Dear Mr David

PE1277 Establishing a Scottish Geodiversity Duty

Thank you for consulting Scottish Natural Heritage (SNH) on the above Petition.

1. Background

Geodiversity is the variety of rocks, minerals, fossils, landforms, sediments, and soils in an area, together with the natural processes which form and alter them. For its size, Scotland has a remarkable geodiversity, reflecting a rich and varied geological history that spans some 3 billion years of the Earth’s existence. Scotland’s geodiversity is a major asset of national and international importance for interpreting past geological processes of global significance, such as volcanism, plate tectonics, and ice ages, and for understanding contemporary global change. Some of Scotland’s rocks also contain a rich variety of fossils which have greatly elucidated the evolution of the plant and animal kingdoms, and our organic soils contain some of the largest soil carbon stocks in Europe.

Traditionally, the conservation of Scotland’s geodiversity has focused mainly on the management of statutory protected sites. Today, however, geodiversity is increasingly recognised to have much wider relevance as an integral component of the landscape and to be a key influence on habitats and species, economic activities, historical and cultural heritage, sustainable management of the land, river catchments, and the coast, and climate change impact mitigation and adaptation. In this wider context, geodiversity provides a variety of supporting, provisioning, regulating, and cultural services, analogous to the concept of ‘ecosystem services’. It has a fundamental bearing on the health and wellbeing of Scotland’s people and therefore has a significant contribution to make in delivering the Scottish Government’s Strategic Objectives, National Outcomes, and the 5 key themes for a Greener Scotland. However, the recognition of geodiversity in the Scottish policy and planning environment does not yet adequately reflect these wider values.

SNH supports the establishment of a geodiversity duty. This would help bridge the gap between the current focus on statutory protected sites and Scotland’s wider geodiversity interest as well providing a more effective linkage with the 5 strategic objectives of Government. It could also provide a mechanism to underpin a ‘Scottish Geodiversity Framework’, analogous to the Scottish Government’s Scottish Soil Framework. This would sit within the developing UK Geodiversity Action Plan (UKGAP) which sets an overall context for geodiversity action in the UK.
2. A geodiversity duty in the context of a ‘Scottish Geodiversity Framework’

SNH and the British Geological Survey are currently collaborating on a partnership study (completion 2010) to establish an evidence base for the development of framework for the conservation and protection of Scotland’s geodiversity, incorporating the wider role of ‘geodiversity services’. The aims of such a ‘Scottish Geodiversity Framework’ would be to instigate a process through which key stakeholders would work together to achieve better protection of geodiversity and better integration of geodiversity in policy and guidance to deliver sustainable management of land and water, consistent with the economic, social, cultural and environmental needs of Scotland.

A ‘Scottish Geodiversity Framework’ would help to:

1. provide an environment in which the rich geodiversity of Scotland can be understood, valued and conserved; and
2. make geodiversity more relevant to the way we work and live, providing a sense of place and contributing to the decisions we make about a sustainable future for our environment, for both people and nature.

In doing so, it would contribute to delivering the Scottish Government’s National Outcome on Natural Resource Protection and Enhancement.

A geodiversity duty could be defined in the context of such a ‘Scottish geodiversity framework’ as a means to place a duty on all local authorities, agencies and other public bodies to further the conservation and enhancement of geodiversity and to recognise its wider economic, social, cultural and environmental values.

3. Objectives of a geodiversity duty

At a strategic level, the objectives of a geodiversity duty could focus on:

1. what all public bodies, local authorities and agencies can do for geodiversity;
2. what geodiversity can do for delivering sustainable solutions;
3. how planning authorities and others can help to connect people better with landscapes, nature and the geological heritage; and
4. how the integration of geodiversity, nature, landscape and natural processes into policy and development planning could inform mitigation and adaptation to climate change, delivering sustainable development and enhancing the quality of life for Scotland’s people.

Specifically, planning authorities could contribute towards a geodiversity duty by, for example:

1. Ensuring the authority’s legal obligations in relation to protected geodiversity features are reflected in strategic development plans and local plans and taken fully into account in development management decisions.
2. Encouraging the designation of sites of local geodiversity interest and their integration with Greenspace strategy.
3. Ensuring that geodiversity interests outwith designated sites are properly reflected in strategic plans and local plans and in development management decisions. Un-notified GCR sites, in particular, should be accorded appropriate recognition as nationally/internationally important locations for geodiversity.
4. Founding planning decisions affecting geodiversity on up-to-date information about the geodiversity of an area and sound geoscience, including preparation of local geodiversity audits and Local Geodiversity Action Plans (LGAPs).

5. Ensuring opportunities to enhance geodiversity are considered in all relevant development proposals, including the potential to create, extend or restore geodiversity interests (e.g. during mineral working and restoration).

6. Allowing for dimension stone quarrying both for local use in maintaining local distinctiveness and helping to safeguard the integrity of the built heritage in our towns and cities.

7. Ensuring that river and coastal developments, including flood protection, form part of a strategic plan (such as a Shoreline Management Plan), taking account of the effects upon natural processes and steering development away from geomorphologically dynamic areas. As far as possible, approaches to erosion management that retain the natural habitats, processes and landscapes and which enable Scotland’s rivers and coastlines to evolve naturally with minimal human intervention should be adopted.

8. Including in strategic plan and local plan policies and planning decisions the key requirements and recommendations in the Scottish Soil Framework; implementing a policy towards soil sustainability and soil management procedures within the development control process; and developing soil action planning.

9. Preparing supplementary guidance on protection and enhancement of geodiversity.

10. Promoting awareness and understanding of geodiversity through local initiatives, including geotourism, and other activities related to outdoor access.

4. Potential benefits of a ‘geodiversity duty’

Potential benefits of a geodiversity duty could include:

1. Better integration of geodiversity into the planning framework.

2. Enhanced protection for Scotland’s geodiversity.

3. Wider recognition of the economic, social and cultural values of geodiversity, as well as the public benefits.

4. Better understanding of geological protected areas by local authorities, public bodies and the public.

5. Greater ‘ownership’ by planning authorities of their natural heritage.

6. Implementation of more sustainable approaches to development and sustainable management of natural resources based on understanding natural processes.

7. Recognition that enhancement and public engagement are as important as protection.

8. Delivery of positive action to enhance natural capital of local value.

9. Helping to foster a sense of pride in local Earth heritage among communities and visitors.

10. Educational benefits through providing resources for outdoor learning for schools and lifelong learning.

11. Public health benefits from promoting outdoor access.

If you wish to discuss this response, please get in touch with John Gordon, Policy & Advice Manager: Earth Science (john.gordon@snh.gov.uk; tel: 0131 316 2611), in the first instance.
Yours sincerely

Ron Macdonald
Head of Policy & Advice