

## **Scoring the Global Biodiversity Standard Assessment**

The Global Biodiversity Standard is a certification scheme for projects that successfully manage to improve biodiversity outcomes through ecological restoration. Applicants for certification by the Global Biodiversity Standard will be assessed according to eight (8) criteria:

- 1. Protect existing habitats and biodiversity.
- 2. Select appropriate areas and don't displace existing biodiverse habitats.
- 3. Manage biodiversity in consultation and partnership with local communities and stakeholders.
- 4. Aim to maximize biodiversity recovery through ecosystem restoration, including planting, natural regeneration and assisted natural regeneration.
- 5. Manage and reduce invasive or potentially invasive species.
- 6. As appropriate, use native species and incorporate threatened and rare species.
- 7. Promote genetic diversity and resilience.
- 8. Implement robust monitoring, evaluation, and adaptive management of biodiversity.

Each criterion is assessed with a score out of ten (10) points. An overall score out of ten (10) will be assigned to each project by taking the mean average score for each of the criteria. Global Biodiversity Standard certification will be awarded to a project based on attainment of the required score. This required score is to be decided following public consultation and testing of the Global Biodiversity Standard methodology.

For criterion one (1) that relates only to protected areas, scores are weighted according to the size of the protected areas assessed.

For the remaining criteria, scores for the following five land uses will be measured:

- Protected Areas
- Restoration Areas
- Agroforestry Areas
- Plantation Areas
- Agricultural Areas

For each of the criteria 2-8, scores for each land use will be averaged (mean), weighting the score according to the percentage area of the overall project that is represented by each land use. Assessments will be made based on:

- 1. Information provided through the online application form;
- 2. Remote sensing analysis;
- 3. Field-based rapid biodiversity assessments undertaken at assessment locations within the overall project area.

The number of assessment locations that will be visited and assessed by the Global Biodiversity Standard will be proportional to the area for each land use:



Area (hectares)	Number of assessment
	locations
Less than five hectares (<5 ha)	One (1)
Between five and fifty hectares (5 - 50 ha)	Two (2)
Between fifty and two hundred hectares (50 - 200 ha	Three (3)
Between two hundred and one thousand hectares (200 - 1000	Four (4)
ha)	
More than one thousand hectares (>1000 ha)	Five (5)

The assessment process for each criterion is as follows:

#### **Criterion 1: Protect existing habitats and biodiversity**

Under criterion 1, areas designated as protected areas are assessed according to their level of protection (reference 1) at the time of project inception and at the time of the survey. Areas that protect biodiversity gain a positive score, with the highest level of protection assigned a score of ten (10) points. Areas that are protected but only to a level whereby activities are insufficient to halt degradation are scored zero (0) points. Areas that are protected but have ongoing threats and are experiencing declines in biodiversity are scored negative points.

The assessment score for criterion 1 is calculated by subtracting the level of protection score at project inception from the current level of protection score. A maximum of ten (10) points can be scored, but there is no limit on the maximum negative score.

#### Criterion 2: Select appropriate areas and don't displace existing biodiverse habitats

Criterion 2 is assessed according to the ecosystem integrity of the project. Ecosystem integrity is assessed according to twenty one (21) attributes (reference 2). For each attribute, the site is assigned a star rating, ranging from one (1) to five (5) stars. Star ratings relate to the level of recovery of the respective attribute (see reference 3 for a general description of the five star ratings).

Each attribute is assigned a star rating at both project inception and under current conditions. The number of points awarded for each attribute is calculated by subtracting the star rating at project inception from the current star rating. Points are then awarded according to the following:

- Increase in star rating of two or more (2+) stars (10 points)
- Increase in star rating of one (1) star (6 points)
- No change in star rating but a trajectory of improving the star rating in the future (2 points)
- No change in star rating (0 points)
- No change in star rating but a trajectory of a declining star rating in the future (-2 points)
- Reduction in star rating of one (1) star (-6 points)
- Reduction in star rating of two or more (2+) stars (-10 points)

Ecosystem integrity score for the site is calculated by taking the mean average number of points for each attribute. Under some circumstances, it may not be possible to assess all attributes of ecosystem integrity. Any attributes that cannot be assessed are not included when calculating the mean average.



### <u>Criterion 3: Manage biodiversity in consultation and partnership with local communities</u> and stakeholders

Criterion 3 is assessed according to the level of stakeholder engagement undertaken by the project. Stakeholder engagement is assessed by summing the total score achieved based on twelve (12) questions. These twelve (12) questions are scored as outlined in reference 4.

### <u>Criterion 4: Aim to maximize biodiversity recovery through ecosystem restoration,</u> <u>including planting, natural regeneration and assisted natural regeneration</u>

Criterion 4 is assessed according to the biodiversity value of the project. Biodiversity value is assessed by taking the mean average change in the ecosystem integrity score since project inception for the following attributes:

- Desirable plants, fungi and lichens (reference 2h)
- Desirable animals (reference 2i)
- Rare and threatened species (reference 2j)
- No undesirable species (reference 2k)
- Provenance and genetic diversity (reference 2I)
- All vegetation strata (reference 2m)
- All trophic levels (reference 2n)
- Spatial mosaic (reference 20)

Ecosystem integrity scores for each attribute are calculated according to the change in star rating since project inception (see criterion 2).

#### Criterion 5: Manage and reduce invasive or potentially invasive species

Criterion 5 is assessed according to the presence and abundance of invasive species in the project. Invasive species are assessed by taking the mean average change in the ecosystem integrity score since project inception for the following attributes:

- Invasive species (reference 2b)
- No undesirable species (reference 2k)

Ecosystem integrity scores for each attribute are calculated according to the change in star rating since project inception (see criterion 2).

#### <u>Criterion 6: As appropriate, use native species and incorporate threatened and rare</u> <u>species</u>

Criterion 6 is assessed according to the presence and abundance of native, rare and threatened species in the project. Native, rare and threatened species are assessed by taking the mean average change in the ecosystem integrity score since project inception for the following attributes:

- Desirable plants, fungi and lichens (reference 2h)
- Rare and threatened species (reference 2j).



Ecosystem integrity scores are calculated according to the change in star rating since project inception (see criterion 2).

#### Criterion 7: Promote genetic diversity and resilience.

Criterion 7 is assessed according to the genetic diversity of the project. Genetic diversity is assessed by taking the mean average change in the ecosystem integrity score since project inception for the following attributes:

- Provenance and genetic diversity (reference 2I)
- Gene flows (reference 2t)

Ecosystem integrity scores for each attribute are calculated according to the change in star rating since project inception (see criterion 2).

# <u>Criterion 8: Implement robust monitoring, evaluation, and adaptive management of biodiversity</u>

Criterion 8 is assessed according to the presence and comprehensiveness of the ongoing monitoring, evaluation and management of the project. Monitoring, evaluation and management are assessed by summing the total score achieved based on two (2) questions. These two (2) questions are scored as outlined in reference 5.

Category	Description	Source	Points
Strict nature reserve	Strictly protected for biodiversity and also possibly geological/geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values.	IUCN Cat. 1a	10 points
Wilderness Area	Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition.	IUCN Cat. 1b	10 points
National park	Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.	IUCN Cat. II	10 points
Natural monument or feature	Areas set aside to protect a specific natural monument, which can be a landform, sea mount,	IUCN Cat. III	10 points

#### **Reference 1: Level of Protection**



	marine cavern, geological feature such as a cave, or a living feature such as an ancient grove.		
Habitat/species management area	Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category.	IUCN Cat. IV	10 points
Protected landscape/seascape	Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.	IUCN Cat. V	10 points
Protected area with sustainable use of natural resources	Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims.	IUCN Cat. VI	10 points
Primary conservation	Areas meeting the IUCN definition of a protected area, but where the governance authority (e.g. community, Indigenous peoples' group, religious group, private landowner) does not wish the area reported as a protected area.	OECM definition	8 points
Secondary conservation	Active conservation of an area where biodiversity outcomes are only a secondary management objective, but in-situ conservation is delivered (e.g. some conservation corridors).	Modified from OECM definition	6 points
Ancillary conservation	Areas delivering in-situ conservation as a by- product of management, even though biodiversity conservation is not an objective (e.g. some military training grounds, protected marine war graves and freshwater protection zones).	OECM definition	6 points
Paper park	A legally established protected area where experts believe current protection activities are insufficient to halt degradation.		0 points



Conflicted	Despite management efforts to conserve the		-2
	ecosystem and maintain associated cultural values,		points
	conflicting human activities that are not consistent		
	with sustainable long-term conservation objectives		
	are allowed to occur.		
Concerned	Conservation objectives are stated but not	Inspired by	-2
	implemented or met.	IUCN RLE	points
Threatened	Lack of management that cause ecosystem	Inspired by	-4
	alteration (e.g., invasions of destructive flora or	IUCN RLE	points
	fauna, fire suppression or unnatural fire).		
Vulnerable	Observed or inferred threatening processes (eg.,	Adapted	-6
	illegal hunting, grazing, overexploitation) that are	from IUCN	points
	likely to cause continuing declines in geographic	RLE	
	distribution, environmental quality or biotic		
	interactions and considered to be at a high risk of		
	collapse.		
Collapse	Biotic or abiotic features are lost, and the	Modified	-10
	characteristic native biota are no longer sustained	from <u>IUCN</u>	points
	(e.g., illegal occupation of protected area,	RLE	
	deforestation, mining).		



#### Reference 2 – Ecosystem Integrity 5 star system – Adapted from the Society for Ecological Restoration 5-Star Recovery System (Gann et al. 2019)<sup>1</sup>.

Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
a)	Contamination	Some contamination drivers (e.g. use of toxic herbicides, legal or illegal dumping) absent but others remain high in number and degree (residual contamination, spraying for mosquitos, leakage from adjacent sites).	Direct contamination drivers (e.g., residual contamination, spraying for mosquitos, leakage from adjacent sites) intermediate in number and degree.	Number of direct contamination drivers low but some may remain intermediate in degree.	Direct contamination drivers, both external and on-site, low in number and degree.	All threats from contamination managed or mitigated to high extent
b)	Invasive species	Some invasive species drivers (e.g. planting of invasive species, contaminated equipment or supplies) absent but others remain high in number and degree (e.g. reproductive invasive plants on site, soil seed bank, reproductive plants	Direct invasive species drivers (reproductive invasive plants on site, soil seed bank, reproductive plants on adjacent sites) intermediate in number and degree (e.g. <10% cover of invasive species).	Number of direct invasive species drivers low but some may remain intermediate in degree (e.g. <5% cover of invasive species).	Direct invasive species drivers, both external and on-site, low in number and degree (e.g. <2% cover of invasive species).	All threats from invasive species managed or mitigated to high extent (e.g. <1% cover of invasive species).

<sup>&</sup>lt;sup>1</sup> Gann, G.D., McDonald, T., Walder, B., Aronson, J., Nelson, C.R., Jonson, J., Hallett, J.G., Eisenberg, C., Guariguata, M.R., Liu, J., Hua, F., Echeverría, C., Gonzales, E., Shaw, N., Decleer, K. and Dixon, K.W. (2019), International principles and standards for the practice of ecological restoration. Second edition. Restor Ecol, 27: S1-S46. https://doi.org/10.1111/rec.13035



Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
		on adjacent sites).				
c)	Over-utilization	Protection status secured; some over-utilization drivers (e.g. over harvesting, illegal logging or harvesting, mining) absent but others remain high in number and degree (e.g. overgrazing, over-hunting, infrastructure development).	Direct over-utilization drivers (overgrazing, over-hunting) intermediate in number and degree.	Number of direct over- utilization drivers low but some may remain intermediate in degree.	Direct over-utilization drivers, both external and on-site, low in number and degree.	All threats from over- utilization managed or mitigated to high extent.
d)	Disturbances	Some direct disturbance drivers (e.g. harmful wildfire) absent but others (e.g. absence of appropriate natural disturbances) remain high in number and degree.	Direct disturbance drivers (including, e.g. absence of appropriate natural disturbances) intermediate in number and degree.	Number of direct disturbance drivers low but some may remain intermediate in degree.	Direct disturbance drivers, both external and on-site, low in number and degree.	Threats from direct disturbance drivers minimal or effectively absent.
e)	Water chemo- physical conditions	Most physical and chemical properties of the site's hydrology (e.g., pH, nutrients,	Physical and chemical properties of hydrology remain at low similarity levels relative to	Physical and chemical properties of hydrology stabilized within intermediate	Physical and chemical conditions of hydrology within high range of reference	Physical and chemical conditions of hydrology highly similar to that of the reference



Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
		hydrological conditions) still highly dissimilar to reference ecosystem but some showing improved similarity.	reference ecosystem but capable of supporting some biota of reference ecosystem.	range of reference ecosystem and capable of supporting growth and development of many characteristic native biota.	ecosystem and suitable for ongoing growth and recruitment of most characteristic native biota.	ecosystem with evidence they can indefinitely sustain all characteristic species and processes.
f)	Substrate chemical conditions	Most chemical properties of the site's substrates (e.g., pH, nutrients, salinity) still highly dissimilar to reference ecosystem but some showing improved similarity.	Chemical properties of substrates remain at low similarity levels relative to reference ecosystem but capable of supporting some biota of reference ecosystem.	Chemical properties of substrates stabilized within intermediate range of reference ecosystem and capable of supporting growth and development of many characteristic native biota.	Chemical conditions of substrates within high range of reference ecosystem and suitable for ongoing growth and recruitment of most characteristic native biota.	Chemical conditions of substrates highly similar to that of the reference ecosystem with evidence they can indefinitely sustain all characteristic species and processes.
g)	Substrate physical conditions	Most physical properties of the site's substrates (e.g., soil structure) still highly dissimilar to reference ecosystem but some (e.g. topography) showing improved similarity.	Physical properties of substrates remain at low similarity levels relative to reference ecosystem but capable of supporting some biota of reference ecosystem.	Physical properties of substrates stabilized within intermediate range of reference ecosystem and capable of supporting growth and development of many	Physical conditions of substrates within high range of reference ecosystem and suitable for ongoing growth and recruitment of most characteristic native	Physical conditions of substrates highly similar to that of the reference ecosystem with evidence they can indefinitely sustain all characteristic species and processes.



1	Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
					characteristic native biota.	biota.	
	h)	Desirable plants, fungi and lichens	Some colonizing native plant, fungi and lichen species present (e.g., ~2% of the reference ecosystem).	A small subset of characteristic native plant, fungi and lichen species present (e.g., ~10% of the reference ecosystem) across site.	A subset of key native plant, fungi and lichen species present (e.g., ~25% of the reference ecosystem) over substantial proportions of the site.	Substantial diversity of characteristic native plant, fungi and lichen species and genes present (e.g., ~60% of the reference ecosystem) across the site and representing a wide diversity of functional groups.	High diversity of characteristic native plant, fungi and lichen species and genes present (e.g., >80% of the reference ecosystem), with high similarity to the reference ecosystem and high potential for colonization of more native species over time.
i	i)	Desirable animals	Some colonizing native species present (e.g. ~2% of the reference ecosystem).	A small subset of characteristic native species present (e.g. ~10% of the reference ecosystem) across site.	A subset of key native species present (e.g. ~25% of the reference ecosystem) over substantial proportions of the site.	Substantial diversity of characteristic native species and genes present (e.g. ~60% of the reference ecosystem) across the site and representing a wide diversity of functional groups.	High diversity of characteristic native species and genes present (e.g. >80% of the reference ecosystem), with high similarity to the reference ecosystem and high potential for colonization of more



Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
						native species over time.
j)	Rare and threatened species	Some colonizing rare and threatened species present (e.g. ~2% of the reference ecosystem).	A small subset of characteristic rare and threatened species present (e.g. ~10% of the reference ecosystem) across site.	A subset of key rare and threatened species present (e.g. ~25% of the reference ecosystem) over substantial proportions of the site.	Substantial diversity of characteristic rare and threatened species and genes present (e.g. ~60% of the reference ecosystem) across the site and representing a wide diversity of functional groups.	High diversity of characteristic rare and threatened species and genes present (e.g. >80% of the reference ecosystem), with high similarity to the reference ecosystem and high potential for colonization of more native species over time.
k)	No undesirable species	Very high levels of nonnative, invasive or undesirable plants (e.g., >80% cover), or nonnative or undesirable animals (e.g. harmful livestock).	High to moderate levels of nonnative, invasive or undesirable plants (e.g., <60% cover), or nonnative or undesirable animals	Moderate to low levels of nonnative, invasive or undesirable plants (e.g., <25% cover), or nonnative or undesirable animals (e.g. harmful livestock).	Low to very low levels of nonnative, invasive or undesirable plants (e.g., <10% cover), or nonnative or undesirable animals (e.g. harmful livestock).	Very low to nil nonnative, invasive or undesirable plants (e.g., <2% cover), or nonnative or undesirable animals (e.g. harmful livestock).



Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
1)	Provenance and genetic diversity	Provenance of material appropriate to site and adequate genetic diversity for a very low proportion of native species (e.g., <2% of the reference ecosystem) are present.	Adequate genetic diversity for a very low to low proportion of native species (e.g., <10% of the reference ecosystem) are present.	Adequate genetic diversity for a low to moderate proportion of native species (e.g. ~25% of the reference ecosystem) are present.	Adequate genetic diversity for a moderate to high proportion of native species (e.g., ~60% of the reference ecosystem) across the site.	High genetic diversity of characteristic native species (e.g. >80% of the reference ecosystem), with high similarity to the reference ecosystem.
m)	All vegetation strata	One horizontal stratum of the reference present (e.g. emergent, canopy, subcanopy, shrub, groundcover).	More than one stratum of the reference present.	Most strata of the reference present.	All strata of the reference present.	All strata of the reference present. Further complexity able to self-organize to highly resemble the reference ecosystem.
n)	All trophic level	Community trophic complexity still largely dissimilar to reference ecosystem (based on complexity of levels of primary producers, herbivores, secondary consumers, tertiary	Some similarity of trophic complexity, relative to reference ecosystem.	Intermediate similarity of trophic complexity relative to reference ecosystem.	Substantial similarity of trophic complexity relative to reference ecosystem.	All trophic complexity high. Further trophic complexity able to self- organize to highly resemble the reference ecosystem.



Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
		consumers, apex predators).				
0)	Spatial mosaic	Spatial patterning still largely dissimilar to reference ecosystem.	Some similarity of spatial patterning relative to reference ecosystem.	Intermediate similarity of spatial patterning relative to reference ecosystem.	Substantial similarity of spatial patterning relative to reference ecosystem.	All spatial patterning high. Further spatial patterning able to self- organize to highly resemble the reference ecosystem.
p)	Productivity/ cycling	Physical and biological processes and functions (e.g. photosynthesis and growth, water and nutrient cycling) are at a very foundational stage only, compared to the reference ecosystem.	Low numbers and levels of physical and biological processes and functions, relative to the reference ecosystem (including plant growth, decomposition, soil processes), are present	Intermediate numbers and levels of physical and biological processes and functions, relative to the reference ecosystem.	Substantial levels of physical and biological processes and functions, relative to the reference ecosystem are present.	All functions and processes are on a secure trajectory towards the levels of the reference and are showing evidence of being sustained.
q)	Habitat & interactions	Habitat provision at a very foundational stage only, compared to the reference ecosystem.	Low numbers and levels of habitat provision relative to the reference ecosystem are present.	Intermediate numbers of habitat provision relative to the reference ecosystem are present.	Substantial levels of habitat provision relative to the reference ecosystem are present.	Habitat provisions are on a secure trajectory towards the levels of the reference and are showing evidence of being sustained.



Ref.	Sub - Attribute	One star (★)	Two stars (★★)	Three stars (★★★)	Four stars (★★★★)	Five stars (★★★★★)
r)	Resilience/ recruitment	Resilience and recruitment are at a very foundational stage only compared to the reference ecosystem.	Low levels of resilience and recruitment relative to the reference ecosystem (including return of appropriate disturbance regimes) are present.	Intermediate levels of resilience and recruitment relative to the reference ecosystem (including return of appropriate disturbance regimes) are present.	Substantial levels of resilience and recruitment relative to the reference ecosystem (including return of appropriate disturbance regimes) are present.	Resilience and recruitment (including appropriate disturbance regimes) are on a secure trajectory towards the levels of the reference and are showing evidence of being sustained.
s)	Landscape flows	Positive exchanges and flows with the surrounding environment (e.g., of species, water, fire) in place for only very low numbers of species and processes.	Positive exchanges and flows with the surrounding environment in place for a few characteristic species and processes.	Positive exchanges and flows between site and surrounding environment in place for intermediate levels of characteristic species and processes.	Positive exchanges and flows with the surrounding environment in place for most characteristic species and processes and likely to be sustained.	Evidence that exchanges and flows with the surrounding environment are highly similar to the reference for all species and processes and likely to be sustained.
t)	Gene flows	Positive genetic flow with surrounding environment in place for only very low numbers of species (e.g. ~2% of the reference	Positive genetic flow with surrounding environment in place for a few characteristic species (e.g. ~10% of	Positive genetic flow between site and surrounding environment in place for intermediate levels	Positive genetic flow with surrounding environment in place for most characteristic species (e.g. ~60% of	Evidence that genetic flow with the surrounding environment are highly similar to the reference



F	Ref. Sub - Attribut	e One star (★)	Two stars (★★)	Three stars ( $\star\star\star$ )	Four stars (★★★★)	Five stars (★★★★★)
		ecosystem).	the reference ecosystem).	of characteristic species (e.g. ~25% of the reference ecosystem).	the reference ecosystem) and likely to be sustained.	for nearly all species (e.g. ~80% of the reference ecosystem) and likely to be sustained.
l	ı) Habitat links	Positive habitat links with surrounding environment in place for only very low numbers of species (e.g. ~2% of the reference ecosystem).	Positive habitat links with surrounding environment in place for a few characteristic species (e.g. ~10% of the reference ecosystem).	Positive habitat links between site and surrounding environment in place for intermediate levels of characteristic species (e.g. ~25% of the reference ecosystem).	Positive habitat links with surrounding environment in place for most characteristic species (e.g. ~60% of the reference ecosystem) and likely to be sustained.	Evidence that habitat links with the surrounding environment are highly similar to the reference for nearly all species (e.g. ~80% of the reference ecosystem) and likely to be sustained.



Reference 3: General description of the five (5) star ratings for ecosystem integrity (Adapted from the Society for Ecological Restoration Five Star Recovery System).

Ecosystem Integrity	General Description for Background Only
One star (★)	Over-utilization ceased and conservation status secured but other threats persisting at high level. Substrates physically and chemically showing some similarity to the reference ecosystem and low level of native biota present. Foundational level of ecosystem processes, functions and exchanges present.
Two stars (★★)	Some remaining threats still high in degree. Physical conditions capable of supporting some biota. Site has a small subset of characteristic native species with intermediate levels of undesirable species present. Positive exchanges with surrounding environment initiated.
Three stars (★★★)	Low numbers of threats but still intermediate in degree. An intermediate subset of characteristic native species is established and are likely to be self-sustaining due to presence of intermediate levels of functions and processes. Positive exchanges with surrounding environment in place for many species and processes.
Four stars (★★★★)	Threats low in number and degree and physical conditions of high similarity to reference. A substantial subset of characteristic biota present (representing all species groupings), along with characteristic structure, and evidence of key functions and processes capable of supporting self-sustaining populations. There are positive exchanges with other native ecosystems in the surrounding environment.
Five stars (★★★★★)	Threats effectively absent. A characteristic assemblage of biota present, exhibiting structural and trophic complexity of very high similarity to the reference ecosystem. Self-organizing potential on a trajectory likely to emulate the reference ecosystem functions and processes and are likely to be sustained. Appropriate cross-boundary flows are enabled, and resilience is restored with return of appropriate disturbance regimes.



## Reference 4: Scoring system for criterion 3: Manage biodiversity in consultation and partnership with local communities and stakeholders

- 1. Is there evidence that primary and secondary stakeholders have been adequately identified?
  - Yes (0.5 point)
  - No (0 points)
- 2. Is there evidence that primary and secondary stakeholders have been consulted or contacted?
  - Yes (0.5 point)
  - No (0 points)
- What stakeholder engagement activities are implemented?
  (0.75 point each for small projects; 0.5 points each for medium projects; 0.25 points for large projects<sup>2</sup> maximum 1.5 points)
  - Stakeholder engagement strategy implemented
  - Political engagement strategy in place
  - Participatory monitoring strategy in place
  - Plans to develop stakeholder capacity in place
  - Common concerns are defined prior to intervention
  - The restoration project is defined from an ecological, social and economic point of view
  - Other
- What type and diversity of stakeholders are engaged?
  (0.75 point each for small projects; 0.5 points each for medium projects; 0.25 points for large projects<sup>1</sup> maximum 3 points)
  - Individuals
  - Local communities
  - Local community groups and non-profits (civil society)
  - Ethnic or other minority groups, including indigenous peoples
  - Women and girls
  - Youth
  - Local government
  - State and provincial government
  - National government
  - Small and local business
  - Regional business
  - Global corporations

<sup>1</sup> **Project size categories:** Small: < 200ha Medium: 200 – 1000ha Large: > 1000ha



- Other
- 5. Is there evidence that key primary stakeholders and in particular disadvantaged and vulnerable groups have not been consulted and engaged?
  - Yes (minus 2 points)
  - No (0 points)
- 6. Is there evidence that project provides benefits to primary stakeholders?
  - Yes (0.5 point)
  - No (0 points)
- 7. Is there evidence that project supports the local economy by utilising local infrastructure and supply chains or providing local employment?
  - Yes (0.5 point)
  - No (0 points)
- 8. Is there evidence that the project builds capacity among primary or secondary stakeholders?
  - Yes (0.5 point)
  - No (0 points)
- 9. Is there evidence that the project utilises local knowledge in a responsible way?
  - Yes (0.5 point)
  - No (0 points)
- 10. Is there evidence that the project has considered the economic and cultural priorities of local communities or other key stakeholders in species selection and established access or use rights?
  - Yes (0.5 point)
  - No (0 points)
- 11. What change in local community restoration-based livelihoods have been achieved since project inception?
  - Large decrease (-2 points)
  - Small decrease (-1 point)
  - Unchanged (0 points)
  - Small increase (1 point)
  - Large increase (2 points)



- 12. Is there evidence that primary stakeholders have faced significant negative economic and social impacts arising from involuntary loss of access to land or natural resources as a result of the project, without a mitigation plan in place?
  - Yes (minus 3 points)
  - No (0 points)



## Reference 5: Scoring system for criterion 8: Implement robust monitoring, evaluation, and adaptive management of biodiversity.

1. What management is in place?

(0.5 points each up to a maximum of 5 points)

- The management plan is co-developed with stakeholders, rights-holders, and local agencies and communities, and integrates measures outlined during planning (See SC13) and results obtained from monitoring and adaptive management.
- The plan builds, as far as possible, on effective local and traditional restoration practices.
- The plan incorporates relevant management agreements and includes a detailed description of all required activities specifying their duration of time and frequency.
- The management plan involves subject matter experts, including stakeholders and rightsholders, who can help develop innovative management methods based on lessons learned from other projects.
- The management is plan available to all those involved in the ongoing management of the project.
- The management plan identifies the ongoing management team, and clearly communicates roles and responsibilities of members of the team.
- The management plan is modified based on the results of periodic monitoring, and on changes in trade-offs or stakeholder or rights holder interests or needs.
- If not fully secured, appropriate long-term sources of funding for ongoing management are determined. There is coordination with other restoration projects to reduce costs and duplication of effort. These synergies can include, for example, alignment of schedules to facilitate sourcing of plant materials, sharing equipment, and monitoring.
- The project conducts periodic monitoring of the site to check for re-occurrence of degradation and to protect the investment in restoration, ideally involving local stakeholders.
- The project conducts site protection measures needed to prevent deleterious external or internal impacts (e.g., protection from unsustainable grazing, prevention of inappropriate fire, prevention of unsustainable harvesting, control of infestations by invasive species, management of weeds and other vegetative competitors).
- The project ensures essential ecosystem functions and processes are operating as appropriate and required to maintain ecosystem integrity and provide ecosystem resilience to degradation stressors (e.g., management of hydrological regimes, ensuring natural disturbance regimes such as periodic fire in fire-adapted ecosystems or flooding of riparian zones).
- The project facilitates beneficial external exchanges with the broader landscape or seascape, including the exchange of genetic material in fragmented landscapes and seascapes (e.g., through hand pollination or movement of propagules), or for depleted populations suffering from inbreeding depression or other genetic deficiencies.
- The project develops or supports training and stewardship programs for local communities and practitioners, to improve ongoing management of the site and prevent harm from inappropriate management.
- The project communicates to new generations about long-term project trajectories and outcomes to ensure that the restoration project and past investments are valued. This can



be accomplished by continuing cultural activities that maintain the history of the project and celebrate its achievements, by reinforcing lessons learned including the opportunity to carry out similar projects elsewhere, and though science education and research.

- The project provides a governance structure to oversee ongoing management and stewardship of the site, and ensure legal protections for the investments made in restoration.
- The project prepares contingency plans and protocols in case known degradation drivers reemerge (e.g., populations of invasive animals that were previously managed through a biocontrol agent that ceases to function).
- The project invests in knowledge sharing, acquisition, and training to incorporate updated best practices when designing and implementing responses to unexpected or unforeseen events that threaten the integrity of the restoration site.
- The project adopts a policy of continuous improvement informed by reliable monitoring. Such a policy can allow managers to continually upgrade and build on project goals to advance initial recovery toward progressively higher outcomes, seeking the highest level of recovery possible over the long-term.
- The project seeks opportunities for the implementation of additional restoration activities or projects at the project site or in the broader landscape or seascape through replication or scaling up.
- The project conducts additional restoration activities that take advantage of the improved condition of the site (e.g., infill planting, reintroduction or augmentation of rare species, reinstatement of natural disturbance regimes).
- The project ensures ownership from local communities, so that they benefit from ongoing management and are involved in continuous improvement.
- The project explores further funding mechanisms and capital investment to extend restoration at sites, including the development of partnerships with local agencies and other partners.

### 2. What baseline and monitoring data are available?

- (0.5 points each up to a maximum of 5 points)
- The monitoring program was planned while the restoration project or program was being designed, rather than after implementation
- The monitoring program is adequately resourced
- The monitoring program has the proper timing, frequency, and duration so that lessons learned can be applied to adaptive management
- Monitoring questions are directly linked with restoration objectives
- Monitoring questions are clearly described in planning documents, with specific measurable indicators that include the amount of change desired and a specified timeframe
- The monitoring program includes collecting, managing (including cleaning and meta-data documentation), and archiving data
- The monitoring program includes statistical analyses (if appropriate)
- The monitoring program includes a plan for interpreting results and sharing findings



- The monitoring program is being used to apply lessons learned to adaptive management within and across programs
- The monitoring plan includes an evaluation of the efficacy of the monitoring program itself