintenance and development.
3.1.2 Fishery Independent Survey
- Fishery-independent surveys are to be conducted in Spencer Gulf and Gulf St Vincent using commercial vessels (the cost of hiring commercial vessels is included in the budget).

3.1.3 Voluntary pot sampling program
- Manage and report against data collected by fishers for up to two fine-mesh pots for each fishing day.

3.1.4 Review of management strategies and plan
- Work with the industry and the fishery manager to review the research plan and the Management Plan.
- Investigate opportunities for new projects and potential additional funding sources.

3.1.5 Analysis and interpretation
- Interpret results of the research program in the stock assessment report

3.1.6 Project management
- Supervise project, quality control, management of deliverables
- Respond to requests from PIRSA Fisheries and Aquaculture

3.1.7 Reporting
- Attend Blue Crab industry meetings including preparation and follow up
- Keep the industry abreast of research projects relevant to the Blue Crab Fishery.

3.2 Outcomes:
- Provide a survey report (in the form of an advice note to PIRSA) that summarises 2014 survey results by 30 September 2014.
- Provide a stock assessment report on the Blue Crab Fishery to PIRSA Fisheries and Aquaculture by 31 March 2015 that documents, analyses and interprets the available data and assesses the fishery against the performance indicators identified in the Management Plan.

4. FUNDING ARRANGEMENTS

4.1 PROJECT COSTING POLICY

This Stock Assessment and Monitoring Project Scope and Costing has been costed at a full cost recovery rate.
4.2 PROJECT COST

<table>
<thead>
<tr>
<th>PROJECT COST</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research (SARDI)</td>
<td>173,581</td>
</tr>
<tr>
<td>Vessel Hire Fishery Independent Survey</td>
<td>68,202</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td><strong>241,783</strong></td>
</tr>
<tr>
<td><strong>GST</strong></td>
<td><strong>NO GST</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>241,783</strong></td>
</tr>
</tbody>
</table>

4.3 MILESTONE AND PAYMENT SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
<th>Payment ($) Ex GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 September 2014</td>
<td>2014 survey results (advice note)</td>
<td>-</td>
</tr>
<tr>
<td>31 December 2014</td>
<td>First Half Payment 2014/15 SLA</td>
<td>120,891</td>
</tr>
<tr>
<td>31 March 2015</td>
<td>Stock Assessment report (2015)</td>
<td>-</td>
</tr>
<tr>
<td>31 May 2015</td>
<td>Second Half Payment 2014/15 SLA</td>
<td>120,892</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td><strong>241,783</strong></td>
</tr>
<tr>
<td><strong>GST</strong></td>
<td></td>
<td><strong>NO GST</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>241,783</strong></td>
</tr>
</tbody>
</table>

5. PROJECT STAFF

<table>
<thead>
<tr>
<th>Staff (if identified)</th>
<th>Position</th>
<th>FTE Commitment</th>
<th>Funded/In-Kind</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA PO501</td>
<td>Principal Investigator</td>
<td>0.10</td>
<td>Funded</td>
</tr>
<tr>
<td>Craig Noell</td>
<td></td>
<td>0.15</td>
<td>Funded</td>
</tr>
<tr>
<td>Stephen Mayfield</td>
<td></td>
<td>0.05</td>
<td>Funded</td>
</tr>
<tr>
<td>Graham Hooper</td>
<td></td>
<td>0.30</td>
<td>Funded</td>
</tr>
<tr>
<td>TBA PO201</td>
<td></td>
<td>0.08</td>
<td>Funded</td>
</tr>
<tr>
<td>Casual OPS203</td>
<td></td>
<td>0.05</td>
<td>Funded</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>0.73</strong></td>
<td></td>
</tr>
</tbody>
</table>
# SCHEDULE 2 - PROJECT COSTING

## 1. PROJECT COST SUMMARY

<table>
<thead>
<tr>
<th>Cost</th>
<th>Detail</th>
<th>2014/15 Total ($) Ex GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>0.73 fte</td>
<td>80,402</td>
</tr>
<tr>
<td><strong>Operating</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logbook program</td>
<td></td>
<td>18,560</td>
</tr>
<tr>
<td>Payment to industry for surveys</td>
<td></td>
<td>68,202</td>
</tr>
<tr>
<td>Fieldwork</td>
<td></td>
<td>12,500</td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Travel</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Office &amp; communication</td>
<td></td>
<td>1,500</td>
</tr>
<tr>
<td>Capital equipment</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>SARDI overhead</td>
<td></td>
<td>60,619</td>
</tr>
<tr>
<td>SARDI inkind</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td><strong>241,783</strong></td>
</tr>
<tr>
<td><strong>Revenue – PRICE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licence holders</td>
<td>70%</td>
<td>169,248</td>
</tr>
<tr>
<td>PIRSA F&amp;A contribution</td>
<td>30%</td>
<td>72,535</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td></td>
<td><strong>241,783</strong></td>
</tr>
<tr>
<td>SARDI Investment</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

**Breakdown explanations:**

- **Logbook Program**
  Entry, validation, management and reporting of data

- **Payment to industry for surveys**
  Direct costs of using industry vessels and staff to undertake surveys

- **Fieldwork**
  Fieldwork costs including vessels, travel and OHS requirements

- **Laboratory**
  Costs for processing samples

- **Travel**
  Costs for attending meetings with industry, PIRSA F&A and stakeholders

- **Office and communication**
  Stationery, communications and publications

- **Capital equipment**