PIRSA FISHERIES & AQUACULTURE

COST RECOVERY PROGRAM

2013-14

SARDINE FISHERY
## SUMMARY TABLE - SARDINE FISHERY

<table>
<thead>
<tr>
<th>2012-13 $</th>
<th>PROGRAM AREA</th>
<th>2013-14 $</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>479,775</td>
<td>Stock Assessment and Monitoring</td>
<td>273,431</td>
<td>As per SARDI Scope. Research programs (stock assessment $242,876) plus $30,555 for Dolphin Interaction Research. Industry will progress the initial project work for 'Improved Adult Collection Method' with SARDI in 2013-14 ($9K is held in trust by PIRSA).</td>
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<tr>
<td>10,678</td>
<td>Economic Assessment</td>
<td>10,998</td>
<td>As per Economic Research contract</td>
</tr>
<tr>
<td>30,150</td>
<td>Observer Coverage</td>
<td>60,800</td>
<td>Protec observers based on 10% coverage (84 nights @ $700/day) $58,800 plus $2,000 additional for West Coast trips. (Note: 1) additional 5% residual from 2012-13 held for additional services; 2) increase to observer coverage rate to $800/day (GST excl) to be adjusted for 2014-15.)</td>
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</table>

**PIRSA RELATED COSTS**

| 69,564     | Policy and management         | 69,577     | Same level of service as previous year   | 80     |
| 12,972     | Legislation                   | 12,571     | Same level of service as previous year   | 15     |
| 17,098     | Licensing                     | 17,184     | Same level of service as previous year   | 21     |
| 6,785      | Directorate                   | 6,877      | Same level of service as previous year   | 7      |
| 100,367    | Compliance                    | 102,852    | Scope of work is to address the compliance risk profile.                                                                                       | 90     |
| 43,212     | Vessel                        | 44,592     | Same level of service as previous year   | 7      |
| 12,600     | VMS                           | 12,600     | Maintained VMS at $900 per licence holder, same as last year (still significantly less than actual cost)                                       | 14     |
| 12,296     | Quota Monitoring              | 12,848     | Same level of service as previous year   | 22     |

**OTHER COSTS**

| 49,877     | FRDC                          | 51,948     | Funding based on 0.25% of rolling three year average GVP                                                                                     |
| 4,200      | Co-Management Services        | 4,200      | Previously Consultative and Strategic Planning Services. (Marine Fishers Association to provide services)                                      |
| 0          | Adjustments                   | 0          | No adjustments                                                                                                                                 |

**$849,573**  **TOTAL**  **$680,477**

### Licence Fees 2013-14

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Base Fee</td>
<td>4,938</td>
</tr>
<tr>
<td>Net Fee</td>
<td>43,668</td>
</tr>
<tr>
<td>Total</td>
<td>48,606</td>
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</tbody>
</table>

### Licence Fee 2012-13

<table>
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<tr>
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<tbody>
<tr>
<td>MS Base Fee</td>
<td>4,614</td>
</tr>
<tr>
<td>Net Fee</td>
<td>56,070</td>
</tr>
<tr>
<td>Total</td>
<td>60,684</td>
</tr>
</tbody>
</table>
INTRODUCTION

In October 2010, the Fisheries and Aquaculture Divisions of Primary Industries and Regions South Australia (PIRSA) were combined into a single administrative division known as PIRSA Fisheries & Aquaculture.

The decision to amalgamate the Fisheries and Aquaculture Divisions is a forward step in the Government’s positioning of itself to not only fulfil its management and regulatory responsibilities, but also address the future needs and projected growth of the seafood industry.

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 100% of 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 licence fees for the upcoming licensing year.

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.
## SARDINE FISHERY MANAGEMENT OBJECTIVES 2013/14 – 2015/16

<table>
<thead>
<tr>
<th>Fishery</th>
<th>Management Plan 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 &amp; Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sardine Fishery</td>
<td>Sustainable harvest of resources in the Sardine fishery</td>
<td>Implement management plan under the <em>Fisheries Management Act 2007</em> Stock maintenance</td>
<td>Coordinate and lead implementation of new management plan, including harvest strategy</td>
<td>Implement compliance program, in accordance with risk assessment</td>
<td>Support implementation of new management plan</td>
<td>Support implementation of management plan</td>
</tr>
<tr>
<td></td>
<td>Optimal utilisation of sardine fishery resources within the constraints of sustainability imperatives</td>
<td></td>
<td>Administer Sardine TACC-setting in accordance with harvest strategy</td>
<td>Support implementation of management plan</td>
<td>Provide scientific advice to PIRSA Fisheries &amp; Aquaculture and Research and Management Committee of SASIA</td>
<td>Provide ongoing support for licensing, quota and transfer queries</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Administer Anchovy TACC-setting in accordance with management plan</td>
<td>Attend SASIA meetings and provide advice on compliance issues, as required</td>
<td>Undertake and deliver fishery assessment report</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Preparation, attendance and participation at SASIA meetings and provision of advice, as required</td>
<td>Pre-season briefings with licence holders</td>
<td>Provide scientific advice to industry for fishery-dependent sampling</td>
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<td></td>
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<td></td>
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<td></td>
<td>FRDC project – incorporation of the continuous underway fish egg sampler (CUFES) methodology into DEPM model</td>
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<tr>
<td>Fishery Plan Objectives</td>
<td>Outcomes 2013/14 to 2015/16</td>
<td>Policy and Management</td>
<td>Compliance</td>
<td>Assessment and Research</td>
<td>Systems &amp; Information</td>
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<tr>
<td>Minimise adverse impacts of fishing operations on the ecosystem</td>
<td>Real-time monitoring of threatened, endangered and protected species (TEPs) interactions</td>
<td>Real-time monitoring of TEPs interactions with industry</td>
<td>Implement compliance program, in accordance with risk assessment</td>
<td>Real-time monitoring of TEPs interactions with industry</td>
<td>Real-time monitoring of TEPs interactions with industry</td>
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<tr>
<td></td>
<td>Review of Code of Practice (CoP) to mitigate TEPs interactions (ongoing)</td>
<td>Preparation, attendance and participation in TEPs working group meetings</td>
<td>Assist in ongoing review of CoP</td>
<td>Assist in ongoing review of CoP</td>
<td>Assist in ongoing review of CoP</td>
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<tr>
<td></td>
<td>Manage observer program</td>
<td>Investigate and develop suitable performance indicators and decision rules to inform</td>
<td>Real-time monitoring of TEPs interactions with industry</td>
<td>TEPS annual report</td>
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<td></td>
<td>Progress DSEWPaC recommendations under EPBC Act accreditation</td>
<td>mitigation of dolphin interactions and observer coverage</td>
<td>TEPS interactions investigated</td>
<td>TEPS quarterly report</td>
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<td></td>
<td></td>
<td>Assist in ongoing review of CoP</td>
<td>Mortalities collected and processed</td>
<td>Maintenance of observer data in SARDI database</td>
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<td></td>
<td></td>
<td>Management of Protec contract and observer authorisations</td>
<td>Preparation, attendance and participation in TEPs working group meetings</td>
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<td></td>
<td></td>
<td>Continue implementation and management of existing programs</td>
<td>Annual session with licence holders</td>
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<td></td>
<td></td>
<td></td>
<td>Attend SASIA meetings and provide scientific advice, as required</td>
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<td></td>
<td>Provide ongoing support for licensing, quota and transfer queries</td>
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<tr>
<td>Good governance of the Sardine fishery</td>
<td>Effective engagement with industry</td>
<td>Preparation, attendance and participation at SASIA meetings</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Regular communication with industry and Executive Officer, SASIA</td>
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<tr>
<td></td>
<td></td>
<td>Implement rules review outcomes</td>
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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 strategic 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:
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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 other members of the Division on an as needs basis. Among other things these services include 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 amendment of regulations, the introduction of new regulations and drafting of other legislative and administrative instruments such as delegation instruments required or permitted 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 liaison with the Office of Parliamentary Counsel and the Crown Solicitor’s Office to ensure that regulations are accurately and effectively drafted.

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

3. Problem solving together with the co-ordination of the provision 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. 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:
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PROGRAM: LICENSING

BRIEF DESCRIPTION OF FUNCTION

The Fisheries Systems and Information 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
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PROGRAM: DIRECTORATE

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 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, in particular SARDI.
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, Aquaculture and Fisheries and the Director, Aquaculture and Fisheries, PIRSA fisheries managers, 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

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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 from 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.

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.
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

Program Contact Officer:
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Fishery Management Plan Goals:

1. Sustainable harvest of resources in the Sardine Fishery
2. Minimise adverse impact of fishing operations on the ecosystem
3. Optimal utilisation of Sardine Fishery resources within constraints of sustainability imperatives
4. Good governance of the Sardine Fishery

Risk Summary:

1. Threatened, Endangered & Protected species (TEPS) - PIRSA Risk Rating: EXTREME (Likelihood - Likely 6: Consequence - Major 4: Score 24)

Inappropriate use of TEPS related information including news of dolphin mortalities could lead to significant political, social and Industry reputation damage. This is a key reason for the Consequence of this risk being rated as MAJOR, despite the definition “likely to cause local extinctions, if continued in longer term” implying the bio-mass of dolphins could be placed at risk.

It is imperative that the Sardine fishery adheres to the TEPS Code of Conduct at all times and that all TEPS mortalities and interactions are reported 100% of the time.

In 2012, industry initiated real time recording and monitoring of TEPS interactions, as reported by Skippers, and followed up by raising Skipper awareness of the matter via Port Meetings. These initiatives have had a positive impact on the interactions rated reported by Skippers. However, as evident through the Q4 2011 – 2012 interaction results, there remains further opportunity to close the “gap” between interactions rates reported when Observers are on board as compared to when they’re not.

Whilst reduction in the gap will be a great outcome, and preventative measures as per the TEPS Code of Conduct will minimise TEPS interactions including mortalities, the nature of fishing operations with the Sardine fishery means TEPS interactions will always occur and therefore this risk will remain EXTREME.

Elements of TEPS include:

- Accidental entrapment leading to death of TEPS including dolphins
- Not all TEPS interactions being reported, leading to a gap between Observer coverage report rates compared to those when Observers aren’t present
- Non adherence to TEPS procedures leading to incidents that potentially could be avoided
- Poor performance in managing TEPS interactions leads to poor perception of fishery management or Industry

The Quota Management System (QMS) is the collection of elements, each including various measures that when adhered to, enable effective accountability of all fish taken and subsequently sold or transferred. Integrity is the term used to describe the effectiveness of the measures contained within the QMS. The more effective the measures, the better the integrity.

The lack of a consistent and auditable approach to catch weight determination undermines the integrity of the sardine QMS. The “measured bin” approach to catch weighing has yielded success in the past and is suited to a large scale fishery such as the Sardine Fishery. However, variables including bin drainage time, allowance for water loss (both in actual kilograms and also as a % of total bin + contents weight), the type of product (human consumption, pet food, fresh and frozen feed) have all contributed to variation in how catch weight is now determined. The varying catch weighing methodology used by each Fish Processor means no two Fish Processors will determine the same total weight of fish despite processing the same number of bins.

Whilst a 5% variance in catch weight could potentially lead to an overall variation of 1500 tons (based on a 30,000 ton quota), it is not acknowledged as having a significant bearing on the sardine biomass.

In October 2012, Compliance and SASIA Exec commenced a project that aimed to review the existing catch weight determination practices and to identify options that, if adopted, would result in a more consistent approach to catch weight determination across the fishery. Any options that arise from this project are not anticipated to occur until start 2014. The outcomes of this project are anticipated to have a positive impact on this risk.

Inconsistency in catch weighing methodology will inevitably lead to discrepancy in “true” weight of catch. As such, this risk has a direct bearing on the risk Quota Evasion.

Elements impacting Quota Management System Integrity include:

- The legal requirement for licence holders to adhere to requirements including prior to departure and landing reporting, submitting accurate catch information via CDR’s (including separation of fish caught in both traditional and non-traditional fishing areas) is pertinent for the accurate monitoring of the Quota Management System. Should discrepancy in any of the above requirements occur and incorrect information be received by PIRSA Fisheries, the integrity of the Quota Management System is placed at risk
- Not making a Prior Report
- Errors and / or omissions on CDR’s
- Inaccurate reporting of specific fishing zones being fished
- Both under and over declaring actual weight through utilisation of estimated weight via the “measured bin” approach

As highlighted in the risk Quota Management System Integrity, the fishery remains exposed to both under and over declaration of the “true” weight of fish caught. Whilst acknowledging that each of the processes adopted by Fish Processors is visible and known, it also provides opportunity to evade quota by deliberately under estimating the “true” weight of fish caught.

The movement of tuna farms further out is expected to continue and as such it is also expected that the volume of requests by Skippers to unload within the required 2 hr prior report time frame will also likely increase. This inevitably inhibits the ability to Compliance to observe the unload, which in turn heightens the risk.

Elements of Quota Evasion can include:

- Under declaring certified weight
- The lack of a consistent approach to catch weighing exposes the fishery to risk of Quota Evasion, particularly when unloading at sea occurs and where there is potential for collusion between fishers and Fish Processors
- Including false or misleading information on CDR to under declare actual weight and exceeding quota entitlements by collusion.
- Failing to prior report, not completing a CDR at point of landing, errors and omissions on CDR’s or not completing a CDR at all
- Falsifying CDR by fisher or by Fish Processor

4. Take of non Permitted By-Catch - PIRSA Risk Rating: LOW (Likely 6: Consequence Minor 1: Score 6)

There is always the risk of taking species other than sardines in large quantities due to the size of the nets used, and in some circumstances the area in which the net is being deployed, the main species being mackerel.

Elements of taking non permitted species (By-Catch) can include:

- Fail to report By-Catch
- Fail to release By-Catch for the sake of loosing sardines.
## Risk Likelihood & Consequence Analysis:

<table>
<thead>
<tr>
<th>LIKELIHOOD</th>
<th>CONSEQUENCES</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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<td>LIKELY</td>
<td>By-Catch (6)</td>
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<td></td>
<td>Quota Management System Integrity (12)</td>
<td></td>
<td>TEPS (24)</td>
<td></td>
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</tbody>
</table>

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

### Consequence Definitions
- **Negligible**: Local extinctions are imminent / immediate
- **Minor**: Likely to cause local extinctions, if continued in longer term
- **Moderate**: Affecting recruitment levels of stocks / or their capacity to increase
- **Severe**: Full exploitation rate, but long term recruitment / dynamics not adversely impacted
- **Major**: Possibly detectable, but minimal impact on population size and none on dynamics
- **Catastrophic**: Insignificant impacts to population. Unlikely to be measurable against background variability

### 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

**Target Outcomes:**

The following target outcomes have been identified:

- Quota Management System Integrity maintained
- Minimise Quota Evasion
- Minimize TEPS interactions; maximise reporting of TEPS interactions
- Minimize take of By-Catch / non permitted species
### Risks Addressed

<table>
<thead>
<tr>
<th>Risks Addressed</th>
<th>Strategies</th>
</tr>
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<td>1 2 3</td>
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### Strategies

<table>
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<tr>
<th>Strategies</th>
<th>Coordination Team:</th>
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<tr>
<td>1 = TEPS</td>
<td>West – Brett Willis (State Coordinator)</td>
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<tr>
<td>2 = Quota Management System Integrity</td>
<td>Southern Ranger – Shane Gassner</td>
</tr>
<tr>
<td>3 = Quota Evasion</td>
<td>Policy Manager – Alice Fistr (Tempory)</td>
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<td>4 = Take of non permitted By-Catch</td>
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</table>

### Risks

- 1 = TEPS
- 2 = Quota Management System Integrity
- 3 = Quota Evasion
- 4 = Take of non permitted By-Catch

### Strategies

- 1 = Education & Awareness
- 2 = Deterrence
- 3 = Enforcement

### Coordination Team:

- West – Brett Willis (State Coordinator)
- Southern Ranger – Shane Gassner
- Policy Manager – Alice Fistr (Tempory)

### Initiative

**1 on 1 interactions**

- **Actions:**
  - Update the current Sardine Fishery Operating Guidelines as required (including TEPS procedures)
  - Meet with Licence Holders, Registered Masters and Processors prior to season. Refer to and distribute the current Sardine Fishery Operating Guidelines and Sardine Fish Processor Guidelines where necessary. Ensure all clear on:
    - Legislative changes impacting the coming season
    - TEPS requirements including reporting of TEPS mortalities
  - State Coordinator meets with PROTEC Observers every 3 months

- **Who:** SC, Policy
- **When:** Pre Season

**Fishery Induction Package**

- **Actions:**
  - Induct all new entrants; utilise the current Sardine Fishery Operating Guidelines. All new entrants to understand TEPS requirements

- **Who:** SC
- **When:** As Required

**Established liaison & contact with Industry**

- **Actions:**
  - Prior to season commencing, present forthcoming season Compliance focus
  - Regularly attend Industry meetings including TEPS
  - Have regular contact with SARDI, Policy & Industry EO
  - Industry days at sea

- **Who:** SC, Ops Mgr West
- **When:** Pre Season, Season, Season

**Audits**

- **Actions:**
  - Conduct an annual cross check of CDR data against Prior Reports and Parts A & B on selected licence holders and Fish processors.
  - Conduct random VMS positioning audits to confirm vessels are fishing in authorised fishing grounds and closed areas.

- **Who:** BW, SC, VMS
- **When:** End Season
<table>
<thead>
<tr>
<th>Risks Addressed</th>
<th>Strategies</th>
<th>Initiative</th>
<th>Actions</th>
<th>Who</th>
<th>When</th>
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<tbody>
<tr>
<td>x x x x x x x</td>
<td>1 2 3 4 1 2 3</td>
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<td>Follow up CDR irregularity</td>
<td>Identify CDR irregularities and follow up Monitor quota balance for exceeding catch</td>
<td>Quota, SC Quota, SC</td>
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<tr>
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<td>x</td>
<td>Checks at sea, at landing &amp; at Processor</td>
<td>Conduct random and targeted inspections of CDR documentation by: ● By Southern Ranger at Sea ● At catch landing and at Fish Processor</td>
<td>Southern Ranger West</td>
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<tr>
<td>x x x x x x x</td>
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<td>x</td>
<td>TEPS monitoring</td>
<td>● Targets observations at sea (Southern Ranger &amp; FPV Baudin) ● Monitoring of TEPS reporting by Skippers ● Analysis of individual Skipper TEPS interaction reporting with Sardine Industry EO and Industry members</td>
<td>Southern Ranger SC</td>
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<tr>
<td>x x x x x x x</td>
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<td>x</td>
<td>Weighing of catch</td>
<td>Progress catch weighing project with view to implementing resultant catch weighing option(s) from start 2014</td>
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<tr>
<td>x x x x x x x</td>
<td>x</td>
<td>x</td>
<td>Media</td>
<td>Utilise media to update on prosecution outcomes</td>
<td>SC</td>
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<tr>
<td>x x x x x x x</td>
<td>x</td>
<td>x</td>
<td>Policy review and revision</td>
<td>Review and contribute to amendment of policy wherever appropriate</td>
<td>SC</td>
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<tr>
<td>x x x x x x x</td>
<td>x</td>
<td>x</td>
<td>Intelligence</td>
<td>Investigate and manage TEPS interactions as per requirements Southern Ranger to board vessels unannounced to observe adherence to TEPS requirements</td>
<td>SC Southern Ranger</td>
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<tr>
<td>x x x x x x x</td>
<td>x</td>
<td>x</td>
<td>Intelligence driven operations</td>
<td>Carry out intelligence driven operations in line with Serious Offence Plan</td>
<td>SC, SOG</td>
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<tr>
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<td>Brief Quality Assurance</td>
<td>Briefs of evidence meet quality assurance guidelines and are vetted Briefs of evidence to meet evidentiary requirements and are in line with the guidelines</td>
<td>FO’s, Ops Mgrs PSC</td>
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