Scottish Borders Council

Local Development Plan 2: Main Issues Report

Interim Environment Report

Appendix 3: Baseline Report and Maps

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Introduction

This section of the Environmental Report gives a description of the current state of the environment (the environmental baseline) for the Scottish Borders Council area and how this might change in the future in the absence of the Local Development Plan 2, as well as the environmental characteristics of the area, as required by the Environmental Assessment (Scotland) Act.

Scottish Borders is the 6th largest council area in Scotland covering 4,734km^2 and has a population estimated at 115,020 as of 2017. The area is predominantly rural with small towns and villages scattered throughout the area, and has an abundance of natural and man-made attractions.

Baseline information has been gathered on aspects of the environment and the key environmental issues, problems and sensitivities of the area can be summarised below. The baseline will seek to provide an overview of the study using information from Scottish Borders Council, as well as national statistics. The aim is to use this information, in order to establish the environmental effects of options, policies and proposals outlined within this Environment Report.

This baseline will be presented under the following SEA environment topic headings:

- Air
- Biodiversity, Flora and Fauna
- Climatic Factors
- Cultural Heritage
- Landscape and Townscape
- Material Assets
- Population and Human Health
- Soil
- Water

SEA Topic: Air

SEA Objective: To protect current air quality and provide opportunities for public transport

SEA Sub-Objectives:

- **Reduce the need to travel**
- **Promote accessibility by sustainable transport nodes**
- **Provide for digital connectivity**

Local Authorities have a responsibility under the Environment Act 1995 and Air Quality (Scotland) Amendments Regulations (2002) to improve air quality, not merely minimise pollution. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2000) and Addendum (2003) set health based objectives for nine air pollutants and two for the protection of vegetation and ecosystems. Where it is found that these objectives are unlikely to be met by the due date, then an Air Quality Management Area (AQMA) must be declared and an action plan setting out proposals for addressing the problems prepared. In the Scottish Borders there are no AQMAs, nor areas close to designation.

The Climate Change (Scotland) Act 2009 include emissions reduction targets covering greenhouse gases (GHG), the list is as follows: Carbon dioxide (C02), Methane (CH4), Nitrous oxide (N20), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF6). The amount to which these gases are emitted due to human processes varies; far much more CO2 is emitted than the other five gases, however the five other gases are more powerful in their greenhouse effect (known as Global Warming Potential). Table 1, below, shows the most recent Scottish Borders greenhouse gas emissions data.

Another area that affects air quality is emissions from transport. An increased population and related development will cause an increase in journeys, many of which will be made by car. This will increase carbon and nitrogen oxide omissions and worsen air quality in parts of the region. Therefore, by reducing the need for individuals to travel, will decrease the omissions produced from travelling.

Important transportation developments in Scottish Borders include the potential for the extension of the Borders Railway, and the potential for a railway station at Reston. Rail transport assists with reducing GHG emissions from cars. Important road routes in Scottish Borders include

the A1, A68, A7 and A702 which are under route management schemes. The increased infrastructure to allow public transport within the area will aid to reduce omissions from individual car travel.

The Census data from 2011 provides information on the method of travel to work or study by 'day time' population in Scottish Borders. This information is provided below in Table 2. Daily average traffic flows for certain key routes in Scottish Borders which are shown below in Map 1.

Table 1: Scottish Borders Greenhouse Gas Emissions

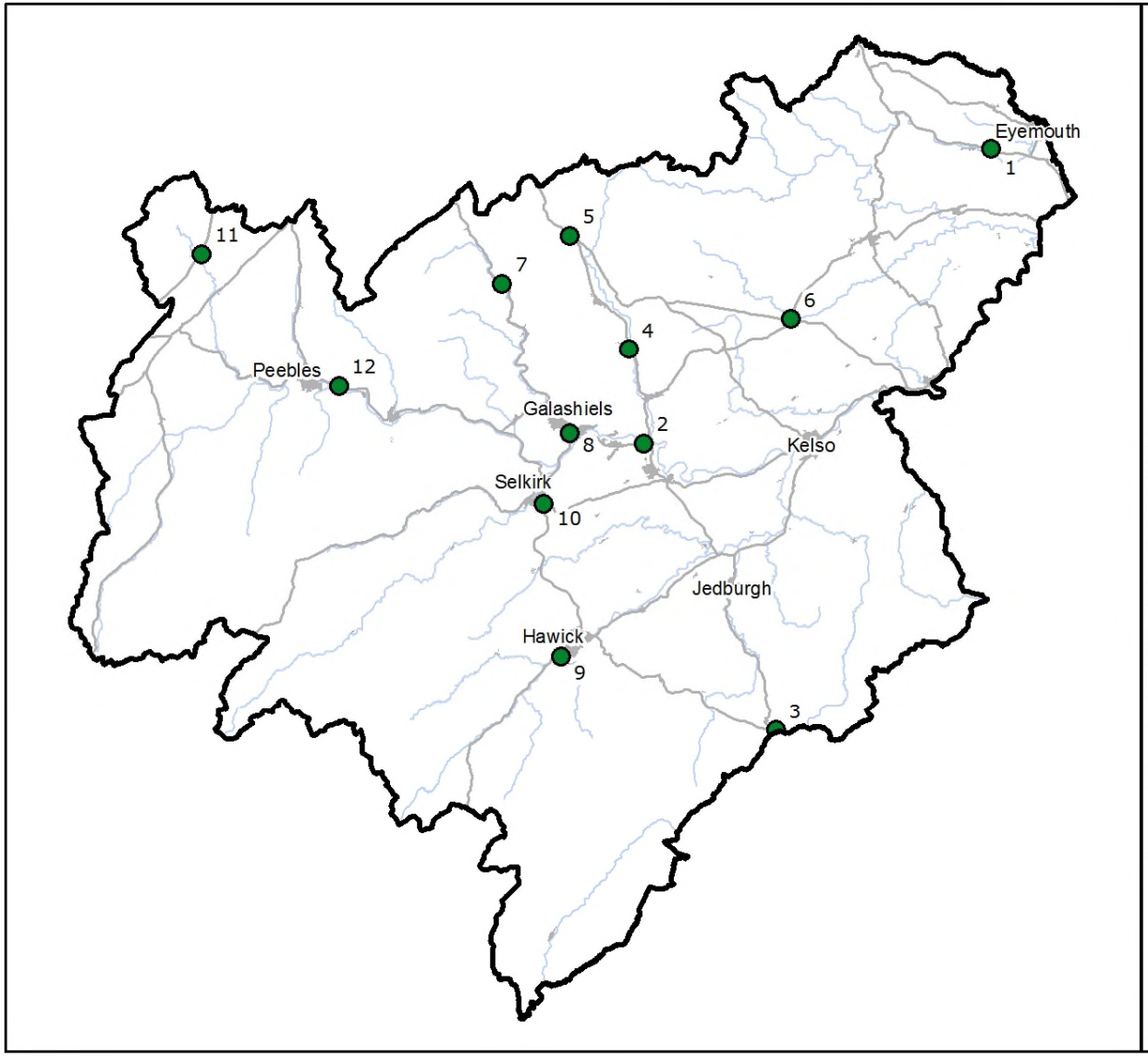
Scottish Borders **Population 115,020**

	PER CAPITA FOOTPRINT				TOTAL FOOTPRINT		
	Ecological Footprint (gha/capita)	Carbon Footprint (tonnes CO2/capita)	GHG Footprint (tonnes CO2eq/capita)		Total Ecological Footprint (gha)	Total Carbon Footprint (Tonnes CO2)	Total GHG Footprint (Tonnes CO2 eq)
TOTAL	**5.52**	**12.59**	**17.02**		**611,216**	**1,392,837**	**1,882,729**
Housing	1.44	4.10	4.59		159,741	454,143	507,433
Transport	0.94	3.09	3.58		103,548	341,616	396,351
Food	1.40	1.23	3.05		155,110	135,697	337,371
Consumer Items	0.73	1.44	2.09		80,764	158,856	231,677
Private Services	0.29	0.74	1.05		31,839	81,415	116,578
Public Services	0.59	1.58	2.13		65,637	174,520	236,014
Capital Investment	0.12	0.36	0.46		13,756	39,298	51,049
Other	0.01	0.07	0.06		821	7,293	6,257

Table 2: Method of Travel to Work or Study

Method of Travel to Work or Study	Number of People
Total 'day time' population (as of 2011)	106,944
'Day time' population not currently working or studying	41,152
'Day time' population that works or studies mainly at or from home	10,469
Train	62
Bus, minibus or coach	5,595
Driving a car or van	27,794
Passenger in a car or van	5,604
Bicycle	691
On foot	14,882
Other	695

Map 1: Day Traffic Flow at Selected Monitoring Sites



Scottish Borders Council

SEA Baseline Report

Air

Annual Average Daily Traffic Flow 2017 At Selected Monitoring Sites

Key:

- Monitoring Sites

ID	Monitoring Site	Road	Traffic Flow
1	Nr. Reston	A1	8706
2	Nr. Newstead	A6091	15137
3	Carter Bar	A68	1927
4	Nr. Nether Blainslie	A68	5711
5	Nr. Oxton	A68	9018
6	Greenlaw	A697	4953
7	Nr. Fountainhall	A7	6173
8	Galashiels	A7	19123
9	Hawick	A7	3651
10	Selkirk	A7	7349
11	West Linton	A702	6685
12	Eshiels	A72	8340

0 5 10 15 20 25 30 km

SEA Topic: Biodiversity, Flora & Fauna

SEA Objective: To protect and enhance biodiversity and habitats in Scottish Borders

SEA Sub-Objectives:

- **Protect/enhance international, national and local Conservation Areas**
- **Protect/enhance greenspace**
- **Protect/enhance Borders Green Network**

A principal asset of the Scottish Borders area is the high quality natural environment and diverse range of species and habitats which are protected and conserved by a range of designations on an international and national scale.

The Land Cover map (2000) classifies the type of land throughout Scottish Borders using satellite remote sensing. The outputs of the land cover map are shown below in Table 3.

In 2011, the Scottish Government published its first Land Use Strategy, the development of which is a key commitment to their response to climate change. The Government sets out a vision to guide thinking about how we use our land and how we want to see that develop in the future. Therefore, the Land Use Strategy takes a strategic approach to the many different economic, environmental and social challenges facing land use in Scotland. Scottish Borders Council were one of two Council's to undertake a pilot study and subsequently published the Land Use Framework. The aim is to enable more informed and integrated decisions to be made about how we use the land within the Scottish Borders in a sustainable manner.

Supplementary Planning Guidance: Biodiversity, was adopted in 2005, which provides guidance for the protection of nature conservation sites. Table 4 below outlines the hierarchy of designation ranges from international, national, through to local level of importance. There are 10 Special Areas of Conservation (SAC) and 5 Special Protected Areas (SPA) within the Scottish Borders, which are strictly designated under the ED Habitats Directive, all habitat types and species included are those considered to be most in need of conservation at a European level. Ramsar sites are wetlands of international importance selected by the Ramsar Convention (1971), there are 3 located within the Borers; Westwater Reservoir, Greenlaw Moor and Hoselaw Loch. They are designated for wildfowl and waders covering an overall area of 349 hectares. The

Council have an adopted Local Biodiversity Action Plan (2001) and have recently published an updated LBAP Supplementary Guidance, which is currently subject to public consultation.

Natura 2000 Sites are the collective term for internationally designated nature conservation sites including SAC's, SPA's and Ramsar Sites. These are designated because of their habitat and/or species interest and are of the following main type: rivers, birds, uplands and/or bogs, coastal or woodland. A main objective of the SEA is to protect and enhance species and habitat.

National Nature Conservation Areas comprise nationally important sites, which are Sites of Scientific Interest (SSSI) and National Nature Reserves (NNR). There are 2 NNR's and 95 SSSI's within the Scottish Borders. SSSI's are legally protected for their floral, faunal, geological and geomorphological interests, while NNR sites are protected for the conservation of habitats and species.

Maps 2-6 below show the following:

- Sites of Special Scientific Interest
- Special Areas of Conservation and Special Protection Areas
- National Nature Reserves and Ramsar Sites
- Ancient Woodland Inventory
- Green Networks

Green Networks consist of a network of greenspaces (including green infrastructure) and green corridors through, within and around settlements, linking open spaces within settlements to the wider countryside. They can assist in enhancing the biodiversity, quality of life and sense of place of an area. The Green Networks identified within the Scottish Borders LDP are shown below in Map 6, they assist in supporting sustainable economic growth, tourism, recreation, the creation of an environment that promotes a healthier-living lifestyle and the protection and enhancement of biodiversity, and has the potential to improve the quality of the water environment, promote flood protection and reduce pollution.

The Phase 1 Habitat Classification is produced by the Joint Nature Conservation Committee and provides a system to record of semi-natural vegetation and other wildlife habitats. The ten categories of habitats include woodland and scrub, grassland and marsh, and heathland and

amongst these categories there are 155 habitat types. Accordingly, the habitat map of Scottish Borders is too detailed to be legible but more information to the Phase 1 Habitat Classification can be found at http://jncc.defra.gov.uk/page-4258.

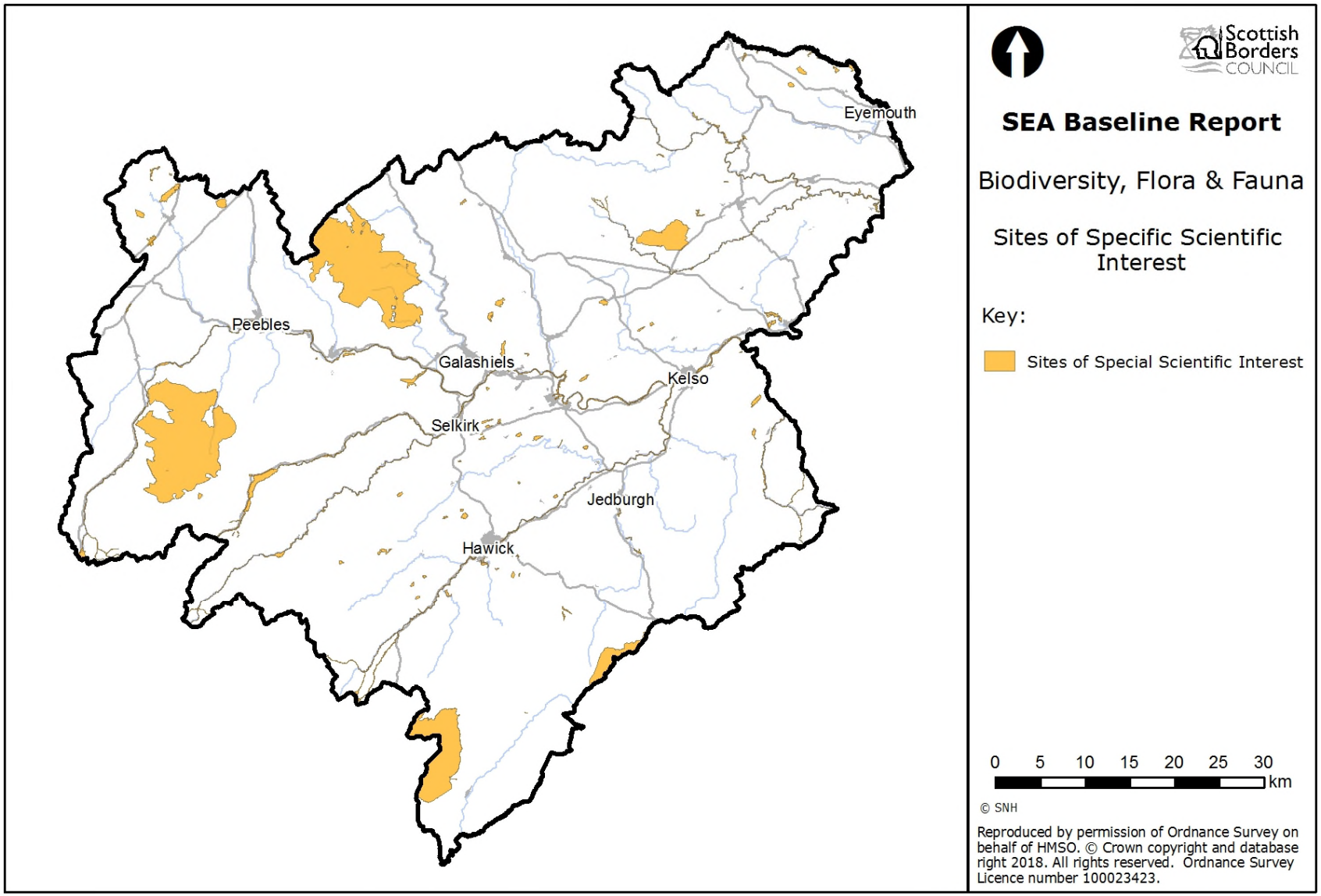
Table 3: Land Cover of Scottish Borders

Type of Land Cover	Area (Ha)
Acid	63,438
Arable & Horticulture	103,641
Bog	8,020
Bracken	9,318
Broad-leafwood	19,799
Built-up areas and gardens	3,663
Calcareous	8,201
Coniferous woodland	57,004
Continuous urban	1,118
Dwarf shrub heath	13,543
Improved grassland	97,562
Inland rock	463
Littoral rock	168
Littoral sediment	75
Neutral	35,927
Open dwarf shrub heath	51,813
Standing Water	1,744
Supra-littoral sediment	11

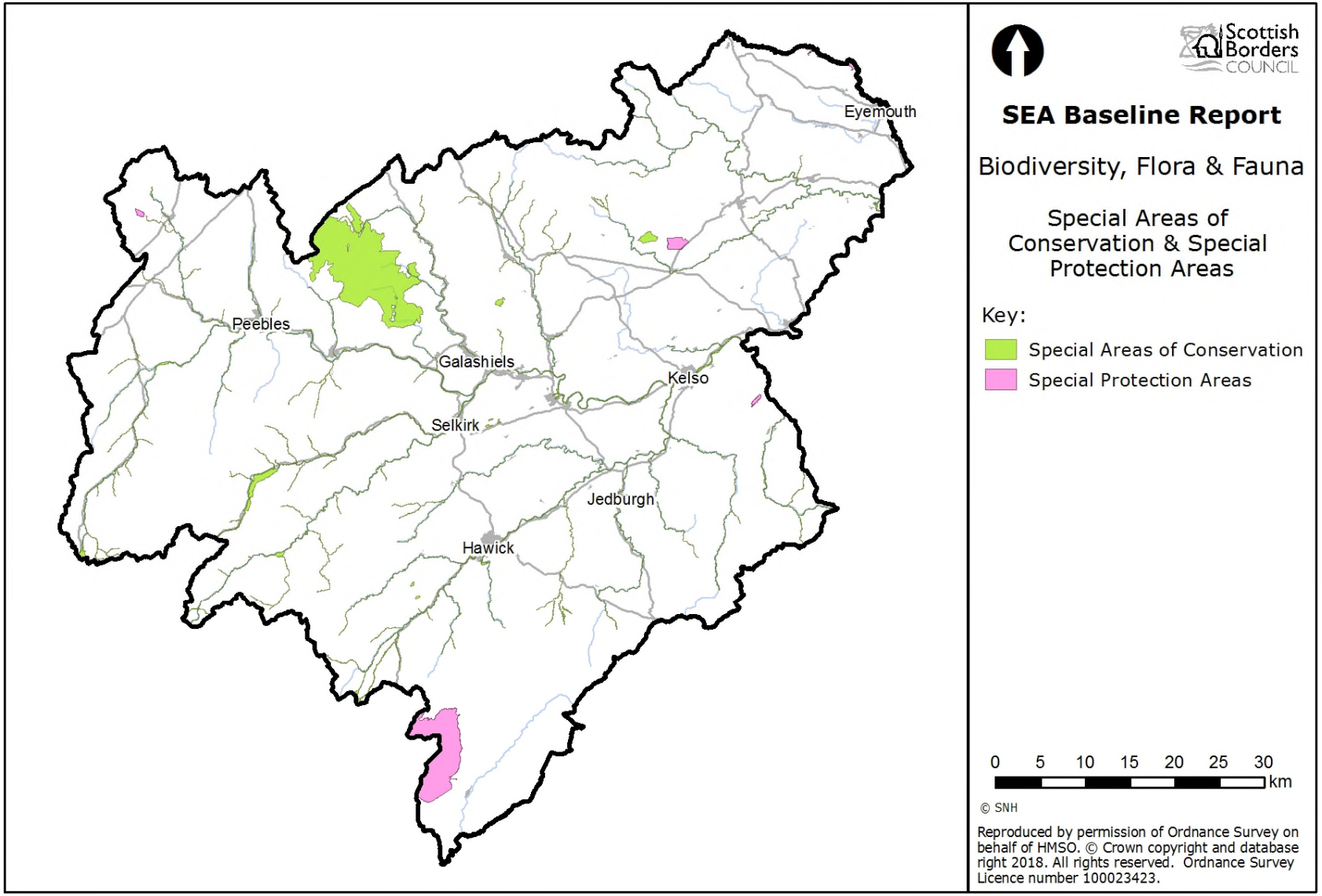
Table 4: Hierarchy of habitat and species designations (SPG: Biodiversity)

International	Special Protection Areas (SPA)	Birds
	Special Areas of Conservation (SAC)	Habitats
	Ramsar Sites	Wetlands
National	Sites of Special Scientific Interest (SSSI)	Habitats
	National Nature Reserves (NNR)	Habitats
Local	Local Wildlife Sites	Habitats

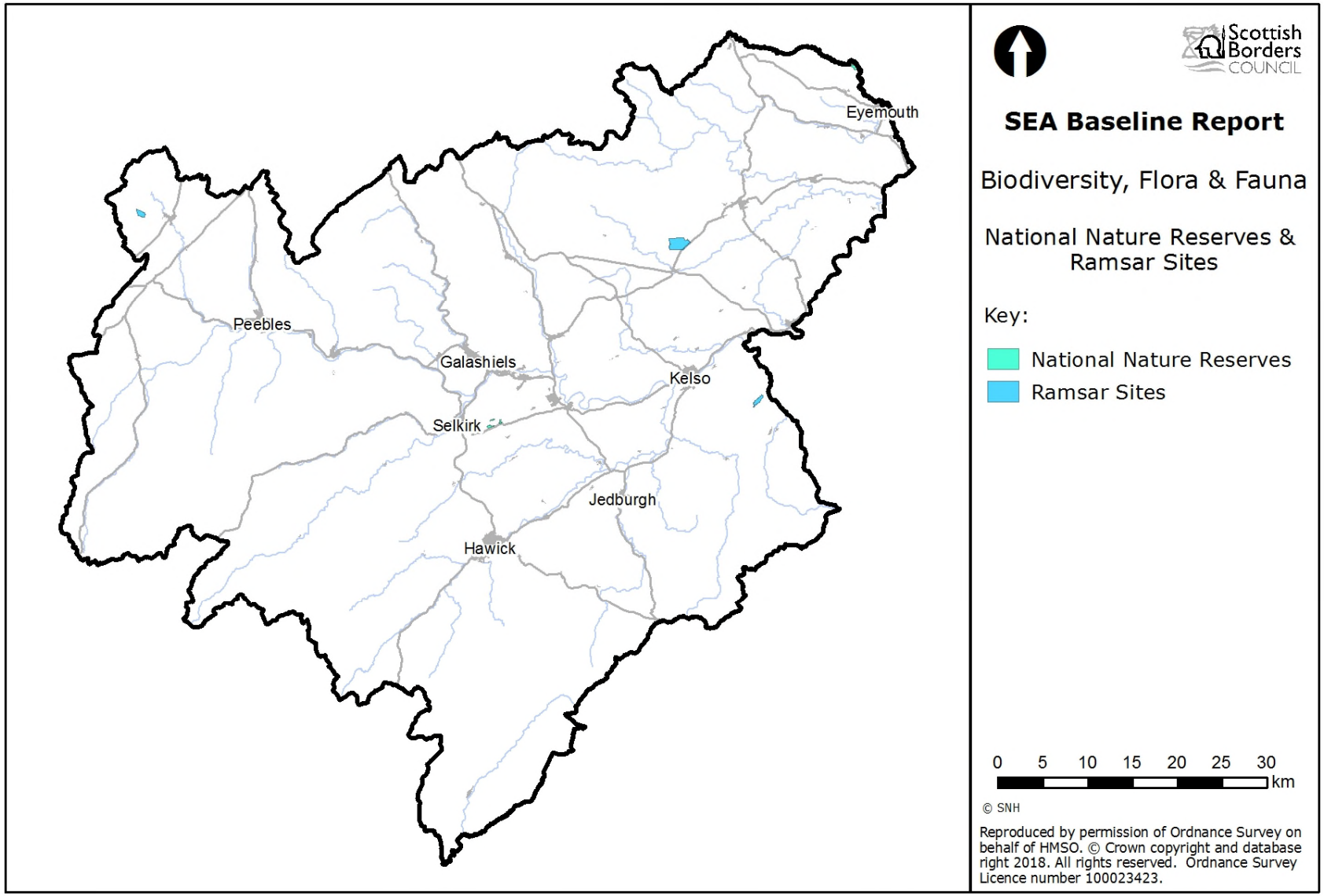
Map 2: Sites of Scientific Special Interest



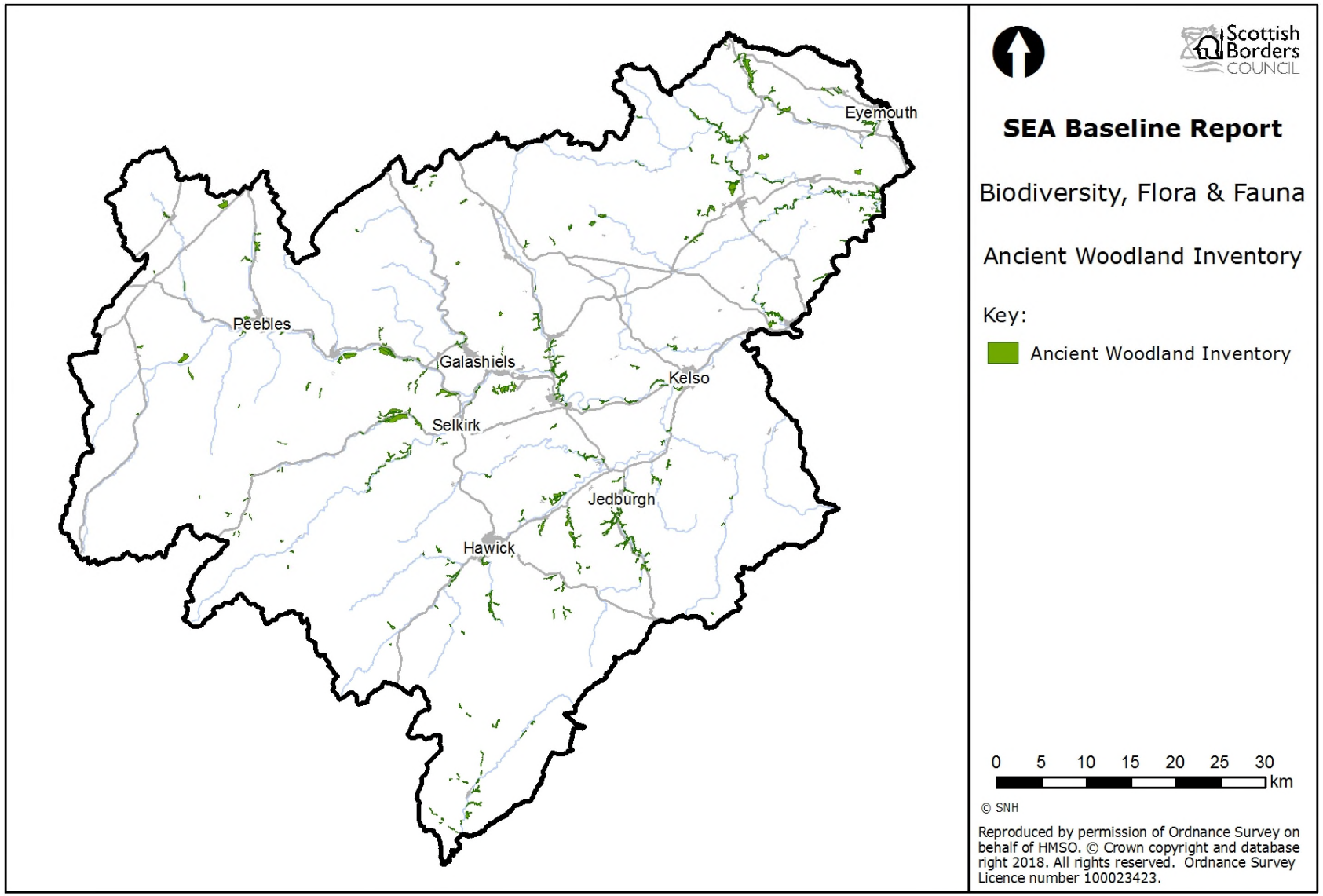
Map 3: Special Areas of Conservation & Special Protection Areas



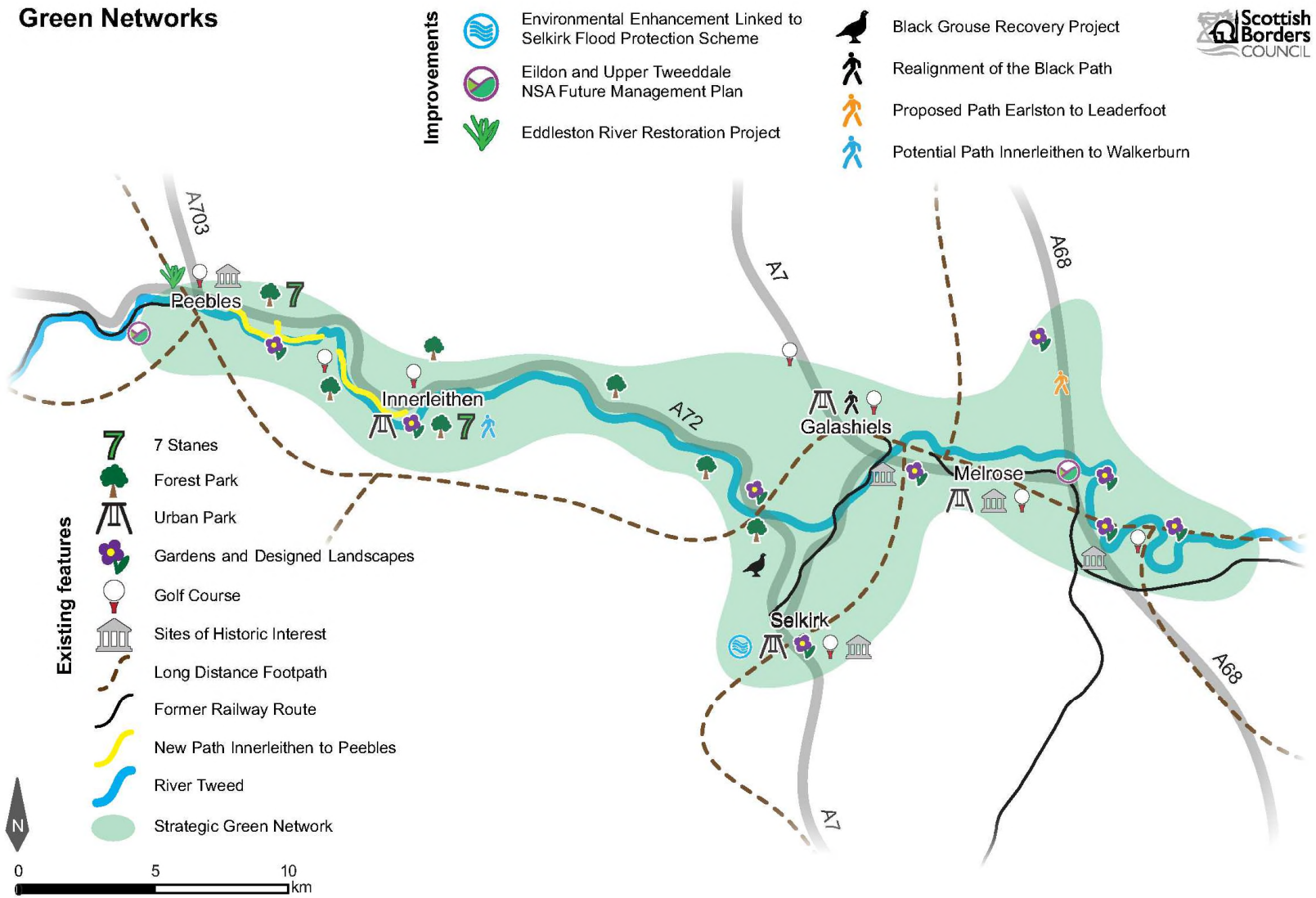
Map 4: National Nature Reserves & Ramsar Sites



Map 5: Ancient Woodland Inventory



Map 6: Green Networks



SEA Topics: Climatic Factors

SEA Objective: To reduce greenhouse gas emissions, reduce energy consumption and promote climate change adaption

SEA Sub-Objectives:

- **Promote use of renewable energy, where appropriate**
- **Consider impacts of climate change on the water resource**

The climate change Act 2009 sets out ambitious targets for Scotland to reduce carbon emissions which are 42% reduction by 2020 and 80% by 2050. It is possible to show a comparison for ecological and greenhouse gas footprints for the Scottish Borders Local Authority area:

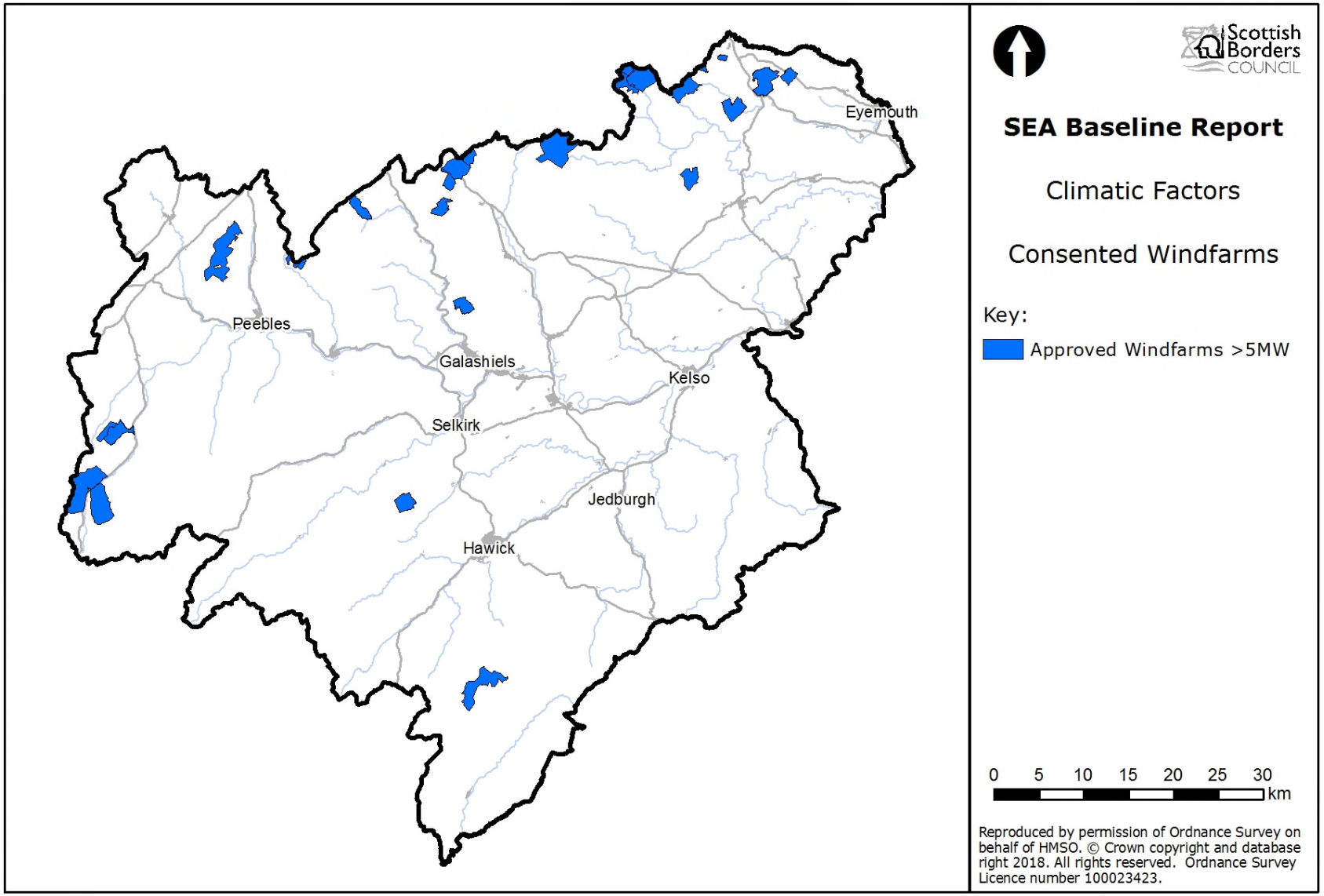
- Ecological Footprint (g/ha/capita): 5.52
- GHG Footprint (tCO2eq/capita): 17.02

To put these figures into context the UK ecological footprint average is 5.3 and the world average GHG footprint is 16.34. An assumption that can be drawn from these figures is that Scottish Borders consumes resources at an unsustainable rate.

The development of renewable energy sources has been identified as a key strand in the Scottish Government's plans to help tackle the issue of climate change. This is demonstrated by the framework for renewables in 'Scotland's Renewables Action Plan' (The Scottish Government (2009) Renewables Action Plan).

The estimated capacity of renewable energy generation is Scotland has been estimated at 60 GW (The Scottish Government (2002) Scotland's Renewable Energy Potential – Beyond 2010). Scottish Borders has, and continues to play a key role in the development of sustainable energy sources with several existing and proposed windfarms, the number of windfarms (5MW or above generation) is shown in Map 7 (please note this figure is indicative of the status at the time of writing). The Borders also has the potential of wood fuel and heat recovery systems associated with forestry and recently there has been a growing interest in solar farms.

Map 7: Operational and Consented Windfarms



SEA Topic: Cultural Heritage

SEA Objective: To safeguard and enhance the built and historic environment

SEA Sub-Objectives:

- **Protect designated historic/cultural sites, areas and landscapes**
- **Provide opportunities for greater access to/understanding of the historic environment**

Scottish Borders has a rich cultural and historical heritage and this is shown through the number of related designations and initiatives undertaken in the area. For example the Council has completed Townscape Heritage Initiatives (THI) in Hawick and Kelso in recent years, which were undertaken with the aim to culturally, socially and economically regenerate the towns. Supplementary Guidance reports include Planning Briefs for historically sensitive sites including one underway for Kelso High School. Furthermore, the Jedburgh and Selkirk Conservation Area Regeneration Scheme (CARS) has been undertaken for these towns, which focused on a range of heritage and conservation based regeneration activities within the historic town centre.

The Register is maintained by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) on behalf of Historic Scotland, and provides information on properties of architectural or historic merit throughout the country that are considered to be at risk. Currently the register identifies that there are 172 buildings within Scottish Borders at risk whilst 11 are currently being restored (as at 20/07/2016).

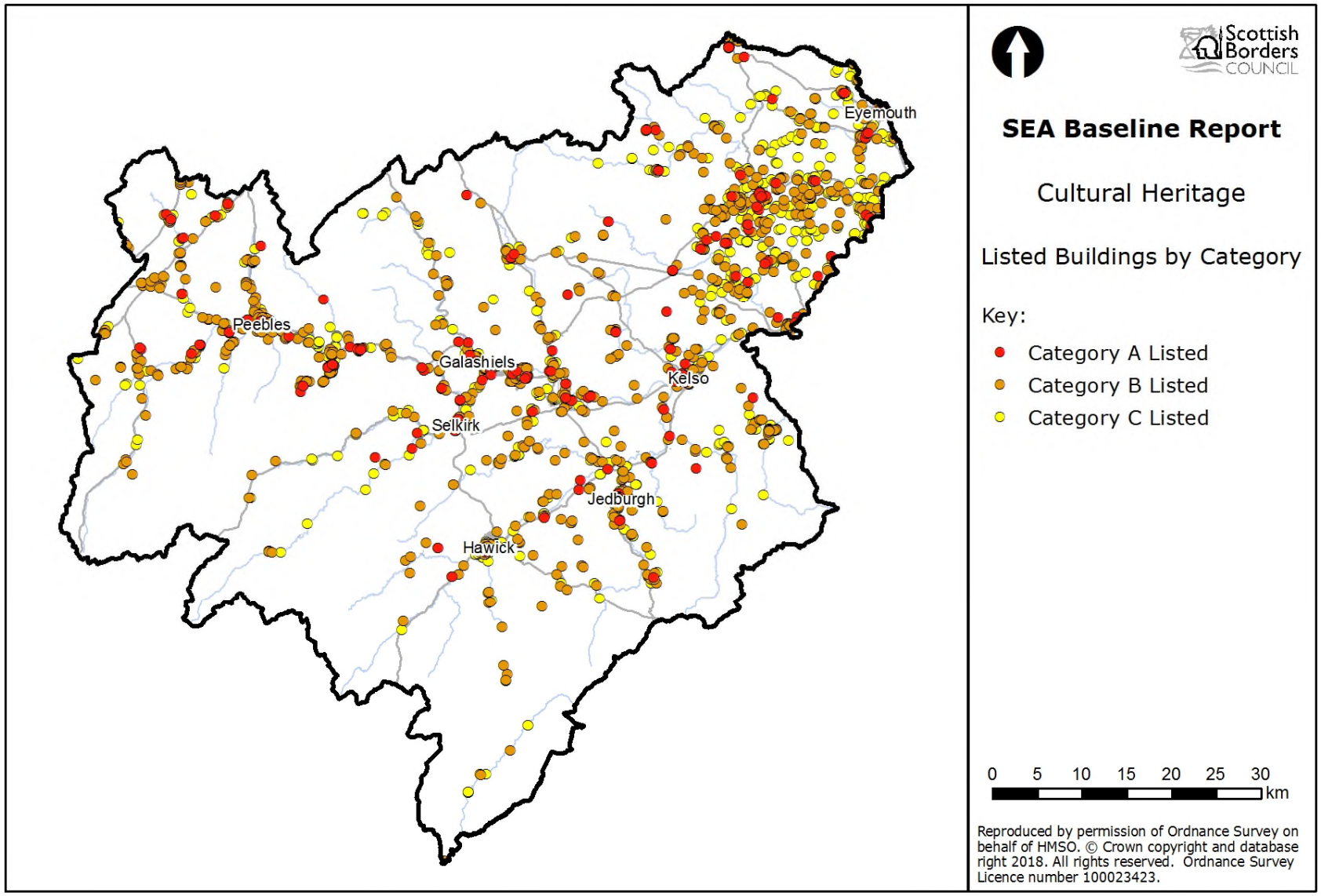
As of 8/5/17, The Historic Environment Scotland website shows that Scottish Borders has 3,020 listed buildings, shown in Map 8; the categories of listed buildings and the description are listed below in Table 5. There are also 43 conservation Areas in Scottish Borders these have been designated by the Council to ensure the character of the area is protected. The largest Conservation Areas in Scottish Borders are Peebles (117ha) and Dryburgh (71ha) in total the Conservation Areas cover almost 900ha, as shown in Map 9. There are 749 Scheduled Monuments within Scottish Borders and locations of these are provided in Map 10. All sites contained on the Council's Historic Environment Record are shown in Map 11. The 31 Gardens and Designed Landscapes in Scottish Borders are shown in Map 12, and the 3 battlefields in Scottish Borders are shown in Map 13.

Table 5: Listed Buildings in Scottish Borders by Category

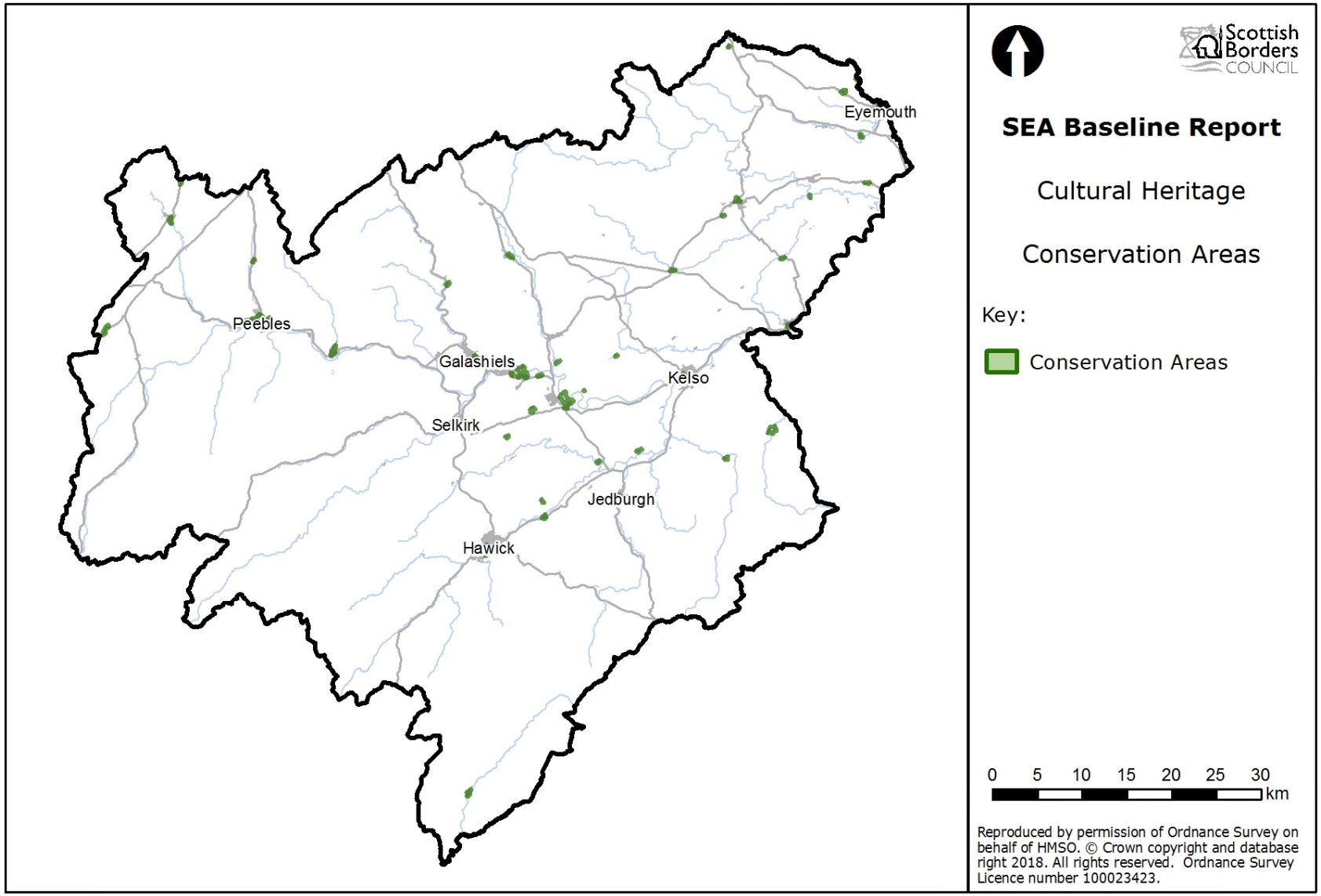
Category	Category Description	Total number
A Listed	Buildings of national or international importance, either architectural or historic, or fine little-altered examples of some particular period, style or building type.	185
B Listed	Buildings of regional or more than local importance, or major examples of some particular period, style or building type which may have been altered.	1,233
C Listed	Buildings of local importance, lesser examples of any period, style, or building type, as originally constructed or moderately altered; and simple traditional buildings which group well with others in categories A and B.	1,602
		3,020

Source: Historic Environment Scotland Website

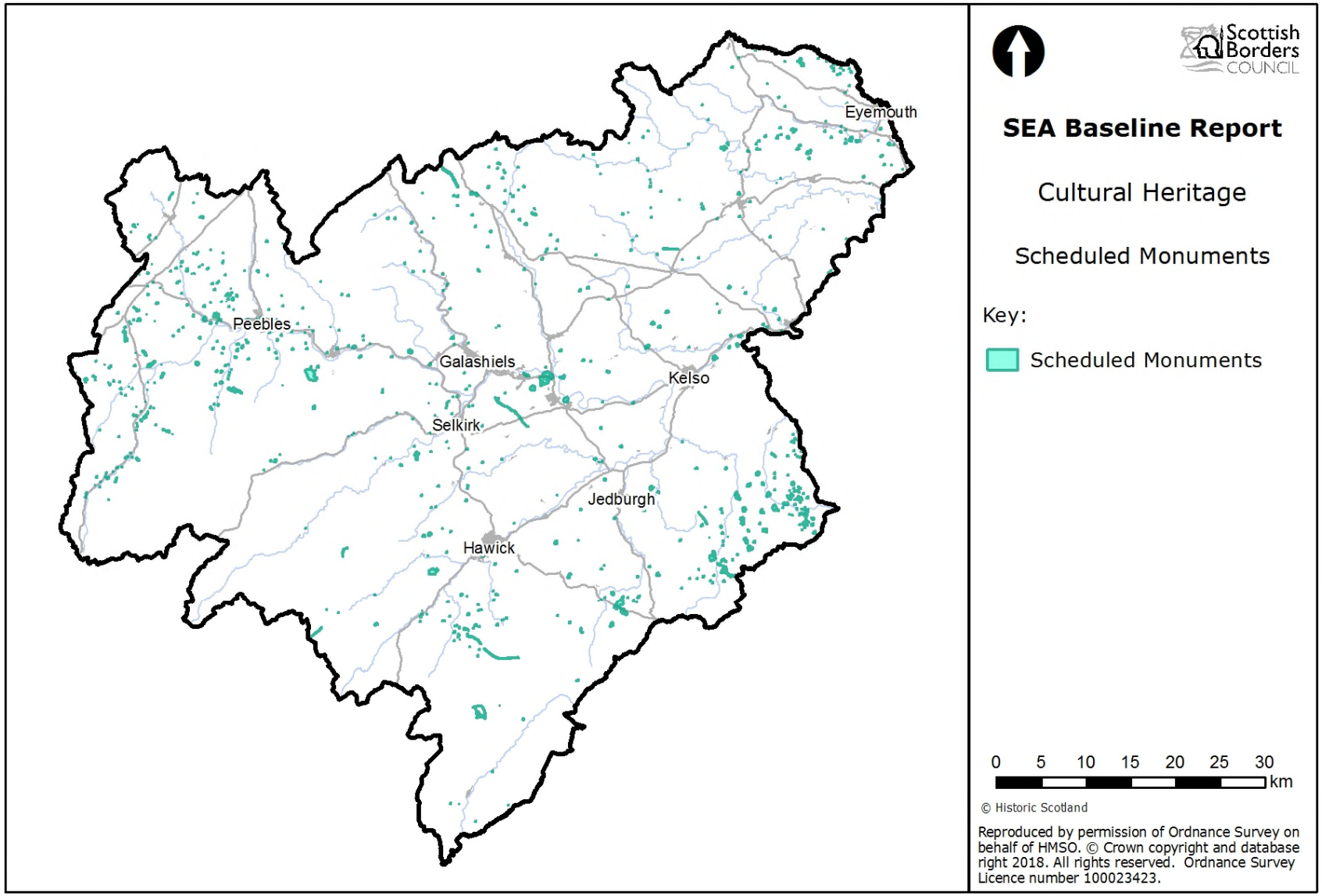
Map 8: Listed Buildings



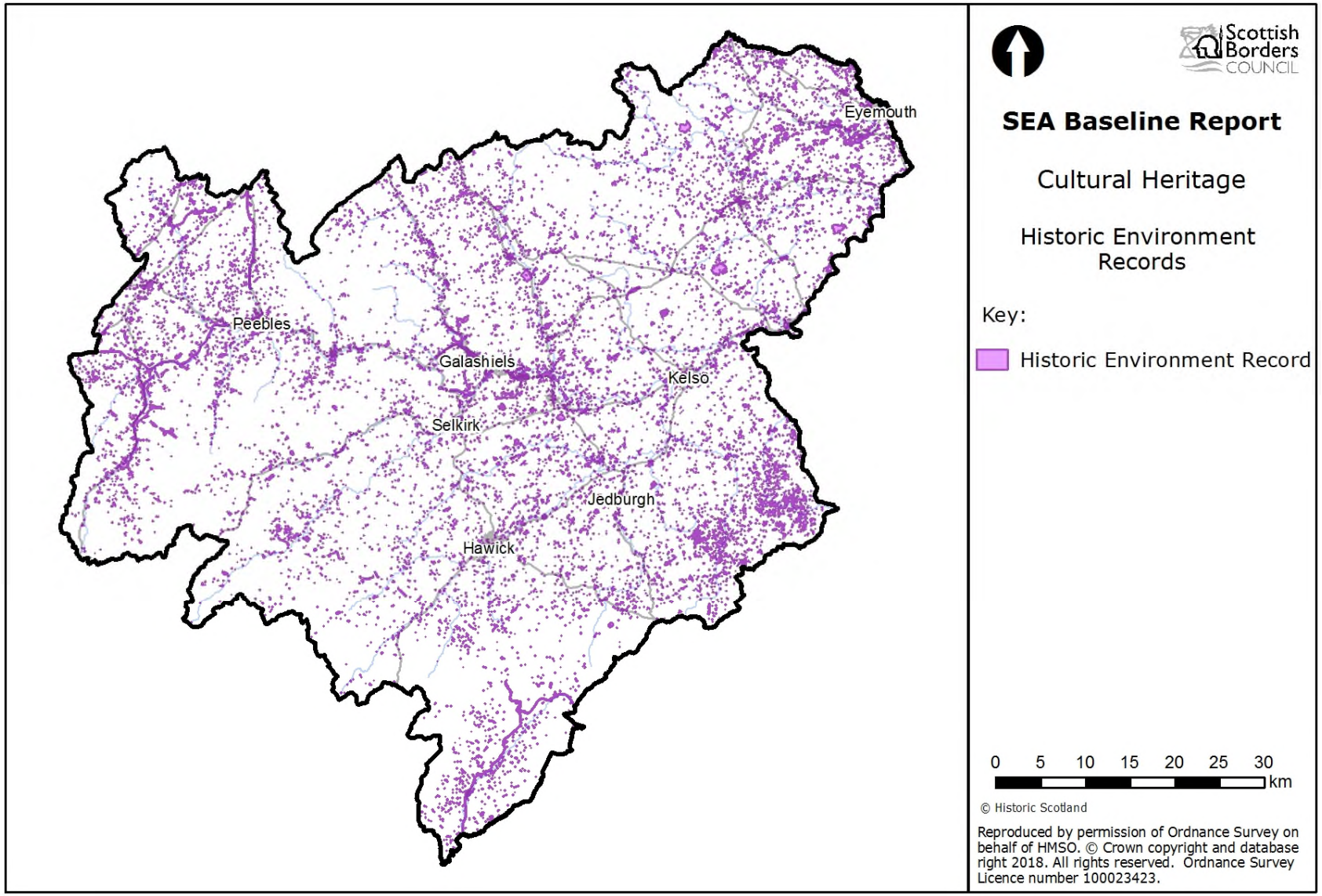
Map 9: Conservation Areas



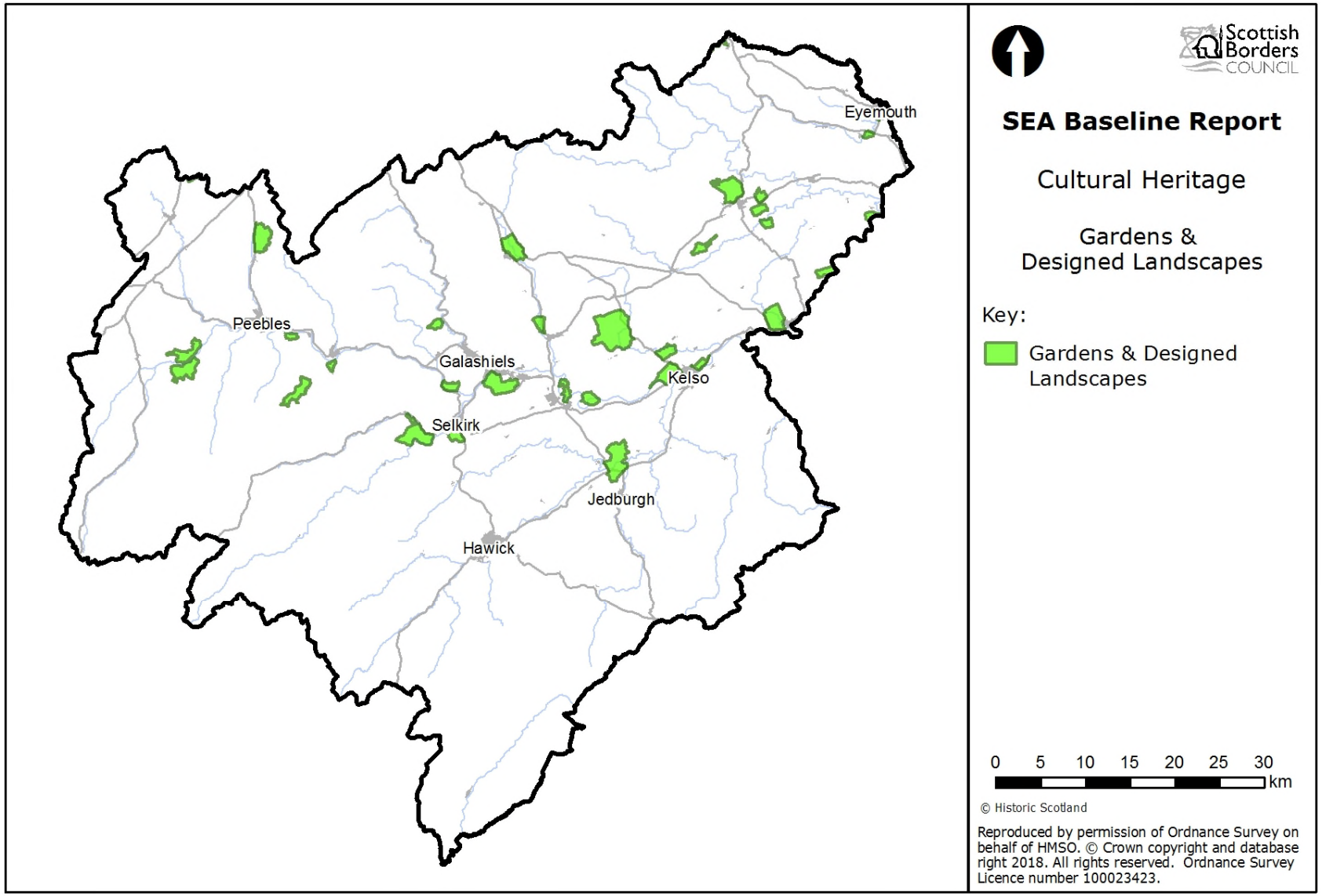
Map 10: Scheduled Monuments



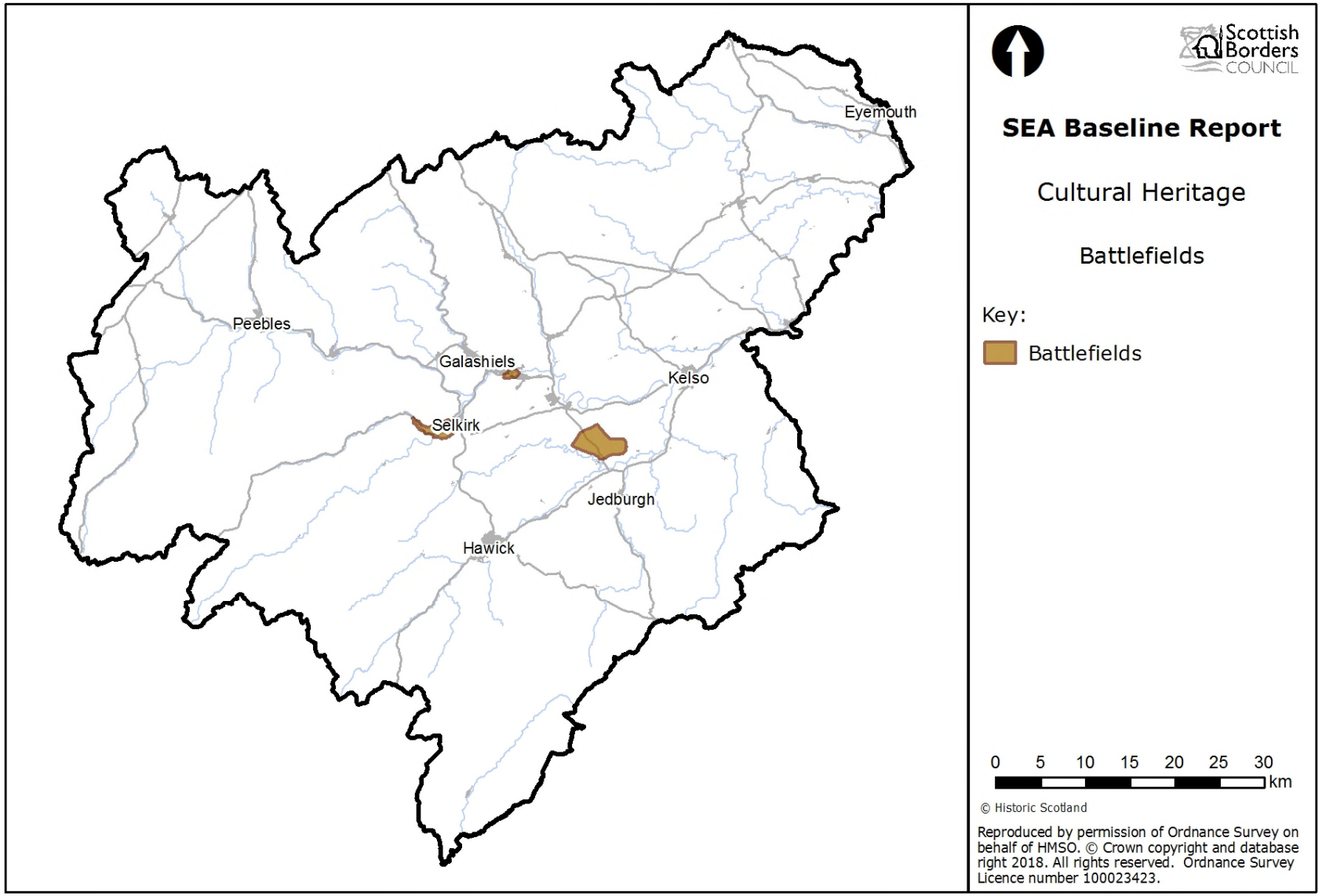
Map 11: Historic Environment Records



Map 12: Gardens & Designed Landscapes



Map 13: Battlefields



SEA Topic: Landscape and Townscape

SEA Objective: To protect and enhance the landscape and townscape in the Borders

SEA Sub-Objective:

- **Monitor relevant Supplementary Planning Guidance designed to protect the Borders landscape**

The Scottish Borders is considered to have a special and diverse landscape which includes differing variations of upland, lowland, valley and coastal landscapes. The most special landscapes in the Borders are protected by national and local landscape designations. There are two National Scenic Areas (NSAs) and nine Special Landscape Areas (SLAs). The landscape designations are listed with their area size in Table 6 below.

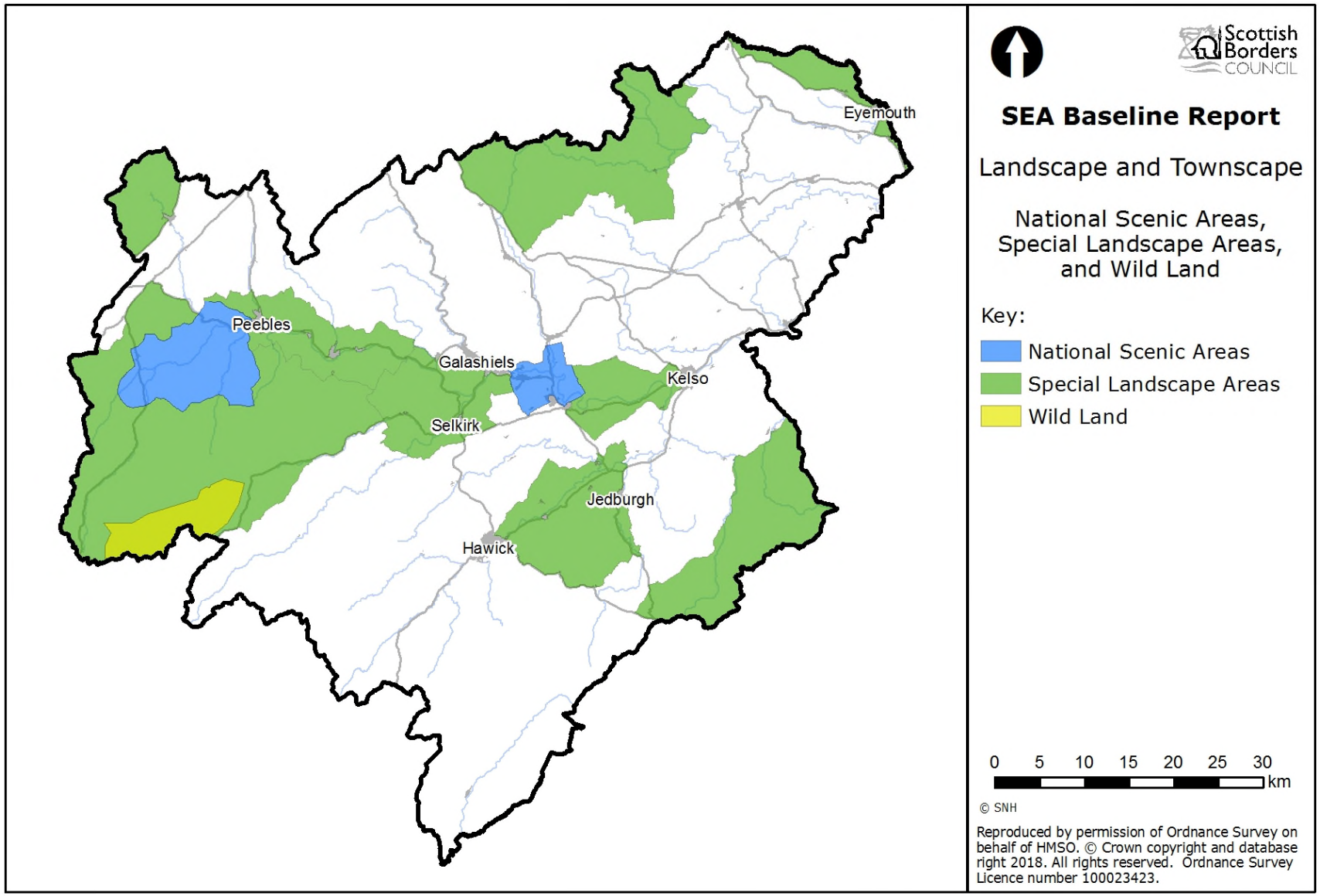
National Scenic Areas were introduced by the Countryside Commission in 1980. NSAs are nationally important areas of outstanding beauty, representing some of Scotland's grandest landscapes, the purpose of their designation is to preserve and enhance their character or appearance (Scottish Natural Heritage (1995) The Natural Heritage of Scotland: an overview). Special Landscape Areas are defined by local authorities in development plans with a view to safeguarding areas of regional or local landscape importance from inappropriate development - the SLAs in the Scottish Borders are designated within the Supplementary Guidance titled 'Local Landscape Designations'. The National Scenic Areas, Special Landscape Areas and Wild Land Areas are shown in Map 14 below.

The Scottish Borders Landscape Character Assessment highlights the 5 types of landscapes in the Borders – coastal, lowland, river valley, upland fringe, and upland - and is shown in Map 15. In addition to the designations a number of Scottish Borders Council policies aim to protect the landscape - one such example is the Countryside Around Towns policy which was introduced to prevent settlement coalescence in the central Borders area, the CAT area is shown in Map 16.

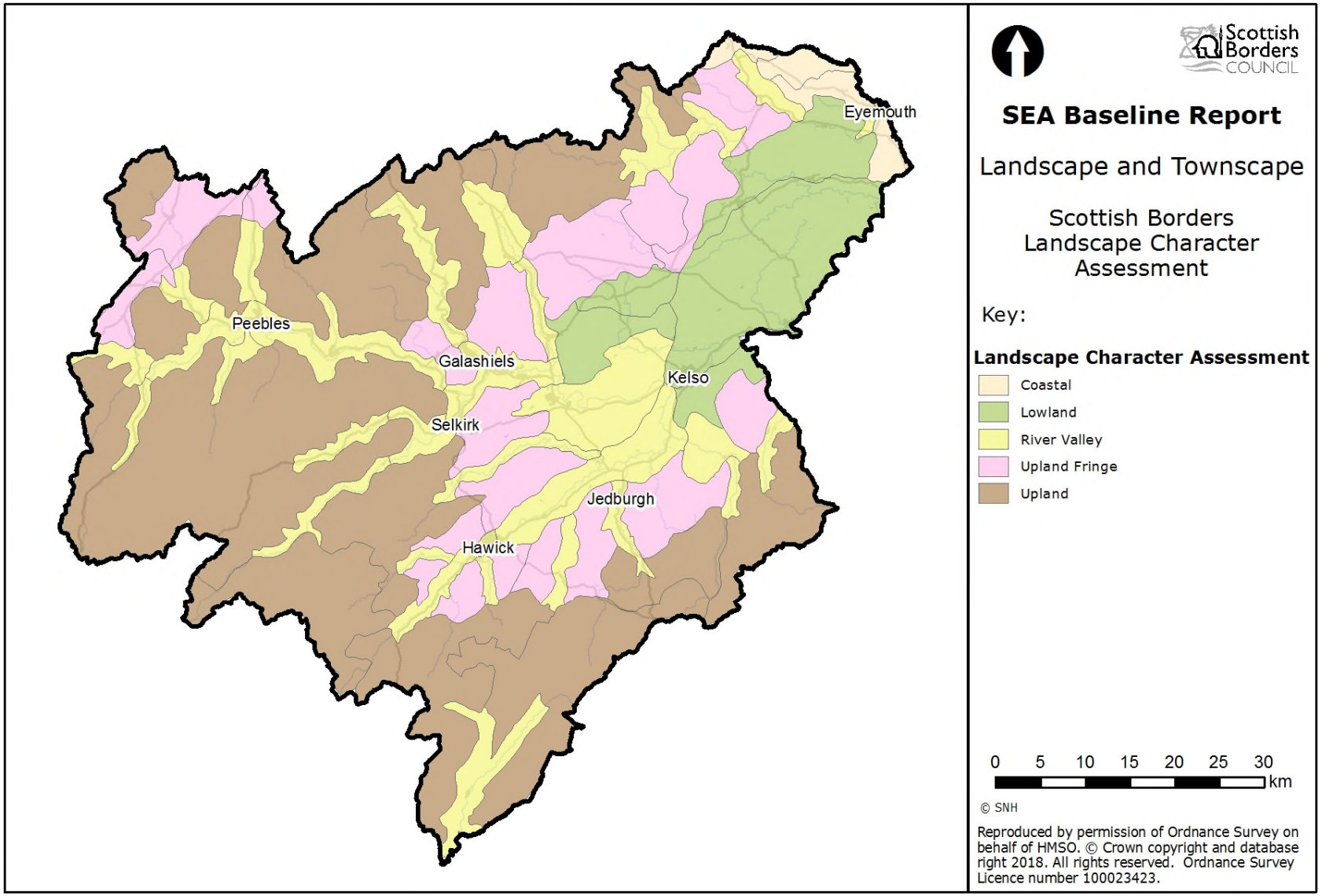
Table 6: National Scenic Areas (NSA) and Special Landscape Areas (SLA) in Scottish Borders

Landscape Designation	Area (Ha)
Eildon and Leaderfoot NSA	3880
Upper Tweeddale NSA	12770
Berwickshire Coast SLA	4469
Cheviot Foothills SLA	18602
Lammermuir Hills SLA	25057
Pentland Hills SLA	5949
Teviot Valleys SLA	15693
Tweed, Ettrick and Yarrow Confluences SLA	11994
Tweed Lowlands SLA	6819
Tweedsmuir Uplands SLA	53569
Tweed Valley SLA	10959

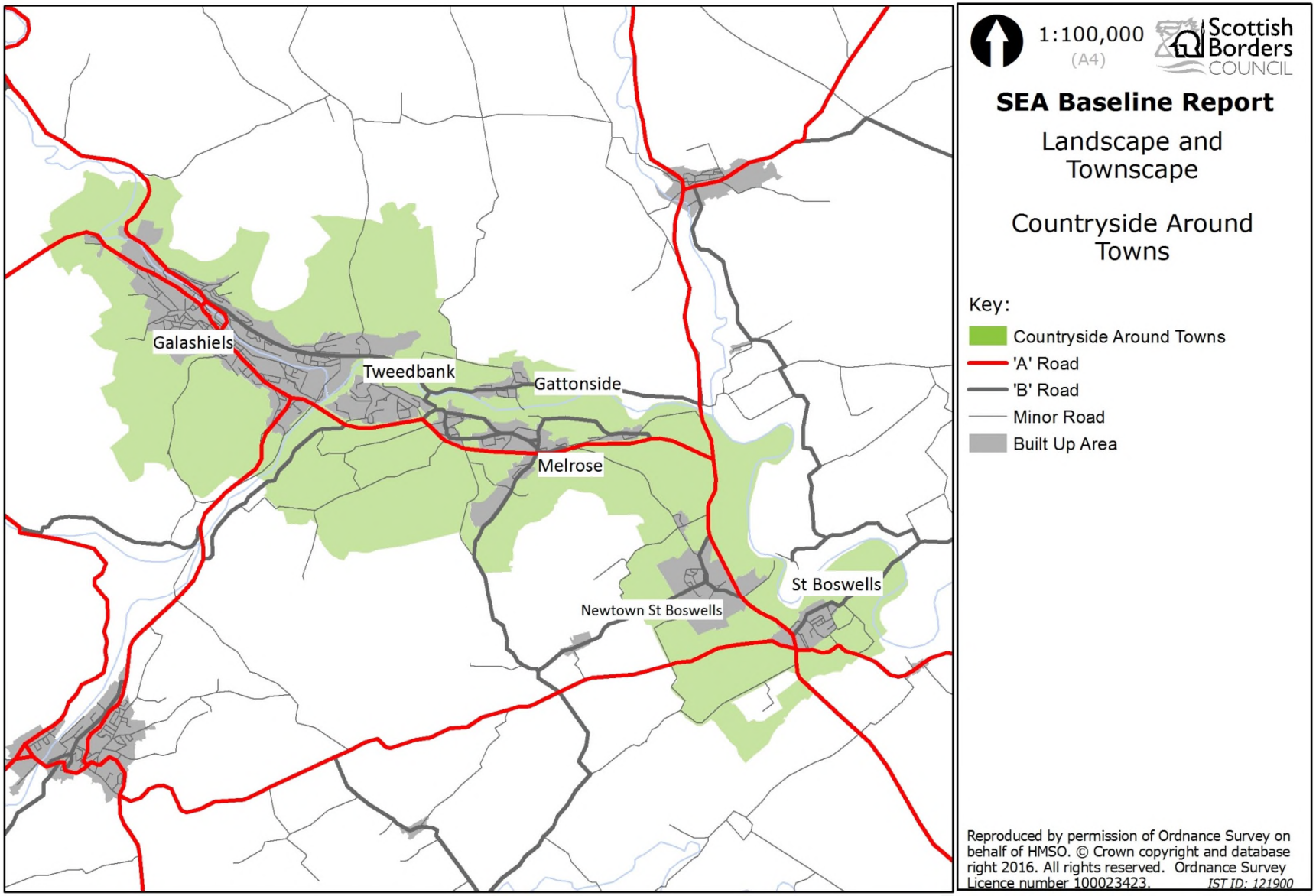
Map 14: National Scenic Areas and Special Landscape Areas



Map 15: Scottish Borders Landscape Character Assessment



Map 16: Countryside around Towns



SEA Topic: Material Assets

SEA Objective: To promote the sustainable use of natural resources and increase waste recycling

SEA Sub-Objective:

- **Consider sustainable options for waste treatment**

For the purposes of this SEA 'Material Assets' has been taken to include open spaces, infrastructure covering transport, waste and water facilities, education provision, and mineral resources that contribute to the means to provide development.

The Scottish Government defines just over two thirds of the Scottish Borders as being "accessible" with the remainder being "remote", this means that there is a significant reliance on private car for use in daily life. This has been shown above in the daily average traffic flows (Map 1). Map 17 below shows the Strategic Road Network and Map 18 shows the Rail Network.

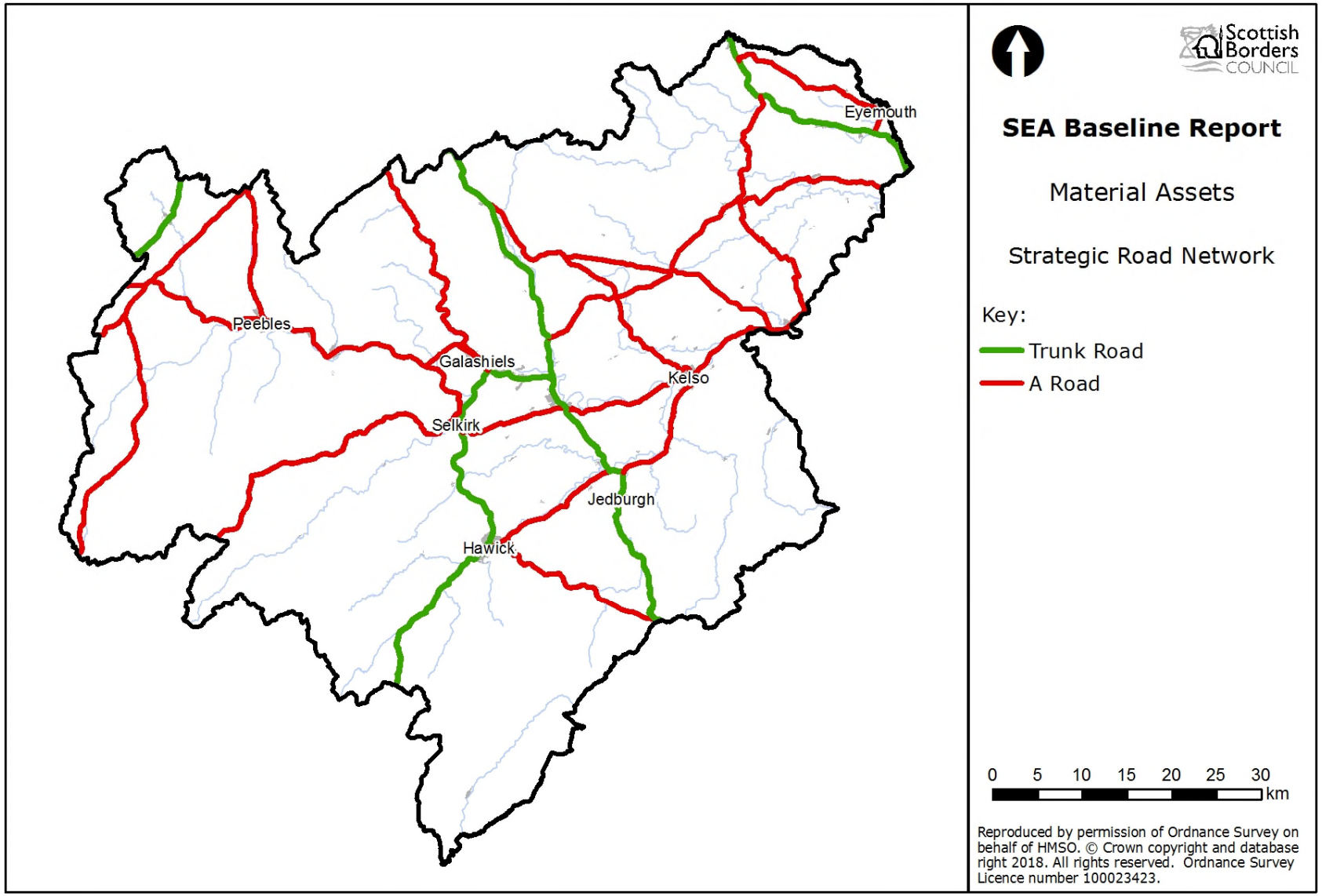
Sustrans develops and maintains the National Cycle Network which provides sustainable transport routes across the country. Map 19 below shows National Routes 1 and 76, which have sections in the Scottish Borders.

- National Route 1 terminates at Dover and John O'Groats. The route passes inland from Berwick-Upon-Tweed to Melrose and on to Edinburgh.
- National Route 76 runs from Berwick-Upon-Tweed to St Andrews, passing through the Scottish Borders.

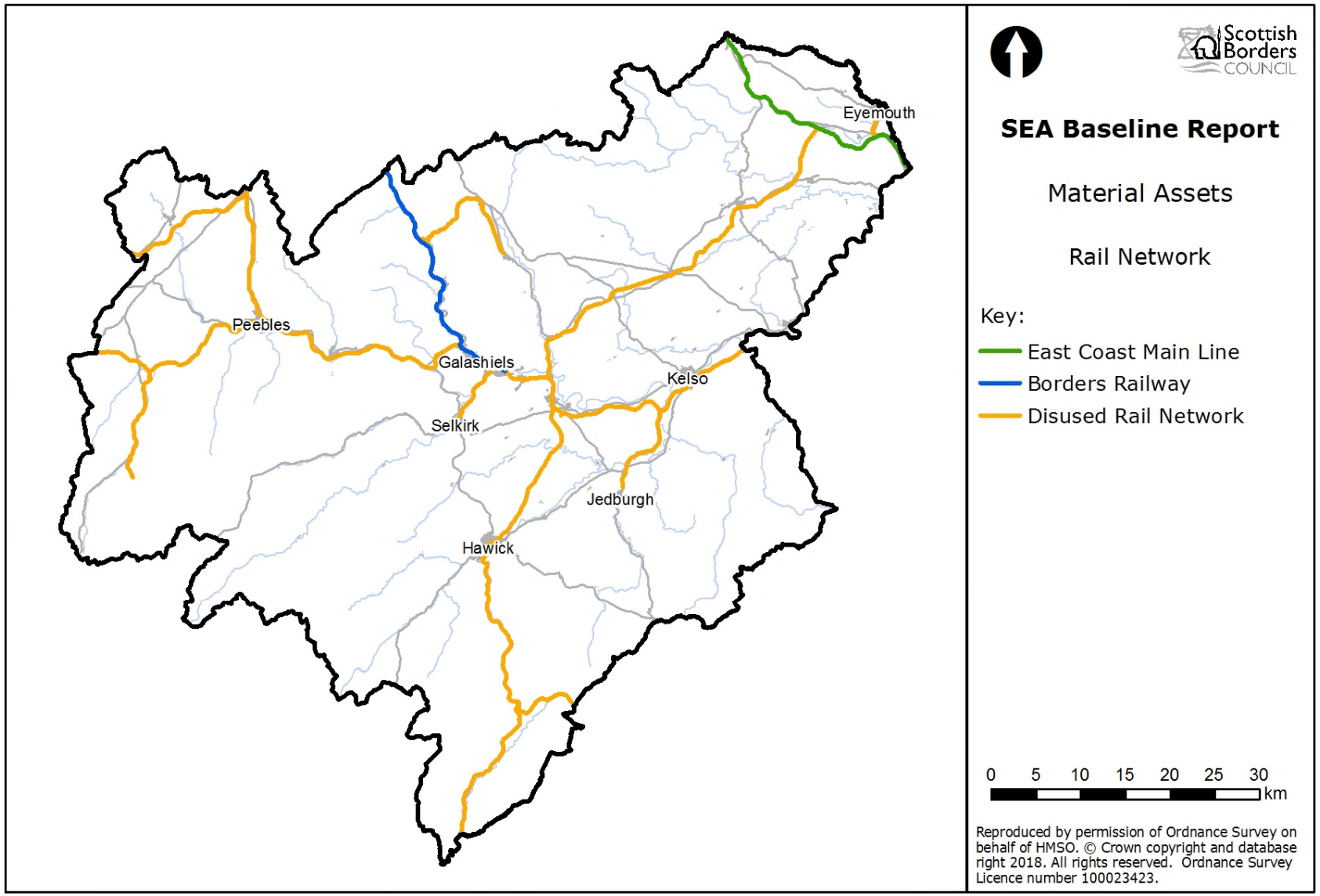
Each of the routes also has various other linkages associated with other routes in the Scottish Borders.

The Local Development Plan identifies a series of protected green spaces, which are of local importance. The aim in the identification of these greenspaces is to protect and safeguard the most important spaces within settlements, there are currently 176 key greenspaces within the Scottish Borders, shown on Map 23.

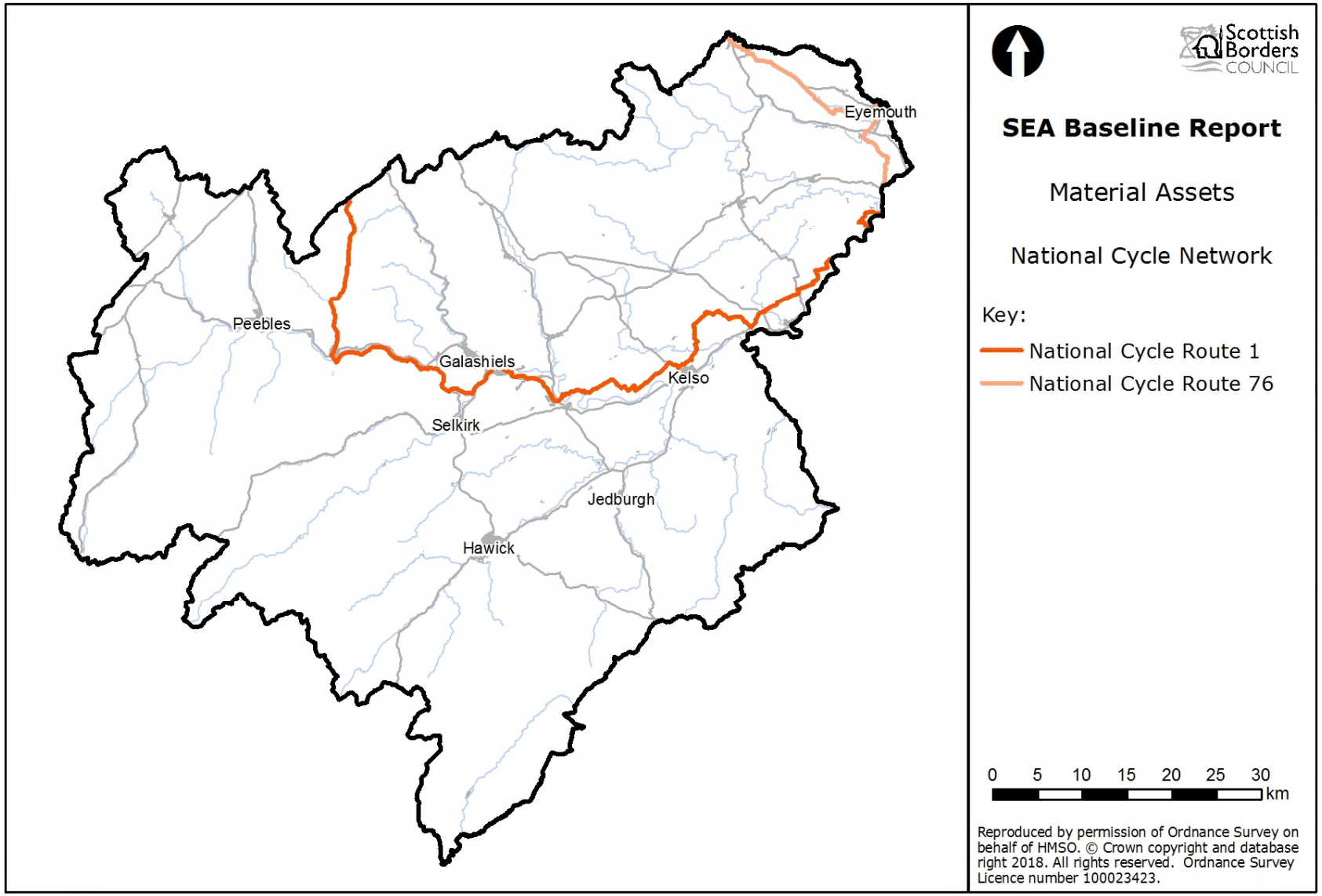
Map 17: Strategic Road Network



Map 18: Rail Network



Map 19 : National Cycle Network



The Scottish Government introduced the Zero Waste Plan in 2010, the vision of the document is to reach 70% recycling and maximum 5% to landfill of Scotland's waste by 2025; in addition there will also be landfill bans for specific waste types, source segregation and separate collection of specific waste types; and restrictions on inputs to energy from waste facilities.

Table 7 below shows the waste collected within Scottish Borders and the quantities that were composted or recycled:

Table 7: Municipal Waste collected within Scottish Borders (2009)

Total municipal waste collected in tonnes	**Waste collected for disposal (tonnes)**			**Waste collected for recycling and composting (tonnes)**	
	Household	**Commercial**	**Other non-household**	**Household**	**Commercial**
70,498	30,699	12,698	120	23,593	3,088

Source: SEPA Waste Data Digest 11: Data Tables 2009

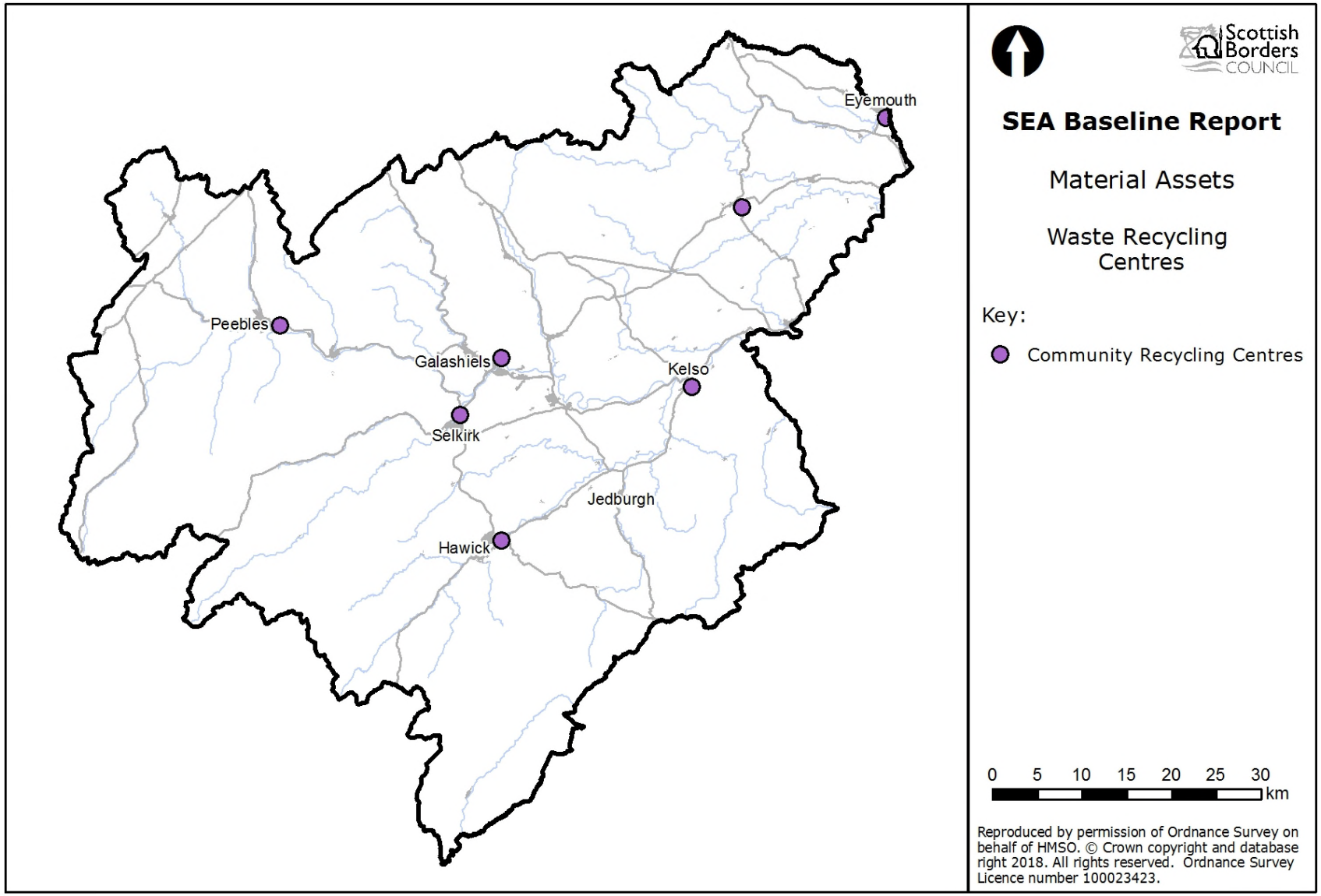
Table 8: Water and Wastewater Asset Capacity

Area	**Wastewater Asset Status**	**Drinking Water Asset Status**
Stow	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Lauder	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Galashiels	Galashiels has limited capacity. Contributions may be required when updates are necessary. Developers may be required to contribute to the local water network to enable development.	There is currently limited capacity at Manse Street WTW; supply may be supported by another WTW
Peebles	A growth project has been raised to enable development	There is currently sufficient capacity for identified

	in this area	development needs. However, any further development a growth project may be required where the developer will need to meet 5 growth criteria
Innerleithen	Current capacity is sufficient for identified development needs	There is currently sufficient capacity for identified development needs. However, any further development a growth project may be required where the developer will need to meet 5 growth criteria
Selkirk	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Hawick	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Newtown St Boswells	A growth project has been raised to enable development in this area	Current capacity is sufficient for identified development needs
Jedburgh	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Melrose	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Duns	Current capacity is sufficient for identified development needs. Developers may be required to contribute towards upgrading the local water network to enable development.	Current capacity is sufficient for identified development needs
Reston	There is currently sufficient capacity at the treatment works. However, if development exceeds current capacity a growth project would be required.	Current capacity is sufficient for identified development needs
Kelso	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs

Earlston	Earlston has limited capacity, however the growth project is awaiting confirmation of the 5 Criteria from the developer. Contributions may be required when upgrades are necessary	Current capacity is sufficient for identified development needs
Coldstream	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Eyemouth	Current capacity is sufficient for identified development needs	Current capacity is sufficient for identified development needs
Howden WWTW	Current capacity is sufficient for identified development needs	N/A

Map 20: Waste Recycling Centres



Mineral resources are finite and they can only be worked where they occur, so it is essential that they are worked in the most efficient and sustainable manner. The use of alternatives or recycling of minerals only partially contributes to meeting demand. Transport of minerals over long distances is not always viable as it is costly not only to the consumer, but also to the environment. Securing local supplies can make an important contribution to sustainable development.

It is possible to show the consented mineral operations in Scottish Borders and this is shown in Table 9 below:

Table 9: Consented Mineral Operations in Scottish Borders

Hard rock mineral extraction	Sand and gravel mineral extraction	Other mineral extraction
• Cowieslinn • Craighouse • Greena • Soutra Hill • Trowknowes • Edston • Glenfin • Hazelbank • Swinton	• Kinegar • Reston	• Whim Moss

SEA Topic: Population & Human Health

SEA Objective: To improve the quality of life and human health for communities in the Borders

SEA Sub-Objectives:

- **Provide access to greenspace and to proposed green network**
- **Provide for digital connectivity**
- **Provide access to employment and services**

In 2017 the estimated population of the Borders was 115,020. The majority of the population is located in a 'central hub' of settlements; these include Hawick, Galashiels, Melrose, Selkirk and Jedburgh. The National Records of Scotland provides an estimated population of Scottish Borders 2017; this is shown in Table 10 below:

Table 10: Scottish Borders Population Breakdown

Age Group	Male Population Scottish Borders	Female Population Scottish Borders	Total Population of Scottish Borders	% of Total Population Scottish Borders
0 - 15	9625	9401	19026	17%
16 - 24	5269	5094	10363	9%
25 - 44	10700	11702	22402	19%
45 - 64	17380	18150	35530	31%
65 - 74	7689	8026	15715	14%
75+	5126	6858	11984	10%
Totals	55789	59231	115020	100%

The number of residents in the Scottish Borders claiming jobseeker's allowance in November 2016 was 660, this equals 1% of the Scottish Borders working population. (Source: Office for National Statistics).

The Scottish Government is committed to ensuring that people have access to essential services essential to their life and work. In 2002, they published a report 'Availability of Services in Rural Scotland'. This looked at local amenities using drive times as the key factor. Categories included post offices, banks, petrol stations and convenience stores. The report highlighted the lack of service provision for people within certain rural areas within Scotland. Two examples from the report are shown in Figures 1 and 2 below, drive times to petrol stations and access to general/convenience stores:

Figure 1: Drive Times for Petrol Stations

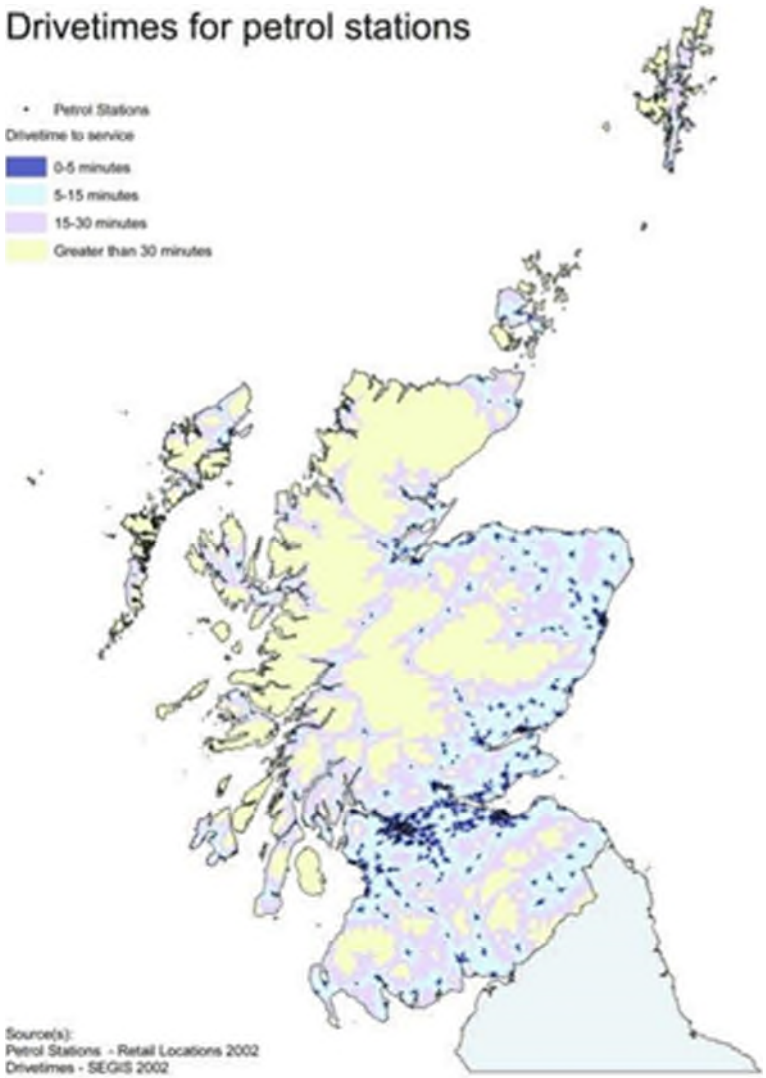
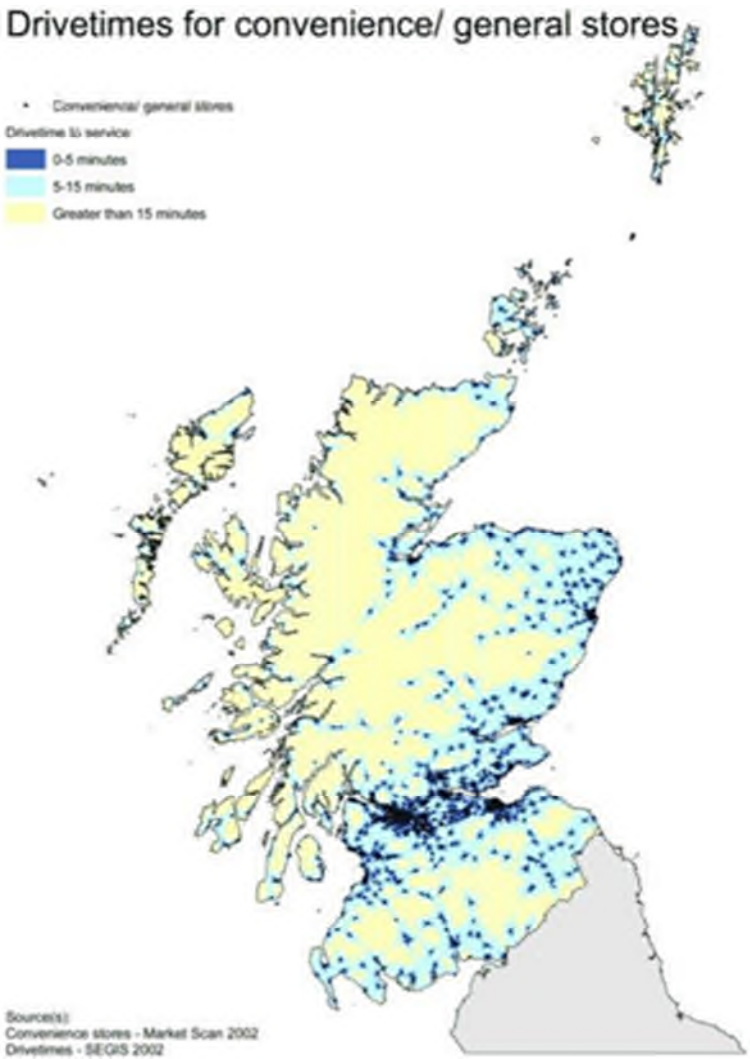


Figure 2: Drive Times for Convenience/General Stores



Scottish Planning Policy states that where a housing needs and demand assessment (HNDA) identifies a shortage of affordable housing, it should be addressed in the development plan as part of the housing allocation. The Scottish Borders Council HNDA update (February 2011) states that there is no surplus stock (as the vacant level is below 3%); the number of completions for 2006/7 was 60 and for 2007/2008 was 83. Table 11 below shows the Total Affordable Housing Stock Available and Table 12 the Future Annual Supply of Affordable Housing Units:

Table 11: Total Affordable Housing Stock Available

Dwellings currently occupied by households in need	2,235
Surplus stock	0
Committed additional housing stock	83
Units to be taken out of management	4
Total	2,322

Table 12: Future Annual Supply of Affordable Housing Units

Social rented units	911
Intermediate units	0
Units to be taken out of management	0
Total	911

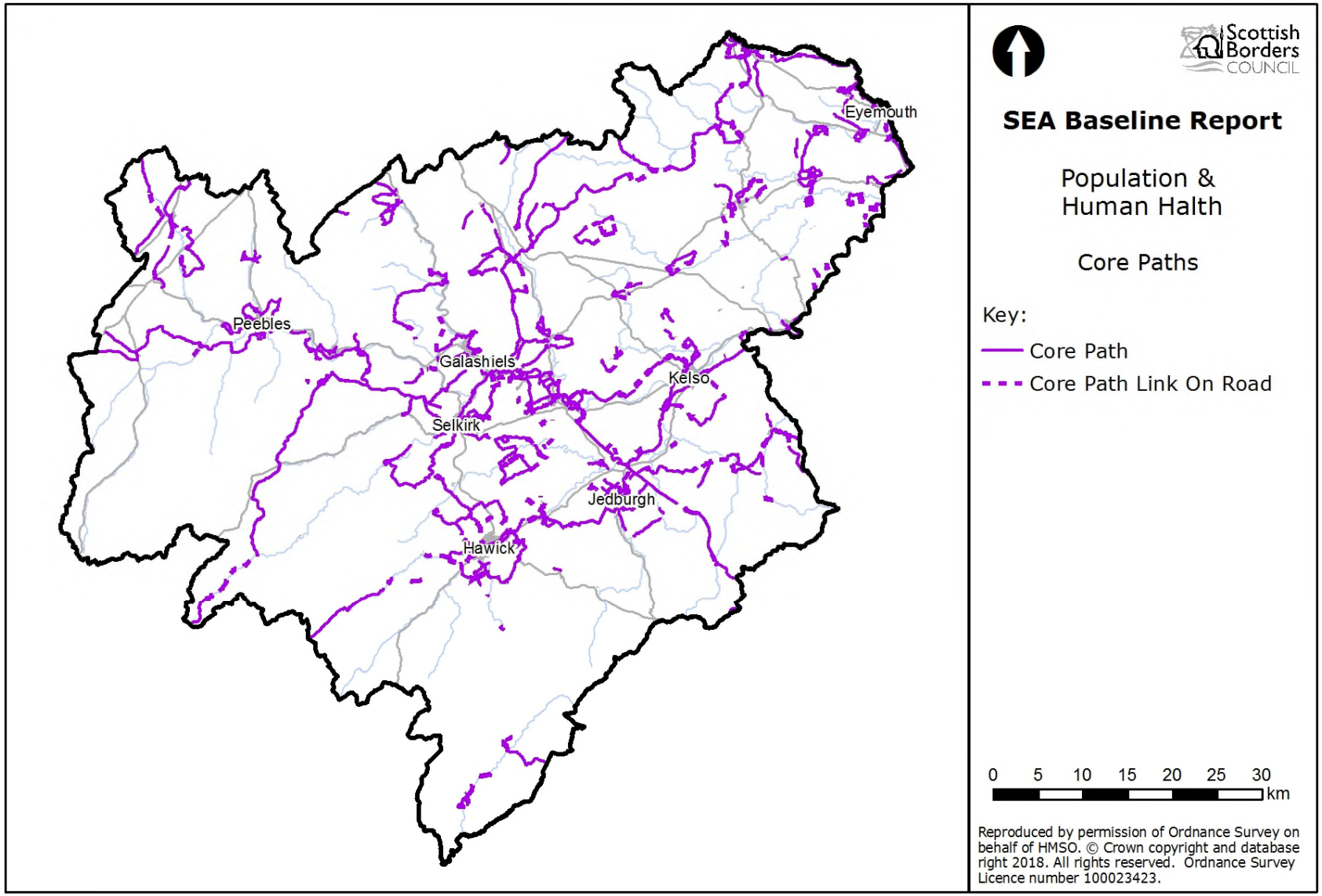
Core paths are described in the Land Reform (Scotland) Act 2003 as "a system of paths sufficient for the purpose of giving the public reasonable access throughout their area". These paths include Rights of Way, Council managed routes and any other route that provides reasonable countryside access. The majority are off-road, though some may be pavements or reached by quiet roads. These paths vary in type and quality. The Core Paths within Scottish Borders are shown in Map 21 below.

As discussed above, The Local Development Plan identified a Strategic Green Network, shown in Map 22. The purpose of the Strategic Green Network is to assist in supporting sustainable economic growth, tourism, recreation, the creation of an environment that promotes a

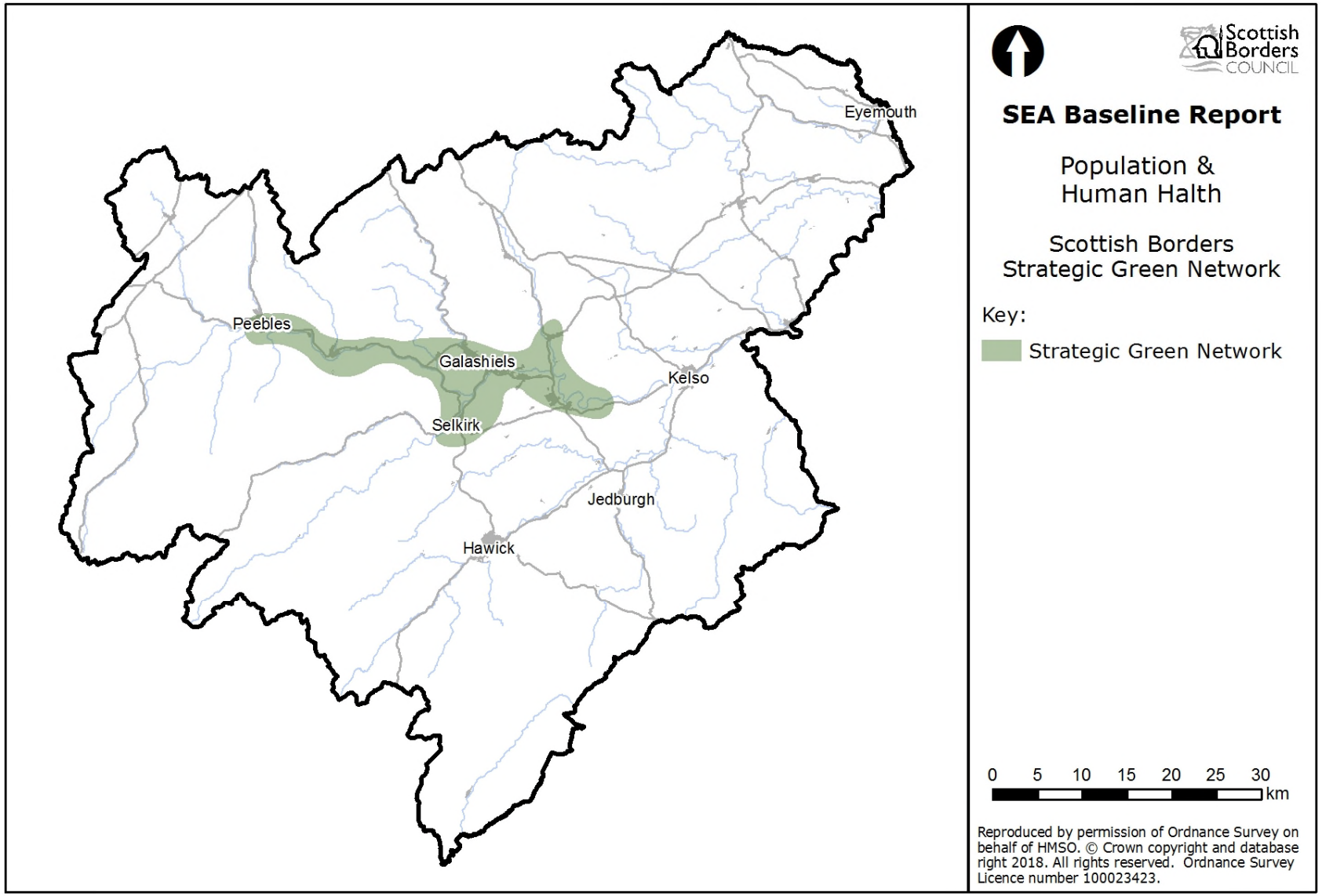
healthier-living lifestyle, and the protection and enhancement of biodiversity, and to improve the quality of the water environment, promote flood protection and reduce pollution.

Furthermore, as outlined above in Map 23, the Local Development Plan also identifies key green spaces within the Development Boundaries of settlements. The spaces identified within the Plan are those spaces which are considered to be of the greatest value to the community and are therefore worthy of protection. It is intended that within key green spaces only proposals that will enhance the space will be supported by the Council. The key green spaces are shown in Map 23 below, with a closer look at the green space in Scottish Borders' largest towns in Map 24.

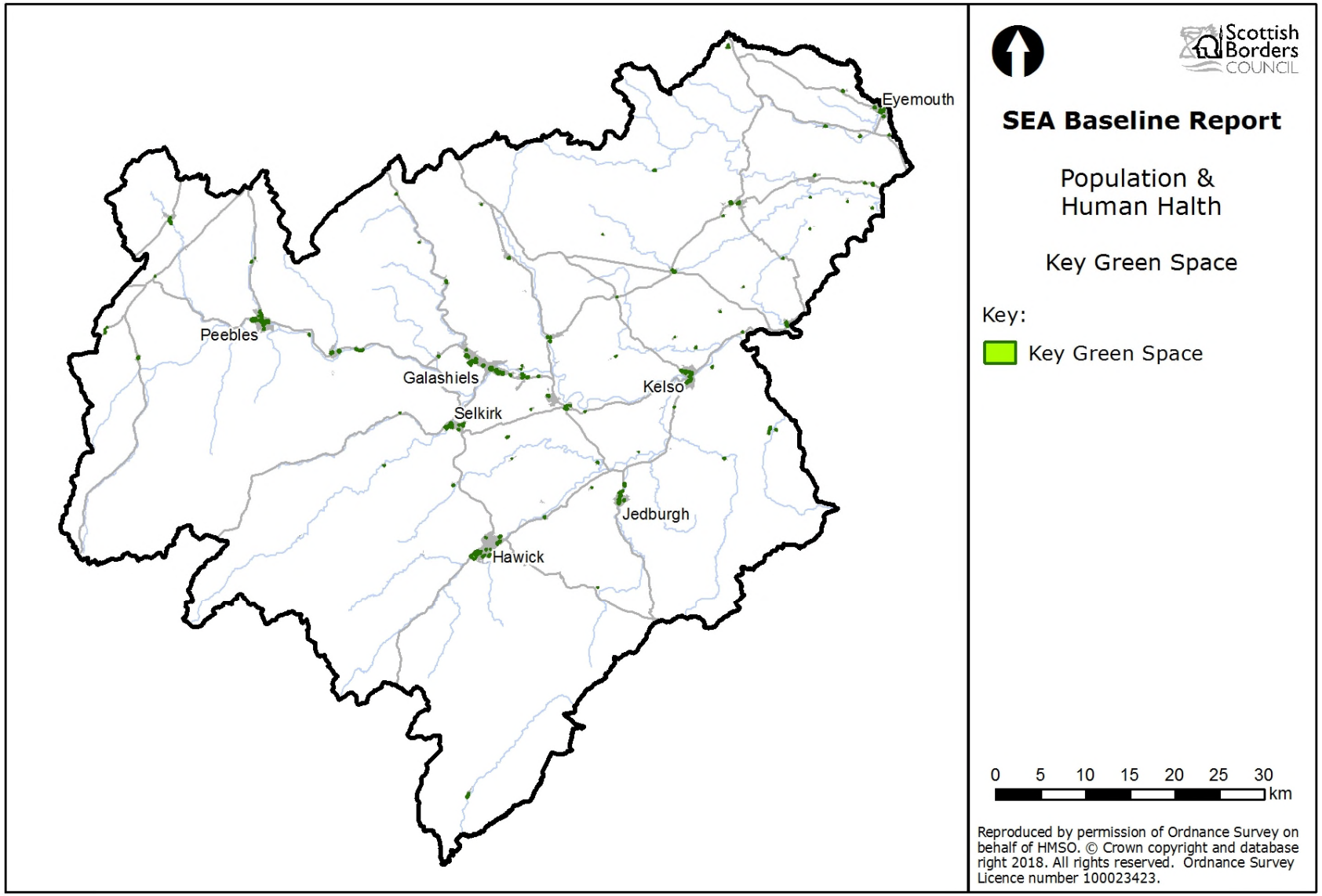
Map 21: Core Paths



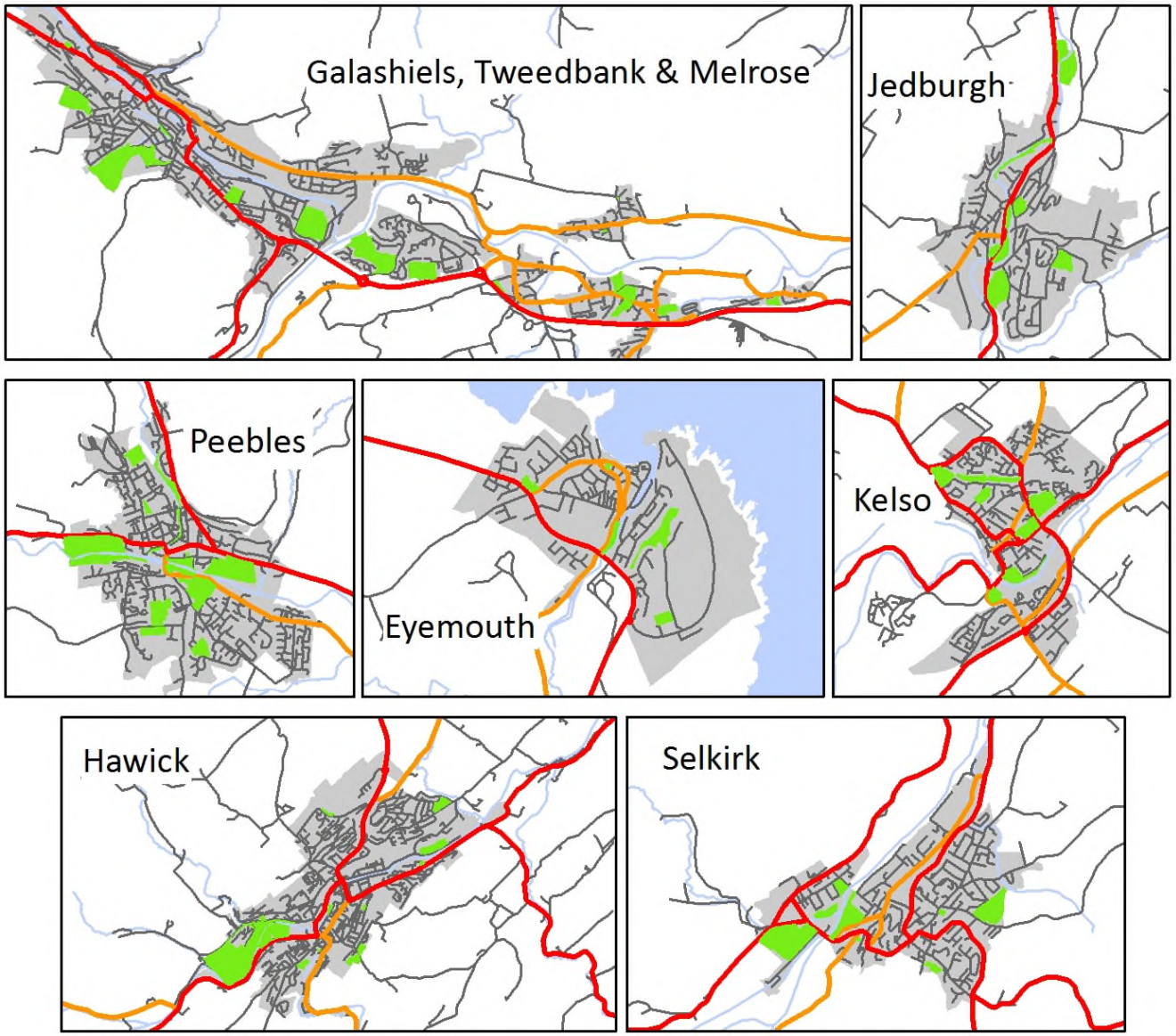
Map 22: Strategic Green Network



Map 23: Key Green Space



Map 24: Key Green Space Around Selected Towns



SEA Topic: Soil

SEA Objective: To protect the quality of soil in the Scottish Borders

SEA Sub-Objectives:

- **Protect soil quality**
- **Protect the carbon rich soil and peat resource**
- **Address contaminated land**

There are two sources that indicate the availability of brownfield land in Scottish Borders. These are:

- Vacant and Derelict Land Survey
- Urban Capacity Study

Vacant and derelict land presents an opportunity for development to take place on previously developed area (thereby reducing development pressure on rural or more sensitive areas) but also presents potential issues surrounding contaminated land and the need for remediation and appropriate development. Table 13 below shows the Derelict and urban vacant land in Scottish Borders as of 2014:

Table 13: Derelict Land and Urban Vacant Land

	Area (HA)	No. of Sites
Derelict Sites	46	57
Vacant Land	23	15
Vacant Land And Buildings	7	6
Total	**76**	**78**

As part of the production of the Strategic Development Plan (SESPlan) an Urban Capacity Study was undertaken, the results for Scottish Borders are shown in Table 14 below:

Table 14: Urban Capacity Results

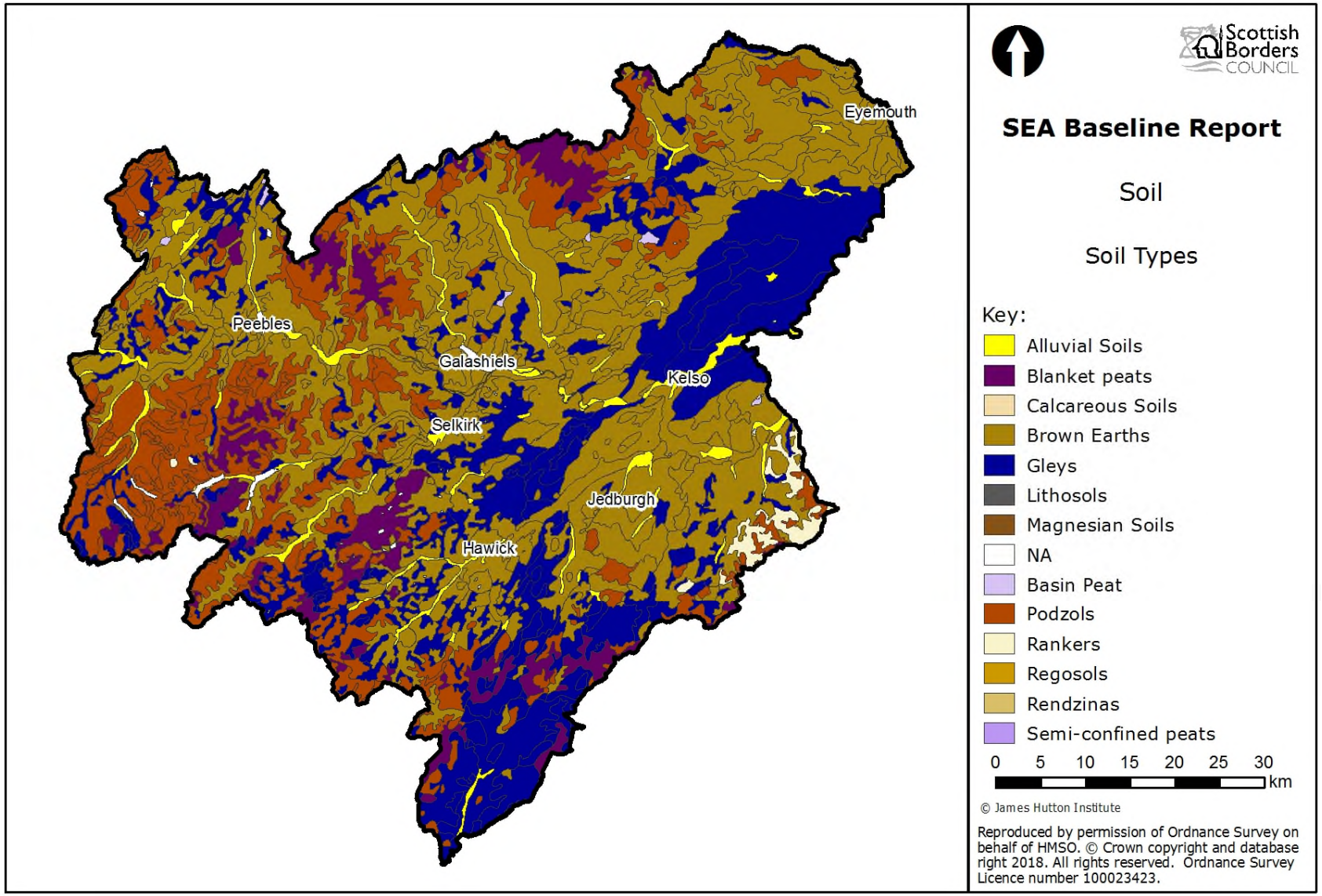
No. of Sites	Gross Area	Gross Units	Discounted	Annual Average
282	445	5167	2817	402

The soils of the Borders have a varied quality with regard to agricultural capability with better quality soils capable of supporting a wider range of arable crops including areas of prime agricultural land located along the south eastern part of Scottish Borders from Jedburgh northwards to Duns and east to Eyemouth on the coast (shown in Map 5,438 below). There are poorer quality soils within the area with regards to agricultural capability associated with upland areas of the Pentlands, in the far North West, to the Moorfoot Hills on the western boundary and the Lammermuirs in the north; here the land is only capable of supporting rough grazing.

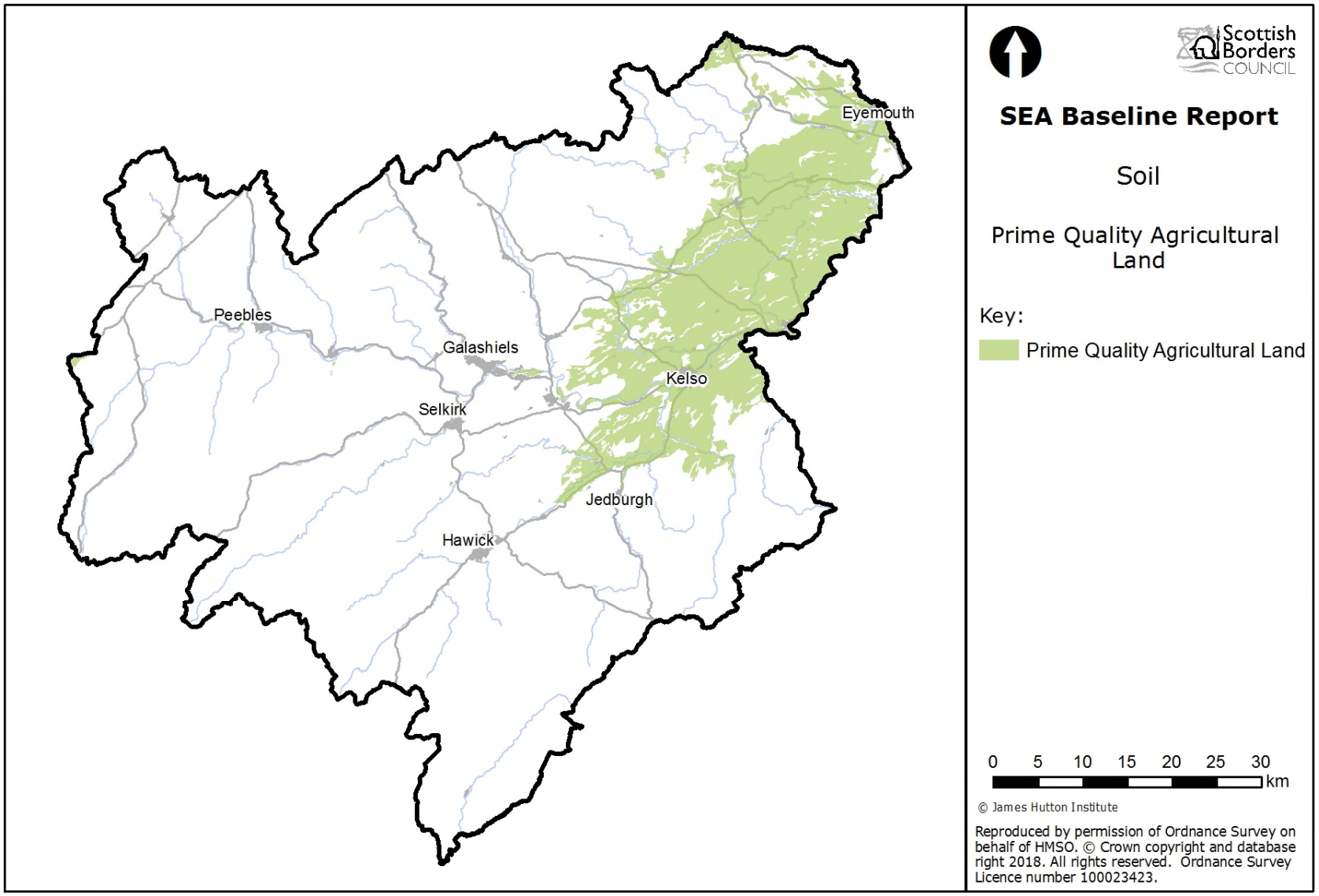
Soils are of key importance in water quality, flood prevention, biodiversity and other soil related functions for natural heritage. The protection of soils is crucial to maintaining natural processes and in turn maintaining the quality of our environment as a whole. Map 25 below provides a broad indication of the soil types in Scottish Borders.

Contaminated land can cause severe adverse conditions on ecosystems, human health and water systems. Part IIA of the Environmental Protection Act 1990 came into force in Scotland in July 2000. It places responsibilities on local authorities to deal with contaminated land in accordance with a published Contaminated Land Strategy. Scottish Borders Council adopted a Contaminated Land Inspection Strategy in 2001 and allows the council to adopt a strategic approach to identify land that could be potentially contaminated within the local authority area. The Council provided contaminated land performance indicators (2006/2007) to the Scottish Executive. This shows the sites by the local authority as warranting inspection under the Contaminated Land Regime at 31.3.07. In Scottish Borders there were 790 sites covering a total area of 302.6ha.

Map 25: Soil Types



Map 26: Prime Quality Agricultural Land



SEA Topic: Water

SEA Objective: To protect and enhance the quality of the water environment

SEA Sub-Objective:

- **Protect quality of the River Tweed and other watercourses**
- **Identify areas of expansion away from flooding areas**
- **Provide strategic flooding work**

The quality of the water environment is monitored by SEPA, who in 2015 updated the river basin management plan for the Solway Tweed river basin district. Much of this district is located within Scottish Borders. Table 15 below shows the status of the 560 surface waters and 64 groundwaters in the Solway Tweed river basin management district in 2014.

Table 15: Status of Surface Water and Groundwaters in the Solway Tweed River Basin District

Condition of Water	Surface Waters (rivers, lochs, estuaries, coastal waters)	Groundwaters
High/Maximum	16	-
Good	239	46
Moderate	158	-
Poor	126	18
Bad	21	-
Total	560	64

SEPA has also set environmental objectives for this river basin management district over future river basin planning cycles so that sustainable improvement to its status can be made over time, or alternatively that no deterioration in status occurs, unless caused by new activity providing significant specified benefits to society or the wider environment.

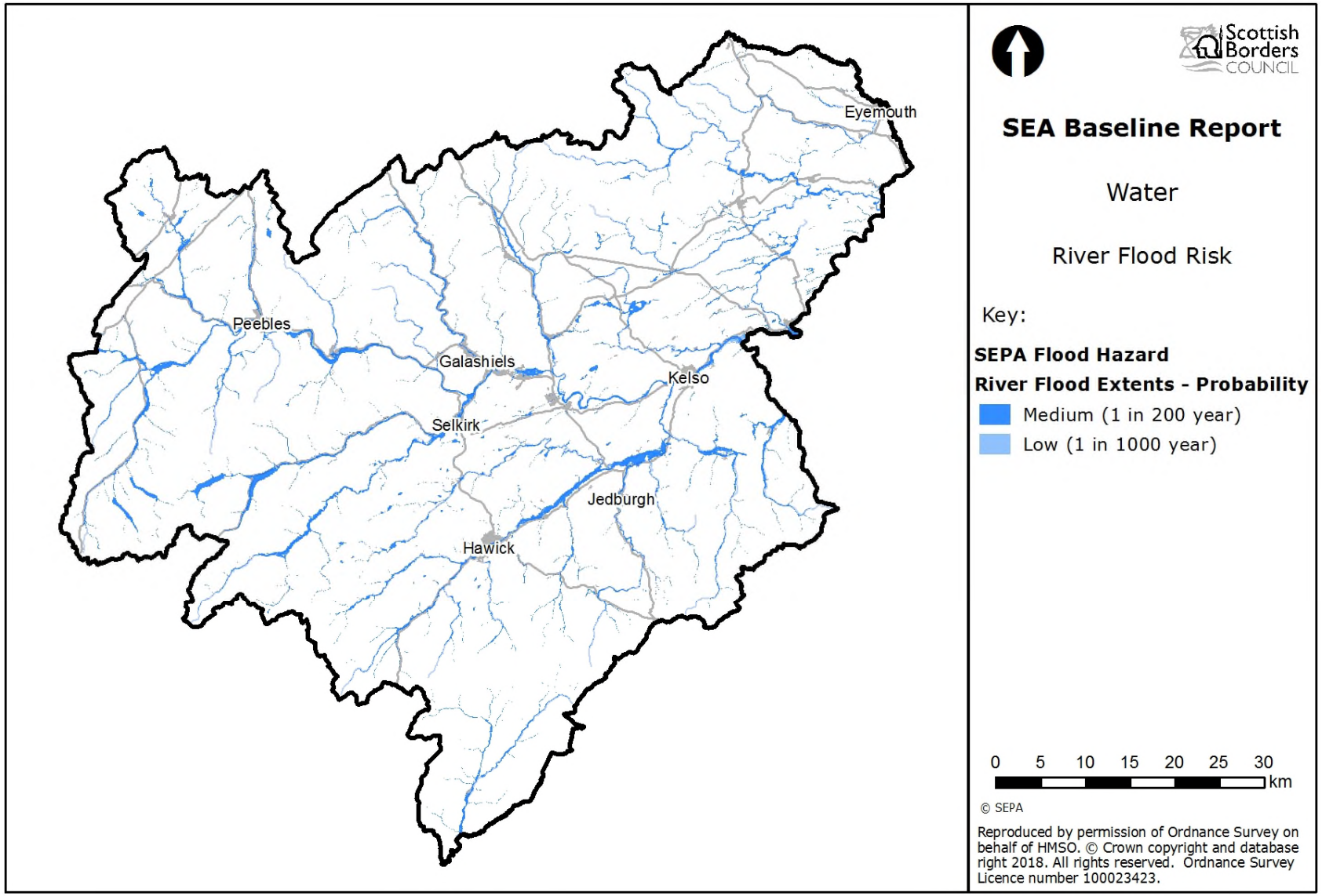
Table 16: Water Quality Objectives in the Solway Tweed River Basin District

Water bodies **currently** good or better	48%
Water bodies good or better **by 2021**	57%
Water bodies good or better **by 2027**	90%
Water bodies good or better **after 2027**	94%

Flooding is a natural phenomenon that plays an important role in shaping the environment. However, climate change may mean that flooding becomes more severe and more frequent in certain areas. Flood risk comes from a variety of sources including fluvial, coastal, groundwater, surface water and/or sewer flooding. It should be managed rather than prevented and needs to be taken into account in decisions about locating development. This management takes the forms of mitigation against the impacts of flooding including sustainable flood management projects; and adaptation to the changing flood risk in the future.

Maps 27 and 28 below shows the fluvial and surface flood risk for the Scottish Borders area:

Map 27: River Flood Risk



Map 28: Surface Water Flood Risk