THE BIODIVERSITY CONSULTANCY

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Critical Habitat: a concise summary

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Summary

The Biodiversity Consultancy has world-leading experience in helping companies identify Critical Habitat, and in guiding project implementation in Critical Habitat. This document summarises the rationale of Critical Habitat, the kinds of biodiversity that may qualify areas as Critical Habitat, and the outline method by which Critical Habitat assessment is undertaken. It is important to note that this brief summary necessarily simplifies some of the detailed technical aspects of Critical Habitat. IFC Performance Standard 6 (PS6) and its accompanying Guidance Note (GN6), should be consulted for full details.

1 Why should I be interested in Critical Habitat?

Critical Habitat is a concept developed by the International Finance Corporation (IFC) in its Performance Standard 6 (PS6) on Biodiversity Conservation and Sustainable Management of Living Resources. This concept is designed to identify areas of high biodiversity value in which development would be particularly sensitive and require special attention. The concept has been developed in consultation with numerous international conservation organisations and thus takes into account many pre-existing conservation approaches, such as Key Biodiversity Areas, Important Bird Areas, and Alliance for Zero Extinction Sites. This comprehensive approach has meant that it has seen high levels of interest and uptake. A number of multilateral banks have policies closely aligned with PS6, and more than 75 private banks signed up to the Equator Principles have an implicit commitment to PS6. Critical Habitat and PS6 are becoming recognised as global best-practice in biodiversity for the private sector.

2 What is Critical Habitat?

Critical Habitat is a description of the areas of the planet of highest biodiversity conservation. It takes into account both global and national priorities and builds on the conservation principles of 'vulnerability' (threat) and 'irreplaceability' (rarity/restricted distribution). It is recognised that not all Critical Habitat is equal: there are grades of Critical Habitat of varying importance. The IFC distinguish two main grades: Tier 1 Critical Habitat highest importance in which development is very difficult to implement and offsets are generally not possible except in exceptional circumstances. Tier 2 Critical Habitat high importance in which development may be possible and offsets may be possible under some circumstances.

3 Critical Habitat is not...

Critical Habitat is not a panacea. It is an approach to identifying areas of biodiversity importance from a *global* or *national* perspective: it does not take into account *sub-national* or *local* priorities or values. For example, species threatened at the state/regional level are not considered within Critical Habitat. Similarly, local biodiversity values such as sacred forests and iconic species, are not included as they cannot be identified in a standardised way. Nevertheless, from the perspective of a developer, these local values are important to take into account through local stakeholder engagement. Critical Habitat cannot, therefore, be used as a one-size-fits-all approach to biodiversity risk assessment.

4 What types of biodiversity qualify as Critical Habitat?

Identification of Critical Habitat is fundamentally based on five criteria:

- Globally or nationally Critically Endangered or Endangered species;
- Restricted-range or endemic species;
- Concentrations of migratory and congregatory species;
- Highly-threatened and unique ecosystems;
- Key evolutionary processes.

In addition to the above five biological criteria, there are further circumstances in which an area may be recognised as Critical Habitat. For simplicity, we list two further criteria:

6. Most Legally Protected Areas (particularly IUCN Categories I-IV) and Internationally Recognised *Areas (e.g., KBAs and IBAs);*

7. Other areas of high biodiversity value, such as areas of high scientific value or areas of old growth forest.

Importantly, areas qualify as Critical Habitat if they qualify under any of these seven criteria. The IFC Guidance Note 6 (GN6) provides further clarification on which areas may be recognised as Critical Habitat.

Criteria 1-5

Criteria 1-3 have quantitative thresholds (as summarised in the table below) which help determine whether an area is Critical Habitat. Criteria 4 and 5 are qualitatively defined at present and so require consultation with experts. Criterion 4 covers rare and threatened habitats which might not necessarily hold species triggering Criteria 1-3. Criterion 5 is particularly identified by physical landscape features promoting evolution (e.g. islands, mountains, ecotones), or by groups of species with distinct evolutionary history.

'Criterion 6': Legally Protected Areas and Internationally Recognised Areas

Criterion 6 is effectively a short-cut by which developers can avoid the technical screening process of Criteria 1-5 if a site is already legally or internationally recognised. This is either because most Internationally Recognised Areas have been designated as such based on similar criteria to those in Criteria 1-5, or because Legally Protected Areas *are themselves intrinsically* of value to stakeholders (such as national governments) irrespective of their importance for biodiversity. The most useful site to identify areas under Criterion 6 is the Integrated Biodiversity Assessment Tool. Accessible maps and details of legally protected areas globally can be found at: Protected Planet. A useful guide to internationally recognised areas and legally protected areas, with specific guidance for business, is available at: A-Z Areas of Biodiversity Importance.

'Criterion 7': Other areas of high biodiversity value

This criterion is particularly open to interpretation. It is effectively a catch-all which allows sites which do not meet Criteria 1-6 to be identified as Critical Habitat e.g. areas of great wilderness or high scientific value. Hence, large tracts of old growth forest which do not meet any of the other six criteria may still be viewed as Critical Habitat by the IFC. For developers wishing to apply the concept of Critical Habitat for their own purposes, this criterion is best assessed on a case-by-case basis using a stakeholder risk assessment.

5 How is Critical Habitat assessed?

The Spatial Unit of Analysis

The area assessed for Critical Habitat is not just the direct footprint, but a relevant spatial 'Discrete Management Unit' (DMU) that includes the direct footprint and potential secondary/indirect impacts[1]. DMUs may be ecologically-defined (e.g. a whole patch of a certain habitat type or a watershed) or politically-defined (e.g. a protected area, property or local political unit). This approach is precautionary, intending to take direct and indirect impacts into account, and to acknowledge the inherent connectivity of ecological systems. Hence, crucially, Critical Habitat is identified irrespective of the type or scale of the development or impact: it is value-based, not risk-based. An area can be Critical Habitat despite zero predicted impacts on the biodiversity for which it was designated. Therefore developments can take place within Critical Habitat, but only if it can be demonstrated it will not have significant impacts on the biodiversity for which it was designated as Critical Habitat (a set of conditions described in Paragraph 17 of PS6).

Steps to take

Once a DMU has been defined, a list of candidate biodiversity features (species, habitats, etc., as per the seven Critical Habitat criteria) is compiled. This list is then screened against relevant thresholds (for criteria 1-3) or discussed with experts (for criteria 4, 5 and 7) in order to identify which candidate features qualify as Critical Habitat. The significance of a DMU to a particular biodiversity feature is ascertained by assessing the proportion of the feature's overall global population (for species) or distribution (for habitats or where species population data are limited) that occurs within the DMU. For nationally-threatened species, the proportion of the feature's national rather than global population is relevant. This is a specialist process requiring access to global and national biodiversity databases, a network of experts, and an ability to make appropriate value judgements in some cases where data are equivocal.

[1] Linear developments such as pipelines may require rather different treatment, with a 'potentially-affected landscape/ seascape' surrounding planned infrastructure and related indirect impacts and several DMUs identified within that landscape/seascape.

6 Simple rules for identifying Critical Habitat using Criteria 1-5

Table 1 provides the formal quantitative thresholds for species Criteria 1-3. As a guide for managers, Table 1 can be reduced to five relatively simple rules to cover most eventualities[2]. Note, however, that these alone should not be relied upon for a comprehensive Critical Habitat assessment.

- DMUs with ≥10% global population of a CR or EN species (or, generally, the equivalent in terms of known sites for that species, e.g. if the DMU is one of only 10 sites globally) = Tier 1 (Sub-criteria 1a+1b)
- DMUs with a single regularly occurring individual of a CR species = Tier 2 (Sub-criterion 1c)
- DMUs with regionally important concentrations of a EN species = Tier 2 (Sub-criterion 1c)
- DMUs with ≥95% of the global population of a restricted-range, endemic or migratory/congregatory species (effectively site endemics) = Tier 1 (Sub-criteria 2a+3a)
- DMUs with ≥1% of the global population of a restricted-range, endemic or migratory/congregatory species (this is the easiest category in which to trigger CH) = Tier 2 (Sub-criteria 2b+3b)

The additions to these simple rules are covered by Sub-criteria 1d, 3c, 3d and 3e. Sub-criterion 1d was created for species where DMUs cannot easily be identified (e.g. for wide-ranging animals such as tigers. Sub-criterion 3d and 3e cover situations of species population clumping and recruitment and are most relevant in the marine realm: e.g. a site such as a reef spawning site used once per year might hold very few individuals but be responsible for recruiting >1% of the global population each year.

[2] Although the marine realm may present some particular challenges.

Quantitative thresholds for Criteria 1-3 relating to Tier 1 and Tier 2 Critical Habitat.

Table 1.

Criteria	Tier 1	Tier 2
1.Critically Endangered (CR)/ Endangered (EN) Species	(a) Habitat required to sustain ≥ 10 percent of the global population of a CR or EN species/subspecies where there are known, regular occurrences of the species and where that habitat could be considered a discrete management unit for that species. (b) Habitat with known, regular occurrences of CR or EN species where that habitat is one of 10 or fewer discrete management sites globally for that species.	(c) Habitat that supports the regular occurrence of a single individual of a CR species and/or habitat containing regionally-important concentrations of a Red-listed EN species where that habitat could be considered a discrete management unit for that species/subspecies. (d) Habitat of significant importance to CR or EN species that are wide-ranging and/or whose population distribution is not well understood and where the loss of such a habitat could potentially impact the long-term survivability of the species. (e) As appropriate, habitat containing nationally/regionally important concentrations of an EN, CR or equivalent national/regional listing.
2. Endemic/ Restricted Range Species	(a) Habitat known to sustain ≥ 95 percent of the global population of an endemic or restricted-range species where that habitat could be considered a discrete management unit for that species (e.g., a single-site endemic).	(b) Habitat known to sustain ≥ 1 percent but < 95 percent of the global population of an endemic or restricted-range species/subspecies where that habitat could be considered a discrete management unit for that species, where data are available and/or based on expert judgement.
3. Migratory/ Congregatory Species	(a) Habitat known to sustain, on a cyclical or otherwise regular basis, ≥ 95 percent of the global population of a migratory or congregatory species at any point of the species lifecycle where that habitat could be considered a discrete management unit for that species.	(b) Habitat known to sustain, on a cyclical or otherwise regular basis, ≥ 1 percent but < 95 percent of the global population of a migratory or congregatory species at any point of the species lifecycle and ' where that habitat could be considered a discrete management unit for that species, where data are available and/or based on expert judgement. (c) For birds, habitat that meets BirdLife International's Criterion A4 for congregations and/or Ramsar Criteria 5 or 6 for Identifying Wetlands of International Importance. (d) For species with large but clumped distributions, a provisional threshold is set at ≥ 5 percent of the global population for both terrestrial and marine species. (e) Source sites that contribute ≥ 1 percent of the global population of recruits.