A Risk Assessment of Compliance issues in the Northern Territory Spanish mackerel fishery

Objectives

- To identify and assess the severity of the compliance risks associated with commercial fishing activities undertaken in areas within the Northern Territory and provide justifications for the ranking assigned to each area;
- To identify specific compliance strategies in each area that could be undertaken to obviate the risks identified;
- To identify policy, management or legislative deficiencies with the fishery that may impact on the effectiveness of any compliance activities.

1. **Unlicensed commercial fishing in a fully allocated fishery (exceeding the catch share)**

CONSEQUENCE 2

LIKELIHOOD 2

RISK 4

Justification & Compliance strategies: The threat of unlicensed commercial fishing has not been recognized and is unlikely to cause inequity between fishers and a devaluing of the fishery. The threat has been identified and current precautionary management strategies, low licence numbers and annual review of sector catches are considered adequate at this time.

2. **Illegal foreign fishing**

CONSEQUENCE 2

LIKELIHOOD 4

RISK 6

Justification & Compliance strategies: The threat of illegal foreign fishing occurs and is very likely to cause not only gross inequity between fishers and a devaluing of the fishery, and is a moderate threat to the sustainability of the fishery. To date, catches found on board apprehended vessels has contained little Spanish mackerel but this could change rapidly as availability of other target species decline. The probable apprehension

of foreign vessels by compliance officers remains low; therefore this area has been identified as a high priority risk by all Commonwealth, State and Territory enforcement agencies. This is the responsibility of the Commonwealth, it should be clearly stated that the Commonwealth and in particular AFMA have responsibility for this threat. The issue has been raised by the NT Government at a Federal level.

3. **Remote port transshipping**

CONSEQUENCE 2

LIKELIHOOD 3

RISK 6

Justification & Compliance strategies: The threat of remote port transshipping may be possible and is likely to cause inequity between fishers and a devaluing of the fishery. However, the Territory has a limited number of accessible boat ramps in more remote parts but the freight costs would be prohibitive for any large scale transshipping to occur on a regular basis.

4. **High grading/selective retention**

CONSEQUENCE 2

LIKELIHOOD 1

RISK 3

Justification & Compliance strategies: The threat of high grading or selective retention is unlikely to occur as there are no size limits or individual catch quotas applicable to the fishery. At present, the fishery has not attained the MSY of the principal species, Spanish mackerel so only presents a moderate threat to sustainability. The fishery has an observer program and there have been no recorded instances of high grading or selective retention noted.

5. **Non reporting of protected species interaction**

CONSEQUENCE 1

LIKELIHOOD 2

RISK 2

Justification & Compliance strategies: The non-reporting of protected species is may occur but is unlikely to be an immediate or irreversible threat to species sustainability. The low number of operators and the extremely targeted fishing practices provide little opportunity for interaction with threatened, endangered or protected species. This problem has previously been identified and steps taken to assist fishers in identifying and simplifying reporting procedures. Identification booklets have been distributed and the reporting numbers are now printed on the fishers' logbook return sheets. In addition, new logbooks are being developed to assist in the easy recording of protected species interactions, with a listing of major species that fishers may be likely to come into contact with. Reporting procedures have been clarified by DEH and fishers can now report interactions on their compulsory logbook returns.

6. **Fishing outside authorized zone (closed waters offences)**

CONSEQUENCE 0

LIKELIHOOD 1

RISK 0

Justification & Compliance strategies: The threat of fishing outside the fishery zone is not likely to cause inequity between fishers or a devaluing of the fishery. The fishery area includes all waters seaward of the coast out to the AFZ. The seagoing capacity of the vessels involved in the fleet restricts fishers from traveling up rivers and creeks. These areas are not a preferred location for mackerel species.

7. **Non reporting of commercial species/failure to complete and lodge log books and returns**

CONSEQUENCE 1

LIKELIHOOD 3

RISK 3

Justification & Compliance strategies: The threat of non reporting and failure to complete returns or lodge returns is possible and is likely to cause inequity between fishers and a devaluing of the fishery. This threat has previously been identified and measures are now in place to ensure fishers correctly fill in logbook returns and lodge them in a timely manner. Management responses to ensure compliance are in place.

8. **Illegal Shark finning**

CONSEQUENCE 1

LIKELIHOOD 1

RISK 1

Justification & Compliance strategies: The threat of shark finning offences is not expected to occur and is unlikely to cause gross inequity between fishers or a devaluing of the shark fishery. The Spanish mackerel fishery has a nil take of shark, rays or shark products. This area has been identified and compliance checks are carried out regularly when vessels return to port and adherence to policy is monitored during observer voyages.

9. **Illegal gear**

CONSEQUENCE 0

LIKELIHOOD 2

RISK 0

Justification & Compliance strategies: The threat of gear offences may occur but is unlikely to cause gross inequity between fishers and a devaluing of the fishery. The gears used to target Spanish mackerel are selective and there are currently no restrictions on the number of lines permitted for use. This area has been identified and compliance checks are carried out regularly when vessels return to port. There have been no observed gear breaches noted for the fishery.

ASSESSING RISK

The overall risk level for each hazard is generally calculated as the mathematical product of the consequence and likelihood levels (Risk = Consequence x Likelihood). From this product, which is called the *Risk Value*, each issue can be assigned a *Risk Ranking*, depending upon where a risk value falls within one of a number of predetermined categories.

Table 1 The General Consequence Table

Level	General
Negligible (0)	No immediate threat to the sustainability of a fishery No immediate threat to the value of the fishery Is highly unlikely to cause inequity between fishers.
Low (1)	Minor localised threat to the sustainability of a fishery, reversible damage Minor localised threat to the value of the fishery, reversible damage Can possibly cause inequity between fishers
Moderate (2)	Moderate threat to the sustainability of a fishery, immediate and downstream Moderate threat to the value of the fishery Is very likely to cause inequity between fishers
High (3)	Immediate or irreversible threat to the sustainability of a fishery Immediate or irreversible threat to the value of a fishery Gross inequity between fishers Image of industry or PMES threatened.

Likelihood Table

The Likelihood Table that was developed also has qualitative criteria that range from 'remote' to 'likely'.

Table 2 Likelihood Definitions

Level	Descriptor
Remote (1)	Never heard of, but not impossible
Rare (2)	May occur in exceptional circumstances
Possible (3)	Some evidence to suggest this is possible here
Likely (4)	It is expected to occur

Table 3 Risk Matrix – numbers in cells indicate risk value, the colours/shades indicate risk ranking

		Consequence			
		Negligible	**Low**	**Moderate**	**High**
Likelihood		**0**	**1**	**2**	**3**
Remote	**1**	0	1	2	3
Rare	**2**	0	2	4	6
Possible	**3**	0	3	6	9
Likely	**4**	0	4	8	12

Risk Rating Table

The matrix shown in Table 3 shows the resultant risk values, based upon the arithmetical calculation of the Consequence x Likelihood (0-12). These risk values have been separated into three risk ranking categories from 'negligible' risk to 'extreme' risk.

Table 4 Suggested Risk Rankings and Outcomes

Risk Rankings	**Risk Values**	**Likely management response**	**Likely reporting requirements**
Negligible / Acceptable	0	Nil	Short justification only
Moderate management required	1 - 6	Specific compliance strategies required	Full performance report
Extreme / Unacceptable	7 - 12	Likely additional compliance activities needed	Full performance report