

Appendix 2: Baseline Data Information and Maps

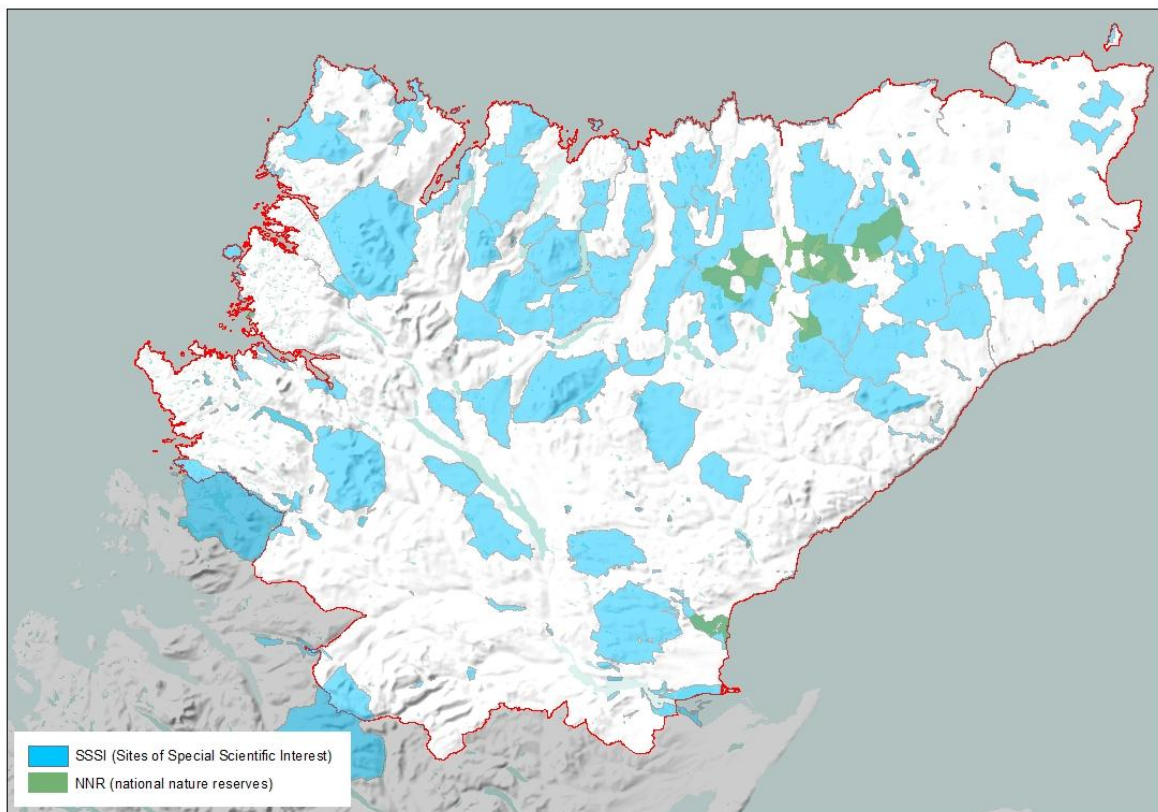
The information in this appendix shows baseline data for Caithness and Sutherland. It consists of a series of maps and links to sources used in the preparation of this Revised Environmental Report. Data has been taken at either Highland wide level or, when available, Caithness and Sutherland level.

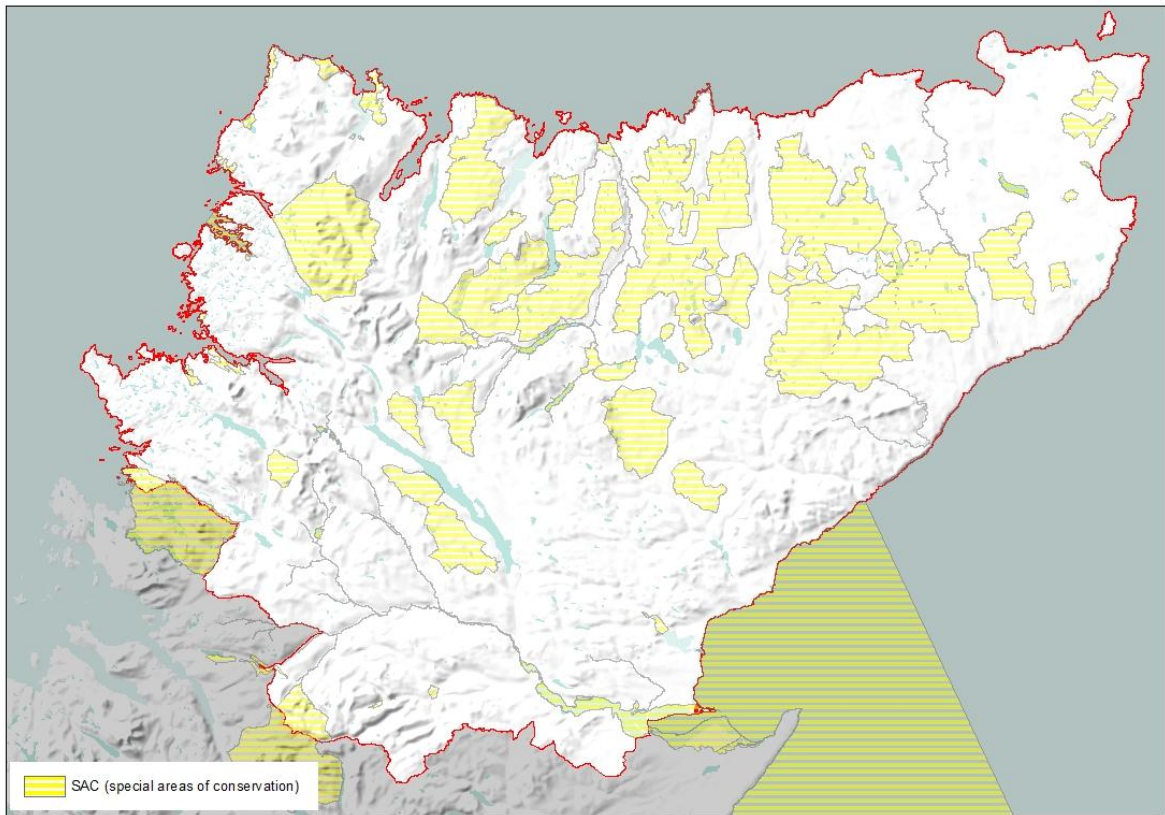
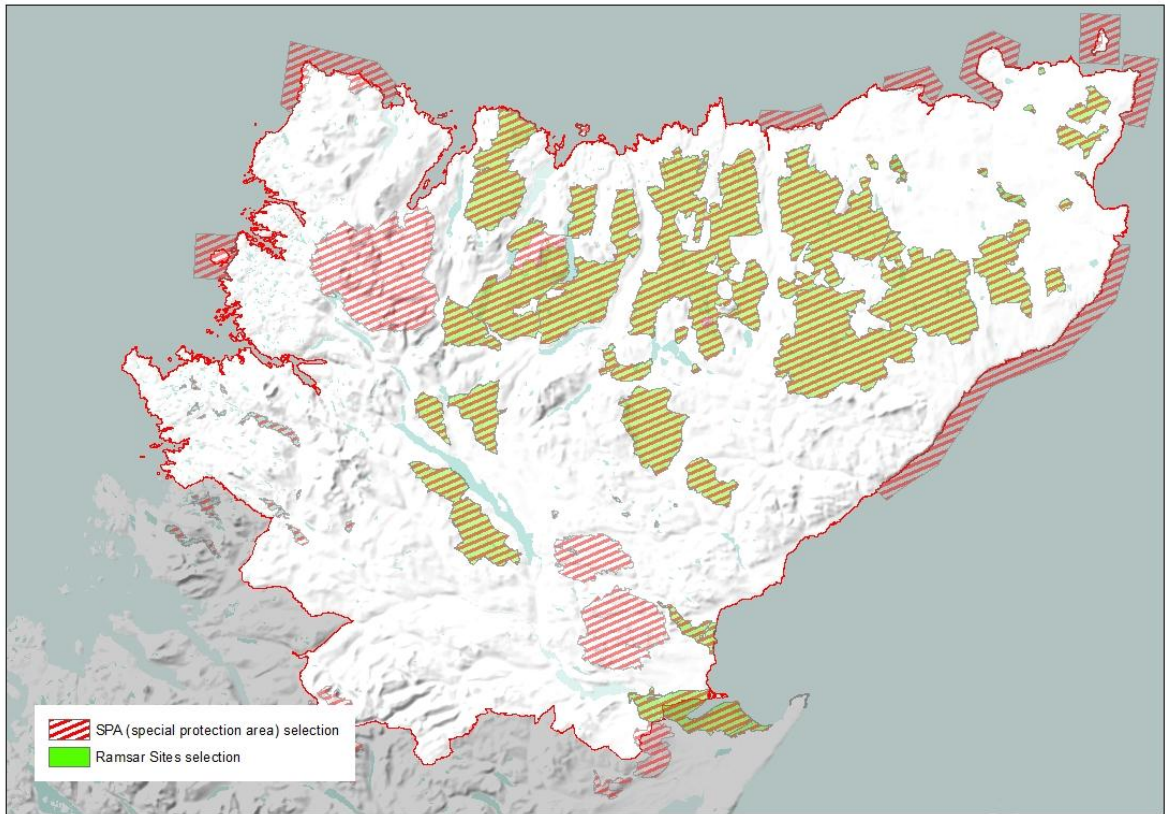
Biodiversity, Flora and Fauna	Key information	Data Source
Protect, enhance and where necessary restore designated wildlife sites and protected species	There are currently 150 SSSI's, 29 SAC's, 15 SPA's, 4 NNR's, 3 RAMSAR in the Plan area.	SNH website for information on designated sites, site condition and qualifying interests/features: www.snh.org.uk Scottish Biodiversity Strategy (Scotland's Biodiversity - It's In Your Hands; 2020 Challenge for Scotland's Biodiversity)
	Flow Country, nominated to UNESCO as a tentative World Heritage Site, is a vitally important habitat on a regional and international scale. It is the largest expanse of blanket bog in Europe, and covers about 4,000 km ² and home to a rich variety of wildlife, and is used as a breeding ground for many different species of birds.	The Peatlands of Caithness and Sutherland - Management Strategy 2005 - 2015
Improve biodiversity, avoiding irreversible losses.	Highland region supports 192 of the 238 priority species in Scotland and 40 of the 42 priority habitats. 455 of the priority species of conservation importance are found in Highland.	Highland Biodiversity Action Plan www.highlandbiodiversity.com Habitat and Birds Directive – Annex 1
Provide appropriate opportunities for people to come into contact with and appreciate wild life and wild places.	Core Paths and Rights of Way	THC Core Paths Scotways
Fisheries and Aquaculture	Natural Resources of the Seas around Highland.	http://www.highland.gov.uk/yourenvironment/agriculturefisheriesandforestry/fisheriesandaquaculture/
Protected species		THC's Statutorily Protected Species Supplementary Guidance. SNH website http://www.snh.gov.uk/publications-data-and-research/snhi-information-

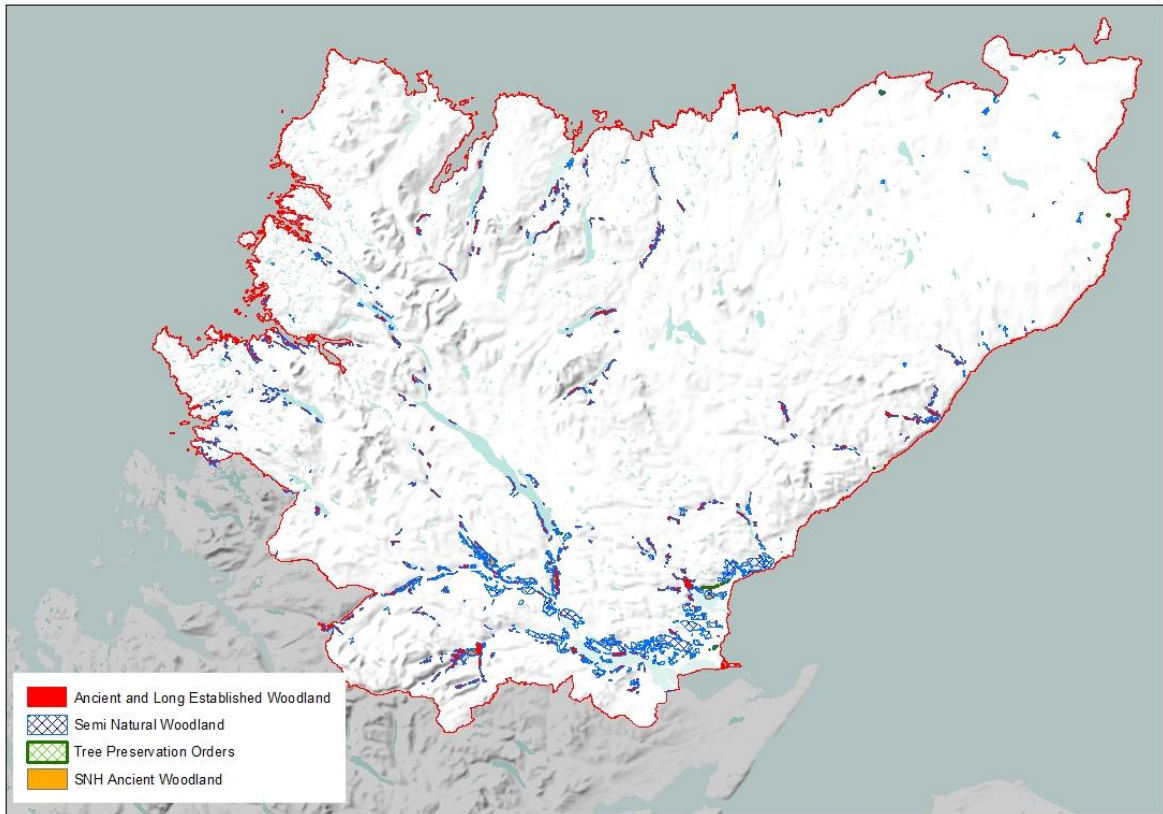
[service/map/](#)

Presence of protected species may be able to be derived from the NBN Gateway <http://data.nbn.org.uk/> (although absence of any record is not conclusive that the species is not present).

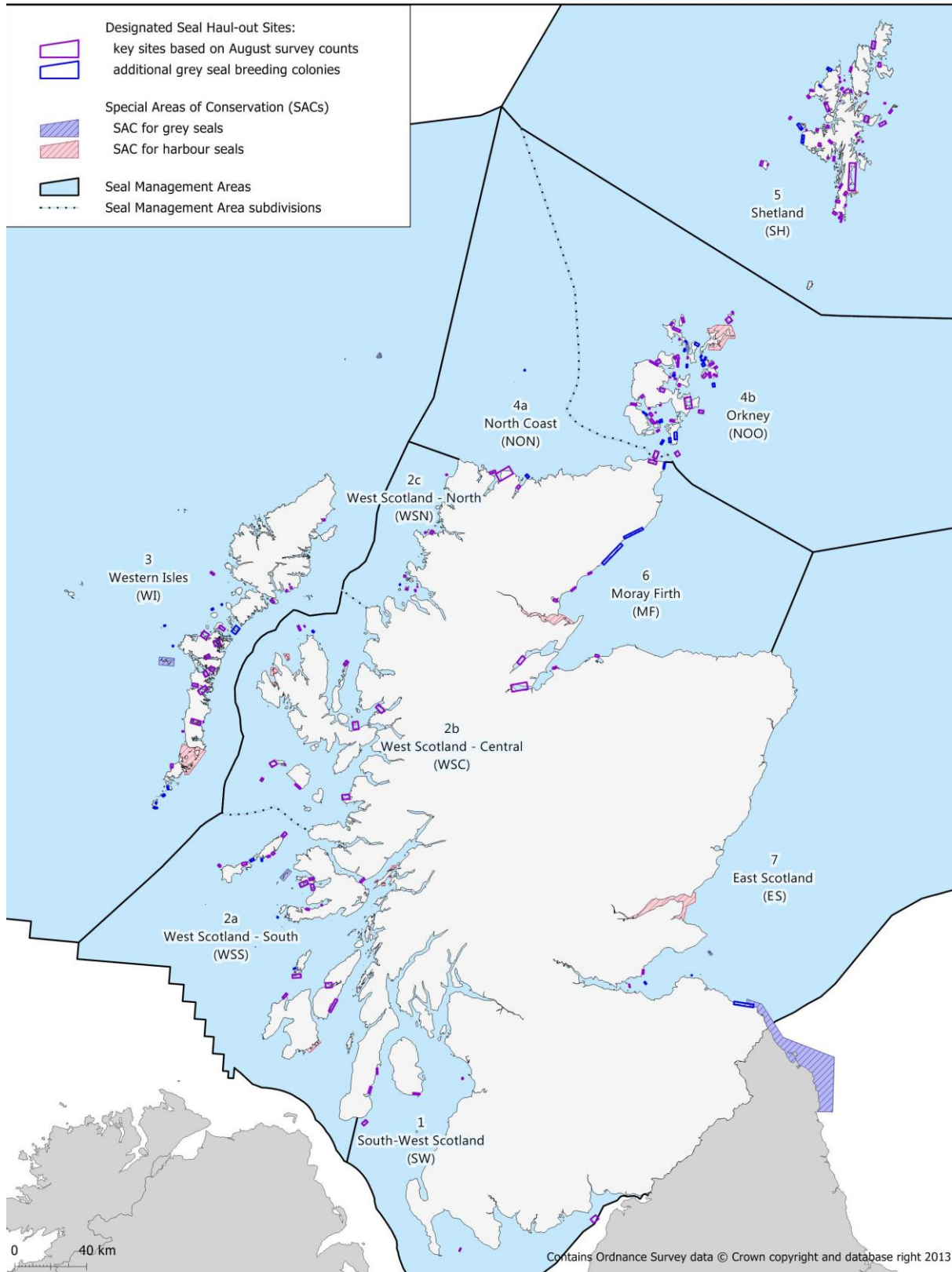
<p>Forest and Woodland</p>	<p>The forestry map below shows the key features within the existing forestry industry across Highland.</p> <p>In the Plan area there are 1,338 Semi-natural woodland sites, 1,010 ancient woodland sites and 8 Tree Preservation Orders.</p>	<p>The Highland Forest and Woodland Strategy</p> <p>Forestry Commission Scotland: http://www.forestry.gov.uk/scotland</p> <p>Native Woodland Survey of Scotland</p>
<p>Protect and enhance the connectivity of green networks</p>	<p>Mapped extent and mapping methodology for identification of green networks in Highland</p>	<p>Green Networks Supplementary Guidance</p>
<p>Marine Protected Areas</p>	<p>2 Nature Conservation Marine Protected Areas</p>	<p>SNH website for information</p> <p>Marine Protected Areas</p>
<p>Seal Haul-out Areas</p>		<p>Seal Haul-out Areas</p>







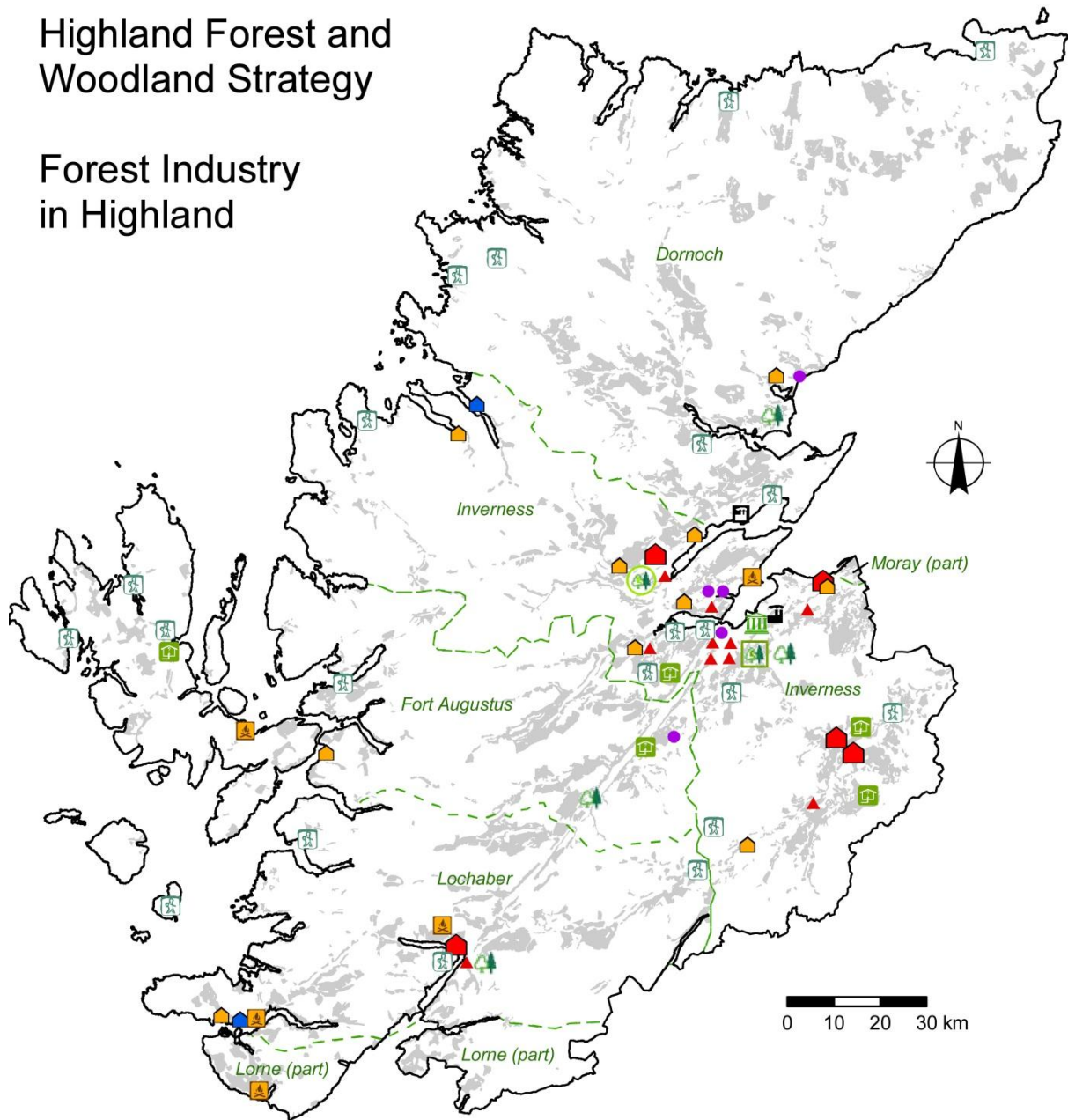
Designated Seal Haul-out Sites in Scotland
as set out in an order made under section 117 of the Marine (Scotland) Act 2010



NEED TO INSERT MAP for MPAS

Highland Forest and Woodland Strategy

Forest Industry in Highland



Forestry Commission Scotland	▲ Forest management company main office	🏠 Major sawmill	🏠 Forestry/woodlands interpretive centre
🏠 Scotland HQ	● Forestry/woodland NGOs	🏠 Smaller scale sawmill	🌲 Forest and woodland area
🌲 Highland Conservancy	🎓 Forestry training colleges	🏠 Mobile sawmills (base location)	
🌲 District office	🏭 Timber processing factory	🏠 Woodfuel supplier	
🌲 Forestry District boundary	🏭 Potential timber processing factory location	🏠 Community woodland	

Population and Human Health	Key Information	Data Source
Population and demographics	<p>Information on the current situation and forecasts for future demographic changes at local, regional and international levels.</p> <ul style="list-style-type: none"> • Population of Highland increased from 208, 914 to 232,132 between 2001 and 2011 (11% increase) • Population is projected to increase by 15% by 2035. • There is expected to be 16, 029 more people of retirement age and 5507 fewer children than in 2004. Therefore the population is expected to age. • 3 data zones in highland Region fall within the 5% most deprived zones in Scotland. 2 data zones fall within the top 5% least deprived. • A large proportion of Highland Region is referred to as “Fragile” in terms of remoteness and scarcity of population. An average of 8 people live per sq km, throughout the region, reducing to 2 people per sq km in some parts. <p>In Caithness and Sutherland the population has grown by 1,312 between 2001 and 2011 to 37,020 but is expected to decline to 35,556 by 2031.</p> <p>Current population density in the Plan area is 5.1 people per km² (compared to Highland at 8.7 people per km² and 67.4 for Scotland. Sutherland is the most sparsely populated area of Scotland with only 2.2 people per km².</p>	<p>Census statistics and analysis www.ons.gov.uk</p> <p>Scottish Household Survey 2012 http://www.scotland.gov.uk/Topics/Statistics/16002</p> <p>Scottish Index of Multiple Deprivation</p> <p>Highland Council Deprivation and Fragility Informaton</p>
Health and well-being	<p>Baseline information on the current situation and forecasts for future trends on a variety of topics including health, crime, environmental health.</p>	<p>www.isdscotland.org</p> <p>Transport Scotland: Household Survey 2012 www.audit-scotland.gov.uk http://www.transportscotland.gov.uk/news/scottish-household-survey-travel-diary-2012</p>
School rolls	<p>Many of the primary and secondary schools are significantly under capacity.</p>	<p>School roll forecasts</p>
Physical activity and active travel	<p>Information on physical activity organisations and current and planned active travel projects.</p> <ul style="list-style-type: none"> • 47.7% of Highland has not walked as a means of transport in the past 	<p>2012 Scottish Household Survey www.scotland.gov.uk/Topics/Statistics/16002</p>

week and only 40.5% walked for pleasure in the last week.

- 49% of Highland population has access to a bicycle (second only to Moray at 49.6%)

Sustrans National Cycle Network Map;
<http://www.sustrans.org.uk/ncn/map/national-cycle-network>

[Active Travel audits](#) are available for Thurso and Wick

[THC Core Paths](#)

Scotways

Open Space

Footpath networks – Highlights the proportion of population living within 200m of a footpath.

Highlights the proportion of population who live within 200m of open space

[THC Open Space Supplementary Guidance and Greenspace Audit](#)

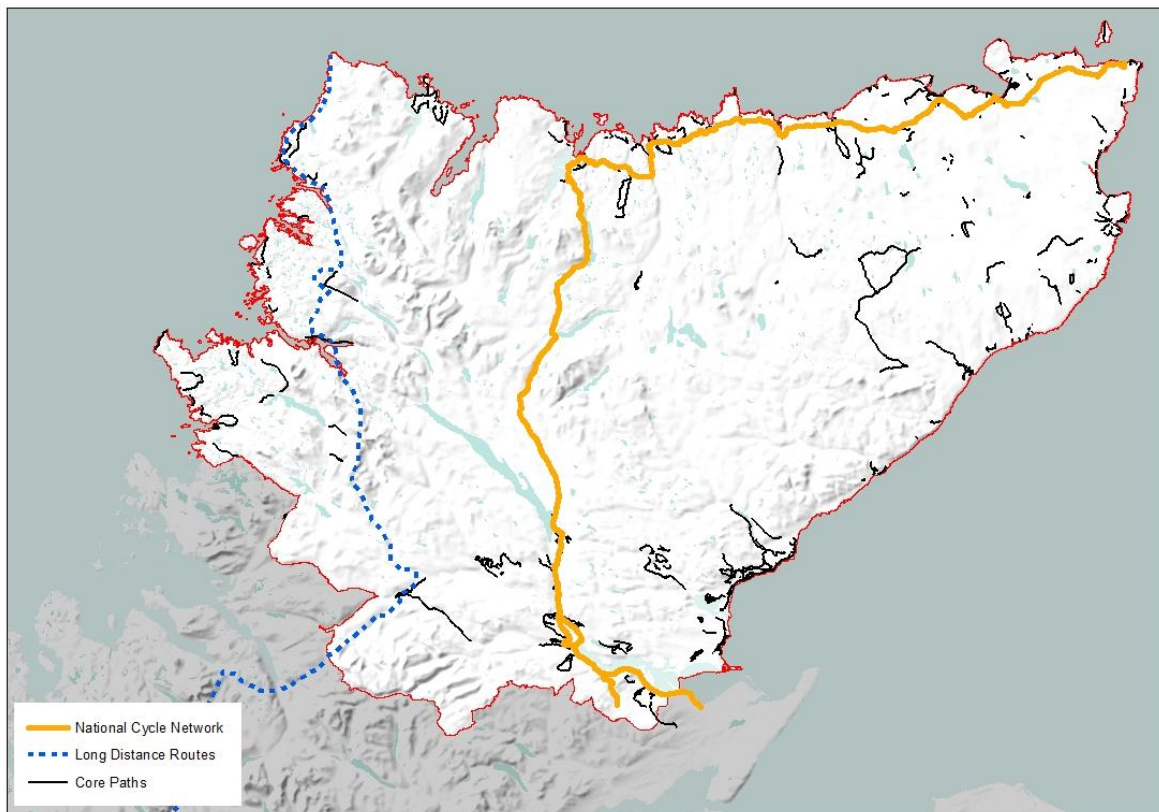
Greenspace Scotland

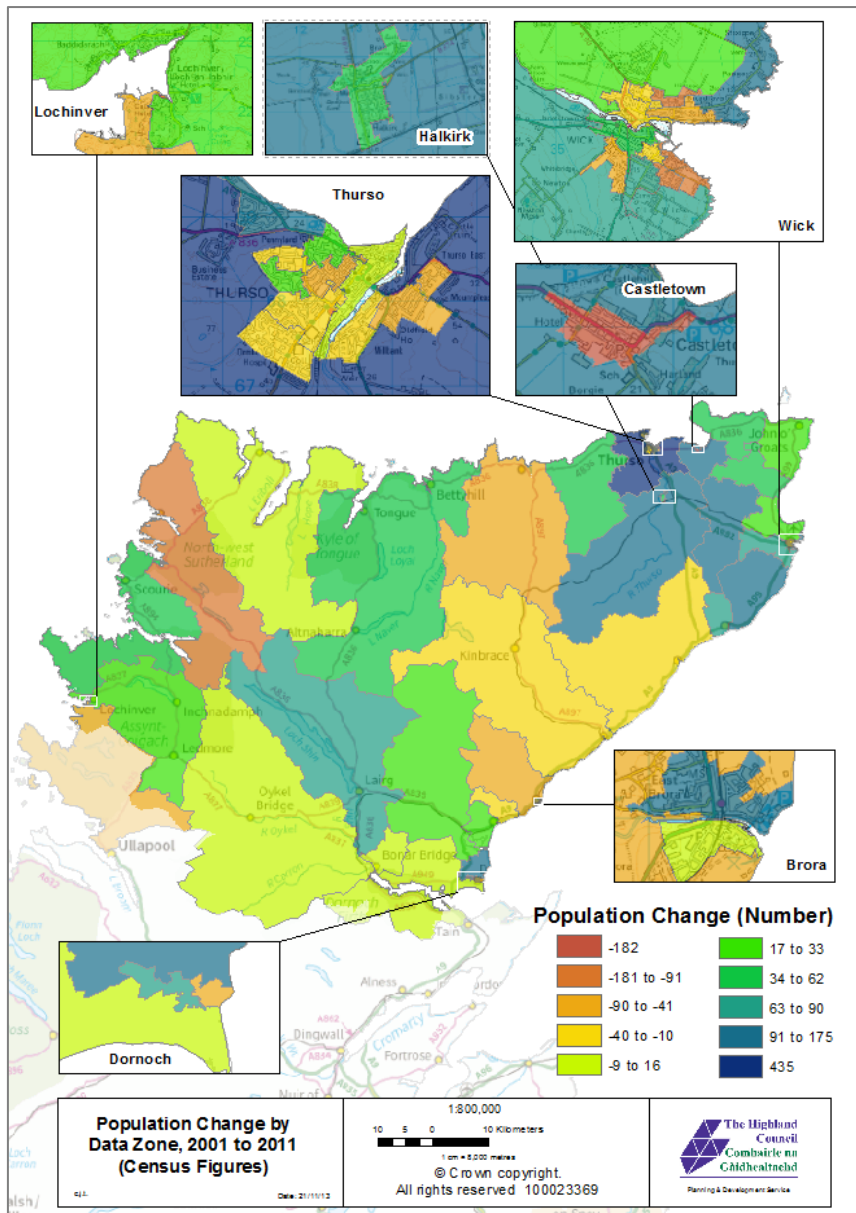
<http://www.greenspacescotland.org.uk/audits-and-strategies.aspx>

Scottish Household Survey 2012

www.gov.scot/Topics/Statistics/16002

SNH - [Attitudes to Greenspace in Scotland](#)





Air	Key Information	Data Source
<p>2013 Air Quality Progress Report</p>	<p>Generally the air quality in the Highland Council area is good.</p> <p>Risk that 15 minute mean air quality objective SO₂ could be exceeded in Castletown as a result of the density of dwellings which burn solid fuels.</p>	<p>http://www.highland.gov.uk/download/file/405/2013_air_quality_progress_report</p>

Number of Air Quality Management Areas (AQMA) in Highland

None at present

<http://www.scottishairquality.co.uk/>

Water	Key Information	Data Source
Flooding likelihood	Within nearly all the main towns and villages there are areas which are at risk of flooding and that both coastal and fluvial flood risk can be an issue in the CaSPlan area.	SEPA flood risk management maps Strategic Flood Risk Assessment - SEPA technical guidance to support Development Planning
Water Quality	<ul style="list-style-type: none"> • North Coast –contains 8 coastal water bodies: 4 ‘high’ ecological status and 4 ‘good’ • Tongue - 19 natural water bodies in coastal catchment: 3 high and 16 good. • River Hope - 5 natural water bodies: 4 ‘good’ and 1 ‘poor’. • River Borgie - 7 natural water bodies: 3 high and 4 good. • River Strathy - 4 natural water bodies: 4 good • Helmsdale River - 7 natural water bodies: 6 high and 1 good • Forss Water – 6 natural, 1 heavily modified: 5 high and 1 poor • Wick Coastal – 11 natural water bodies: 7 good, 2 moderate, 1 poor • East Coast – 10 coastal water bodies, 7 high, 2 good and 1 heavily modified • Wick River – 5 water bodies: 2 moderate, 2 poor and 1 bad • River Thurso – 15 water bodies (13 natural and 2 heavily modified): 1 high, 13 good, 3 moderate, 1 poor, 1 bad • River Helmsdale – 28 water bodies: 6 high, 21 good, 1 moderate • River Naver – 20 water bodies (1 heavily modified): 19 high and 1 moderate. • Dunbeath Water – 5 water bodies 1 high 4 good • Berriedale Water – 3 water bodies: 1 high, 1 good and 1 moderate • River Brora – 14 water bodies (1 heavily modified): 12 good, 1 moderate • Brora Coastal – 2 water bodies: both good • River Shin – 23 water bodies (3 heavily modified): 20 good, 2 moderate, 1 bad • River Oykel – 16 water bodies: 3 high, 12 good and 1 moderate • River Caron (Sutherland) – 8 water 	River Basin Management Plans SEPA http://www.sepa.org.uk/environment/water/monitoring SEPA Water Quality Classifications

bodies (1 heavily modified) : 1 high, 5 good, 2 moderate.

Hydro-power	<p>Over 80 hydro-powered stations in Highlands and Islands</p> <p>More than half of Scotland's 145 hydroelectric schemes are in the Highlands and Islands area</p>	<p>Hi Energy http://www.hi-energy.org.uk/hydroenergy.html</p>
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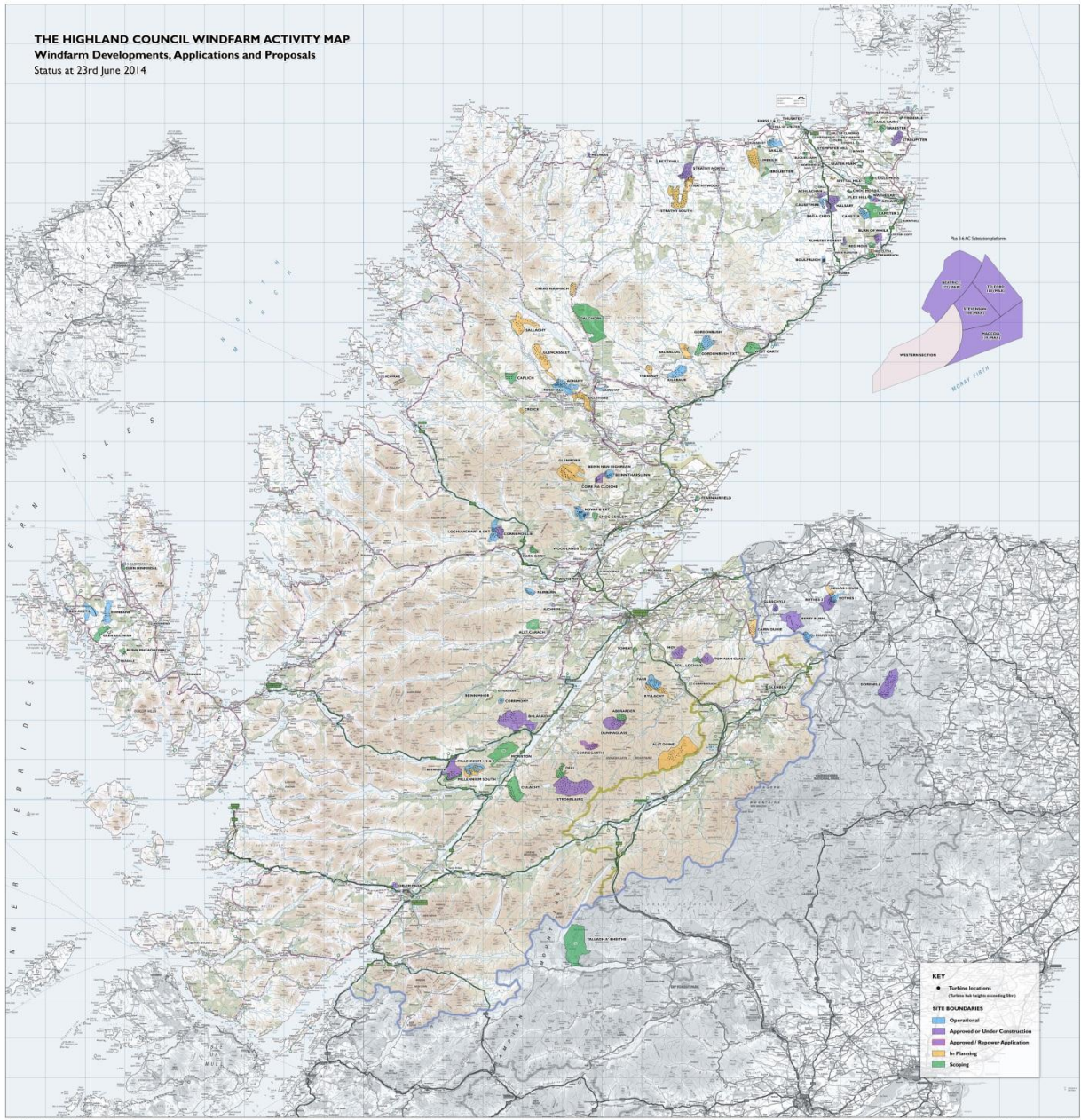
Wave and tidal renewable energy	<p>Pentland Firth and Orkney Waters commercial lease area hosts 6 of the top 10 tidal energy sites in the UK.</p> <p>Potential to generate up to 1.6GW (gigawatts) from tidal and wave device deployment by 2020.</p>	<p>Hi Energy http://www.hi-energy.org.uk/Renewables/Tidal-Energy.htm</p> <p>www.hi-energy.org.uk/Renewables/Wave-Energy.htm</p>
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Ground Water and River Levels		<p>SEPA River Levels http://www.sepa.org.uk/water/river_levels.aspx</p> <p>Centre for Hydrology and Ecology. National Water Archive; http://www.ceh.ac.uk/data/NWA.htm</p> <p>Scotland's River Basin management plan RBMP Interactive Map http://gis.sepa.org.uk/rbmp/</p>
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Climatic Factors	Key Information	Data Source
Vulnerability to effects of climate change		<p>The Scottish Climate Change Impacts Partnership</p> <p>www.adaptationscotland.org.uk/1/1/0/Home.aspx</p> <p>Consideration of Climatic Factors within Strategic Environmental Assessment (SEA)</p> <p>www.scotland.gov.uk/Publications/2010/03/18102927/0</p> <p>SEPA flood risk management maps</p>

		<p>Marine Climate Change Impacts Partnership</p> <p>UKCP09 The climate of the United Kingdom and recent trends.</p> <p>ukclimateprojections.defra.gov.uk</p> <p>http://www.sniffer.org.uk/</p>
Energy consumption	Highland Council energy consumption is 22, 250GWH per annum.	<p>THC energy consumption</p> <p>www.highland.gov.uk/downloads/download/354/energy_consumption</p>
Energy from renewable sources	<p>Renewable Energy installations in Highland Council Building is 1200KWh</p> <p>Promotion of renewable energy.</p>	<p>Renewable energy in THC buildings</p> <p>www.highland.gov.uk/info/1034/land_and_property/271/renewable_energy_in_our_buildings</p> <p>Highland Council Renewable Energy Strategy</p> <p>www.highland.gov.uk/info/198/planning_-_long_term_and_area_policies/152/renewable_energy</p> <p>Community Benefits from Renewables</p> <p>Highland Council Wind Turbine Map</p>
Air Quality Management Areas (AQMA)	None at present in Caithness and Sutherland	http://www.scottishairquality.co.uk/
Travel	<p>44% of people within Highland taking public transport or active travel means to work and study.</p> <p>Active travel audits for Wick and Thurso which includes a variety of baseline information.</p>	<p>Local Transport Strategy and Active Travel Plans</p> <p>www.highland.gov.uk/info/1523/transport_and_streets/121/local_transport_planning</p>
Improve the use of sustainable building techniques	Promotion of Sustainable design in the Community.	Designing for Sustainability in the Highlands

NEED TO INSERT UPDATED WINDFARM MAP



Material Assets	Key Information	Data Source
Vacant & Derelict Land Register		Scottish Vacant and Derelict Land Survey
Waste Generation and Management		Scotland's Zero Waste Plan
		Scotland's Environmental Waste Discovery Data
		Scottish Waste Sites and Capacity Tool
		Household Waste Summary Data

THC Waste Data Report

www.highland.gov.uk/downloads/file/13531/annual_waste_data_report_2011_to_2013

Core Path Plan & Rights of Way		The Highland Council (THC) /Scotways www.highland.gov.uk/info/1457/tourism_and_visitor_attractions/163/paths_in_the_highlands
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Land Use Plan & Open Space Audit		THC Open Space Supplementary Guidance and Greenspace Audit: www.highland.gov.uk/info/178/
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Soil	Key Information	Data Source
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Erosion	Distance and numbers of path where erosion or poor path construction has or is reducing soil quality and quantity. No data available but possible monitoring of core paths in the future can be used.	The Highland Council Core Paths Plan
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Contaminated Land		Highland Council Contaminated Land Database. Scottish Vacant and Derelict Land Survey
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Agricultural Land	Land use, employment and production information. Crofting in Highland Prime agricultural land (considered to be 3.2 and above)	National Farmers Union Scotland; http://www.nfus.org.uk/facts_index.asp Scotland's Soils http://www.soils-scotland.gov.uk/data/lca250k Crofting Commission Annual Report www.crofting.scotland.gov.uk/documents.asp?catid=29
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Soil Quality	Key indicators of soil quality	Soil Indicators for Scottish Soils sifss.hutton.ac.uk/
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Carbon Rich Soils	Peat soils make up 22.5% of Scotland's soil. Scottish soils are estimated to contain approximately 3000 million tonnes	SNH www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/
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carbon, which is the majority of the soil carbon stock of the whole of the UK.

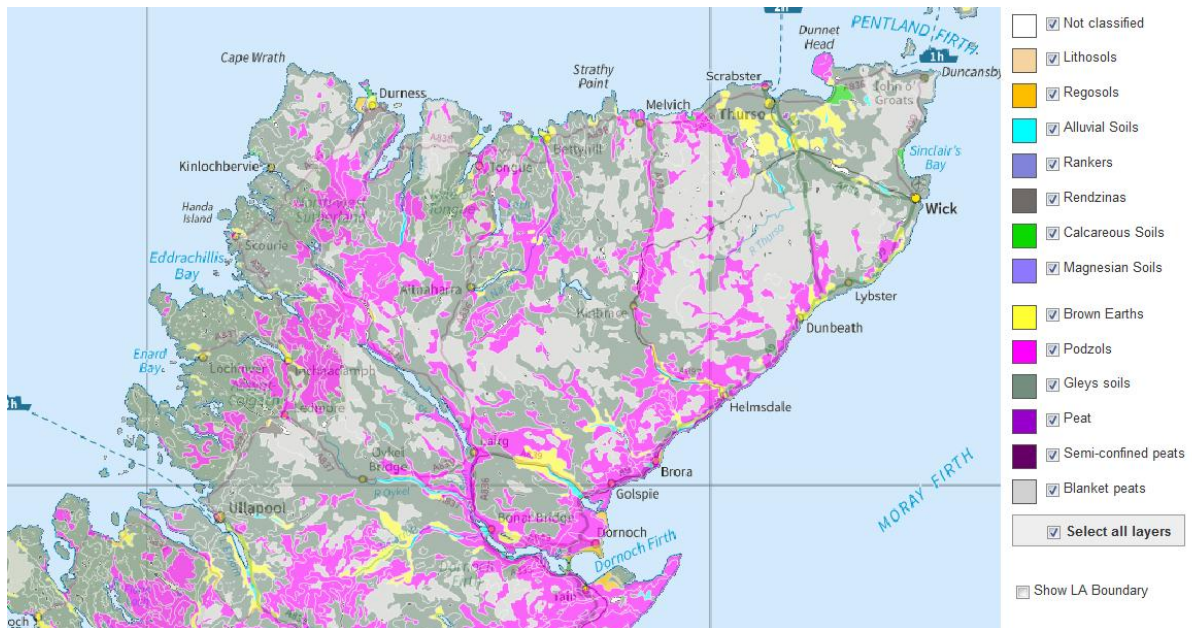
Scotland's Soils – survey data
<http://www.soils-scotland.gov.uk/data/soil-survey>

Geology

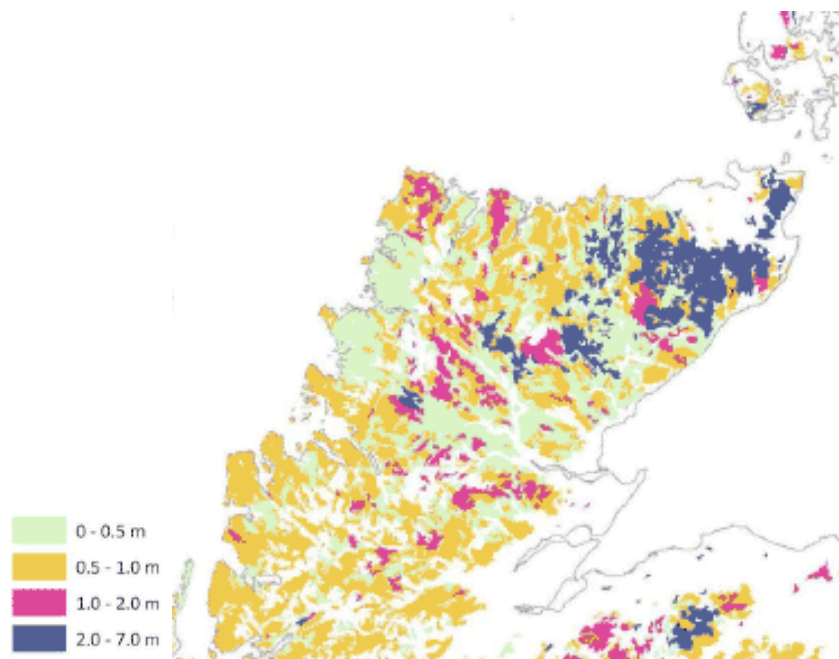
<http://www.scottishgeology.com/>

SNH

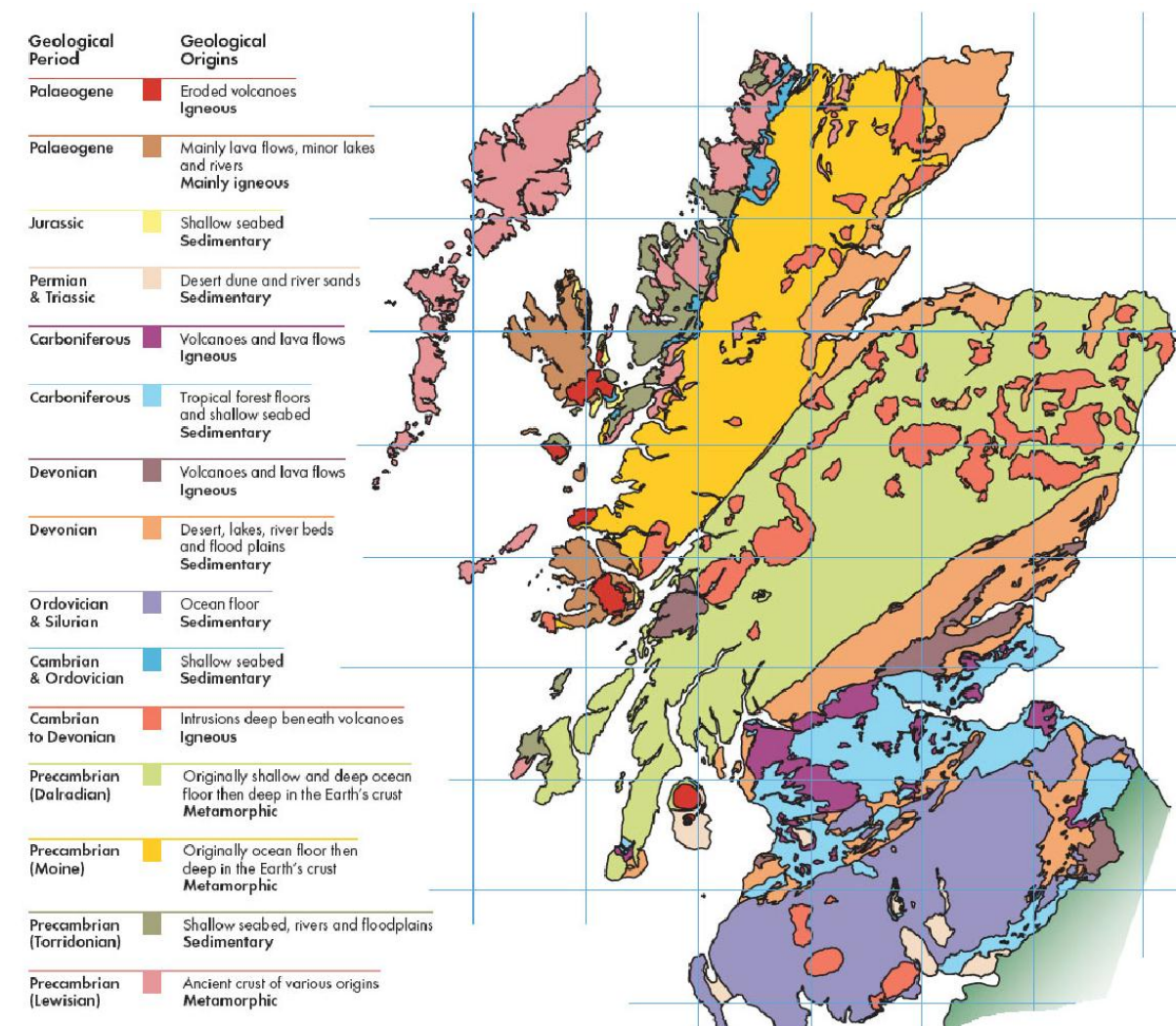
[GCR Sites](#)



Map: Soil types in the Caithness and Sutherland area



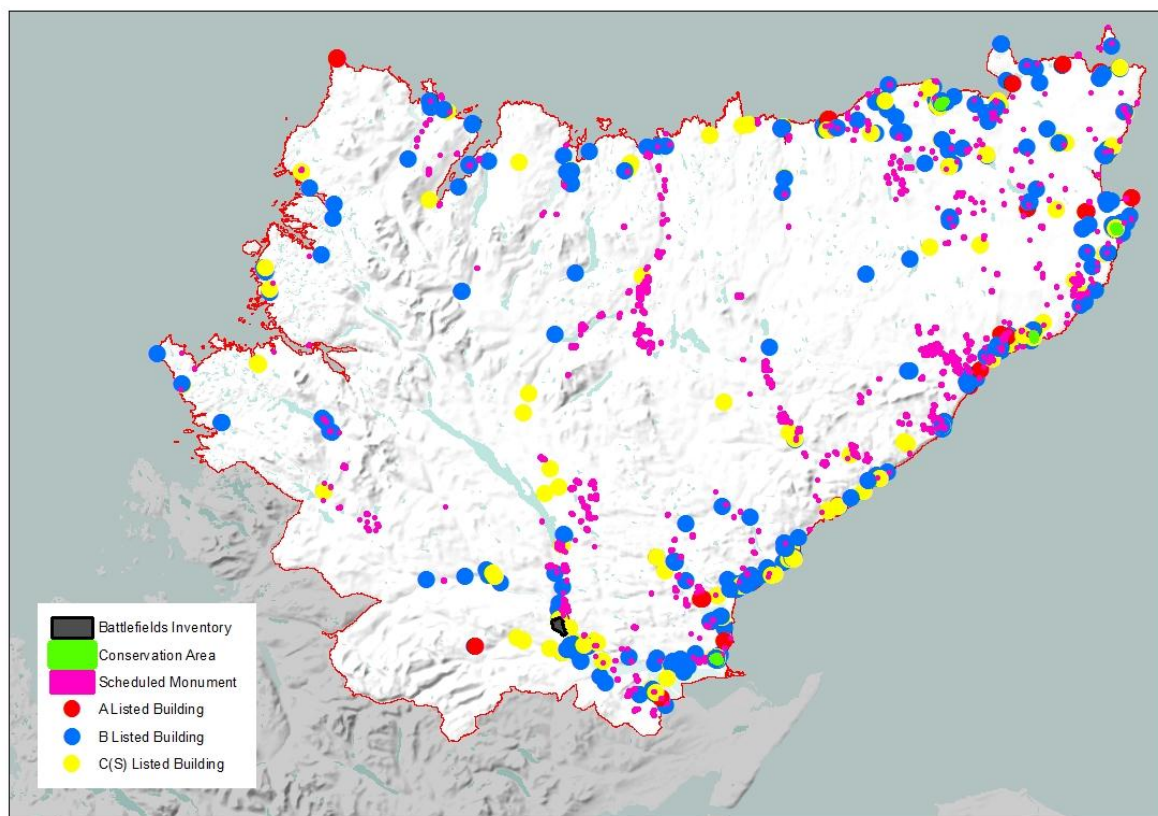
Map: Peat depths



Map: Simplified geological map illustrating the nature, age, origins and distribution of rocks

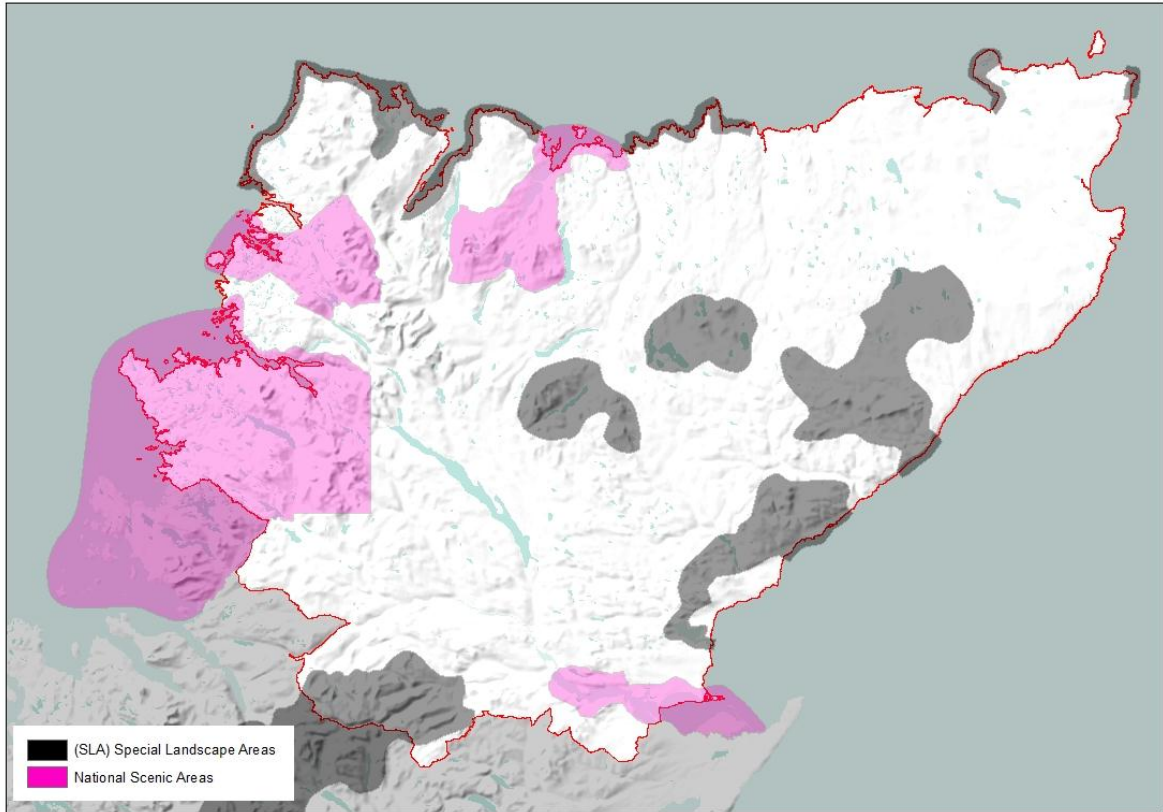
Cultural Heritage	Key Information	Data Source
Value and protect diversity and local distinctiveness.	Detailed masterplans of Wick and Thurso produced with members of the local community.	Wick and Thurso Charrettes – Final Report http://www.highland.gov.uk/info/178/local_and_statutory_development_plans/283/caithness_and_sutherland_local_development_plan/2
Listed Buildings	Number of Listed buildings across Caithness and Sutherland are: A Listed - 66 B Listed - 552 C(S) Listed - 349	Historic Scotland data.historic-scotland.gov.uk/pls/htmlldb/f?p=2000:10:0
Schedule Monuments	Total number of Schedule Monuments in Caithness and Sutherland is 598	Historic Scotland data.historic-scotland.gov.uk/pls/htmlldb/f?p=2000:10:0

Inventory Gardens and Designed Landscapes	There is 1 Inventory Gardens and Designed Landscapes in the Plan area.	10:0 Historic Scotland data.historic-scotland.gov.uk/pls/htmlldb/f?p=2000:10:0
Conservation areas	There are 4 conservation areas across the Plan area.	www.highland.gov.uk/info/192/planning_-_listed_buildings_and_conservation_areas/167/conservation/2
Building at Risk	There are 172 buildings on the Buildings at Risk register in Highland. Many of these are within Caithness.	Buildings At Risk Register http://www.buildingsatrisk.org.uk/



Landscape	Key Information	Data Source
Retain and improve quality and quantity of publicly accessible open space.	There are 15 separate Landscape Character Types identified within Caithness and Sutherland.	Scottish Natural Heritage: Overview of Scotland's national programme of Landscape Character Assessment (2004) Sutherland landscape capacity study: an analysis of housing potential

		(2006). Caithness and Sutherland Landscape Character Assessment (1998) www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/lca/
National Scenic Areas	Caithness and Sutherland includes 4 National Scenic Areas – Scotland's finest landscapes.	SNH National Scenic Areas
Wild Land Areas	There are 10 Wild Land Areas identified in the CaSPlan area that make up approx. 45% of the total CaSPlan area.	SNH Wild Land Areas
Coast		Highland Coastal Strategy
Impact of Built development	Visual impact of built development	SNH's visual indicator of built development and land use change – http://www.snh.gov.uk/publications-data-and-research/trends/scotlands-indicators/natural-heritage-indicators
Special Landscape Areas	There are 10 SLAs wholly or partially within the Plan area.	SLA Citations www.highland.gov.uk/developmentplans



Add map of wild land areas