

Final modified assessment tree

The scope of the fishery contains greenlip abalone (*Haliotis laevis*) broodstock which are commercially harvested and relocated to a hatchery. The resulting juveniles are grown in a land-based facility before being transported to grow-out sites and released at Flinders Bay, Western Australia where they are grown on artificial habitat. There is no additional feed or nutrients used at the site besides naturally growing or drifting seaweed.

This scope is not covered in Annexes SB or SC, therefore we propose to include additional PIs in the assessment tree which will assess the impacts relative to genetics and translocation. We propose to vary the default tree to add PIs as well as some word changes to the PIs. The changes have now been reviewed as part of the 60 day consultation on the ACDR report. No comments were received and therefore the modified assessment tree has been confirmed and posted on the MSC website according to FCP v2.2 7.12.5h.

The additional PIs we are proposing to include are:

- PI 1.1.3; Genetics Outcome – weight: 0.333
- PI 1.2.5; Genetics Management – weight: 0.167
- PI 1.2.6; Genetics Information – weight: 0.167
- PIs 2.4.1-2.4.3 include “enhancement activity” in PI wording – weight: 0.333 (unchanged)
- PIs 2.5.1-2.5.3 include “enhancement activity” in PI wording – weight: 0.333 (unchanged)
- PI 2.6.1; Translocation component Outcome – weight: 0.333
- PI 2.6.2; Translocation component Management – weight: 0.333
- PI 2.6.3; Translocation component Information – weight: 0.333
- PI 3.1.3; “enhancement activity” in PI wording – weight: 0.333 (unchanged)
- PI 3.2.1; “enhancement activity” in PI wording – weight: 0.333 (unchanged)
- PI 3.2.2; “enhancement activity” in PI wording – weight: 0.333 (unchanged)
- PI 3.2.3; “enhancement activity” in PI wording – weight: 0.333 (unchanged)
- PI 3.2.4; “enhancement activity” in PI wording – weight: 0.333 (unchanged)

Overview:

Principle	Component	Performance Indicator (PI)	
One	Outcome	1.1.1	Stock status
		1.1.3	Genetic outcome
	Management	1.2.1	Harvest strategy
		1.2.2	Harvest control rules & tools
		1.2.3	Information & monitoring
		1.2.4	Assessment of stock status
		1.2.5	Genetic management
		1.2.6	Genetic Information
Two	Primary species	2.1.1	Outcome

		2.1.2	Management strategy
		2.1.3	Information/Monitoring
	Secondary species	2.2.1	Outcome
		2.2.2	Management strategy
		2.2.3	Information/Monitoring
	ETP species	2.3.1	Outcome
		2.3.2	Management strategy
		2.3.3	Information strategy
	Habitats	2.4.1	Outcome
		2.4.2	Management strategy
		2.4.3	Information
	Ecosystem	2.5.1	Outcome
		2.5.2	Management
		2.5.3	Information
	Translocation	2.6.1	Outcome
		2.6.2	Management
		2.6.3	Information
Three	Governance and policy	3.1.1	Legal &/or customary framework
		3.1.2	Consultation, roles & responsibilities
		3.1.3	Long term objectives
	Fishery specific management system	3.2.1	Fishery specific objectives
		3.2.2	Decision making processes
		3.2.3	Compliance & enforcement
		3.2.4	Monitoring & management performance evaluation

Full assessment tree and Performance Indicators (PIs) and scoring guideposts

Principle 1

PI 1.1.1 – Stock status (unchanged)

PI 1.1.1		The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing		
Scoring Issue		SG 60	SG 80	SG 100
a	Stock status relative to recruitment impairment			
	Guide post	It is likely that the stock is above the point where recruitment would be impaired (PRI).	It is highly likely that the stock is above the PRI.	There is a high degree of certainty that the stock is above the PRI.
b	Stock status in relation to achievement of Maximum Sustainable Yield (MSY)			
	Guide post		The stock is at or fluctuating around a level consistent with MSY.	There is a high degree of certainty that the stock has been fluctuating around a level consistent with MSY or has been above this level over recent years.

PI 1.1.2 – Stock rebuilding (unchanged)

PI 1.1.2		Where the stock is reduced, there is evidence of stock rebuilding within a specified timeframe		
Scoring Issue		SG 60	SG 80	SG 100
a	Rebuilding timeframes			
	Guide post	A rebuilding timeframe is specified for the stock that is the shorter of 20 years or 2 times its generation time . For cases where 2 generations is less than 5 years, the rebuilding timeframe is up to 5 years.		The shortest practicable rebuilding timeframe is specified which does not exceed one generation time for the stock.
b	Rebuilding evaluation			
	Guide post	Monitoring is in place to determine whether the rebuilding strategies are effective in rebuilding the stock within the specified timeframe.	There is evidence that the rebuilding strategies are rebuilding stocks, or it is likely based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the specified timeframe .	There is strong evidence that the rebuilding strategies are rebuilding stocks, or it is highly likely based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the specified timeframe .

PI 1.1.3 – Genetics outcome

PI 1.1.3		The fishery has negligible discernible impact on the genetic structure of the population		
Scoring Issue		SG 60	SG 80	SG 100
a	Genetic impact of enhancement activity			
	Guide post	The fishery is unlikely to impact genetic structure of wild populations to a point	The fishery is highly unlikely to impact genetic structure of wild populations to a	An independent peer-reviewed scientific assessment confirms with a high degree of

		where there would be serious or irreversible harm	point where there would be serious or irreversible harm.	certainty that there are no risks to the genetic structure of the wild population associated with the enhancement activity.
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PI 1.2.1 – Harvest strategy (unchanged)

PI 1.2.1		There is a robust and precautionary harvest strategy in place		
Scoring Issue		SG 60	SG 80	SG 100
a	Harvest strategy design			
	Guide post	The harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in PI 1.1.1 SG80.
b	Harvest strategy evaluation			
	Guide post	The harvest strategy is likely to work based on prior experience or plausible argument.	The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives.	The performance of the harvest strategy has been fully evaluated and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.
c	Harvest strategy monitoring			
	Guide post	Monitoring is in place that is expected to determine whether the harvest strategy is working.		
d	Harvest strategy review			
	Guide post	The harvest strategy is periodically reviewed and improved as necessary.		
e	Shark finning			

	Guide post	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.
f	Review of alternative measures			
	Guide post	There has been a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock and they are implemented as appropriate.	There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock, and they are implemented, as appropriate.

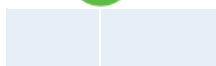
PI 1.2.2 – Harvest control rules and tools (unchanged)

PI 1.2.2		There are well defined and effective harvest control rules (HCRs) in place		
Scoring Issue		SG 60	SG 80	SG 100
a	HCRs design and application			
	Guide post	Generally understood HCRs are in place or available that are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock fluctuating at or above a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, most of the time.
b	HCRs robustness to uncertainty			
	Guide post		The HCRs are likely to be robust to the main uncertainties.	The HCRs take account of a wide range of uncertainties including the ecological role of the stock, and there is evidence that the HCRs are robust to the main uncertainties.

HCRs evaluation				
C	Guide post	There is some evidence that tools used or available to implement HCRs are appropriate and effective in controlling exploitation.	Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	Evidence clearly shows that the tools in use are effective in achieving the exploitation levels required under the HCRs.

PI 1.2.3 – Information and monitoring (unchanged)

PI 1.2.3		Relevant information is collected to support the harvest strategy		
Scoring Issue		SG 60	SG 80	SG 100
a	Range of information			
	Guide post	Some relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.	A comprehensive range of information (on stock structure, stock productivity, fleet composition, stock abundance, UoA removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
b	Monitoring			
	Guide post	Stock abundance and UoA removals are monitored and at least one indicator is available and monitored with sufficient frequency to support the harvest control rule.	Stock abundance and UoA removals are regularly monitored at a level of accuracy and coverage consistent with the harvest control rule , and one or more indicators are available and monitored with sufficient frequency to support the harvest control rule.	All information required by the harvest control rule is monitored with high frequency and a high degree of certainty, and there is a good understanding of inherent uncertainties in the information [data] and the robustness of assessment and management to this uncertainty.
C	Comprehensiveness of information			
	Guide post	There is good information on all other fishery		



removals from the stock.

PI 1.2.4 – Assessment of stock status (unchanged)

PI 1.2.4		There is an adequate assessment of the stock status		
Scoring Issue		SG 60	SG 80	SG 100
a	Appropriateness of assessment to stock under consideration			
	Guide post		The assessment is appropriate for the stock and for the harvest control rule.	The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA.
b	Assessment approach			
	Guide post	The assessment estimates stock status relative to generic reference points appropriate to the species category.	The assessment estimates stock status relative to reference points that are appropriate to the stock and can be estimated.	
c	Uncertainty in the assessment			
	Guide post	The assessment identifies major sources of uncertainty.	The assessment takes uncertainty into account.	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a probabilistic way.
d	Evaluation of assessment			
	Guide post			The assessment has been tested and shown to be robust. Alternative hypotheses and assessment approaches have been rigorously explored.
e	Peer review of assessment			
	Guide post		The assessment of stock status is subject to peer review.	The assessment has been internally and externally peer reviewed.

PI 1.2.5 – Genetics management

PI 1.2.5		There is a strategy in place for managing the hatchery enhancement activity such that it does not pose a risk of serious or irreversible harm to the genetic diversity of the wild population		
Scoring Issue		SG 60	SG 80	SG 100
a	Genetic management strategy in place			
	Guide post	There are measures in place, if necessary, which are expected to maintain the genetic structure of the population at levels compatible with the SG80 Genetic outcome level of performance (PI 1.1.3).	There is a partial strategy in place, if necessary, which is expected to maintain the genetic structure of the population at levels compatible with the SG80 Genetic outcome level of performance (PI 1.1.3).	There is a strategy in place to maintain the genetic structure of the population at levels compatible with the SG80 Genetic outcome level of performance (PI 1.1.3).
b	Genetic management strategy evaluation			
	Guide post	The measures are considered likely to work based on plausible argument (e.g. general experience, theory, or comparison with similar fisheries/species).	There is some objective basis for confidence that the partial strategy will work based on information directly relevant to the population(s) involved.	The strategy is based on in-depth knowledge of the genetic structure of the population, and testing supports high confidence that the strategy will work.
c	Genetic management strategy implementation			
	Guide post		There is some evidence that the partial strategy is being implemented successfully, if necessary.	There is clear evidence that the strategy is being implemented successfully . There is some evidence that the strategy is achieving its overall objective .

PI 1.2.6 – Genetics information

PI 1.2.6		Information on the genetic structure of the population is adequate to determine the risk posed by the enhancement activity and the effectiveness of the management of genetic diversity		
Scoring Issue		SG 60	SG 80	SG 100
a	Information quality			
	Guide post	Qualitative or inferential information is available on the genetic	Qualitative or inferential information and some quantitative	The genetic structure of the population is understood in detail .

		structure of the population Information is adequate to broadly understand the likely impact of hatchery enhancement.	information are available on the genetic structure of the population. Information is sufficient to estimate the likely impact of hatchery enhancement.	Information is sufficient to estimate the impact of hatchery enhancement with a high degree of certainty .
Information adequacy for genetic management strategy				
b	Guide post	Information is adequate to support measures to manage main genetic impacts of the enhancement activity on the stock, if necessary.	Information is adequate to support a partial strategy to manage the main genetic impacts of the enhancement activity on the stock, if necessary.	Information is adequate to support a comprehensive strategy to manage the genetic impacts of the enhancement activity on the stock and evaluate with a high degree of certainty whether the strategy is achieving its objective.

Principle 2

PI 2.1.1 – Primary species outcome (unchanged)

PI 2.1.1		The UoA aims to maintain primary species above the point where recruitment would be impaired (PRI) and does not hinder recovery of primary species if they are below the PRI		
Scoring Issue		SG 60	SG 80	SG 100
a	Main primary species stock status			
	Guid e post	Main primary species are likely to be above the PRI.	Main primary species are highly likely to be above the PRI.	There is a high degree of certainty that main primary species are above the PRI and are fluctuating around a level consistent with MSY.
		OR	OR	
	Guid e post	If the species is below the PRI, the UoA has measures in place that are expected to ensure that the UoA does not hinder recovery and rebuilding.	If the species is below the PRI, there is either evidence of recovery or a demonstrably effective strategy in place between all MSC UoAs which categorise this species as main , to ensure that they collectively do not hinder recovery and rebuilding.	

b	Minor primary species stock status		
	Guide post		<p>Minor primary species are highly likely to be above the PRI.</p> <p>OR</p> <p>If below the PRI, there is evidence that the UoA does not hinder the recovery and rebuilding of minor primary species.</p>

PI 2.1.2 – Primary species management strategy (unchanged)

PI 2.1.2		There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guid e post	There are measures in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to be above the PRI.	There is a partial strategy in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the PRI.	There is a strategy in place for the UoA for managing main and minor primary species.
b	Management strategy evaluation			
	Guid e post	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the fishery and/or species involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved.
c	Management strategy implementation			

			There is some evidence that the measures/partial strategy is being implemented successfully .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its overall objective as set out in scoring issue (a) .
d	Shark finning			
	Guide post	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.
e	Review of alternative measures			
	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species and they are implemented as appropriate.	There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all primary species, and they are implemented, as appropriate.

PI 2.1.3 – Primary species information (unchanged)

PI 2.1.3		Information on the nature and extent of primary species is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage primary species		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impact on main primary species			
	Guide post	Qualitative information is adequate to estimate the impact of the UoA on the main primary species with respect to status. OR If RBF is used to score PI 2.1.1 for the UoA:	Some quantitative information is available and is adequate to assess the impact of the UoA on the main primary species with respect to status. OR	Quantitative information is available and is adequate to assess with a high degree of certainty the impact of the UoA on main primary species with respect to status.

		Qualitative information is adequate to estimate productivity and susceptibility attributes for main primary species.	If RBF is used to score PI 2.1.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes for main primary species.
b	Information adequacy for assessment of impact on minor primary species		
	Guide post		Some quantitative information is adequate to estimate the impact of the UoA on minor primary species with respect to status.
c	Information adequacy for management strategy		
	Guide post	Information is adequate to support measures to manage main primary species.	Information is adequate to support a partial strategy to manage main primary species. Information is adequate to support a strategy to manage all primary species, and evaluate with a high degree of certainty whether the strategy is achieving its objective.

PI 2.2.1 – Secondary species outcome (unchanged)

PI 2.2.1		The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit		
Scoring Issue		SG 60	SG 80	SG 100
a	Main secondary species stock status			
	Guide post	<p>Main secondary species are likely to be above biologically based limits.</p> <p>OR</p> <p>If below biologically based limits, there are measures in place expected to ensure that the UoA does not hinder recovery and rebuilding.</p>	<p>Main secondary species are highly likely to be above biologically based limits.</p> <p>OR</p> <p>If below biologically based limits, there is either evidence of recovery or a demonstrably effective partial strategy in place such that the UoA does not hinder recovery and rebuilding.</p> <p>AND</p>	<p>There is a high degree of certainty that main secondary species are above biologically based limits.</p>

		Where catches of a main secondary species outside of biological limits are considerable , there is either evidence of recovery or a, demonstrably effective strategy in place between those MSC UoAs that have considerable catches of the species , to ensure that they collectively do not hinder recovery and rebuilding.
b	Minor secondary species stock status	
	Guide post	<p>Minor secondary species are highly likely to be above biologically based limits.</p> <p>OR</p> <p>If below biologically based limits', there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species</p>

PI 2.2.2 – Secondary species management strategy (unchanged)

PI 2.2.2		There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are measures in place, if necessary, which are expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a partial strategy in place, if necessary, for the UoA that is expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a strategy in place for the UoA for managing main and minor secondary species.
b	Management strategy evaluation			

	Guide post	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).	There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the UoA and/or species involved.
c	Management strategy implementation			
	Guide post		There is some evidence that the measures/partial strategy is being implemented successfully .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its objective as set out in scoring issue (a) .
d	Shark finning			
	Guide post	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.
e	Review of alternative measures to minimise mortality of unwanted catch			
	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main secondary species.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main secondary species and they are implemented as appropriate.	There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species, and they are implemented, as appropriate.

PI 2.2.3 – Secondary species information (unchanged)

PI 2.2.3		Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impacts on main secondary species			
	Guide post	<p>Qualitative information is adequate to estimate the impact of the UoA on the main secondary species with respect to status.</p> <p>OR</p> <p>If RBF is used to score PI 2.2.1 for the UoA:</p> <p>Qualitative information is adequate to estimate productivity and susceptibility attributes for main secondary species.</p>	<p>Some quantitative information is available and adequate to assess the impact of the UoA on main secondary species with respect to status.</p> <p>OR</p> <p>If RBF is used to score PI 2.2.1 for the UoA:</p> <p>Some quantitative information is adequate to assess productivity and susceptibility attributes for main secondary species.</p>	<p>Quantitative information is available and adequate to assess with a high degree of certainty the impact of the UoA on main secondary species with respect to status.</p>
b	Information adequacy for assessment of impacts on minor secondary species			
	Guide post			<p>Some quantitative information is adequate to estimate the impact of the UoA on minor secondary species with respect to status.</p>
c	Information adequacy for management strategy			
	Guide post	<p>Information is adequate to support measures to manage main secondary species.</p>	<p>Information is adequate to support a partial strategy to manage main secondary species.</p>	<p>Information is adequate to support a strategy to manage all secondary species, and evaluate with a high degree of certainty whether the strategy is achieving its objective.</p>

PI 2.3.1 – ETP species outcome (unchanged)

PI 2.3.1		The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Effects of the UoA on population/stock within national or international limits, where applicable			
	Guide post	Where national and/or international requirements set limits for ETP species, the effects of the UoA on the population/ stock are known and likely to be within these limits.	Where national and/or international requirements set limits for ETP species, the combined effects of the MSC UoAs on the population /stock are known and highly likely to be within these limits.	Where national and/or international requirements set limits for ETP species, there is a high degree of certainty that the combined effects of the MSC UoAs are within these limits.
b	Direct effects			
	Guide post	Known direct effects of the UoA are likely to not hinder recovery of ETP species.	Direct effects of the UoA are highly likely to not hinder recovery of ETP species.	There is a high degree of confidence that there are no significant detrimental direct effects of the UoA on ETP species.
c	Indirect effects			
	Guide post		Indirect effects have been considered for the UoA and are thought to be highly likely to not create unacceptable impacts.	There is a high degree of confidence that there are no significant detrimental indirect effects of the UoA on ETP species.

PI 2.3.2 – ETP species management strategy (unchanged)

PI 2.3.2		The UoA has in place precautionary management strategies designed to: - meet national and international requirements; - ensure the UoA does not hinder recovery of ETP species. Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place (national and international requirements)			
	Guide post	There are measures in place that minimise the UoA-related mortality	There is a strategy in place for managing the UoA's impact on ETP	There is a comprehensive strategy in place for

		of ETP species, and are expected to be highly likely to achieve national and international requirements for the protection of ETP species.	species, including measures to minimise mortality, which is designed to be highly likely to achieve national and international requirements for the protection of ETP species.	managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to achieve above national and international requirements for the protection of ETP species.
Management strategy in place (alternative)				
b	Guide post	There are measures in place that are expected to ensure the UoA does not hinder the recovery of ETP species.	There is a strategy in place that is expected to ensure the UoA does not hinder the recovery of ETP species.	There is a comprehensive strategy in place for managing ETP species, to ensure the UoA does not hinder the recovery of ETP species.
Management strategy evaluation				
c	Guide post	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is an objective basis for confidence that the measures/strategy will work, based on information directly about the fishery and/or the species involved.	The strategy/comprehensive strategy is mainly based on information directly about the fishery and/or species involved, and a quantitative analysis supports high confidence that the strategy will work.
Management strategy implementation				
d	Guide post		There is some evidence that the measures/strategy is being implemented successfully.	There is clear evidence that the strategy/comprehensive strategy is being implemented successfully and is achieving its objective as set out in scoring issue (a) or (b).
Review of alternative measures to minimise mortality of ETP species				
e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species and they are implemented as appropriate.	There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality ETP species, and they are implemented, as appropriate.

PI 2.3.3 – ETP species information (unchanged)

PI 2.3.3		Relevant information is collected to support the management of UoA impacts on ETP species, including: <ul style="list-style-type: none"> - Information for the development of the management strategy; - Information to assess the effectiveness of the management strategy; and - Information to determine the outcome status of ETP species 		
Scoring Issue		SG 60	SG 80	SG 100
a	Information adequacy for assessment of impacts			
	Guide post	<p>Qualitative information is adequate to estimate the UoA related mortality on ETP species.</p> <p>OR</p> <p>If RBF is used to score PI 2.3.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for ETP species.</p>	<p>Some quantitative information is adequate to assess the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species.</p> <p>OR</p> <p>If RBF is used to score PI 2.3.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes for ETP species.</p>	<p>Quantitative information is available to assess with a high degree of certainty the magnitude of UoA-related impacts, mortalities and injuries and the consequences for the status of ETP species.</p>
b	Information adequacy for management strategy			
	Guide post	<p>Information is adequate to support measures to manage the impacts on ETP species.</p>	<p>Information is adequate to measure trends and support a strategy to manage impacts on ETP species.</p>	<p>Information is adequate to support a comprehensive strategy to manage impacts, minimise mortality and injury of ETP species, and evaluate with a high degree of certainty whether a strategy is achieving its objectives.</p>

PI 2.4.1 – Habitats outcome

PI 2.4.1		The UoA and its associated enhancement activities do not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates		
Scoring Issue		SG 60	SG 80	SG 100
a	Commonly encountered habitat status			
	Guide post	The UoA is unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	The UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	There is evidence that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.
b	VME habitat status			
	Guide post	The UoA is unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	The UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.	There is evidence that the UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.
c	Minor habitat status			
	Guide post			There is evidence that the UoA is highly unlikely to reduce structure and function of the minor habitats to a point where there would be serious or irreversible harm.

PI 2.4.2 – Habitats management

PI 2.4.2		There is a strategy in place that is designed to ensure the UoA and associated enhancement activities do not pose a risk of serious or irreversible harm to the habitats		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are measures in place, if necessary, that are expected to achieve	There is a partial strategy in place, if necessary, that is expected to achieve the	There is a strategy in place for managing the impact of all MSC UoAs/non-MSC fisheries

		the Habitat Outcome 80 level of performance.	Habitat Outcome 80 level of performance or above.	UoA and associated enhancement activities on habitats.
b	Management strategy evaluation			
	Guide post	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/ enhancement activities/habitats).	There is some objective basis for confidence that the measures/partial strategy will work, based on information directly about the UoA, enhancement activities and/or habitats involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the UoA, enhancement activities and/or habitats involved.
c	Management strategy implementation			
	Guide post		There is some quantitative evidence that the measures/partial strategy is being implemented successfully.	There is clear quantitative evidence that the partial strategy/strategy is being implemented successfully and is achieving its objective, as outlined in scoring issue (a).
d	Compliance with management requirements and other MSC UoAs'/non-MSC fisheries' measures to protect VMEs			
	Guide post	There is qualitative evidence that the UoA complies with its management requirements to protect VMEs.	There is some quantitative evidence that the UoA and associated enhancement activities comply with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.	There is clear quantitative evidence that the UoA and associated enhancement activities comply with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.

PI 2.4.3 – Habitats information

PI 2.4.3		Information is adequate to determine the risk posed to the habitat by the UoA and associated enhancement activities and the effectiveness of the strategy to manage impacts on the habitat		
Scoring Issue		SG 60	SG 80	SG 100
a	Information quality			
	Guide post	The types and distribution of the main habitats are broadly understood .	The nature, distribution and vulnerability of the main habitats in the UoA area are known at a level of detail relevant to the	The distribution of all habitats is known over their range, with particular attention to the

		<p>OR</p> <p>If CSA is used to score PI 2.4.1 for the UoA: Qualitative information is adequate to estimate the types and distribution of the main habitats.</p>	<p>scale and intensity of the UoA.</p> <p>OR</p> <p>If CSA is used to score PI 2.4.1 for the UoA: Some quantitative information is available and is adequate to estimate the types and distribution of the main habitats.</p>	<p>occurrence of vulnerable habitats.</p>
Information adequacy for assessment of impacts				
b	Guide post	<p>Information is adequate to broadly understand the nature of the main impacts of gear use and enhancement activities on the main habitats, including spatial overlap of habitat with fishing gear.</p> <p>OR</p> <p>If CSA is used to score PI 2.4.1 for the UoA: Qualitative information is adequate to estimate the consequence and spatial attributes of the main habitats.</p>	<p>Information is adequate to allow for identification of the main impacts of the UoA and enhancement activities on the main habitats, and there is reliable information on the spatial extent of interaction and on the timing and location of use of the fishing gear.</p> <p>OR</p> <p>If CSA is used to score PI 2.4.1 for the UoA: Some quantitative information is available and is adequate to estimate the consequence and spatial attributes of the main habitats.</p>	<p>The physical impacts of the gear and enhancement activities on all habitats have been quantified fully.</p>
Monitoring				
c	Guide post		<p>Adequate information continues to be collected to detect any increase in risk to the main habitats.</p>	<p>Changes in all habitat distributions over time are measured.</p>

PI 2.5.1 – Ecosystem outcome

PI 2.5.1	The UoA and associated enhancement activities do not cause serious or irreversible harm to the key elements of ecosystem structure and function		
Scoring Issue	SG 60	SG 80	SG 100

a	Ecosystem status			
	Guide post	The UoA is unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	The UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	There is evidence that the UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.
b	Impacts due to enhancement			
	Guide post	Enhancement activities are unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	Enhancement activities are highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	There is evidence that the enhancement activities are highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.

PI 2.5.2 – Ecosystem management

PI 2.5.2		There are measures in place to ensure the UoA and enhancement activities do not pose a risk of serious or irreversible harm to ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
a	Management strategy in place			
	Guide post	There are measures in place, if necessary which take into account the potential impacts of the UoA on key elements of the ecosystem.	There is a partial strategy in place, if necessary, which takes into account available information and is expected to restrain impacts of the UoA on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.	There is a strategy that consists of a plan , in place which contains measures to address all main impacts of the UoA on the ecosystem, and at least some of these measures are in place.
b	Management strategy evaluation			
	Guide post	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar UoA/ ecosystems).	There is some objective basis for confidence that the measures/ partial strategy will work, based on some information directly about the UoA and/or	Testing supports high confidence that the partial strategy/ strategy will work, based on information directly about the UoA and/or ecosystem involved.

		the ecosystem involved.	
C	Management strategy implementation		
	Guide post	There is some evidence that the measures/partial strategy is being implemented successfully .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its objective as set out in scoring issue (a) .
d	Management of enhancement activities		
	Guide post	There is an established artificial production strategy in place that is expected to achieve the Ecosystem Outcome 60 level of performance.	There is a tested and evaluated artificial production strategy with sufficient monitoring in place and evidence is available to reasonably ensure with high likelihood that the strategy is effective in achieving the Ecosystem Outcome 80 level of performance.
			There is a comprehensive and fully evaluated artificial production strategy to verify with certainty that the Ecosystem Outcome 100 level of performance.

PI 2.5.3 – Ecosystem information

PI 2.5.3	There is adequate knowledge of the impacts of the UoA and associated enhancement activities on the ecosystem		
Scoring Issue	SG 60	SG 80	SG 100
a	Information quality		
	Guide post	Information is adequate to identify the key elements of the ecosystem.	Information is adequate to broadly understand the key elements of the ecosystem.
b	Investigation of UoA impacts		
	Guide post	Main impacts of the UoA and associated enhancement activities on these key ecosystem elements can be inferred from existing information, and have not been	Main interactions between the UoA and associated enhancement activities and these ecosystem elements can be inferred from existing information, and have

		investigated in detail.	investigated in detail.	been investigated in detail.
c	Understanding of component functions			
	Guide post		The main functions of the components (i.e., P1 target species, primary, secondary and ETP species and Habitats) in the ecosystem are known .	The impacts of the UoA and associated enhancement activities on P1 target, primary, secondary and ETP species and Habitats are identified and the main functions of these components in the ecosystem are understood .
d	Information relevance			
	Guide post		Adequate information is available on the impacts of the UoA and associated enhancement activities on these components to allow some of the main consequences for the ecosystem to be inferred.	Adequate information is available on the impacts of the fishery and associated enhancement activities on the components and elements to allow the main consequences for the ecosystem to be inferred.
e	Monitoring			
	Guide post		Adequate data continue to be collected to detect any increase in risk level.	Information is adequate to support the development of strategies to manage ecosystem impacts.

PI 2.6.1 – Translocation outcome

PI 2.6.1		The translocation activity has negligible discernible impact on the surrounding ecosystem		
Scoring Issue		SG 60	SG 80	SG 100
a	Impact of translocation activity			
	Guide post	The translocation activity is unlikely to introduce diseases, pests, pathogens, or non-native species (species not already established in the ecosystem) into the surrounding ecosystem.	The translocation activity is highly unlikely to introduce diseases, pests, pathogens, or non-native species into the surrounding ecosystem.	There is evidence that the translocation activity is highly unlikely to introduce diseases, pests, pathogens, or non-native species into the surrounding ecosystem.

PI 2.6.2 – Translocation management

PI 2.6.2		There is a strategy in place for managing translocations such that the fishery does not pose a risk of serious or irreversible harm to the surrounding ecosystem		
Scoring Issue		SG 60	SG 80	SG 100
a	Translocation management strategy in place			
	Guide post	There are measures in place which are expected to protect the surrounding ecosystem from the translocation activity at levels compatible with the SG80 Translocation outcome level of performance (PI 2.6.1).	There is a partial strategy in place, if necessary, that is expected to protect the surrounding ecosystem from the translocation activity at levels compatible the SG80 Translocation outcome level of performance (PI 2.6.1).	There is a strategy in place for managing the impacts of translocation on the surrounding ecosystem.
b	Translocation management strategy evaluation			
	Guide post	The measures are considered likely to work based on plausible argument (e.g. general experience, theory, or comparison with similar fisheries/species).	A valid documented risk assessment or equivalent environmental impact assessment demonstrates that the translocation activity is highly unlikely to introduce diseases, pests, pathogens, or non-native species into the surrounding ecosystem.	An independent peer-reviewed scientific assessment confirms with a high degree of certainty that there are no risks to the surrounding ecosystem associated with the translocation activity.
c	Translocation contingency measures			
	Guide post		Contingency measures have been agreed in the case of an accidental introduction of diseases, pests, pathogens, or non-native species due to the translocation.	A formalised contingency plan in the case of an accidental introduction of diseases, pests, pathogens, or non-native species due to the translocation is documented and available.

PI 2.6.3 – Translocation information

PI 2.6.3		Information on the impact of the translocation activity on the environment is adequate to determine the risk posed by the fishery		
Scoring Issue		SG 60	SG 80	SG 100
a	Information quality			
	Guide post	Information is available on the presence or absence of diseases, pests, pathogens, and non-native species at the source and destination of the translocated stock to guide the management strategy and reduce the risks associated with the translocation.	Information is sufficient to adequately inform the risk and impact assessments required in the SG80 Translocation management level of performance (PI 2.6.2).	Information from frequent and comprehensive monitoring demonstrates no impact from introduced diseases, pests, and non-native species with a high degree of certainty .

Principle 3

PI 3.1.1 – Legal and/or customary framework

PI 3.1.1		The management system exists within an appropriate legal and/or customary framework which ensures that it: <ul style="list-style-type: none"> - Is capable of delivering sustainability in the UoA(s); - Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and - Incorporates an appropriate dispute resolution framework 		
Scoring Issue		SG 60	SG 80	SG 100
a	Compatibility of laws or standards with effective management			
	Guid e post	There is an effective national legal system and a framework for cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	There is an effective national legal system and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.	There is an effective national legal system and binding procedures governing cooperation with other parties which delivers management outcomes consistent with MSC Principles 1 and 2.
b	Resolution of disputes			
	Guid e post	The management system incorporates or is subject by law	The management system incorporates or is subject by law	The management system incorporates or is subject by law to a transparent

		to a mechanism for the resolution of legal disputes arising within the system.	to a transparent mechanism for the resolution of legal disputes which is considered to be effective in dealing with most issues and that is appropriate to the context of the UoA.	mechanism for the resolution of legal disputes that is appropriate to the context of the fishery and has been tested and proven to be effective .
C	Respect for rights			
	Guide post	The management system has a mechanism to generally respect the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to observe the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to formally commit to the legal rights created explicitly or established by custom of people dependent on fishing for food and livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.

PI 3.1.2 – Consultation, roles and responsibilities

PI 3.1.2		The management system has effective consultation processes that are open to interested and affected parties The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties		
Scoring Issue		SG 60	SG 80	SG 100
a	Roles and responsibilities			
	Guide post	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are generally understood .	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interaction.	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for all areas of responsibility and interaction.
b	Consultation processes			

	Guide post	The management system includes consultation processes that obtain relevant information from the main affected parties, including local knowledge, to inform the management system.	The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information obtained.	The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information and explains how it is used or not used .
C	Participation			
	Guide post		The consultation process provides opportunity for all interested and affected parties to be involved.	The consultation process provides opportunity and encouragement for all interested and affected parties to be involved, and facilitates their effective engagement.

PI 3.1.3 – Long term objectives

PI 3.1.3	The management policy for the SMU and associated enhancement activities has clear long-term objectives to guide decision-making that are consistent with MSC fisheries standard, and incorporates the precautionary approach			
Scoring Issue	SG 60		SG 80	SG 100
a	Objectives			
	Guide post	Long-term objectives to guide decision-making, consistent with the MSC Fisheries Standard and the precautionary approach, are implicit within management policy.	Clear long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach are explicit within management policy.	Clear long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach, are explicit within and required by management policy.

PI 3.2.1 – Fishery-specific objectives

PI 3.2.1	The fishery-specific and associated enhancement management system(s) activities have clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2			
Scoring Issue	SG 60		SG 80	SG 100

Objectives				
a	Guide post			
		Objectives , which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are implicit within the fishery and associated enhancement management system(s).	Short and long-term objectives , which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery and associated enhancement management system(s).	Well defined and measurable short and long-term objectives , which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery and associated enhancement management system(s).

PI 3.2.2 – Decision-making processes

PI 3.2.2		The fishery-specific and associated enhancement management system includes effective decision-making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery		
Scoring Issue		SG 60	SG 80	SG 100
a	Decision-making processes			
	Guide post	There are some decision-making processes in place that result in measures and strategies to achieve the fishery-specific and enhancement objectives.	There are established decision-making processes that result in measures and strategies to achieve the fishery-specific and enhancement objectives.	
b	Responsiveness of decision-making processes			
	Guide post	Decision-making processes respond to serious issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take some account of the wider implications of decisions.	Decision-making processes respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	Decision-making processes respond to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.
c	Use of precautionary approach			
	Guide post		Decision-making processes use the precautionary approach and are	

		based on best available information.		
d	Accountability and transparency of management system and decision-making process			
	Guide post	Some information on the fishery's performance and management action is generally available on request to stakeholders.	Information on the fishery's performance and management action is available on request , and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.	Formal reporting to all interested stakeholders provides comprehensive information on the fishery's performance and management actions and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.
e	Approach to disputes			
	Guide post	Although the management authority or fishery may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability for the fishery.	The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges.	The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.

PI 3.2.3 – Compliance and enforcement

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery and associated enhancement activities are enforced and complied with		
Scoring Issue		SG 60	SG 80	SG 100
a	MCS implementation			
	Guide post	Monitoring, control and surveillance mechanisms exist, and are implemented in the fishery and associated enhancement activities and there is a	A monitoring, control and surveillance system has been implemented in the fishery and associated enhancement activities and has demonstrated an ability to enforce	A comprehensive monitoring, control and surveillance system has been implemented in the fishery and associated enhancement activities and has demonstrated

		reasonable expectation that they are effective.	relevant management measures, strategies and/or rules.	a consistent ability to enforce relevant management measures, strategies and/or rules.
b	Sanctions			
	Guide post	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.	Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide effective deterrence.
c	Compliance			
	Guide post	Fishers and hatchery operators are generally thought to comply with the management system for the fishery and associated enhancement activities under assessment, including, when required, providing information of importance to the effective management of the fishery.	Some evidence exists to demonstrate fishers and hatchery operators comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery and associated enhancement activities.	There is a high degree of confidence that fishers and hatchery operators comply with the management system under assessment, including, providing information of importance to the effective management of the fishery and associated enhancement activities.
d	Systematic non-compliance			
	Guide post	There is no evidence of systematic non-compliance.		

PI 3.2.4 – Monitoring and management performance evaluations

PI 3.2.4		There is a system of monitoring and evaluating the performance of the fishery-specific and enhancement management system(s) against its objectives There is effective and timely review of the fishery-specific and associated enhancement program(s) management system		
Scoring Issue		SG 60	SG 80	SG 100
a	Evaluation coverage			
	Guide post	The fishery and associated enhancement program(s) has in place mechanisms to evaluate some parts	The fishery and associated enhancement program(s) has in place mechanisms to evaluate key parts of	The fishery and associated enhancement program(s) has in place mechanisms to evaluate all parts of

		of the management system.	the management system.	the management system.
b	Internal and/or external review			
	Guide post	The fishery-specific and associated enhancement program(s) management system is subject to occasional internal review.	The fishery-specific and associated enhancement program(s) management system is subject to regular internal and occasional external review.	The fishery-specific and associated enhancement program(s) management system is subject to regular internal and external review.