Appendix B: Baseline Environmental Data, Targets and Trends Affecting Tayside and Central Scotland Biodiversity, Flora, Fauna

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Ramsar	 Angus: 3 Ramsar sites (1,387 ha) Dundee: n/a Perth and Kinross: 4 Ramsar sites (10,381 ha) Stirling: n/a 	To maintain or restore the ecological character of Ramsar sites, through effective planning and integrated management.	No trend. Planning policies have generally prohibited development within international and national designations that may harm these sites, though indirect impacts are affecting some of the sites, especially in relation to water quality and water levels and, air quality.	New development has the potential to put pressure on sites. Transport development should seek to avoid placing pressure on protected sites.	Ramsar Strategic Plan 2016 to 2024 http://www.ramsar.org/ther amsar- strategic-plan-2016-24
Special Areas of Conservation (SAC)	 Angus: 3 SACs (6,443 ha) Dundee: n/a Perth and Kinross: 18 SACs (39,136 ha) Stirling: 8 SACs (8,417 ha) 	To maintain or improve the condition of qualifying features of the designated sites.	As above.	As above.	Nature Scotland datasets available via: https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas
Special Protection Areas (SPA)	 Angus: 4 SPAs (7,225 ha) Dundee: n/a Perth and Kinross: 5 SAPs (37,671 ha) Stirling: n/a 				https://www.nature.scot/do c/nature-networks-tool
Sites of Special Scientific Interest (SSSI)	Angus: 36 SSIs (9,232 ha)Dundee: n/a	Conservation and enhancement of designated sites, and	As above.	As above.	As above.

	•	Perth and Kinross: 111 SSSIs (32,551 ha) Stirling: 66 SSSIs (14,950 ha)	permitting only those developments that will not adversely affect these designations directly and indirectly, unless the proposal will be of national benefit.		However, with regard to impacts from leisure and recreation uses improving access could be damaging to some sites.	
National Nature Reserves (NNR)	•	Angus: 1 NNR (164 ha) Dundee: n/a Perth and Kinross: 2 NNRs (6,261 ha) Stirling: 2 NNRs (17,364 ha)	To ensure that the nature conservation interests of NNRs are kept in or restored to the best possible condition.	As above.	As above.	As above.
Local Nature Reserves (LNR)	•	Angus: 1 LNR (1,024 ha) Dundee: 2 LNRs (6.9 ha) Perth and Kinross: 1 LNR (1,177 ha) Stirling: 1 LNR (6.0 ha)	To protect and enhance.	As above.	As above.	As above.

Landscape

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Characteristic Landscape Areas	 Angus – 31 sites Dundee City – 1 site Perth and Kinross – 30 sites Stirling – 35 sites 	Need to promote Sustainable development and, suitable development Capacity	No trend	The inappropriate scale and insensitive siting of future new development may adversely affect landscape characteristics (e.g. changing its landscape character type, not respecting local topography and contours). New development not fitting in with the landscape's capacity to absorb further developments (e.g. design, layout and sense of place) – need to promote suitable development capacity.	NatureScot – Landscape Character Assessment Tayside Landscape https://www.nature.scot/sit es/default/files/2021- 08/NatureScot%20LCA%2 OReview%20- %20TAYSIDE%20- %20Landscape%20Evoluti on%20and%20Influences %20-%20pdf%20- %20August%202021%20 %28A3518699%29.pdf Perth and Kinross – Landscape Supplementary Guidance https://www.pkc.gov.uk/me dia/45777/Adopted-SG- 2020/pdf/LandscapeSG_m ar2020.pdf?m=637195240 380970000 Stirling – Landscape Character Assessment https://stirling.gov.uk/medi a/3422/sg28-landscape- character- assessments_feb2015- red-1.pdf
National Scenic Areas (NCAs)	 Angus – n/a Dundee City – n/a Perth and Kinross – 4 sites (Loch Rannoch 	As above	No trend	As above	Scottish Natural Heritage Commissioned Report No. 374 - The special qualities of the National Scenic Areas

and Glen Lyon, Loch Rannoch and Glen Lyon, Loch Tummel, River Earn (Comrie to St. Fillans), River Tay (Dunkeld) Stirling – n/a				https://www.nature.scot/sit es/default/files/2017- 07/Publication%202010%2 0- %20SNH%20Commission ed%20Report%20374%20 - %20The%20Special%20Q ualities%20of%20the%20 National%20Scenic%20Ar eas.pdf
--	--	--	--	---

Cultural Heritage

Areas (CA) • [Angus: 19 CAs Dundee: 17 CAs Perth and Kinross: 22 CAs Stirling: 26 CAs	Targets To maintain and enhance the special distinctiveness of such areas.	No trend.	Development can put pressure on, or be constrained by conservation areas. Traffic and parking pressures can detract from the special character of	Angus Council https://www.angus.gov.uk/ planning_and_building/con servation/conservation_ar eas Dundee City Council https://www.dundeecity.go
Ancient	Angus: 370 SAMs Dundee: 14 SAMs Perth and Kinross: 752 SAMs	To protect and, where possible enhance.	No trend.	Development can put pressure on, or be constrained by, the presence of SAMs.	v.uk/service-area/city-development/planning-and-economic-development/development management/conservation -areas-in-dundee Perth and Kinross Council https://www.pkc.gov.uk/conservationareas Stirling Council https://my.stirling.gov.uk/planning-building-the-environment/planning/development-planning/conservation-areas/ Historic Environment Scotland https://portal.historicenvironment.scot/search
	Stirling: 189 SAMs Angus: n/a	As above.	No trend.	Development can put	

	 Dundee: n/a Perth and Kinross: 4 Battlefield sites Stirling: 4 Battlefield sites 			pressure on, or be constrained by, sites of historical significance.	
Gardens and Designated Landscapes (GDL)	 Angus: 13 GDLs Dundee: 3 GDLs Perth and Kinross: 41 GDLs Stirling: 16 GDLs 	As above.	No trend.	Development can put pressure on, or be constrained by, GDLs.	
Listed Buildings (LB)	 Angus: 2,127 LBs Dundee: 894 LBs Perth and Kinross: 3,118 LBs Stirling: 1,471 LBs 	As above.	No trend.	Development can put pressure on Listed Buildings.	
Listed Buildings at Risk	 Angus: 80 LBs at Risk Dundee: 44 LBs at Risk Perth and Kinross: 111 LBs at Risk Stirling: 47 LBs at Risk 		No trend.	As above.	Buildings at Risk Register for Scotland https://www.buildingsatrisk.corg.uk/

Climate Change

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Carbon Dioxide	Angus	Scotland	Although	Transport is a significant	UK local authority and
(CO ₂) emissions			experiencing a	contributor to CO ₂	regional carbon dioxide
(kt)	2016 – 683	2014 – 32,518	degree of fluctuation,	emissions and, contrary	emissions national
	2017 – 661	2015 – 30,999	emissions have	to emissions overall, have	statistics: 2005 to 2020
	2018 – 646	2016 – 29,855	generally been	been increasing in the	
	2019 –	2017 – 29,069	reducing both locally	region in recent	https://assets.publishing.s
	2020 -	2018 – 28,589	and nationally since	years.	ervice.gov.uk/government/
			2012.		uploads/system/uploads/at
	Dundee	Climate Change		Angus	tachment data/file/108698
		(Emissions Reduction	However, in 2017		0/UK-local-authority-ghg-
	2016 – 697	Targets) (Scotland)	transport overtook	2016 – 263.9	emissions-2020.xlsx
	2017 – 659	Act (2019) requires a	energy to become	2017 – 268.7	
	2018 – 688	reduction of	Scotland's primary	2018 – 259.6	
	2019 – 643	Scotland's emissions	source of climate	2019 – 251.5	
	2020 – 622	of all greenhouse	change-causing	2020 – 198.8	
		gases to net-zero by	carbon emissions,		
	Perth and Kinross	2045, with interim	with little sign of a	Dundee	
		targets for reductions	downward trend.		
	2016 – 938	of at least 56% by		2016 – 224.5	
	2017 – 935	2020, 75% by 2030,		2017 – 223.0	
	2018 – 1472	and 90% by 2040.		2018 – 217.8	
	2019 – 1410			2019 – 209.6	
	2020 – 1229	The Update to		2020 – 172.0	
		Scotland's 2018-2032			
	Stirling	Climate Change Plan			
		(2020) sets out the		Perth and Kinross	
	2016 – 564	measures required to			
	2017 – 523	meet the above		2016 – 583.3	
	2018 – 849	targets, a number of		2017 – 605.4	
	2019 – 860	which affect the		2018 – 586.4	
	2020 – 730	transport sector		2019 – 564.0	
		including:		2020 – 436.9	
		 Phasing out the 		Stirling	
		need for new			

Per Capita CO ₂ Emissions (kt)	Angus 2014 – 6.5 2015 – 6.2 2016 – 5.9 2017 – 5.7 2018 – 5.6 Dundee 2014 – 5.2 2015 – 5.0 2016 – 4.7 2017 – 4.4 2018 – 4.4 Perth and Kinross	petrol and diesel cars by 2030; and Reducing the use of cars generally, with the number of kilometres driven to be reduced by 20% by 2030. Other policies include establishing Low Emission Zones (LEZs), decarbonising passenger rail services by 2032 and scheduled flights within Scotland by 2040. Scotland 2014 – 6.1 2015 – 5.8 2016 – 5.5 2017 – 5.4 2018 – 5.3 Targets as above.	Subject to annual fluctuations but overall trend is a decline, both locally and nationally.	2016 – 278.5 2017 – 282.7 2018 – 286.6 2019 – 277.8 2020 – 207.7 With Scotland's commitments to cutting CO ₂ emissions, both through national policy and international agreements, it seems the emissions contribution of transport is going to increasingly come under the spotlight. Future transport projects should seek to reduce emissions from transport. Transport is a significant contributor to per capita emissions. While figures for Dundee are below the Scottish average, emissions in Angus, Perth and Kinross and, Stirling are above average.	As above.
--	--	--	---	--	-----------

Road Transport		2014 – 7.2 2015 – 6.5 2016 – 6.2 2017 – 6.2				
Road Transport						
CO ₂ emissions (kt) 2014 – 246.7 2015 – 248.1 2016 – 252.8 2017 – 260.4 2018 – 253.7 Dundee Targets as above. 2014 – 202.8 2017 – 207.6 2018 – 209.0 Perth and Kinross 2014 – 567.2 2015 – 583.1 2016 – 593.5 2017 – 631.5		2015 – 6.1 2016 – 6.0 2017 – 5.6				
Stirling	CO ₂ emissions	2014 – 246.7 2015 – 248.1 2016 – 252.8 2017 – 260.4 2018 – 253.7 Dundee 2014 – 202.8 2015 – 202.0 2016 – 205.8 2017 – 207.6 2018 – 209.0 Perth and Kinross 2014 – 567.2 2015 – 583.1 2016 – 593.5 2017 – 631.5 2018 – 614.1	2014 - 10,428.7 2015 - 10,590.4 2016 - 10,849.4 2017 - 11,200.2 2018 - 11,042.8	and transport emissions as a proportion of total emissions, are rising both locally and	significant contributor to	As above.

2014 - 268.1 2015 - 275.4 2016 - 284.7 2017 - 291.0 2018 - 286.4		

Air Quality

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Air quality (NO ₂) (μg/m³)	 High Street 2014 – 22 2015 – 22 2016 – 23 2017 – 17 2018 – 21 Atholl Street 2014 – 45 2015 – 49 2016 – 45 2017 – 40 2018 – 37 Crieff James Square 2014 – 23 2015 – 23 2016 – 26 2017 – 25 2018 – 17 Dundee² Broughty Ferry Road 2014 – n/a 2015 – n/a 2016 – 13 2017 – 20 	Target - EU annual mean limit value (40 µg/m³).	Fluctuations in recent years	Regular exceedances of the annual mean limit value are being observed at one out of the three automatic monitoring sites in Perth and Kinross and, at four out of seven sites in Dundee. There is a need to reduce the reliance on private transport and the indiscriminate use of private cars to improve air quality, greenhouse gas emissions and health. Traffic growth arising from new development may be a constraining factor in the future.	Dundee City Council Air Quality Progress Report 2019 https://www.dundeecity.go v.uk/sites/default/files/publi cations/aqannualprogress report 2019 final large.p df Perth and Kinross Air Quality Progress Report 2019 https://www.pkc.gov.uk/me dia/45358/2019-Air- quality-Annual-Progress- Report/pdf/APR_2019_Fin al_Draft.pdf?m=63714244 5928730000

⁻

¹ In addition to the listed automatic monitoring sites, there are further 109 monitoring sites within Perth and Crieff, operating with diffusion tubes.

² In addition to the listed automatic monitoring sites, there are further 89 monitoring sites within Dundee, operating with diffusion tubes.

2018 – 23
Lochee Road
2014 – 46
2015 – 48
2016 – 44
2017 – 43
2018 – 43
Mains Loan
2014 – 12
2014 – 12
2016 – 10
2017 – 12
2017 – 12
2010 – 12
Seagate
2014 – 55
2015 – 50
2016 – 47
2017 – 44
2018 – 46
Union Street
2014 – 28
2015 – 28
2016 – n/a
2017 – n/a
2018 – n/a
Whitehall Street
2014 – 43
2014 – 43
2013 – 30
2016 – 37 2017 – 35
2017 – 33
Meadowside

	T		1	ı	T
	2014 – 40 2015 – 38				
	2016 – 36				
	2017 – 35				
	2018 – 34				
Air quality (PM ₁₀) (μg/m³)	Perth Atholl Street 2014 – 20 2015 – 18 2016 – 18 2017 – 17 2018 – 14 Muirton 2014 – 10 2015 – 9 2016 – 10 2017 – 9 2018 – 10 Crieff James Square 2014 – 20 2015 – 14 2016 – 16 2017 – 11 2018 – 10 Dundee Broughty Ferry Road (average) 2014 – 15 2015 – 13 2016 – 12 2017 – 11 2018 – 11	2010 annual mean Scottish Objective – 18 μg/m³	Although local fluctuations are evident, all sites have seen a steady decline in, or stabilisation of, PM ₁₀ emissions since 2014.	Regular exceedances of the annual mean limit value have been observed at two of the three automatic monitoring sites in Perth and Kinross in recent years and, at five out of ten sites in Dundee. However, 2018 was the first year in which no exceedances were observed at any of the monitoring stations.	As above

Lochee Road		
2014 – 19		
2015 – 20		
2016 – 19		
2017 – 18		
2018 – 13		
Mains Loan		
2014 – 13		
2015 – 12		
2016 – 10		
2017 – 10		
2018 - 9		
2010 - 9		
0		
Seagate		
2014 – 18		
2015 – 15		
2016 – 14		
2017 – 16		
2018 – 16		
Union Street		
2014 – 17		
2014 – 17		
2013 – 17 2016 – n/a		
2017 – n/a		
2018 – n/a		
Whitehall Street		
2014 – n/a		
2015 – n/a		
2016 – 15		
2017 – 15		
2018 – 16		
2010 10		
- Moodowoids		
Meadowside		
2014 – 17		
2015 – 16		

2010 10	T	T	
2016 – 16			
2017 – 15			
2018 – 15			
Albert Street			
2014 – 21			
2015 – 19			
2016 – 15			
2017 – 12			
2018 – 14			
Myrekirk			
2014 – 18			
2015 – 18			
2016 – 16			
2017 – 12			
2018 – 14			
Stannergate			
2014 – 27			
2015 – 27			
2016 – 21			
2017 – 14			
2018 – 12			
Logie Street			
2014 – 16			
2014 – 16			
2016 – 14			
2017 – 15			
2018 – 16			

Noise and Vibration

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Noise Management Areas (NMA)	There are 32 Candidate Noise Management Areas (CNMA) in the Tactran region where noise levels from transport (road and rail) are above acceptable levels. There are also five Candidate Quiet Areas (CQAs) identified where environmental noise quality is good and which require protection against an increase in noise.	Targets are for a reduction of noise in CNMAs and not increase noise levels in the CQAs.	No trend.	Transportation schemes and initiatives have the potential to increase transport related noise.	Transport Scotland Transportation Noise Action Plan (2014) https://www.gov.scot/publi cations/transportation- noise-action- plan/documents/ Dundee Agglomeration Noise Action Plan (2019) https://noise.environment. gov.scot/pdf/RoundTwo/D undee/Dundee%20Agglom eration%20Noise%20Actio n%20Plan.pdf

Human Health

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Quality and availability of public open greenspace	 Angus: 2,603 ha Dundee: 2,320 ha Perth and Kinross: 2,903 ha Stirling: 2,479 ha 	Protection and enhancement of existing open greenspace; creation of new open space as part of development proposals.	The poorest quality parks and open spaces tend to be found within the regeneration priority areas.	The quality of open greenspace varies across the region. Development pressure to build on open greenspace.	Greenspace Scotland – 2018 State of Scotland's Greenspace Report https://www.greenspacesc otland.org.uk/statistics
		proposaio.	It is more difficult to provide open greenspace within densely populated areas.	Transport development should seek to avoid and/or mitigate negative impacts on open greenspace and look to enhance and improve access to open spaces where appropriate.	
Life expectancy at birth (years)	Angus Male 2014-2016: 78.5 2015-2017: 78.2 2016-2018: 78.4 2017-2019: 78.3 Female 2014-2016: 81.8 2015-2017: 81.6 2016-2018: 81.8 2017-2019: 82.3	Scotland Male 2014-2016: 77.1 2015-2017: 77.0 2016-2018: 77.0 2017-2019: 77.2 Female 2014-2016: 81.2 2015-2017: 81.1 2016-2018: 81.1 2017-2019: 81.1	Life expectancy is generally increasing throughout Scotland, although recent figures suggest this trend may be flattening out. Female life expectancy is higher than male.	An increase in life expectancy has implications for ensuring adequate service provision (including transport) for an increasingly ageing population. Opportunities for more people to adopt healthier lifestyles through active travel could further prolong	National Records of Scotland - Life Expectancy for Administrative Areas within Scotland 2017-2019 https://www.nrscotland.gov .uk/statistics-and- data/statistics/statistics-by- theme/life-expectancy/life- expectancy-in- scotland/2017-2019/data- tables
	Dundee Male 2014-2016: 74.5 2015-2017: 73.9 2016-2018: 73.3 2017-2019: 73.9		Life expectancy in Angus, Perth and Kinross and Stirling is higher than it is in Dundee City and in Scotland as a whole.	life expectancy.	

	1	I	I
Female			
2014-2016: 79.6			
2015-2017: 79.4			
2016-2018: 79.2			
2017-2019: 79.5			
Perth and Kinross			
Male			
2014-2016: 79.9			
2015-2017: 79.3			
2016-2018: 79.1			
2017-2019: 79.1			
Female			
2014-2016: 82.6			
2015-2017: 82.5			
2016-2018: 82.8			
2017-2019: 83.3			
Stirling			
Male			
2014-2016: 78.7			
2015-2017: 78.8			
2016-2018: 78.7			
2017-2019: 78.3			
Female			
2014-2016: 82.3			
2015-2017: 82.6			
2016-2018: 82.8			
2017-2019: 82.6			

Population

SEA Theme	C	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Established Population (2018)	•	Angus: 115,138 0-15: 17,760 16-24: 10,352 25-44: 25,219 45-64: 30,431 65-74: 15,512 75+: 15,864	The TAYplan Strategic Development Plan predicts to significantly increase the region's population to 553,230 by 2036.	Generally, population in all four constituent Council areas has increased over the past 20 years, ranging from under 2% in Dundee City to just under 15% in Perth and Kinross.	A growing population has implications for increasing transport provision in the region, especially the need for more people to travel by more sustainable transport more often.	National Record of Scotland – Council Area Data Sheets: https://www.nrscotland.gov .uk/files/statistics/council- area-data-sheets/angus- council-profile.html
	•	Dundee: 148,350 0-15: 22,604 16-24: 20,473 25-44: 44,213 45-64: 32,319 65-74: 15,471 75+: 13,280				https://www.nrscotland.gov .uk/files/statistics/council- area-data-sheets/dundee- city-council-profile.html https://www.nrscotland.gov .uk/files/statistics/council- area-data-sheets/perth- and-kinross-council- profile.html
	•	Perth and Kinross: 152,779 0-15: 22,447 16-24: 13,384 25-44: 33,483 45-64: 41,444 65-74: 20,743 75+: 21,278				https://www.nrscotland.gov .uk/files/statistics/council- area-data-sheets/stirling- council-profile.html
	•	Stirling: 98,836 0-15: 15,213 16-24: 12,399 25-44: 24,728 45-64: 25,181				

Established Households (2018)	Angus 2014: 52,692 2015: 53,142 2016: 53,333 2017: 53,627 2018: 53,888 Dundee 2014: 69,610 2015: 69,534 2016: 69,635 2017: 70,047 2018: 70,337 Perth and Kinross 2014: 66,035 2015: 66,545 2016: 67,101 2017: 67,618 2018: 69,003 Stirling 2014: 38,310 2015: 38,665 2016: 38,951	Scotland 2014: 2.42m 2015: 2.43m 2016: 2.45m 2017: 2.46m 2018: 2.48m	Trend is for an increasing number of households across Scotland. Percentage growth in Perth and Kinross is significantly greater than growth in Scotland as a whole during this period (+4.49% in Perth and Kinross compared to +2.47% in Scotland).	As above.	As above.
	2015: 38,665				
Household Projections (2018 based)	Angus 2018: 53,888 2019: 54,221 2020: 54,302 2021: 54,378 2022: 54,621 2023: 54,813 2024: 54,959 2025: 55,050 2026: 55,122	Scotland 2018: 2.48m 2019: 2.50m 2020: 2.51m 2021: 2.52m 2022: 2.54m 2023: 2.55m 2024: 2.56m 2025: 2.57m 2026: 2.58m	Projections are for an increasing number of households across Scotland, including in Angus, Dundee City, Perth and Kinross and Stirling.	As above.	As above.

2027: 55,126	2027: 2.59m			
2028: 55,189	2028: 2.60m			
Dundee				
2018: 70,337				
2019: 70,685				
2020: 70,863				
2021: 71,077				
2022: 71,267				
2023: 71,358				
2024: 71,388				
2025: 71,427				
2026: 71,434				
2027: 71,484				
2028: 71,581				
5 4 16				
Perth and Kinross				
0040, 00 400				
2018: 68,196				
2019: 69,003				
2020: 69,349				
2021: 69,706				
2022: 70,140				
2023: 70,560 2024: 70,835				
2024: 70,833				
2025: 71,100				
2020: 71,314				
2028: 71,711				
2020. 71,711				
Stirling				
- Curing				
2018: 39,440				
2019: 39,654				
2020: 40,020				
2021: 40,383				
2022: 40,765				
2023: 41,070				
2020. 11,010		1	<u>l</u>	

2024: 41,377		
2025: 41,633		
2026: 41,892		
2027: 42,129		
2028: 42,384		

Geology and Soil

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Statutorily Confirmed Contaminated Land under Part IIA of the Environmental Protection Act 1990	 Angus: n/a Dundee City: 1 Perth and Kinross: n/a Stirling: n/a Several hundred potentially contaminated Sites across the region.	The total number of sites affected by contamination within Scotland is difficult to judge accurately as individual Councils use a variety of assessment methods. However, it is estimated that appr. 67,000 sites (82,034 ha) could be affected by land contamination	No trend.	Contaminants may escape from development sites and cause land pollution and, in some cases, may damage buildings and underground services, and contaminate the food chain. Places financial and Technological constraints on development. Transport development should not contribute to land pollution. Regimes are in place to deal with contaminated sites therefore this position should improve in the future.	Angus Council Dundee City Council Perth and Kinross Council Stirling Council
Prime Agricultural Land	 Angus Around 9.6%, (ca. 60,200ha) of Scotland's prime agricultural land is located in Angus, primarily along the coastal strip between Arbroath and Monifieth Dundee 	Net loss of Scottish agriculture land from roads, housing and industry has increased in recent years	Climate change could increase the level of prime agricultural land in Scotland, however this may cause conflicts with sites of high biodiversity value, sensitive or, designated sites.	Potential impacts of climate may constrain prime agricultural land available in the future. Prime agricultural land may require further protection from development as demand for development rises	The Scottish Soil Framework http://www.scotland.gov.uk /Publications/2009/05/201 45602/6

Soil Erosion	Dundee contains very little prime agricultural land. Perth and Kinross Approximately 11% or 57 000 ha of prime agricultural land are located in the south and eastern areas of Perth and Kinross. Stirling - tbc	While Central	Constal oronion	Autumo/Minter reinfell is	
Soil Erosion	From Berwick to Aberdeen, the eastern coastline is eroding but is stable where there are rocky coasts or, coastal defences.	While Central Scotland is mostly stable with little erosion inland, the coastline is predominantly eroding but stable where there are rocky coasts or coastal defences. Precipitation will be greater in the west due to the west-east precipitation gradient.	Coastal erosion mostly where there are no rocks or coastal defences.	Autumn/Winter rainfall is predicted to increase, giving rise to winter storms and affecting runoff and (wind and water) erosion. Upland schemes such as wind farm access roads and recreation tracks (e.g. mountain biking) on steep ground can increase surface water runoff and lead to significant soil loss	

Water

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Quality of Water Bodies (Ground water)	Angus High status – 0 Good status – 13 Moderate status – 0 Poor status – 9 Bad status – 0 Dundee High status – 0 Good status – 3 Moderate status – 0 Poor status – 2 Bad status – 0 Perth and Kinross High status – 0 Good status – 31 Moderate status – 0 Poor status – 9 Bad status – 9 Bad status – 0	The Water Framework Directive requires that all waterbodies are of good ecological status, or similar objective	Little change in ground water quality in recent years; water quality is good on the whole.	It is important that development, including transportation schemes and initiatives, does not prevent water bodies achieving good ecological status. Target likely to have been missed as a number of water bodies still showing moderate, poor or bad quality in 2020.	SEPA Water Classification Hub https://www.sepa.org.uk/d ata-visualisation/water- classification-hub
	Stirling High status – 0 Good status – 20 Moderate status – 0 Poor status – 5 Bad status - 0				
Quality of Water Bodies (Coastal)	Angus High status – 0 Good status - 4 Moderate status - 0 Poor status – 0 Bad status – 0 Dundee - n/a	As above.	Coastal water quality is generally good	As above.	As above.

	Perth and Kinross - n/a Stirling – n/a				
Quality of Water Bodies (Rivers)	Angus High status – 7 Good status - 29 Moderate status - 21 Poor status – 10 Bad status – 4 Dundee High status – 0 Good status - 0 Moderate status - 4 Poor status – 1 Bad status – 0 Perth and Kinross High status – 19 Good status - 76 Moderate status - 57 Poor status – 29 Bad status – 8	As above.	Water quality variable.	As above.	As above.
Quality of Water	Stirling High status – 4 Good status - 41 Moderate status - 33 Poor status – 7 Bad status - 5 Angus	As above.	Estuary water quality	As above.	As above.
Bodies (Estuaries)	High status – 0 Good status – 2 Moderate status – 0 Poor status – 0 Bad status – 0		generally good		
	Dundee High status – 0				

Good status – 2 Moderate status – 0 Poor status – 0 Bad status – 0		
Perth and Kinross High status – 0 Good status – 1 Moderate status – 0 Poor status – 0 Bad status – 0		
Stirling High status – 0 Good status – 0 Moderate status – 1 Poor status – 0 Bad status – 0		

Material Assets

SEA Theme	Quantified Information	Comparators and Targets	Trends	Issues and Constraints	Data Source(s)
Households with no access to a car for private use (%)	Angus 2017 - 24% 2018 - 20% 2019 - 20% 2020 - 21% 2021 - 18% Dundee 2017 - 40% 2018 - 45% 2019 - 45% 2020 - 46% 2021 - 39% Perth and Kinross 2017 - 21% 2018 - 24% 2019 - 21% 2020 - 17% 2021 - 18% Stirling 2017 - 22% 2018 - 22% 2019 - 20% 2020 - 20% 2021 - 18%	Scotland 2001 - 34% 2011 - 31% 2012 - 31% 2013 - 30% 2014 - 31% 2015 - 30% 2016 - 29% 2017 - 28% 2018 - 29% 2019 - 28%	Car ownership has remained more static in the whole of Scotland over the past years, with an increasing tendency. General trends locally since 2017 are of a rise in car ownership in all four constituent Council areas. Furthermore, it is worth noting that in three of the four constituent Council areas car ownership is significantly higher than the Scottish average.	Increasing car ownership and use puts pressure on the road transport network, both in terms of congestion, as well as contributing to air pollution, carbon emissions, noise emissions and, higher levels of physical inactivity	Cycling Scotland Annual Monitoring Reports https://www.cycling.scot/w hat-we-do/making-cycling- better/monitoring-cycling- in-scotland Scotland Census Data 2001 and 2011 https://www.scotlandscens us.gov.uk/search-the- census#/search-by Scottish Transport Statistics 2020 https://www.transport.gov. scot/media/49874/scottish- transport-statistics-2020- may-2021.pdf
Public road lengths (km)	Angus 2015/16 – 1,864 km 2016/17 – 1,865 km 2017/18 – 1,867 km 2018/19 – 1,868 km 2019/20 – 1,873 km	No target	Public road lengths fairly static in Angus, Dundee City, Perth and Kinross and Stirling Council areas, despite the rise in car ownership	Static road lengths combined with rising car ownership put pressure on the transport network leading to roads operating at or beyond capacity,	Scottish Transport Statistics 2016 https://www.transport.gov. scot/media/33814/sct0117 1871341.pdf

	Dundee 2015/16 – 580 km 2016/17 – 582 km 2018/19 – 590 km 2019/20 – 596 km Perth and Kinross 2015/16 – 2,748 km 2016/17 – 2,751 km 2017/18 – 2,757 km 2018/19 – 2,763 km 2019/20 – 2,764 km Stirling 2015/16 – 1,259 km 2016/17 – 1,160 km 2017/18 – 1,160 km 2018/19 – 1,161 km 2019/20 – 1,162 km			contributing to congestion and pollution	Scottish Transport Statistics 2017 https://www.transport.gov. scot/media/41863/scottish- transport-statistics-2017- with-correction-to-table- 214.pdf Scottish Transport Statistics 2018 https://www.transport.gov. scot/media/44025/scottish- transport-statistics-no-37- 2018-edition.pdf Scottish Transport Statistics 2019 https://www.transport.gov. scot/media/47300/scottish- transport-statistics- 2019.pdf Scottish Transport Statistics 2020 https://www.transport.gov. scot/media/49874/scottish- transport-statistics-2020- may-2021.pdf
Road Condition in 2020 (% of roads classed as red/amber – requiring attention)	Angus Red – 5% Amber – 28% Dundee Red – 3% Amber – 23% Perth and Kinross Red – 6% Amber – 31%	Scotland Red – 7% Amber – 29%	No trend	Good road condition helps to better operate the transport network, reducing congestion, pollution and accidents	Scottish Transport Statistics 2020 https://www.transport.gov. scot/media/49874/scottish- transport-statistics-2020- may-2021.pdf

	Stirling Red – 10% Amber – 32%				
Park and Ride sites	Angus	To further increase bus use throughout the region, with Park and Ride sites playing a significant role in achieving this	Feasibility studies progress for further sites, such as the Tay Cities Park and Choose Strategy	Park and Ride sites can help reduce the number of vehicles in the towns and cities, reducing congestion, pollution and accidents	Angus Council Dundee City Council Perth and Kinross Council Stirling Council Tactran
Railway Stations	Angus – 6 Arbroath Balmossie Carnoustie Golf Street Monifieth Montrose Dundee – 2 Broughty Ferry	To further increase rail travel throughout the region		More people travelling by rail can reduce vehicle use in urban areas, reducing congestion, pollution and accidents	Scotrail https://www.scotrail.co.uk/ plan-your-journey/stations- and-facilities

Dundee		
Perth and Kinross – 7 Blair Atholl Dunkelnd & Birnam Gleneagles Invergowrie Pitlochry Perth Rannoch		
Stirling – 7 Alloa Junction Bridge of Allen Crainlarich Dunblane Stirling Lower Tyndrum Upper Tyndrum		