

Criteria for Impact Assessment	
Criteria	Description of elements that are central to each issue
Nature of impact / status	This is an appraisal/evaluation of the type of effect the construction, operation and maintenance of a development would have on the affected environment. This description should include what is to be affected and how, i.e. Neutral / Positive / Negative
Extent of the impact (Extent / scale is an indication of the physical and spatial size of the impact)	<p>Site specific - extending only as far as the activity, or Limited to the site and its immediate surroundings (Insignificant / Low)</p> <p>Regional - the impact would affect the broader region (e.g. neighbouring towns) beyond the boundaries of the adjacent properties (Low / Low-Med / Med)</p> <p>National – will have an impact on a national scale - particularly if resources of national significance are affected (Med / Med-High)</p> <p>International - will have an impact across international borders or will impact on an ecosystem or species of international significance(High)</p>
Duration of impact (refers to the time frame over which the impact is expected to occur, which is measured in relation to the lifetime of the proposed project)	<p>Temporary - less than 1 year (Insignificant / Low)</p> <p>Short term - the impact will last up to the end of the construction phase, where after it will be entirely negated. (Low)</p> <p>Med term - the impact will either disappear with mitigation or will be mitigated through a natural process in a period shorter than 2 years. (Med)</p> <p>Long term - the impact will continue for the entire operational lifetime of the development, but will be mitigated by direct human action or by natural processes thereafter. (Med-High)</p> <p>Permanent – the impact will be where mitigation or moderation by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient or temporary. Such impacts are regarded to be irreversible, irrespective of what mitigation is applied. (High)</p> <p>Discontinuous or intermittent – the impact may only occur during specific climatic conditions or during a particular time of year (Med-High)</p>
Intensity (refers to the degree to which the impact alters the functioning of an element of the environment or a life-support service that is provided by the environment and whether it is destructive or benign (mild))	<p>Affects the environment in such a way that natural, cultural and soil functions and processes are not affected / that the natural processes or functions can continue with virtually no affect (Low)</p> <p>Affected environment is altered by natural, cultural and social functions and processes continue although in a modified way (Med)</p> <p>Natural, cultural or social functions or processes are altered to the extent that they will temporarily or permanently cease (High)</p>
Reversibility of impacts	<p>Impact is non- reversible (impact is permanent) (Low)</p> <p>Impact is reversible at end of project life; (Med)</p> <p>Impact is reversible, but through intensive mitigation (Med-High)</p> <p>Impact is reversible at any time with minimum mitigation (High)</p>
Irreplaceability of resource loss caused by impacts	<p>Little or no resources are lost (Insignificant)</p> <p>Resources are replaceable (the affected resource is easy to replace/ rehabilitate). (Low)</p> <p>Resources are only replaceable though intensive rehabilitation; (Med)</p> <p>The project will destroy unique resources that cannot be replaced (High)</p>
Probability (describes the likelihood of the impacts actually occurring (based on previous experience with similar projects or based on professional judgement).	<p>The possibility of the impact occurring is very low, due either to the circumstances, design or experience. (Improbable)</p> <p>Distinct possibility - there is a possibility that the impact will occur to the extent that provisions must therefore be made. (Low)</p> <p>It is most likely that the impacts will occur at some stage of the development. Plans must be drawn up to mitigate the activity before the activity commences. (Med)</p> <p>Impact will occur regardless of any prevention measures (>90% chance of occurring) (High / Definite)</p>

Determination of significance

(Significance (Duration X Extent X Intensity) is determined through a synthesis of the above impact characteristics, and drawing on standards, targets etc. and is an indication of the overall importance of the impact. The significance of the impact "without mitigation" is the prime determinant of the nature and degree of mitigation required and is one of the most important factors to take into account during decision-making. (Note – positive significance could also apply and should be described as such)

Intensity = L				
Duration	H			
	M			Med
	L	Low		
Intensity = M				
Duration	H			High
	M		Med	
	L	Low		
Intensity = H				
Duration	H			
	M			High
	L	Med		
		L	M	H
		Extent		

E.g if intensity is med, extent is med and duration is high, then significance is high

Without mitigation:

The impact is not substantial and does not require any mitigation action. **(No significance)**

The impact is of little importance, but may require limited mitigation **(Low)**

The impact is of importance and is therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels. **(Med)**

The impact is of great importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential. **(High)**

With mitigation:

The impact will be mitigated to the point where it is regarded to be insubstantial **(No significance)**

The impact will be mitigated to the point where it is of limited importance. **(Low)**

Notwithstanding the successful implementation of the mitigation measures, the impact will remain of significance. However, taken within the overall context of the project, such a persistent impact does not constitute a fatal flaw **(Med)**

Mitigation of the impact is not possible on a cost-effective basis. The impact continues to be of great importance, and, taken within the overall context of the project, is considered to be a fatal flaw in the project proposal **(High)**

Adapted from T Hacking, AATS – Envirolink, 1998: An innovative approach to structuring environmental impact assessment reports. In: IAIA SA 1998 Conference Papers and Notes

Degree of mitigation

Degree to which the impact can be mitigated (either reduced - if negative impacts; or enhanced – if positive impact)

Where mitigation cannot make impacts disappear / enhance impacts **(Low)**

The impact will disappear / be enhanced with mitigation **(Med)**

If mitigation is not required, the impact will disappear / be enhanced without intervention **(High)**

Confidence

(describes the level of certainty that specialists have in the accuracy of their predictions with respect to any of the assessment criteria (and by implication, with respect to significance). Should there be any factors that could bring into doubt the accuracy of the predictions (e.g. red data species searches undertaken outside of the flowering season or key research data being unavailable) this compromises the level of confidence in the assessment of an impact)

The specialist should state what degree of confidence there is in the predictions based on the available information and level of knowledge and expertise.

Low

Med

High