

10 messages for 2010 Protected areas



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10 messages for 2010

Protected areas

This document is the 2nd in a series of assessments under the title '10 messages for 2010'. Each message provides a short assessment focusing on a specific ecosystem or issue related to biodiversity in Europe. The remaining messages will be published at various intervals throughout 2010. More detailed information on the published and upcoming messages can be found at www.eea.europa.eu/publications/10-messages-for-2010.



Protected areas

Key messages

- Protected areas provide a wide range of services in a context of increasing pressures and a rapidly changing environment.
- Europe is the region with the greatest number of protected areas in the world but they are relatively small in size.
- Europe's unique Natura 2000 network of protected areas and the Emerald network currently under development aim to catalyse biodiversity conservation in Europe and ensure that protected areas can contribute fully to maintaining healthy ecosystems in the wider landscape.

Protected areas provide a wide range of services in a context of increasing pressures and a rapidly changing environment

In addition to their critical role in biodiversity conservation, European protected areas are important for many other reasons. Covering a wide range of ecosystems, including forests, grasslands, wetlands, peat lands, mountain, coastal and marine areas, protected areas ensure the continued flow of ecosystem services. These include providing clean water, protecting soil resources, capturing and storing carbon, and acting as a reservoir of genetic resources.

Further to these ecological values, the Convention on Biological Diversity recognises that protected areas also 'provide opportunities for rural development and rational use of marginal lands, generating income and creating jobs, for research and monitoring, for conservation education, and for recreation and tourism' (CBD, 1992).

Increasingly, protected areas, particularly those listed in IUCN (International Union for Conservation of Nature) categories IV, V and VI (Dudley, 2008), are valued as areas where sustainable resource use and rural development practices can be tested in partnership with a wide range of stakeholders.

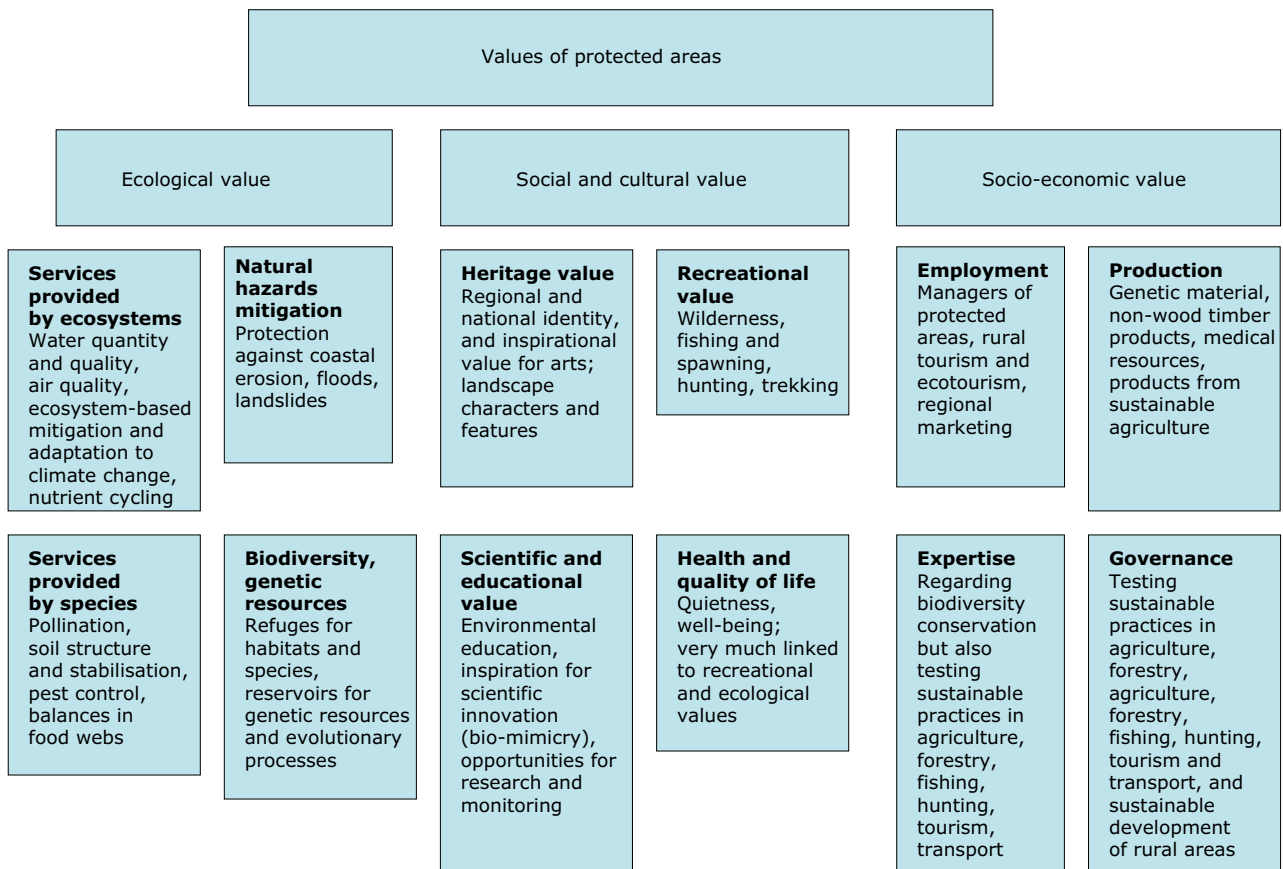
Figure 1 summarises the different values that can be derived from protected areas. The socio-economic benefits of protected areas have recently been demonstrated by the TEEB process (The Economics of Ecosystems and Biodiversity process) (TEEB, 2009).

Europe accounts for the largest number of protected areas in the world but they are relatively small in size

According to IUCN's revised definition, a protected area is a 'clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley, 2008). The conclusions of the Third Biodiversity in Europe Conference (CBD, 2004) emphasised the importance of protected areas and ecological networks to achieving the 2010 target (EC, 2006) and the objectives of the Convention on Biological Diversity (CBD).

With more than 100 000 sites designated in 54 countries, Europe accounts for more protected areas than any other region. To some extent this reflects the high pressure on land use arising from

Figure 1 Ecological, social and socio-economic values of protected areas



Source: Adapted from CREDOC, 2008; and Stolton, 2009.

agriculture, transport and urban development in Europe. Protected areas have long been the only way to preserve remarkable natural assets from adverse land use.

The size of Europe's designated areas varies greatly, ranging from an individual tree, such as the Kačja smreka in Godovic, Slovenia, to over 97 million hectares (ha) for a site in Greenland. Ninety per cent of sites are less than 1 000 ha, however.

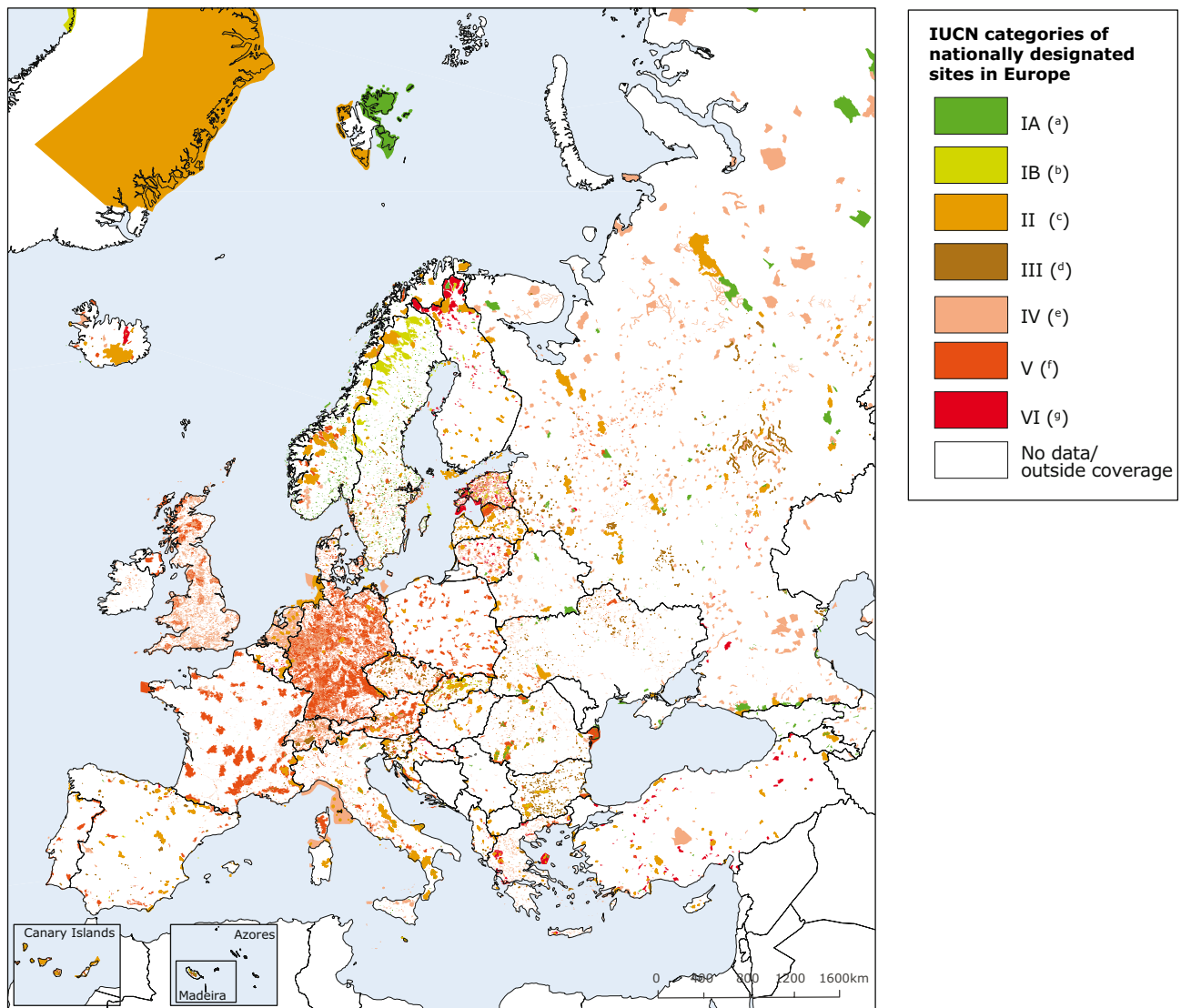
The aims of designation also vary, ranging from strict protection of a natural area (national parks, nature reserves) to regulating human activities (hunting reserves, landscape protection and regulated forest management). While strict nature reserves classified as IUCN category I are mostly situated in northern European countries (principally Scandinavia) as well as in the Russian Federation, most nationally designated sites in Europe are classified as IUCN category V ('Protected Landscape/Seascape') and VI ('Managed Resource Protected Area') (Map 1).

International and European regulations on nature conservation and biodiversity have encouraged countries to cooperate and coordinate actions to protect sites of international importance. Various networks of protected sites have been established as a result, including Ramsar sites (Ramsar Convention, 1987) for wetlands of international importance, World Heritage sites (World Heritage Convention, 1972) and biosphere reserves (MAB, 2010). Each network serves a specific purpose but they complement each other in pursuing the central aim of preserving biodiversity.

International European networks of protected areas catalyse biodiversity conservation

The EU Birds Directive (EC, 1979) and Habitats Directive (EC, 1992) have considerably modified the context and approach to protected areas in the 27 EU Member States by committing countries to set up a 'coherent European ecological network of protected areas', named Natura 2000.

Map 1 **Distribution of nationally protected sites (CDDA) in Europe according to their IUCN category classification**



Note: Nearly 50 % of Spanish sites do not have any IUCN category.

- (^a) Strict Nature Reserve: protected area managed mainly for science.
- (^b) Strict Nature Reserve: protected area managed mainly for wilderness protection.
- (^c) National Park: protected area managed mainly for ecosystem protection and recreation.
- (^d) Natural Monument: protected area managed mainly for conservation of specific natural features.
- (^e) Habitat/Species Management Area: protected area managed mainly for conservation through management intervention.
- (^f) Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation.
- (^g) Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems.

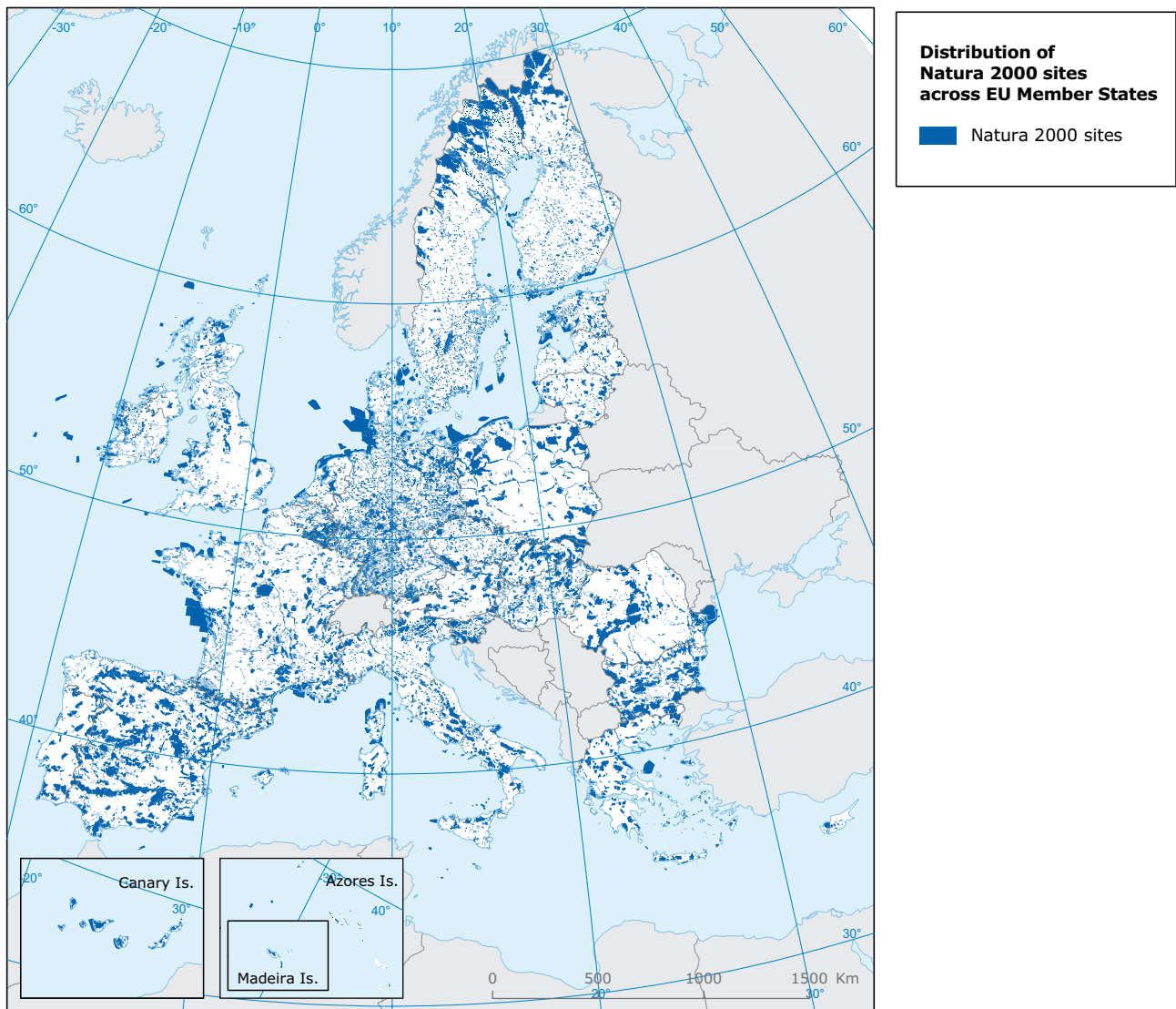
Source: European Topic Centre on Biological Diversity (ETC/BD) and Eionet, 2009.

As a mirror initiative to Natura 2000, the Council of Europe in 1996 launched the Emerald Network, which is based on the same principles as the legally binding Natura 2000 network within the European Union. It extends the strategic transnational approach of a coherent network of Areas of Special

Conservation Interest to non-EU Member States (CoE, 2009).

The Birds Directive requires EU Member States to designate 'Special Protection Areas' and institute appropriate conservation measures in areas of

Map 2 **Distribution of Natura 2000 sites across the 27 EU Member States**



Note: To date, Natura 2000 is a unique international network comprising 22 419 Sites of Community Importance (SCIs) under the Habitat Directive and 5 242 Special Protection Areas (SPAs) under the Birds Directive (EC, 2009a). Therefore, overall more than 17 % of EU territory is designated as Natura 2000 sites (EC, 2009b). The marine part of the network is still in development. Currently, only about 6 % of SCIs and 10 % of SPAs are marine sites.

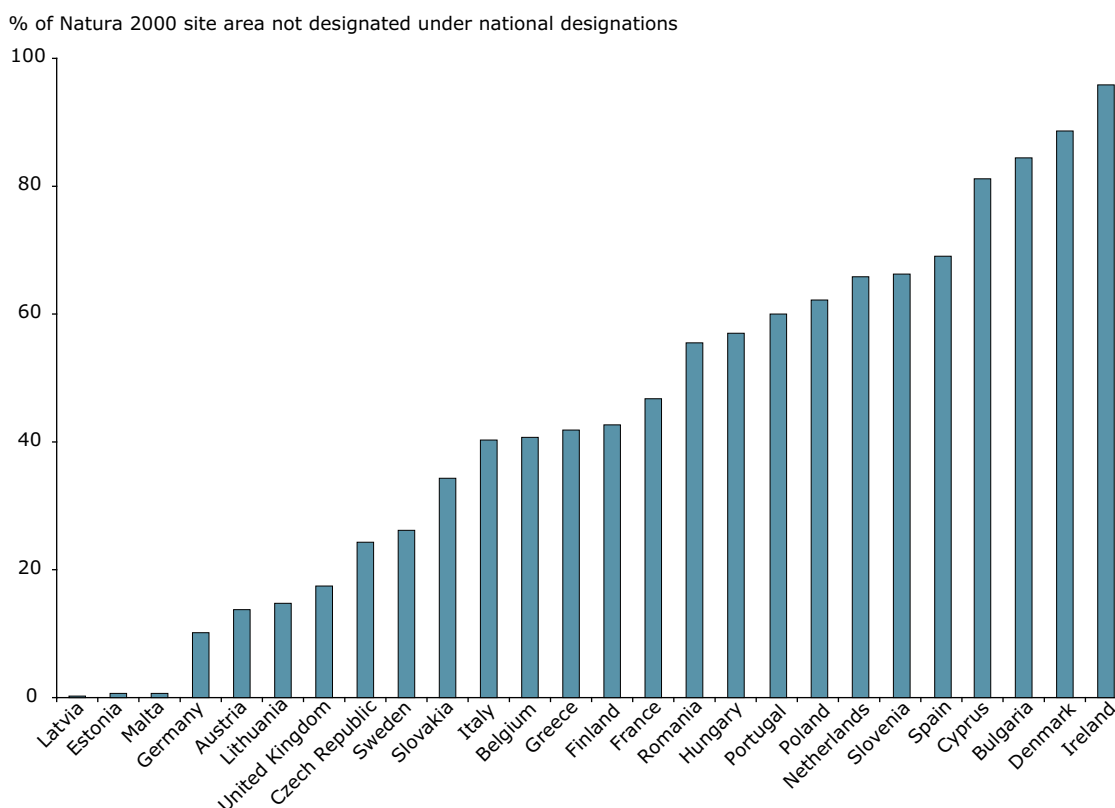
Source: European Topic Centre on Biological Diversity (ETC/BD), 2009.

crucial importance for the survival of 193 bird species (listed in Annex I of the Directive) and regularly occurring migratory species.

The Habitats Directive involves a transnational, concerted approach to the conservation of approximately 1 180 species and 231 habitats of special European concern listed in the EU Habitats Directive, taking into account biogeographical characteristics within nine biogeographical regions (Alpine, Atlantic, Black Sea, Boreal, Continental, Macaronesian, Mediterranean, Pannonian and Steppic).

Natura 2000 exemplifies the creation of an ecological network across the EU (Map 2). By involving a huge number of stakeholders — owners and occupiers of land, local, national and European authorities — across all sectors, the Natura 2000 network aims to ensure biodiversity conservation beyond national boundaries, while maintaining dynamic rural areas. The principle of collaboration is enshrined in the Habitats Directive, which requires that conservation measures 'take account of the economic, social and cultural requirements and the regional and local characteristics of the area'.

Figure 2 Percentage of Natura 2000 site area not protected under national instruments per EU Member State



Note: For some countries CDDA boundaries were not available or incomplete. Figures for Denmark and the Netherlands may be overestimated due to large marine Natura 2000 sites.

Source: European Topic Centre on Biological Diversity (ETC/BD), 2009.

There is, of course, a certain degree of overlap between national, international and EU designations. The implementation of the Natura 2000 network has in general significantly increased the area dedicated to conservation measures across the European Union. For several new EU countries, such as Latvia, Estonia and Malta, there is a very large overlap between Natura 2000 sites and national designations, as accession countries were required to integrate EU legislation into their national system. In countries such as Belgium, France, Greece, Hungary, Italy, Portugal, Romania, Slovenia and Spain, more than 60 % of the surface area now designated as Natura 2000 is not covered by a national instrument (Figure 2). This is partly explained by the fact that some countries, such as France, have chosen contractual means rather than legal instruments to implement Natura 2000 at national level.

Natura 2000 has not only increased considerably the surface area protected through conservation measures but has also improved the quality of these measures. Given that Natura 2000 is still a young

network and that monitoring measures are still at an early stage, however, it is not yet possible to assess properly its full effectiveness in conserving biodiversity.

Europe's green infrastructure beyond 2010

Europe is facing rapid environmental changes driven by increasing competition for land from housing development, transport and energy infrastructure, agriculture and forestry; overexploitation of natural resources; pollution; and climate change. In this context, European protected areas are essential for healthy, functioning and resilient ecosystems.

Europe has made significant progress in applying conservation measures on land, in keeping with the target in CBD decision VII/30, whereby at least 10 % of each of the world's ecological regions should be effectively conserved by 2010.

Progress in the marine environment is less encouraging. The target in CBD decision VII/28 of establishing by 2012 'a global network of comprehensive, representative and effectively managed national and regional protected areas' remains a considerable challenge and requires considerable concerted efforts from countries, also at European level.

To be efficient, the current network of protected areas in Europe needs to be supported by sectoral policies and planning instruments that allow a fully integrated and sustainable ecosystem management approach. Halting Europe's biodiversity loss

will require efforts to reduce pressures on biodiversity and improve the size, management and connectivity of patchworks of habitats and ecosystems in Europe — establishing a spatially coherent network of designated sites.

At the same time, climate change means that establishing corridors for species to move between 'islands of biodiversity' though very relevant, is no longer sufficient. Biodiversity conservation must be integrated into territorial planning to maintain our green infrastructure and ensure that protected areas can contribute fully to maintaining the health of ecosystems in the wider landscape.

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