Following cease of the Sealed Bin & Bag Trial (SBBT) in 2012, PIRSA Fisheries & Aquaculture and the Central Zone Abalone (CZA) Fishery met in November 2013 to review the elements of the CZA Quota Management System (QMS) and to identify future management arrangements. A range of measures were agreed, however their introduction on a permanent basis is unlikely to occur until mid-2014.

In the interim, CZA licence holders have agreed to adopt the new measures on a voluntary basis from January 1, 2014. The cumulative impact of these measures on the related Compliance risks is expected to be positive. However, as the impact of each risk is unknown at this point in time, each risk has been listed as unrated. Following implementation, PIRSA Fisheries & Aquaculture and Industry will meet to determine an appropriate risk rating process.

It is important to note that at the time this document was prepared, a number of key steps in the process had yet to be finalised, including agreement of the meeting Minutes, agreement from Fish Processors on a key initiative and submission of the related submission through Cabinet.

**Fishery Management Plan Goals**

1. Ensure the Abalone resource is sustainably harvested
2. Optimum utilisation and equitable distribution of the abalone resource to the benefit of the community
3. Minimum impacts on the ecosystem
4. Cost effective and participative management of the fishery

**Compliance Risk Summary:**

1. **Quota Management System Integrity – PIRSA Risk Rating:**

The 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 in place, the better the integrity of the QMS.

The 12/13 risk assessment and associated compliance program factored in the conditions of the SBBT. These conditions have been agreed to be included within the new management arrangements along with some additional minor amendments to the Abalone QMS.

A robust and manageable QMS is an integral component to the effective management of a quota fishery. Whilst the proposed management arrangements will add a degree of integrity to the Abalone QMS, a number of shortfalls still remain, with these shortfalls leaving the fishery exposed to other offending including Quota Evasion.
The lack of an accurate weight of the catch on landing has a direct and adverse impact on the integrity of the underlying Abalone QMS. Without an initial accurate weight (the fisher estimates the weight only), there is an absence of a “starting point” against which all audit thereafter can be checked against. This limits the ability of Fisheries Compliance to detect quota evasion if it were to occur.

The requirement for fishers to contain their catch within sealed bins and bags at point of landing has added integrity from point of tagging until delivery at the Fish Processing premises (where tags are broken). The proposed introduction of the requirement for abalone to be contained in tamper proof bins and bags adds further integrity. However opportunity exists for the fisher and or the Fish Processor to under report catch (again, due to the requirement to estimate weight only), which further undermines the integrity of the QMS.

Fishers are required to record the number of sealed bins, bags and tag numbers on Part A of the CDR within 200 metres of landing and also their estimate of total catch weight per species. Actual weighing of the catch is not required until delivery at the Fish Processing premises and in some instances weighing can take place up to 48 hours after the catch has been landed. As a result, the delay exposes the fishery to potential exploitation of catch weight. Increased blood loss can lead to reduced meat weight being declared.

Under proposed arrangements, Fishers who have an interest in the Fish Processing Business that they sell their catch to will not be permitted to complete Part A & B of their CDR (this was permitted under previous management arrangements and had the potential to lead to situations where potential under reporting of actual catch weight, leading to Quota Evasion, could occur).

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

- Inconsistencies between the number of receptacles containing abalone and the number of tags used to seal these receptacles
- Prior reporting but no CDR submitted for that day
- Errors and or omissions on CDR’s and limited scope for Fisheries Officers to prove/disprove offending
- Ineffective application of tags
- Abalone not sealed in bins or bags
- CDR not immediately signed upon completion of weighing the catch
- Abalone not delivered to registered Fish Processor in a timely manner
- Abalone declared as caught in area different to where they were taken from
2. Quota Evasion - PIRSA Risk Rating:

Quota Evasion is where a Commercial Fisher takes fish but not all of those fish are documented as having been taken. The risk “QMS Integrity” has direct links to the risk “Quota Evasion”. Where the QMS lacks effective checks and balances, the potential for Quota Evasion is heightened and at the same time the likelihood of detection is reduced.

The need for or opportunity to increase personal income is the primary driver for quota evasion to occur. Factors including changed personal financial circumstances, reducing profit margins and product sale uncertainty can influence the likelihood of quota evasion occurring.

Quota Evasion can occur in a number of ways including (1) not all catch being delivered to a Fish Processor for weighing and declaration (2) removal of Abalone during the transportation from landing to the processor (3) under declaration of the catch at the Fish Processing premises.

The fact that fishers only estimate their catch weight makes it very difficult to prove or disprove catch weight variances at the Fish Processing Premises. Should catch be under declared by the Processor, additional fishing activity will be required and additional fish taken from the biomass to catch quota. The absence of an accurate weight on Part A inhibits the ability of the Fisher to self-monitor his catch against that recorded by the Fish Processor on Part B of the CDR.

Weighing of the catch occurs at the Fish Processing Premises and can occur up to 48 hours after landing the catch. Fish processors could under declare the weight of the catch, resulting in Quota Evasion occurring, with little opportunity for Fisheries Officers to re-weigh the catch after CDR completion and before the Abalone is dispersed into the Factory.

Within the current QMS there is opportunity for the Fish Processors to exploit the absence of an accurate weight recorded by the fishers by under recording the weight of the catch on Part B. In turn, the fisherman is only paid for the weight of the catch declared by the Processor whilst the processor can retain the un-declared portion of the catch for their own financial gain. Short of conducting a full audit of Fish Processor records and catch on hand annually, the risk of detection for this type of offence remains almost non-existent.

The remote locations at which fishing occurs also provide opportunity for some of the catch to be offloaded at point of landing or fishing activities not being declared.

Other elements that have the potential to lead to Quota Evasion include;

- Failing to make a prior to fishing report and landing catch without completing a CDR
- Making a prior report, cancelling the report but continuing to fish
- Incorrectly reporting number of bins or bags containing abalone that have been landed
- Ineffective application of tags enabling removal of abalone
- Re-using tags by applying loosely to bins or bags
Other elements that have the potential to lead to Quota Evasion (Continued);

- Using bins that can be tampered with
- Tagging bins or bags but not declaring all bins/bags and delivering all abalone to FP
- Sale of or purchase of abalone without a CDR
- No tags applied to bags/bins
- Delayed delivery to FP to allow time for abalone to be skimmed and dispersed
- Landing catch at location different to launch location to avoid detection
- No requirement for RM to de-register commercial vessel before using for a recreational purpose
- No requirement for RM to cancel an existing prior report

3. Take undersize – PIRSA Risk Rating:

There are legislated minimum shell sizes and meat weights in the Abalone Fishery. The taking of undersize abalone results in more abalone being taken in order to catch the quota. More abalone taken means less egg production.

Central Zone can land abalone in shell or as meat only. Whilst acknowledging the comparatively small but growing market for live abalone (fish landed in shell), the majority of abalone are shucked at sea and landed as meat only. This means that the Sheller removes the abalone from its shell when it is sent to the surface by the diver. The shell is then discarded back into the water and only the meat is retained in most instances.

In some areas, there is an increased likelihood of legal size shells containing undersize abalone meats (therefore, when landed as meat only may appear to be undersize).

Where landed meat only, the only opportunity for Fisheries Officers to check shell size is from the time it is sent to the surface by the diver until the Sheller removes the meat from the shell and returns it to the water.

Once shucked the ability of Fisheries Officers to prove the take of undersize is severely impeded. Whilst the minimum meat weights are set, a meat weight detected below the minimum legislated weight does not necessarily mean that it came from an undersized shell (due to variance in meat to shell ratio throughout the year), limiting opportunity to prosecute for this offence.
4. **Pest / Disease Incursion**

Note – Compliance responds to Pest & Disease incursions however, responsibility for the management of such incursions and consequent costs associated, are dealt with separate to this plan. Hence, there are no risk ratings attached to this item (4).

AVG has been located in the waters of Victoria. The movement of AVG into SA waters could result in catastrophic consequences for the Abalone populations of SA. There is limited opportunity for Fisheries (including Compliance) to monitor and limit the risk of AVG spreading. This risk is higher within the SZA area compared to the waters west of this location which is rated at Moderate.

The risk of pest or disease incursion increases where;

- Fisher fails to report mortalities in Abalone
- Diseased abalone shells are returned to the water
- Fisher fails to monitor or react to mortalities
- And due to Fisheries Compliance having limited ability to monitor the transhipment of AVG infected fish


Note – Actions & Initiatives are addressed and delivered against the Recreational Fishery Compliance Plan

Illegal, Unreported, Unregulated harvesting of Abalone, by unlicensed fishers, is a direct risk to the commercial Abalone Fishery. Organised un-licensed fishing has a direct impact on the abalone biomass as Abalone that is taken outside of quote results in more abalone being taken from the water and therefore reduced egg production.

Unlicensed fishers often take abalone well below the legal minimum size which also has an impact on egg production. Unlicensed fishing can lead to localised depletion of abalone stocks as these groups or individuals often fish repeatedly in the same areas with little concern for long term sustainability.

The Central Zone Abalone Fishery continues to be an area targeted by organised groups of unlicenced fishers who take abalone in large quantities for the purpose of sale. Accessibility of abalone to shore makes the fishery particularly vulnerable to shore based diving.
6. 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 eg. Aquatic reserves
- More than one diver undertaking fishing activities at a time
- Failure to lodge SARDI catch and effort returns
- Inaccurate or misleading reporting of catch location and volume on SARDI Returns
- Taking non-permitted species (species not listed on Schedule)
- Taking protected species
- Assist / provide services to other agencies (ie 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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<td>2</td>
<td>3</td>
<td>4</td>
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</table>

### Likelihood Definitions:
- **Likely:** It is expected to occur
- **Occasional:** May occur
- **Possible:** Some evidence to suggest this is possible here
- **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 for this population.
- **Minor:** Possibly detectable, but minimal impact on population size and none on dynamics
- **Moderate:** Full exploitation rate, but long term recruitment / dynamics not adversely impacted
- **Severe:** Affecting recruitment levels of stocks / or their capacity to increase
- **Major:** Likely to cause local extinctions, if continued in longer term
- **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 the QMS 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 the QMS

Target Outcomes:

The following target outcomes have been identified:

- QMS integrity improved
- Minimise quota evasion
- Pest / Disease incursions reported
- Reduce / minimise take of undersize
### Risks

<table>
<thead>
<tr>
<th>Risks</th>
<th>Strategies</th>
<th>Coordination Team:</th>
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<tbody>
<tr>
<td>1 = Quota Management System Integrity</td>
<td>1 = Education &amp; Awareness</td>
<td>Abalone State Coordinator – Yolande Markey</td>
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<tr>
<td>2 = Quota Evasion</td>
<td>2 = Deterrence</td>
<td>Southern Ranger – Steven Kempster</td>
</tr>
<tr>
<td>3 = Pest / Disease incursion</td>
<td>3 = Enforcement</td>
<td>Abalone Fishery Policy Manager – Lianos Triantafillos</td>
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<tr>
<td>4 = Take Undersize</td>
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### Strategies

<table>
<thead>
<tr>
<th>Risks Addressed</th>
<th>Strategies</th>
<th>Initiative</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1 on 1 interactions</td>
<td>Update and distribute Fishery User Guide</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1 on 1 interactions</td>
<td>Meet with LH’s, RM’s and Fish Processors prior to season. Ensure all have a clear understanding of:</td>
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<tr>
<td>3</td>
<td>3</td>
<td>1 on 1 interactions</td>
<td>• Legislative changes impacting coming season</td>
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<td></td>
<td></td>
<td>• Compliance focus for coming season</td>
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<td></td>
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<td></td>
<td>• Fishers obligations in respect to completion of Part A of CDR</td>
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<td></td>
<td>• SARDI Catch &amp; Effort returns</td>
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<td></td>
<td>• Pest / disease incursion protocol</td>
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<td></td>
<td>Have interactions with LH’s, RM’s and Fish Processors throughout the season; ensure all remain clear on the rules and their obligations</td>
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<td>Industry Days</td>
<td>Have regular contact with SARDI, Policy, Industry Representatives and Stakeholders</td>
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<td>Industry Days</td>
<td>Prior to season commencing, communicate forthcoming Compliance focus</td>
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<tr>
<td></td>
<td></td>
<td>Industry Days</td>
<td>Attend Industry meetings. Communicate Industry performance. Raise Compliance issues in a timely manner</td>
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</tbody>
</table>

### Actions

- **Who:**
  - SC
  - FO’s

- **When:**
  - Pre-Season
  - Season
  - Ongoing
## Risks Addressed

<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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</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>Audit</td>
<td>Audits to include but not limited to:</td>
<td>Central</td>
<td>Season</td>
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<tr>
<td>x</td>
<td>x</td>
<td></td>
<td>• Identification of CDR irregularities</td>
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<td></td>
<td></td>
<td></td>
<td>• Monitor quota balance for exceeding catch</td>
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<td></td>
<td></td>
<td></td>
<td>• Checking to ensure CDR’s are completed fully</td>
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<td></td>
<td>• Ensure that audit points between Part A and Part B match accordingly</td>
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<td></td>
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<td></td>
<td>• Compare CDR data against Prior Reports to ID unreported fishing</td>
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<td></td>
<td>• Maintain appropriate business rules for CDR completion so that errors and/or anomalies are detected and followed up accordingly</td>
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<td></td>
<td>x</td>
<td>Field based inspections</td>
<td>Inspections at sea, landing, transit and at Fish Processor</td>
<td>Central, SR</td>
<td>Season</td>
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<tr>
<td>x</td>
<td>x</td>
<td>Regulatory review and revision</td>
<td>Contribute to amendment of legislation and policy where appropriate</td>
<td>SC</td>
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<tr>
<td>x</td>
<td>x</td>
<td>Media</td>
<td>Utilise media to update on successful prosecution outcomes and disease outbreaks</td>
<td>SC, PRSA Comm’s</td>
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<tr>
<td>x</td>
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<td>Intelligence</td>
<td>Collate and analyse information received through FISHWATCH and stakeholders</td>
<td>SC, Intel Analyst</td>
<td>Ongoing</td>
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<tr>
<td>x</td>
<td>x</td>
<td>Intelligence driven operations</td>
<td>Develop investigations and carry out targeted operations in line with the Serious Offence Plan</td>
<td>Central, SOG</td>
<td>As required</td>
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<tr>
<td>x</td>
<td>x</td>
<td>Address non-compliance</td>
<td>Investigate instances of non-compliance</td>
<td>FO’s</td>
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<tr>
<td>x</td>
<td>x</td>
<td></td>
<td>Take enforcement action including issue of Caution, Expiation and Brief</td>
<td>FO’s</td>
<td>As required</td>
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<tr>
<td>x</td>
<td>x</td>
<td>Brief Quality Assurance</td>
<td>Briefs of evidence meet evidentiary requirements and are vetted to ensure quality assurance</td>
<td>FO’s, PSC</td>
<td>As required</td>
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</table>

**Abbreviations:** FO (Fisheries Officer); Central (Central Region Compliance team); SR (Southern Ranger), 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)