Dartmoor Local Plan Review HRA- Initial Screening: European Site Characterisations

European sites within Dartmoor National Park

Site Name: Dartmoor **Grid Reference: SX590864** **JNCC Site Code: UK0012929** **Size: 23158.64ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The site is the largest designated site in the National Park, and consists of three separate blocks of upland with a diverse range of habitats contained within the site. The site is largely dependent on long-established farming techniques which have helped form the ecological character of the SAC. The SAC is also the southernmost blanket bog in Europe. The bogs are dominated by purple moor-grass, with the areas of the bog that are very wet supporting widespread *Sphagnum* mosses. The SAC contains extensive areas of western gorse, with bristle bent dry heath found in lowland areas and heather-bilberry found in upland areas. There are 3 main areas of upland oak woods within the SAC, largely and the rivers and streams located within the SAC contain populations of otter and Atlantic salmon. The habitats within the SAC also support a range of invertebrate and bird species, including Southern damselfly.
Qualifying Features	Annex I habitats that are primary reason for selection of the site: ▪ Northern Atlantic wet heaths with *Erica tetralix* ▪ European dry heaths ▪ Blanket bogs ▪ Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles Annex II species that are primary reason for selection of the site: ▪ Southern damselfly Qualifying features but nor primary reason for site selection: ▪ Atlantic Salmon ▪ Otter
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

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	▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species ▪ The distribution of qualifying species within the site
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Human intrusions and disturbances (including recreational activity) (Threat from inside[1]) ▪ Grazing- (Threat from inside) ▪ Air pollution, air-borne pollutants- (Threat from inside & outside) ▪ Pollution to groundwater (point sources and diffuse sources)- (Threat from inside & outside) ▪ Human induced changes in hydraulic conditions- (Threat from inside & outside) Other Vulnerabilities and affected features: ▪ Wildfire/Arson- Features affected: Wet heathland and Blanket bogs ▪ Invasive Species- Features affected: European dry heath ▪ Erosion- Features affected: Blanket bogs, European dry heaths ▪ Disease- Features affected: Western acidic oak woodland ▪ Changes in Land Management- Features affected: Wet heathland, European dry heaths, Blanket bogs

[1] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: South Dartmoor Woods **Grid Reference: SX710701** **JNCC Site Code: UK0012749** **Size: 2159.06ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The South Dartmoor Woods SAC site is located in the east of the National Park and is largely comprised of old sessile oak woods which supports nationally important assemblages of lower plants that are unique in Western Europe. The site is a popular recreational area, The woodland is part of a complex mosaic that includes heathland and species associated with open ground, such as the nationally rare high brown fritillary and pearl-bordered fritillary butterfly. Secondary birch has also developed with bracken on the sites of old field systems, where there is active regeneration of oak.
Qualifying Features	Annex I habitats that are primary reason for selection of the site: ▪ Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles Qualifying feature but not a primary reason for site selection: ▪ European dry heaths
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The supporting processes on which qualifying natural habitats rely
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Air pollution, air-borne pollutants- (Threats from inside & outside[2]) Other Vulnerabilities and affected features: ▪ Grazing levels- Features affected: Lower plants, Dry heaths ▪ Recreational pressure- Features affected: Whole site

[2] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: South Hams **Grid Reference: SX942565** **JNCC Site Code: UK0012650** **Size: 126.87ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The South Hams SAC is partially located within the National Park boundary, with the rest of the site located to the south east of Dartmoor, on the Devon coastline. The South Hams SAC is thought to hold the largest population of Greater horseshoe bat in the UK, and is the only one containing more than 1,000 adult bats. It contains the largest known maternity roost in the UK and possibly Europe. The site contains both maternity and hibernation sites. Many of the roosts are within caves not open to the public. However, within the National Park boundary there are 3 bat roosts (on the south-eastern edge of Dartmoor), with associated flightpaths and sustenance zones. The unlit countryside of the moor is beneficial for the bats who use the landscapes linear features for navigation purposes. Guidance related to the South Hams SAC and associated bat feature is currently being updated. The SAC is important for its extensive limestone grassland. The limestone headland cliffs of Torbay supports calcareous grassland and scrubland facies. The site is exceptional in that it supports a number of rare and scarce vascular plants. The SAC also supports areas of *Tilio-Acerion* ravine forest, which is woodland containing ash, elm and small leaved lime and field maple. A number of the specific habitat features of the SAC are not relevant for the areas of the SAC located within the National Park boundary. These include the vegetated sea cliffs and limestone grasslands, which are located in the SAC area on the Devon coastline. The SAC area within Dartmoor has a designation focused on the caves and associated bat roosts at Buckfastleigh, and are the relevant features to consider in this HRA.
Qualifying Features	Annex I habitats that are primary reason for selection of the site: ▪ European dry heaths ▪ Semi-natural dry grasslands and scrubland facies on calcareous substrates Annex 1 habitats that are a qualifying feature but not primary reason for site selection ▪ Vegetated seas cliffs of the Atlantic and Baltic Coasts ▪ Caves not open to the public ▪ *Tilio-Acerion* forests of slopes, screes and ravines Annex II Species that are primary reason for selection of the site: ▪ Greater horseshoe bat

Site Name: South Hams **Grid Reference: SX942565** **JNCC Site Code: UK0012650** **Size: 126.87ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species ▪ The distribution of qualifying species within the site
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Other urbanisation, industrial and similar activities- (Threats from inside & outside[3]) ▪ Human induced changed in hydraulic conditions- (Threats from inside & outside) ▪ Outdoor sports and leisure activities, recreational activities- (Threats from inside & outside) ▪ Modification of cultivation practices- (Threats from inside & outside) ▪ Biocenotic evolution, succession- (Threats from inside & outside) Other Vulnerabilities and affected features: ▪ Physical modification- Features affected: Greater horseshoe bat ▪ Air pollution, risk of atmospheric nitrogen deposition- Features affected: Greater horseshoe bat

[3] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

European sites outside of the Dartmoor National Park boundary

Site Name: Culm Grasslands **Grid Reference: SS843214** **JNCC Site Code: UK0012679** **Size: 774.21ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Culm Grasslands SAC is located to the north of the National Park, and is comprised of individual blocks located across North Devon. The Culm Grasslands SAC represents *Molinia* meadows in south-west England, and is present as a result of human activity. This site contains extremely diverse examples of the heathy type of fen-meadow, ranging from short, grazed swards through to stands that are transitional to scrub. The structural diversity accounts for the conservation of a wide range of flora and fauna, particularly of species characteristic of south-western Europe, such as meadow thistle. The Culm Grasslands SAC also contains the largest cluster of sites for Marsh fritillary in the south-west peninsula. It is judged to be the most important location for the species in its major south-west stronghold.
Qualifying Features	Annex I habitats that are primary reason for selection of the site: ▪ *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils ▪ Northern Atlantic wet heaths with *Erica tetralix* Annex 1 habitats that are a qualifying feature but not primary reason for site selection ▪ Northern Atlantic wet heaths with *Erica tetralix* Annex II species that are primary reason for selection of the site: ▪ Marsh fritillary butterfly
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species ▪ The distribution of qualifying species within the site

Site Name: Culm Grasslands **Grid Reference: SS843214** **JNCC Site Code: UK0012679** **Size: 774.21ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Human induced changed in hydraulic conditions- (Threats from inside & outside[4]) ▪ Modification of cultivation practices- (Threats from inside) ▪ Changes in biotic conditions- (Threats from inside & outside) ▪ Air pollution, air-borne pollutants- (Threats from inside & outside) ▪ Cultivation- (Threats from inside) Other Vulnerabilities and affected features: ▪ Hydrological changes- Features affected: Marsh fritillary butterfly ▪ Invasive species- Features affected: Marsh fritillary butterfly

[4] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: Blackstone Point **Grid Reference: SX535462** **JNCC Site Code: UK0030091** **Size: 7.81ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Blackstone Point SAC consists of sea cliffs, shingle beach and islets, and supports one of the largest concentrations of shore dock on rocky sea-cliffs in south-west England. In 1999 there were five discrete colonies totalling at least 29 plants.
Qualifying Features	Annex II species that are primary reason for selection of the site: ▪ Shore dock *Rumex rupestris*
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ▪ The extent and distribution of the habitats of qualifying species ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying species rely ▪ The populations of qualifying species ▪ The distribution of qualifying species within the site
Vulnerabilities (includes existing pressures and trends)	None listed

Site Name: Plymouth Sound & Estuaries **Grid Reference: SX472506** **JNCC Site Code: UK0013111** **Size: 6386.95ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Plymouth Sound and Estuaries SAC is located on the south coast of England and straddles the border between Devon and Cornwall. Plymouth Sound and its associated tributaries comprises a complex site of marine inlets. The ria systems entering Plymouth Sound (St John's Lake and parts of the Tavy, Tamar and Lynher), the large bay of the Sound itself, Wembury Bay, and the ria of the River Yealm are of international marine conservation importance because of their wide variety of salinity conditions and sedimentary and reef habitats. The extensive mudflats present throughout the SAC are a highly productive system, forming a critical part of the food chain. The high diversity of habitats and conditions gives rise to communities both representative of ria systems and some very unusual features, including abundant southern Mediterranean-Atlantic species rarely found in Britain. There are extensive and important areas of saltmarsh present, particularly on the Lynher Estuary, with natural transitions to reedbed and fringing woodland. Saltmarsh is an uncommon habitat in the south west and provides important roosting areas for birds. The reef communities which are located in the SAC are important due to the number of species present, with the Devonian limestone reef of particular importance as this is one of only two sites in the south west with coastal Devonian limestone. Intertidal reefs with rockpools at Wembury, Penlee, Hooe Lake Point and the mouth of the Yealm support a nationally uncommon sponge, seasquirt and red algae community.
Qualifying Features	Annex I habitats that are primary reason for selection of the site: ▪ Sandbanks which are slightly covered by sea water all the time ▪ Estuaries ▪ Large shallow inlets and bays ▪ Reefs ▪ Atlantic salt meadows ▪ Mudflats and sandflats not covered by seawater at low tide Annex I habitats that are a qualifying feature but not primary reason for site selection: ▪ Mudflats and sandflats not covered by seawater at low tide

Site Name: Plymouth Sound & Estuaries **Grid Reference: SX472506** **JNCC Site Code: UK0013111** **Size: 6386.95ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
	Annex II species that are primary reason for selection of the site: ▪ Shore dock *Rumex rupestris* Annex II species that are a qualifying feature but not primary reason for site selection: ▪ Allis shad *Alosa alosa*
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site.
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Other urbanisation, industrial and similar activities- (Threats from inside & outside[5]) ▪ Pollution to groundwater (point sources and diffuse sources)- (Threats from inside & outside) ▪ Human induced change sin hydraulic conditions- (Threats from inside & outside) ▪ Outdoor sports and leisure activities, recreational activities- (Threats from inside and outside) ▪ Changes in abiotic conditions- (Threats from inside & outside) Other Vulnerabilities and affected features: ▪ Inappropriate weirs, dams and other structures- Features affected: Allis shad ▪ Fisheries- Features affected: Reefs, subtidal sandflats, shallow inlets and bays

[5] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: Dawlish Warren **Grid Reference: SX984792** **JNCC Site Code: UK0030130** **Size: 58.69ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Dawlish Warren SAC is located to the east of Dartmoor National park, and is situated at the mouth of the Exe Estuary. The SAC is a large sand-spit with a dune system, and contains a wide variety of habitats including sand dunes, dune grassland, dune slacks and heath. The flora includes several plants of local distribution. Short-sward grassland on the warren supports the only mainland British population of the sand crocus *Romulea columnae*. Large populations of petalwort occur in two dune slacks.
Qualifying Features	Annex I Habitats that are primary reason for selection of the site: ▪ Humid dune slacks Annex I habitats that are a qualifying feature but not primary reason for site selection: ▪ White dunes ▪ Grey dunes Annex II Species that are primary reason for selection of the site: ▪ Petalwort, *Petalophyllum ralfsii*
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying ▪ species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of ▪ qualifying species rely ▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site.
Vulnerabilities (includes	Vulnerabilities listed on the Natura 2000 Standard Data Form:

Site Name: Dawlish Warren **Grid Reference: SX984792** **JNCC Site Code: UK0030130** **Size: 58.69ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
existing pressures and trends)	▪ Modification of cultivation practices- (Threats from inside[6]) ▪ Outdoor sports and leisure activities, recreational activities- (Threats from inside) ▪ Changes in biotic conditions- (Threats from inside and outside) ▪ Changes in abiotic conditions- (Threats from inside and outside)

[6] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: Tamar Estuaries Complex **Grid Reference: SX472506** **JNCC Site Code: UK9010141** **Size: 1995ha** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Tamar Estuary lies on the border between Devon and Cornwall on the southern coast of England. The estuary system is a large marine inlet on the English Channel coast comprising the estuaries of the rivers Tamar, Lynher and Tavy which collectively drain an extensive part of Devon and Cornwall. The Tamar river and its tributaries provide the main input of fresh water into the estuary complex, and form a ria (drowned river valley) with Plymouth lying on the eastern shore. The broader lower reaches of the rivers form extensive tidal mud-flats bordered by saltmarsh communities. The mud-flats contain extensive and varied communities rich in bivalves and other invertebrates and feeding grounds for waterbirds in numbers of European importance. Saltmarshes provide important feeding and roosting areas for large numbers of wintering waterbirds.
Qualifying Features	▪ Little egret *Egretta garzetta*- Non-breeding. 72 individuals representing at least 9.0% of the population in Great Britain (Count as at 1993) ▪ Avocet *Recurvirostra avosetta*, 201 individuals representing at least 15.8% of the wintering population in Great Britain
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features ▪ The distribution of the qualifying features within the site
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Other urbansation, industrial and similar activities- Inside & outside[7] ▪ Pollution to groundwater (point sources and diffuse sources)- Inside & outside ▪ Outdoor sports and leisure activities, recreational activities- Inside ▪ Changes in abiotic conditions- Inside & outside ▪ Industrial or commercial areas- Outside

[7] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: Exe Estuary **Grid Reference: UK9010081** **JNCC Site Code: UK9010081** **Size: 2345.71ha** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Exe Estuary is located to the east of the National Park. The site extends 10 km south from Exeter to the open sea at Dawlish Warren. It comprises the waters, foreshore, low-lying land, three saltmarshes and an unusual double spit across the mouth of the estuary, and the sand dunes of Dawlish Warren. The mud- and sand-flats support Eelgrass *Zostera spp.* and *Enteromorpha* beds, and contain an abundance of invertebrates including extensive Mussel beds, which together provide rich feeding habitats for wintering waders and wildfowl. This complex of coastal habitats supports internationally important numbers of wintering and passage waterbirds.
Qualifying Features	▪ Slavonian Grebe (*Podiceps auritus)* ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) ▪ Avocet (*Recurvirostra avosetta)* ▪ Eurasian oystercatcher (*Haematopus ostralegus*) ▪ Grey plover (*Pluvialis squatarola*) ▪ Dunlin (*Calidris alpina alpine*) ▪ Black-tailed godwit (*Limosa limosa islandica*)
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features ▪ The distribution of the qualifying features within the site.

Site Name: Exe Estuary **Grid Reference: UK9010081** **JNCC Site Code: UK9010081** **Size: 2345.71ha** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Modification of cultivation practices- (Threats from inside[8]) ▪ Changes in biotic conditions- (Threats from inside & outside) ▪ Outdoor sports and leisure activities, recreational activities- (Threats from inside) ▪ Changes in abiotic conditions- (Threats from inside & outside)

[8] Inside threats relate to changes from Inside the Natura 2000 site, outside changes relate to changes outside of the Natura 2000 site boundary

Site Name: Exe Estuary **JNCC Site Code: UK11025** **Size: 6806.3ha** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Exe Estuary is located to the east of the National Park. The site extends 10 km south from Exeter to the open sea at Dawlish Warren. The site encompasses the waters, foreshore, low-lying land, three marshes and an unusual double spit across the mouth of the estuary and sand dunes of Dawlish Warren. The site encompasses the waters, foreshore, low-lying land, three marshes and an unusual double spit across the mouth of the estuary and sand dunes of Dawlish Warren. This complex of habitats supports internationally important numbers of wintering and passage waterfowl, as well as populations of breeding birds and nationally important rare plants and invertebrates.
Qualifying Features	▪ Assemblages of international importance ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) ▪ Black-tailed godwit (*Limosa limosa islandica*)
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features ▪ The distribution of the qualifying features within the site.
Vulnerabilities (includes existing pressures and trends)	Vulnerabilities listed on the Natura 2000 Standard Data Form: ▪ Modification of cultivation practices- (Threats from inside) ▪ Changes in biotic conditions- (Threats from inside & outside) ▪ Outdoor sports and leisure activities, recreational activities- (Threats from inside) ▪ Changes in abiotic conditions- (Threats from inside & outside)