

**Green Building Council of South Africa
Green Star SA Eco Conditional Requirement - FEEDBACK & RESPONSES
April, 2010**



Background:

The Green Building Council of South Africa (GBCSA) began a process of revising the Eco Conditional Requirement in May of 2009. A draft of the revised requirements was publically released 26 November, 2009. A public feedback period was held until 15 January, 2010, during which anyone could submit feedback comments and recommendations concerning the requirements.

All comments were considered in discussion of changes to be made in preparation for the release of revised version in April, 2010. The revised version will be included in the Green Star SA - Retail Centre v1 tool as well as replace the one in the Green Star SA - Office v1 tool for all projects registered after the release date. All feedback comments have been responded to below.

Date Submitted	Submitted by	Issue Summary	Comment/ Suggested Solution or Amendment	GBCSA Response
2009-12-02	Green Building Consultant 1	watercourse	Bullet 6 criteria is unclear. Propose rewording of that paragraph to read: land located within 100m of a watercourse that is NOT listed as being of 'high ecological value' can only be deemed eligible for Green Star SA certification if the Watercourse Protection Measures (outlined below) have been completed.	Thank you for the suggestion. The final wording is very similar to this suggestion.
		ridge	Omit grammatically incorrect capitalisation of ridge	The ridge criteria have been deleted entirely because ridges are defined only within Gauteng and it proved too complex for the GBCSA to define ridge criteria in the other provinces. In addition, it was felt that most of the ecological valuable characteristics of ridges will be picked up with the other criteria.
		red data	Omit grammatically incorrect capitalisation of red data	Terminology has been corrected to 'threatened red listed species.'
		prime agricultural land	At what stage can the report on the quality of the land for agricultural purposes be submitted to the GBCSA to assess if the project would make the conditional requirement?	A project can submit for an Eligibility Ruling at any point, before or after project registration.
31/11/2009	Mechanical Engineer 1	conditional requirement wording	Conditional requirements criteria not easy to understand - perhaps rephrase "Is not located on land within 100m of a watercourse listed as being of 'high ecological value' unless the building is a refurbishment and the Watercourse Protection Measures (outlined below) have been completed."	Thank you for the suggestion. The final wording should be more clear.
		conditional requirement wording	Conditional requirements criteria - final bullet point doesn't make sense to me and also refers to both watercourse and wetland. Perhaps rephrase "Is not located on land within 100m of any other watercourse unless the Watercourse Protection Measures (outlined below) have been completed." (assuming a wetland comes under the watercourse classification)	Thank you for the suggestion. The final wording should be more clear.
		conditional requirement wording	Water course management plan has to be produced, exhibited and IMPLEMENTED? What about if it is a design rating - some sort of commitment to implement ?	Language has been clarified to indicate that implementation is required for As Built projects.

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		length	11 pages of writing in the manual for 1 credit seems too much to me - can some detail be edited out and/or repetition between additional guidance and background reduced	The GBCSA was receiving many inquiries regarding how to verify compliance with the Eco Conditional Requirement, and the revised requirements should make it more clear to environmental practitioners exactly how to verify compliance.
		ridge definition	Ridges are defined as consisting of slopes of 5° or more (equivalent to slopes of > 8.8% or > 1: 11 gradient) AND containing two or more of the following features - a crest, plateau, cliff or footslope. - surely many sites includes slopes and a plateau/crest ??? Better definition needed or omit ridges from the criteria	The ridge criteria have been deleted entirely because ridges are defined only within Gauteng and it proved too complex for the GBCSA to define ridge criteria in the other provinces. In addition, it was felt that most of the ecological valuable characteristics of ridges will be picked up with the other criteria.
		conditional requirement to onerous/complicated	Overall the conditional requirement seems even more complex than it was previously, and creating more work for ecologists. Bearing in mind projects need confidence that they are going to achieve this credit BEFORE DECIDING ON WHETHER TO DO A RATING, I think the conditional requirement should be simpler and possible for a non-ecologist to have a reasonable idea about whether their project complies or not.	The GBCSA was receiving many inquiries regarding how to verify compliance with the Eco Conditional Requirement, and the revised requirements should make it more clear to environmental practitioners exactly how to verify compliance. Unfortunately, these land classification issues are not straightforward and South Africa does not have easily referenced standards. The GBCSA has tried to be as succinct as possible while providing enough clear information to eliminate as much confusion as possible.
		prime agricultural land	I would question whether building on prime agricultural land or within 200m of ridges etc etc is such a "crime" as to mean that the building cannot get any sort of rating. However I am not an ecologist, nor an expert on current ecological problems in SA.	The ridge criteria have been deleted entirely because ridges are defined only within Gauteng and it proved too complex for the GBCSA to define ridge criteria in the other provinces. In addition, it was felt that most of the ecological characteristics will be picked up with the other criteria. However, the GBCSA believes that prime agricultural land is becoming a scarce resource that must be protected for the possibility of cultivation. The Eco Conditional Requirement is a core value of the Green Star SA tools.
2009-12-02	Architect 1	Ridge	I think it is important to place the same development restriction on developments on a ridge or within 200m of a ridge as on the agricultural and primary vegetation land where there is redevelopment. The development MUST be restricted to the existing development footprint in order to deter enlarged building and expansion of building on or near ridges.	The ridge criteria have been deleted entirely because ridges are defined only within Gauteng and it proved too complex for the GBCSA to define ridge criteria in the other provinces. In addition, it was felt that most of the ecological valuable characteristics of ridges will be picked up with the other criteria.
2009-12-02	Green Building Consultant 2	graphics	The coloured images are informative, but the manual is printed in black and white and these might turn into nonsensical spaces on the page.	The maps are not used in the final version of the revised requirements.
2009-12-02	Architect 2	Wetlands	The revised Eco-0 Credit proposal is significantly better than the original document and will be more usable. It carries my support!	Thank you.
2009-12-09	Biodiversity Specialist 1, City Govt	Biodiversity	p.1 Bullet 2: In addition to "primary vegetation" need to add "or any vegetation identified as a Critical Biodiversity Area in a fine-scale systematic conservation plan".	The decision was made to stick with 'vegetation of high ecological value' for simplicity at this point. The suggestion can be taken up in future revisions.

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			p.6 Primary vegetation. 1 st sentence "in its untransformed state" – remove "climax" as this term is inappropriate for the majority of our vegetation types, especially those that are fire-driven and follow the auto-succession model. Note that for nationally threatened vegetation types, the restoration potential of the site should be considered (e.g. from soil stored propagules) if the above-ground vegetation is degraded.	The change has been made from "climax" to "untransformed state."
			p.6 Red Listed – note that we no longer refer to "threatened species" as "Red Data" but as "threatened Red List" species according to IUCN. The Red List also includes non-threatened species (very confusing). Refs: they need to add the latest 2009 national ecosystem status doc (Driver A (in press) Threatened ecosystems for listing under NEM:BA 2009, South African Biodiversity Institute, Pretoria.)	The change has been made from "Red Data" to "threatened red list."
2009-12-12	Architect 3	<p>Wetlands Context:</p> <p>Comment:</p> <p>Proposed amendment:</p>	<p>We are currently assessing a project. The new development is located between 30 and 50m from a watercourse of low ecological value. We attach the 'Wetland delineation report.' This report clearly states that an effective buffer zone for this wetland area is no more than 15m from the stream valleys. The watercourse has deeply eroded sides and limited wetland vegetation.</p> <p>We query the 100m distance. Whilst this may have its benefits in most cases, there are some exceptions. We consider the two new conditional requirements now introduced, (Emi-5 and Emi-7) to be too onerous. Whilst we agree with the intent of Emi-5, we think it is too exclusive to have to achieve all three points. (There must be an alternative for projects that just do not have the available land, or which show exceptional compliance in other regards). We also do not understand the appropriateness of the Emi-7 (light pollution) requirement within the context of wetland protection. We believe the weighting of this conditional requirement, relative to the overall improved performance (of this building at least), is disproportional, especially in respect of the low value watercourse in discussion.</p> <p>We propose that the additional conditions be amended: Emi 5 should require a minimum of [2 out of 3 points], and Emi-7 should be excluded altogether.</p>	While the GBCSA appreciates the challenges for some projects, we feel that the removal of the 100m buffer for watercourses not of 'high ecological value' and replacement with the requirement for the watercourse protection measures is fair. If developments are permitted within the 100m buffer, they must implement the protection measures including all points of Emi-5 Watercourse Pollution and Emi-7 Light Pollution. Emi-5 protects the watercourse from stormwater pollution and Emi-7 protects the watercourse wildlife from light pollution which can affect navigation of nocturnal animals and disrupt biological rhythms and otherwise interfere with the behaviour of nocturnal animals and insects.
2009-12-14	Engineer General 1	Wetlands	Compliance with emi-05 would be problematic for many sites. Consider allowing treatment / retention of water off site.	A project could submit a CIR for off site treatment clearly documenting how the credit criteria are being met with the same degree of certainty as on-site treatment.
2010-01-14	Green Building Consultant 3	Wetlands	<p>I support the proposal. I think the requirement to provide the Watercourse Protection Measures for projects that are within 100m of non listed wetlands is a practical and sensible approach.</p> <p>One issue that may require additional clarity is the definition of Watercourse. The NWA defines it as a "natural" channel (2nd bullet point). What about a manmade canal? The Excluded drainage systems mentions manmade stormwater channels and swales but what about manmade canals (i.e. carry water all year round)? My suggestion is that these be included in the Excluded drainage systems section.</p>	Please see the finalised Additional Guidance for excluded systems. A suitably qualified specialist will need to determine how the watercourse is functioning and whether or not it is included under the National Water Act.

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2010-01-15	Project Manager 1	Wetlands	[Our company is] in the process of managing a number of retail developments that are adjacent to water courses. Retail developments, by their very nature, tend to be developed in large open areas that are close to residential suburbs etc. Often, the only land available for these developments is adjacent to water courses etc. The EIA investigations have thoroughly looked at the impacts of these developments adjacent to water courses and have defined the buffer zones as 30m. This has been undertaken by accredited environmental specialist and accepted by all the statutory bodies and Government Departments that have approved these EIA's. Therefore, we propose that this 100m zone be reduced to a more realistic 30m!	Please see the finalised Eco Conditional Requirement criteria. The 100m buffer remains for watercourses of high ecological value, as the GBCSA and Expert Reference Panel for this conditional requirement feel that these watercourses must have this level of protection from disturbance. For watercourses not of high ecological value, the 100m buffer has been removed and replaced with the watercourse protection measures.
2010-01-15	Project Manager 2	General	The concept of what is being proposed is agreed with in principle, but the descriptions and distances need to be tidied up a bit to provide appropriate and unambiguously defined / described parameters. The issue of discouraging development on ecologically valuable sites is fine, within constraints that can be argued elsewhere (e.g. EIA processes), but the determination of the distance proximity to the "ecological site" is an issue. The comments below are provided to try and highlight some areas needing attention and are intended to be constructive.	(No response needed here.)
		Prime Agricultural Land	Requirement Criteria : If an existing building / development footprint is present over what may have been prime agricultural land, the land is thus no longer prime agricultural land in itself as it has already been sterilised, so the "unless" portion of the stated requirement is effectively nonsensical. It would be more appropriate to word the requirement along the following lines - Is not located on prime agricultural land. Existing development footprints in such areas may be refurbished / redeveloped without increasing the existing development footprint	Thank you for the suggestion. The wording has been revised.
		Primary Vegetation	The 100m restriction seems somewhat arbitrary and excessive, does it have a sound basis upon which it has been calculated? A more logical application would be one where the distance would be a nominal but justifiable / reasonable distance, such as "a distance from the vegetation boundary of 30m to the edge of the projected longest shadows (SA winter solstice at midday) caused by any portion of the development and parallel to the boundary of the primary vegetation". This description could also be applied for vegetation to the north, east and west, even though the above is really only applicable to the south side (i.e. it prevents sun blocking of the vegetation and, wind etc. impacts are reduced as the distance is linked to the height of the building).	Please see the finalised Eco Conditional Requirement criteria. The 100m buffer remains for vegetation of high ecological value, as the GBCSA and Expert Reference Panel for this conditional requirement feel that this vegetation type must have this level of protection from disturbance. While your suggestion is certainly valid, the panel feels that the 100m distance is the most effective method for ensuring minimal disturbance, which is not based only on shadows but other emissions from buildings, vehicles and humans.

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		Ridge	<p>The 5 degree minimum slope is considered to be far too flat. At 1:11 it is flatter than the building regulations maximum slope (1:10) for a wheelchair! A greater value much closer to 10 degrees (1:5.7) would be more appropriate. Further, the Green Star SA context includes "hills" as ridges, but many of these only have a crest, with no second component (plateau, cliff, foot slope) thus unnecessarily excluding a huge amount of land that could be applicable for development at some point. Also, the 200m restriction seems rather arbitrary and excessive, does it have a sound basis for its imposition? The point from which it is measured is also ambiguous, initially it seems as if it is from the "crest" of the "ridge", but then based on the defined components of a ridge, it could be taken as 200m from the start of the minimum 5 degree slope! This needs to be clarified. A more reasonable means of defining the distance needs to be applied, as from an aesthetic point, it is all relative to where the observer is located. Practically it should be based on a repeatable calculation, such as being related to a maximum acceptable ground slope (e.g. 15 degrees - 1:3.7) and / or a distance linked to the height of the development (e.g. 5 times the building structure height with a minimum of say 50m) measured to the "crest" (or first significant "stepped edge of the crest") of the ridge (whichever criteria provides the greater distance).</p>	<p>The ridge criteria have been deleted entirely because ridges are defined only within Gauteng and it proved too complex for the GBCSA to define ridge criteria in the other provinces. In addition, it was felt that most of the ecological valuable characteristics of ridges will be picked up with the other criteria.</p>
		Watercourses	<p>The 100m restriction seems somewhat arbitrary and excessive, does it have a sound basis upon which it has been calculated? For watercourses with a high ecological value a distance larger than that for one that is not of high ecological value makes good sense, but what is reasonable and scientifically prudent / justifiable? Current environmental management plans all appear to work on a 30 m buffer for wetlands, which appears reasonable for limiting disturbance to the area and one assumes that this is based on motivated ecological reasoning. For high ecological value watercourses and wetlands a distance of double this seems reasonable (60 m) but needs to be backed up.</p>	<p>Please see the finalised Eco Conditional Requirement criteria. The 100m buffer remains for watercourses of high ecological value, as the GBCSA and Expert Reference Panel for this conditional requirement feel that these vegetation types must have this level of protection from disturbance. While your suggestion is certainly valid, the panel feels that the 100m distance is the most effective method for ensuring minimal disturbance, which is not based only on shadows but other emissions from buildings, vehicles and humans. For watercourses not of high ecological value, the 100m buffer is replaced by the watercourse protection measures. Most legal requirements call for a 30m buffer in urban areas and a 50m buffer in rural areas.</p>
		Distances	<p>Whatever the final distances are or able to be calculated as, they need to be defined precisely as to their start and end points. In the case of the development this should probably defined to be to the closest point of any structure, including parking, hard landscaping and masonry / concrete perimeter fencing / walls, to the relevant Eco-feature.</p>	<p>Please see the finalised Eco Conditional Requirement criteria for the definition of development footprint, which defines the point from which disturbance is measured.</p>

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		Distances	<p>The current use of 100m or 200m distances needs to be backed up by credible reasoning and logic, which should take into account the size and extent of the proposed development. For illustration, if we were still using the Imperial measurement system, would the number have been 100 yards? Quite likely, but there is nearly 9m difference between 100 yards and 100 metres, a difference of close to 10%, which is significant for developments. Further to this, a 10 storey office building will have a far greater impact than a 3 storey building and, such parameters should be part of the distance determination, thus providing appropriate values, not a simple blanket number.</p>	<p>Please see the finalised Eco Conditional Requirement criteria. The 100m buffer remains for watercourses of high ecological value, as the GBCSA and Expert Reference Panel for this conditional requirement feel that these vegetation types must have this level of protection from disturbance. While your suggestion is certainly valid, the panel feels that the 100m distance is the most effective method for ensuring minimal disturbance, which is not based only on shadows but other emissions from buildings, vehicles and humans. For watercourses not of high ecological value, the 100m buffer is replaced by the watercourse protection measures. Most legal requirements call for a 30m buffer in urban areas and a 50m buffer in rural areas.</p> <p>While it may be more technically correct to take into account all of the variables of a development which may affect the surrounding watercourse or land types, Green Star SA has to on many occasions filter down to an implementable, assessable criteria that all projects can somewhat easily confirm compliance with.</p>
		General	<p>Notwithstanding the fact that some of the quoted definitions and distances are potentially linked to some other body or legislated backing does not mean that the GBCSA has to automatically accept these items. They should define what is appropriate and reasonable to allow responsible developments that are as "green" as possible, within the context that development of new areas to accommodate the increasing masses is an unfortunate necessity. A clause should be added that separates the GBCSA requirements from any legislated requirements and does not supersede them as they must in any case be complied with. The GBCSA requirements should effectively thus only be applicable where they are more stringent than those legislated. GBCSA should not simply perpetuate other definitions etc., that may in fact be lacking, but stand out as being independent, repeatable with scientific or other backing and merit, while also being appropriate! If this is able to be done, then the requirement for motivations for specialist studies etc. to try and justify an exception to the requirements will be significantly reduced, as the requirements have a sound backing. (Legislation that is viewed as being excessive / inappropriate etc. can be challenged and changed via other means).</p>	<p>Thank you for the input. The GBCSA is intent on not repeating legislation, and all of our criteria are based on international best practice regardless of local law.</p>
2009/15/01	Project Manager 3	Wetlands	<p>[Our company] is involved in various projects of different magnitudes and complexity. Regarding wetlands I would like to point that we have had EIA conducted for projects so to assess their impacts on the surrounding environment. EIA has however also considered wetlands and this is supported by the fact that we do find some facilities like shopping centres located close to wetlands. I would like to suggest that the 100m distance be looked at once again. I suggest that the 100m be reduced. At this stage, I think it is important that we have an easy-to-understand concise definition of a wetland- i.e., it could be defined by amount of water, its age, size, etc.</p>	<p>Please see other responses above regarding the 100m distance. Also, please refer to the final Eco Conditional Requirement language for the definition of watercourse. Unfortunately it is not a simple definition, though primarily refers to what is considered under the National Water Act. The GBCSA has provided as much guidance as possible as to how to determine the ecological value.</p>