



## Convention on Biological Diversity

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### CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

Ninth meeting  
Bonn, 19–30 May 2008  
Agenda item 4.9

#### **DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY AT ITS NINTH MEETING**

##### *IX/20. Marine and coastal biodiversity*

*The Conference of the Parties,*

*Reiterating* the United Nations General Assembly's central role in addressing issues relating to the conservation and sustainable use of biodiversity in marine areas beyond national jurisdiction,

*Recalling* that General Assembly resolution 60/30 emphasized the universal and unified character of the United Nations Convention on the Law of the Sea and reaffirmed that the United Nations Convention on the Law of the Sea sets out the legal framework within which all activities in the oceans and seas must be carried out, and that its integrity needs to be maintained, as recognized also by the United Nations Conference on Environment and Development in chapter 17 of Agenda 21,

*Recognizing* that the principles adopted in the Rio Declaration on Environment and Development <sup>1/</sup> play an important role in the conservation and sustainable use of marine biodiversity,

*Considering* the objectives of the Convention and the principle contained in Article 3, which establishes the responsibility of States to ensure that activities within their jurisdiction or control, do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

*Recalling* the section of its decision VIII/24 on options for cooperation for the establishment of marine protected areas in marine areas beyond the limits of national jurisdiction, in particular paragraph 42, in which the Conference of the Parties recognizes that the Convention on Biological Diversity has a key role in supporting the work of the General Assembly with regard to marine protected areas beyond national jurisdiction, by focusing on the provision of scientific and, as appropriate, technical information and advice relating to marine biological diversity, the application of the ecosystem approach and the precautionary approach, and in delivering the 2010 target,

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<sup>1/</sup> Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions Adopted by the Conference (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I.

*Recalling also* paragraph 38 of decision VIII/24, which recognizes that application of tools beyond and within national jurisdiction need to be coherent, compatible and complementary and without prejudice to the rights and obligations of coastal States under international law,

*Recalling* that the Joint Statement by the Co-Chairpersons of the second meeting of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, established by General Assembly, registered support for the scientific criteria for the identification of ecologically or biologically significant marine areas in need of protection developed in the context of the Convention on Biological Diversity,

1. *Takes note of* the synthesis and review of the best available scientific studies on priority areas for biodiversity conservation in marine areas beyond the limits of national jurisdiction, which was undertaken in pursuance of paragraph 44 (a) of decision VIII/24;

2. *Taking into account* the role of Food and Agriculture Organization of the United Nations, *requests* the Executive Secretary in collaboration with the Food and Agriculture Organization of the United Nations, Parties, other Governments, and relevant organizations, to compile and synthesize available scientific information on the impacts of destructive fishing practices, unsustainable fishing, and illegal, unreported, and unregulated (IUU) fishing on marine biodiversity and habitats, and make such information available for consideration, at a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the tenth meeting of the Conference of the Parties;

3. *Taking into account* the role of the International Maritime Organization, *requests* the Executive Secretary to seek the views of Parties and other Governments, and, in consultation with the International Maritime Organization, other relevant organizations, and indigenous and local communities, to compile and synthesize available scientific information on potential impacts of direct human-induced ocean fertilization on marine biodiversity and make such information available for consideration at a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the tenth meeting of the Conference of the Parties;

4. *Requests* the Executive Secretary, in collaboration with Parties, other Governments, and relevant organizations, to compile and synthesize available scientific information on ocean acidification and its impacts on marine biodiversity and habitats, which is identified as a potentially serious threat to cold-water corals and other marine biodiversity, and make such information available for consideration at a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the tenth meeting of the Conference of the Parties;

5. *Welcomes* the review of spatial databases containing information on marine areas beyond the limits of national jurisdiction and the development of an Interactive Map (IMap), <sup>2/</sup> which was prepared in collaboration with the United Nations Environment Programme World Conservation Monitoring Centre in pursuance of paragraph 44 (c) of decision VIII/24, and *requests* the Executive Secretary, in collaboration with the UNEP – WCMC, to invite the International Maritime Organization and other relevant organizations, to promote wide use of the Interactive Map (IMap), including, where appropriate, its integration into the World Database on Protected Areas, and continue, within the mandates of the Convention on Biological Diversity, to update relevant information, incorporating information on ecosystem functions and connectivity, threats and habitats in the water column, and

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<sup>2/</sup> There exists a disclaimer: “The material and geographic designations in this map do not imply the expressions of any opinion whatsoever on the part of UNEP-WCMC concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. © UNEP-WCMC, 2007.”

further linkages with the Food and Agriculture Organization of the United Nations, and other relevant organizations, as appropriate;

6. *Takes note of* the report on Global Open Oceans and Deep Seabed (GOODs) Biogeographic Classification, (UNEP/CBD/COP/9/INF/44), and *requests* the Executive Secretary to make this report available for information at a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the tenth meeting of the Conference of the Parties;

7. *Takes note of* the various options, which are being applied and/or under development to prevent and mitigate the adverse impacts of human activities to selected seabed habitats, as referred to in paragraph 5 of decision VIII/21;

8. *Invites* Parties, other Governments and relevant organizations, including in the context of the United Nations Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, to cooperate in further developing scientific and technical guidance for the implementation of environmental impact assessments and strategic environmental assessments for activities and processes under their jurisdiction and control which may have significant adverse impacts on marine biodiversity beyond national jurisdiction, taking into consideration the work of Food and Agriculture Organization of the United Nations, the International Maritime Organization, and other relevant organizations, with a view to ensuring such activities are regulated in such a way that they do not compromise ecosystem integrity, and to report to the Conference of the Parties at its tenth meeting on progress made in that regard;

9. *Notes* the need for capacity-building for developing countries, in order to fully implement existing provisions of environmental impact assessment, as well as the challenges and difficulties in carrying out environmental impact assessment in areas beyond national jurisdiction;

10. For the purpose of paragraphs 8 and 9 of the present decision, taking into account the relevant provisions of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity, *decides* to convene an expert workshop, including experts from different relevant organizations, with balanced regional and sectoral representation, to discuss scientific and technical aspects relevant to environmental impact assessment in areas beyond national jurisdiction with a view to contributing to the development of such scientific and technical guidance, building on ongoing relevant sectoral, regional and national environmental impact assessment efforts;

11. *Also invites* Parties, other Governments and relevant organizations, including the Food and Agriculture Organization of the United Nations, the United Nations Division for Ocean Affairs and Law of the Sea, the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization, and the International Maritime Organization, to cooperate in further developing and applying effective options for preventing and mitigating the adverse impacts of human activities to selected seabed habitats, and make available information on their experiences and case-studies on and lessons learned from developing and applying these options, and *requests* the Executive Secretary, in collaboration with relevant organizations, to compile and disseminate such information through the clearing-house mechanism and other means of communication;

12. *Expresses its gratitude* to the Government of Portugal for hosting and providing financial support for the Expert Workshop on Ecological Criteria and Biogeographic Classification Systems for Marine Areas in Need of Protection, held in the Azores, Portugal, from 2 to 4 October 2007, and to other Governments and organizations for sponsoring the participation of their representatives;

13. *Welcomes* the report of the Expert Workshop on Ecological Criteria and Biogeographic Classification Systems for Marine Areas in Need of Protection;

14. *Adopts* the scientific criteria, as contained in annex I to the present decision, for identifying ecologically or biologically significant marine areas in need of protection, and the scientific guidance, contained in annex II to the present decision, for designing representative networks of marine protected areas, as recommended by the Expert Workshop on Ecological Criteria and Biogeographic Classification Systems for Marine Areas in Need of Protection, and *requests* the Executive Secretary to transmit the information contained in annex I and II to the present decision to the relevant General Assembly processes;

15. *Recognizes* that when new scientific information, as well as experiences and results from the practical application, are made available, there may be a need to scientifically review the criteria in annex I to the present decision and scientific guidance in annex II, and *decides* to consider the need to establish a mechanism for such a review at a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice after the tenth meeting of the Conference of the Parties;

16. *Takes note of* the four initial steps to be considered in the development of representative networks of marine protected areas, in annex III to the present decision, as recommended by the Expert Workshop on Ecological Criteria and Biogeographic Classification Systems for Marine Areas in Need of Protection, and *requests* the Executive Secretary to transmit this information, to the relevant United Nations General Assembly processes;

17. *Invites* Parties, other Governments, the Food and Agriculture Organization of the United Nations, and other relevant organizations, to submit to the Executive Secretary their views on, and experiences from, the use of the scientific criteria in annex I to the present decision, the scientific guidance in annex II, and the four initial steps in annex III, <sup>3/</sup> and *requests* the Executive Secretary to compile these views and make them available to Parties as part of the efforts to further improve the criteria, scientific guidance, and steps;

18. *Urges* Parties, and *invites* other Governments, and relevant organizations to apply, as appropriate, the scientific criteria in annex I to the present decision, the scientific guidance in annex II, and initial steps in annex III, to identify ecologically or biologically significant and/or vulnerable marine areas in need of protection, with a view to assist the relevant processes within the General Assembly and implement conservation and management measures, including the establishment of representative networks of marine protected areas in accordance with international law, including the United Nations Convention on the Law of the Sea, and recognizing that these criteria may require adaptation by Parties if they choose to apply them within their national jurisdiction noting that they will do so with regard to national policies and criteria;

19. *Further decides* to convene an expert workshop, including scientific and technical experts from different Parties, other Governments and relevant organizations, with balanced regional and sectoral participation and using the best available information and data at the time, in order to provide scientific and technical guidance on the use and further development of biogeographic classification systems, and guidance on the identification of areas beyond the national jurisdiction, which meet the scientific criteria in annex I to the present decision. The workshop will review and synthesize progress on the identification of areas beyond national jurisdiction which meet the scientific criteria in annex I to the present decision, and experience with the use of the biogeographic classification system, building upon a compilation of existing sectoral, regional and national efforts, and *requests* the Executive Secretary to

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<sup>3/</sup> A Party expressed the view that proposals on ways and means for coordination, management and control in these areas should also be included.

transmit the results of this workshop to a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice for its consideration prior to the tenth meeting of the Conference of Parties with a view to assisting the United Nations General Assembly. This workshop shall not consider issues relating to management and only provides scientific and technical information and guidance;

20. *Invites* Parties, other Governments, and relevant organizations to provide relevant information concerning the objectives of the workshop referred to paragraph 19 above and on the progress towards the 2012 target to the Executive Secretary for compilation and provision to the expert workshop;

21. *Acknowledges and welcomes* the work undertaken by regional agreements and conventions in setting up such networks, in accordance with international law, and *encourages* cooperation and collaboration and capacity-building amongst existing bodies;

22. *Recognizes* that strong evidence has been compiled, that emphasizes the need for urgent action to protect biodiversity in selected seabed habitats and marine areas in need of protection in accordance with the precautionary approach and international law, including the United Nations Convention on the Law of the Sea;

23. *Urges* Parties, other Governments and relevant organizations to undertake further research to improve understanding of marine biodiversity, especially in selected seabed habitats and marine areas in need of protection, including, in particular, elaboration of inventories and baselines to be used for, *inter alia*, assisting in the assessment of the status and trends of marine biodiversity and habitats, paying special attention to those ecosystems and critical habitats that are relatively unknown;

24. *Calls upon* Parties, other Governments and relevant organizations to collaborate on capacity development in developing countries, particularly the least developed countries and small island developing States among them, as well as countries with economies in transition, for the application of the scientific criteria in annex I to the present decision and the scientific guidance in annex II, and for the mitigation of the significant adverse impacts of human activities in marine areas;

25. *Calls upon* Parties, other Governments and relevant organizations to collaborate with developing countries, particularly the least developed countries and small island developing States among them, as well as countries with economies in transition, in enhancing their scientific, technical and technological capacities to engage in activities aimed at conservation and sustainable use of marine biodiversity, including through specialized training, participation in research, and regional and subregional collaborative initiatives;

26. *Invites* Parties to promote full and effective participation of indigenous and local communities, in accordance with the national legislation and applicable international obligations, when establishing new marine protected areas; also noting the United Nations Declaration on the Rights of Indigenous Peoples; <sup>4/</sup>

27. *Calls on* Parties to integrate the traditional, scientific, technical and technological knowledge of indigenous and local communities, consistent with Article 8(j) of the Convention, and to ensure the integration of social and cultural criteria and other aspects for the identification of marine areas in need of protection as well as the establishment and management of marine protected areas.

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<sup>4/</sup> General Assembly resolution 61/295 of 13 September 2007, annex.

28. Welcomes the offer by the Government of Canada to host, and the Government of Federal Republic of Germany to co-fund, the expert workshop referred to in paragraph 19 above.

## Annex I

**SCIENTIFIC CRITERIA FOR IDENTIFYING ECOLOGICALLY OR BIOLOGICALLY SIGNIFICANT MARINE AREAS IN NEED OF PROTECTION IN OPEN-OCEAN WATERS AND DEEP-SEA HABITATS <sup>5/</sup>**

Criteria	Definition	Rationale	Examples	Consideration in application
<b>Uniqueness or rarity</b>	Area contains either (i) unique (“the only one of its kind”), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features	<ul style="list-style-type: none"> <li>• Irreplaceable</li> <li>• Loss would mean the probable permanent disappearance of diversity or a feature, or reduction of the diversity at any level.</li> </ul>	<p><i>Open ocean waters</i> Sargasso Sea, Taylor column, persistent polynyas.</p> <p><i>Deep-sea habitats</i> endemic communities around submerged atolls; hydrothermal vents; sea mounts; pseudo-abyssal depression</p>	<ul style="list-style-type: none"> <li>• Risk of biased-view of the perceived uniqueness depending on the information availability</li> <li>• Scale dependency of features such that unique features at one scale may be typical at another, thus a global and regional perspective must be taken</li> </ul>
<b>Special importance for life-history stages of species</b>	Areas that are required for a population to survive and thrive.	Various biotic and abiotic conditions coupled with species-specific physiological constraints and preferences tend to make some parts of marine regions more suitable to particular life-stages and functions than other parts.	Area containing: (i) breeding grounds, spawning areas, nursery areas, juvenile habitat or other areas important for life history stages of species; or (ii) habitats of migratory species (feeding, wintering or resting areas, breeding, moulting, migratory routes).	<ul style="list-style-type: none"> <li>• Connectivity between life-history stages and linkages between areas: trophic interactions, physical transport, physical oceanography, life history of species</li> <li>• Sources for information include: e.g. remote sensing, satellite tracking, historical catch and by-catch data, vessel monitoring system (VMS) data.</li> <li>• Spatial and temporal distribution and/or aggregation of the species.</li> </ul>

<sup>5/</sup> Referred to in paragraph 1 of annex II to decision VIII/24.

Criteria	Definition	Rationale	Examples	Consideration in application
<p><b>Importance for threatened, endangered or declining species and/or habitats</b></p>	<p>Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.</p>	<p>To ensure the restoration and recovery of such species and habitats.</p>	<p>Areas critical for threatened, endangered or declining species and/or habitats, containing (i) breeding grounds, spawning areas, nursery areas, juvenile habitat or other areas important for life history stages of species; or (ii) habitats of migratory species (feeding, wintering or resting areas, breeding, moulting, migratory routes).</p>	<ul style="list-style-type: none"> <li>• Includes species with very large geographic ranges.</li> <li>• In many cases recovery will require reestablishment of the species in areas of its historic range.</li> <li>• Sources for information include: e.g. remote sensing, satellite tracking, historical catch and by-catch data, vessel monitoring system (VMS) data.</li> </ul>
<p><b>Vulnerability, fragility, sensitivity, or slow recovery</b></p>	<p>Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.</p>	<p>The criteria indicate the degree of risk that will be incurred if human activities or natural events in the area or component cannot be managed effectively, or are pursued at an unsustainable rate.</p>	<p><i>Vulnerability of species</i></p> <ul style="list-style-type: none"> <li>• Inferred from the history of how species or populations in other similar areas responded to perturbations.</li> <li>• Species of low fecundity, slow growth, long time to sexual maturity, longevity (e.g. sharks, etc).</li> <li>• Species with structures providing biogenic habitats, such</li> </ul>	<ul style="list-style-type: none"> <li>• Interactions between vulnerability to human impacts and natural events</li> <li>• Existing definition emphasizes site specific ideas and requires consideration for highly mobile species</li> <li>• Criteria can be used both in its own right and in conjunction with other criteria.</li> </ul>

Criteria	Definition	Rationale	Examples	Consideration in application
			<p>as deepwater corals, sponges and bryozoans; deep-water species.</p> <p><i>Vulnerability of habitats</i></p> <ul style="list-style-type: none"> <li>• Ice-covered areas susceptible to ship-based pollution.</li> <li>• Ocean acidification can make deep-sea habitats more vulnerable to others, and increase susceptibility to human-induced changes.</li> </ul>	
<b>Biological productivity</b>	Area containing species, populations or communities with comparatively higher natural biological productivity.	Important role in fuelling ecosystems and increasing the growth rates of organisms and their capacity for reproduction	<ul style="list-style-type: none"> <li>• Frontal areas</li> <li>• Upwellings</li> <li>• Hydrothermal vents</li> <li>• Seamounts polynyas</li> </ul>	<ul style="list-style-type: none"> <li>• Can be measured as the rate of growth of marine organisms and their populations, either through the fixation of inorganic carbon by photosynthesis, chemosynthesis, or through the ingestion of prey, dissolved organic matter or particulate organic matter</li> <li>• Can be inferred from remote-sensed products, e.g., ocean colour or process-based models</li> <li>• Time-series fisheries data can be used, but caution is required</li> </ul>

Criteria	Definition	Rationale	Examples	Consideration in application
<b>Biological diversity</b>	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.	Important for evolution and maintaining the resilience of marine species and ecosystems	<ul style="list-style-type: none"> <li>• Sea-mounts</li> <li>• Fronts and convergence zones</li> <li>• Cold coral communities</li> <li>• Deep-water sponge communities</li> </ul>	<ul style="list-style-type: none"> <li>• Diversity needs to be seen in relation to the surrounding environment</li> <li>• Diversity indices are indifferent to species substitutions</li> <li>• Diversity indices are indifferent to which species may be contributing to the value of the index, and hence would not pick up areas important to species of special concern, such as endangered species</li> <li>• Can be inferred from habitat heterogeneity or diversity as a surrogate for species diversity in areas where biodiversity has not been sampled intensively.</li> </ul>
<b>Naturalness</b>	Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.	<ul style="list-style-type: none"> <li>• To protect areas with near natural structure, processes and functions</li> <li>• To maintain these areas as reference sites</li> <li>• To safeguard and enhance ecosystem resilience</li> </ul>	Most ecosystems and habitats have examples with varying levels of naturalness, and the intent is that the more natural examples should be selected.	<ul style="list-style-type: none"> <li>• Priority should be given to areas having a low level of disturbance relative to their surroundings</li> <li>• In areas where no natural areas remain, areas that have successfully recovered, including reestablishment of species, should be considered.</li> <li>• Criteria can be used both in their own right and in conjunction with other criteria.</li> </ul>

*Annex II*

**SCIENTIFIC GUIDANCE FOR SELECTING AREAS TO ESTABLISH A REPRESENTATIVE NETWORK OF MARINE PROTECTED AREAS, INCLUDING IN OPEN OCEAN WATERS AND DEEP-SEA HABITATS <sup>6/</sup>**

<b>Required network properties and components</b>	<b>Definition</b>	<b>Applicable site specific considerations (<i>inter alia</i>)</b>
Ecologically and biologically significant areas	Ecologically and biologically significant areas are geographically or oceanographically discrete areas that provide important services to one or more species/populations of an ecosystem or to the ecosystem as a whole, compared to other surrounding areas or areas of similar ecological characteristics, or otherwise meet the criteria as identified in annex I to decision IX/20.	<ul style="list-style-type: none"> <li>• Uniqueness or rarity</li> <li>• Special importance for life history stages of species</li> <li>• Importance for threatened, endangered or declining species and/or habitats</li> <li>• Vulnerability, fragility, sensitivity or slow recovery</li> <li>• Biological productivity</li> <li>• Biological diversity</li> <li>• Naturalness</li> </ul>
Representativity	Representativity is captured in a network when it consists of areas representing the different biogeographical subdivisions of the global oceans and regional seas that reasonably reflect the full range of ecosystems, including the biotic and habitat diversity of those marine ecosystems.	A full range of examples across a biogeographic habitat, or community classification; relative health of species and communities; relative intactness of habitat(s); naturalness
Connectivity	Connectivity in the design of a network allows for linkages whereby protected sites benefit from larval and/or species exchanges, and functional linkages from other network sites. In a connected network individual sites benefit one another.	Currents; gyres; physical bottlenecks; migration routes; species dispersal; detritus; functional linkages. Isolated sites, such as isolated seamount communities, may also be included.
Replicated ecological features	Replication of ecological features means that more than one site shall contain examples of a given feature in the given biogeographic area. The term “features” means “species, habitats and ecological processes” that naturally occur in the given biogeographic area.	Accounting for uncertainty, natural variation and the possibility of catastrophic events. Features that exhibit less natural variation or are precisely defined may require less replication than features that are inherently highly variable or are only very generally defined.
Adequate and viable sites	Adequate and viable sites indicate that all sites within a network should have size and protection sufficient to ensure the ecological viability and integrity of the feature(s) for which they were selected.	Adequacy and viability will depend on size; shape; buffers; persistence of features; threats; surrounding environment (context); physical constraints; scale of features/processes; spillover/compactness.

*Annex III*

<sup>6/</sup> Referred to in paragraph 3 of annex II of decision VIII/24

**FOUR INITIAL STEPS TO BE CONSIDERED IN THE DEVELOPMENT OF REPRESENTATIVE NETWORKS OF MARINE PROTECTED AREAS:**

1. *Scientific identification of an initial set of ecologically or biologically significant areas.* The criteria in annex I to decision IX/20 should be used, considering the best scientific information available, and applying the precautionary approach. This identification should focus on developing an initial set of sites already recognized for their ecological values, with the understanding that other sites could be added as more information becomes available.
2. *Develop/choose a biogeographic, habitat, and/or community classification system.* This system should reflect the scale of the application and address the key ecological features within the area. This step will entail a separation of at least two realms—pelagic and benthic.
3. *Drawing upon steps 1 and 2 above, iteratively use qualitative and/or quantitative techniques to identify sites to include in a network.* Their selection for consideration of enhanced management should reflect their recognised ecological importance or vulnerability, and address the requirements of ecological coherence through representativity, connectivity, and replication.
4. *Assess the adequacy and viability of the selected sites.* Consideration should be given to their size, shape, boundaries, buffering, and appropriateness of the site-management regime.

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