Farming for the Nation

Dorset Area of Outstanding **Natural Beauty**
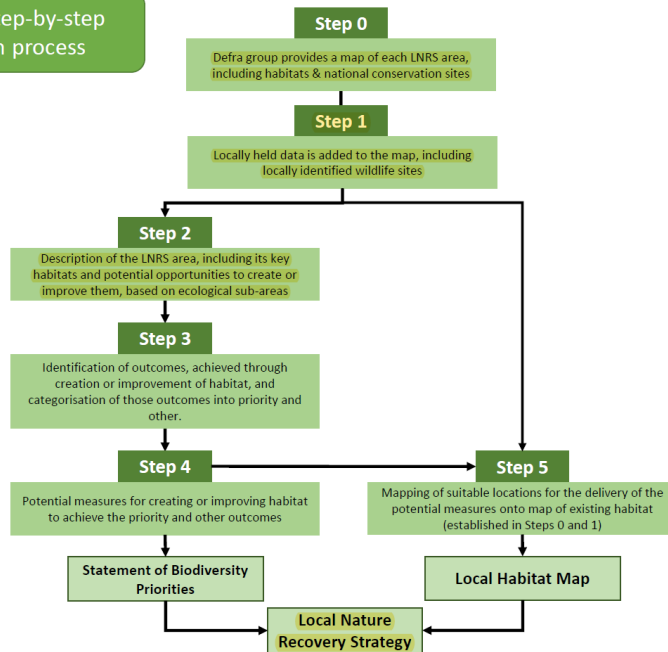
Defra Test & Trial and links to Nature's Recovery in Dorset

Background

LNRS pilot step-by-step production process

Step 0
Defra group provides a map of each LNRS area, including habitats & national conservation sites

Step 1
Locally held data is added to the map, including locally identified wildlife sites

Step 2
Description of the LNRS area, including its key habitats and potential opportunities to create or improve them, based on ecological sub-areas

Step 3
Identification of outcomes, achieved through creation or improvement of habitat, and categorisation of those outcomes into priority and other.

Step 4
Potential measures for creating or improving habitat to achieve the priority and other outcomes

Step 5
Mapping of suitable locations for the delivery of the potential measures onto map of existing habitat (established in Steps 0 and 1)

Statement of Biodiversity Priorities

Local Habitat Map

Local Nature Recovery Strategy

Natural Assets Overview:
Land Use & Habitats

The way land is used is very important for understanding natural capital and its ability to provide benefits.

Land use & habitats
- Arable
- Improved grassland
- Woodlands
- Un-/semi-improved grasslands
- Wetlands
- Lowland dry heath
- Coastal & intertidal habitats
- Other semi-natural habitats
- Waterbodies
- Urban
- Gardens
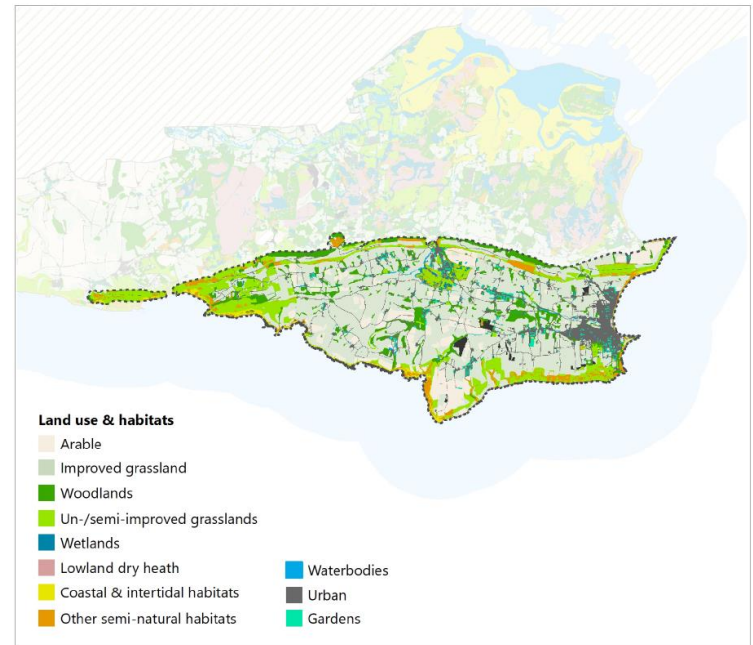
Datasets used in map: OSV, AONB, OSBL, LCA, DHM. See page 54 for full references.

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The 'public goods'

ELM Public Goods

A Green Future: Our 25 Year Plan to Improve the Environment

- Clean and plentiful water
- Clean air
- Protection from and mitigation of environmental hazards
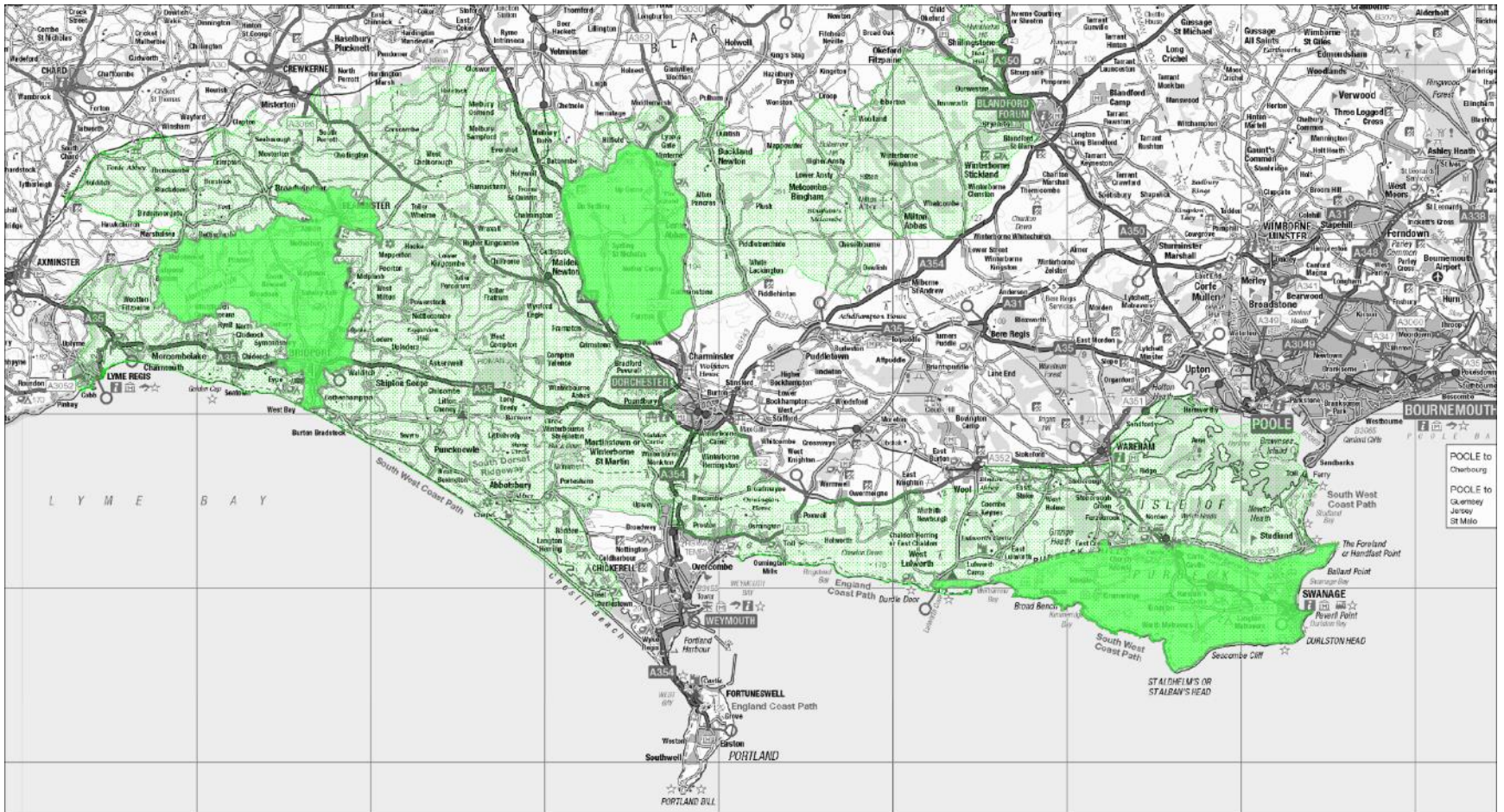- Mitigation of and adaptation to climate change
- Thriving plants and wildlife
- Beauty, heritage and engagement

Where we are doing it?

Strategic Landscape Plan

- Looked at the six public goods.

- For each of these:
  - Quantity & location
  - Quality
  - Areas for investigation & action

- For quantity, location and quality, we have used existing methods refined with local data
  - Natural England Indicators
  - Nature England Natural Capital Atlas
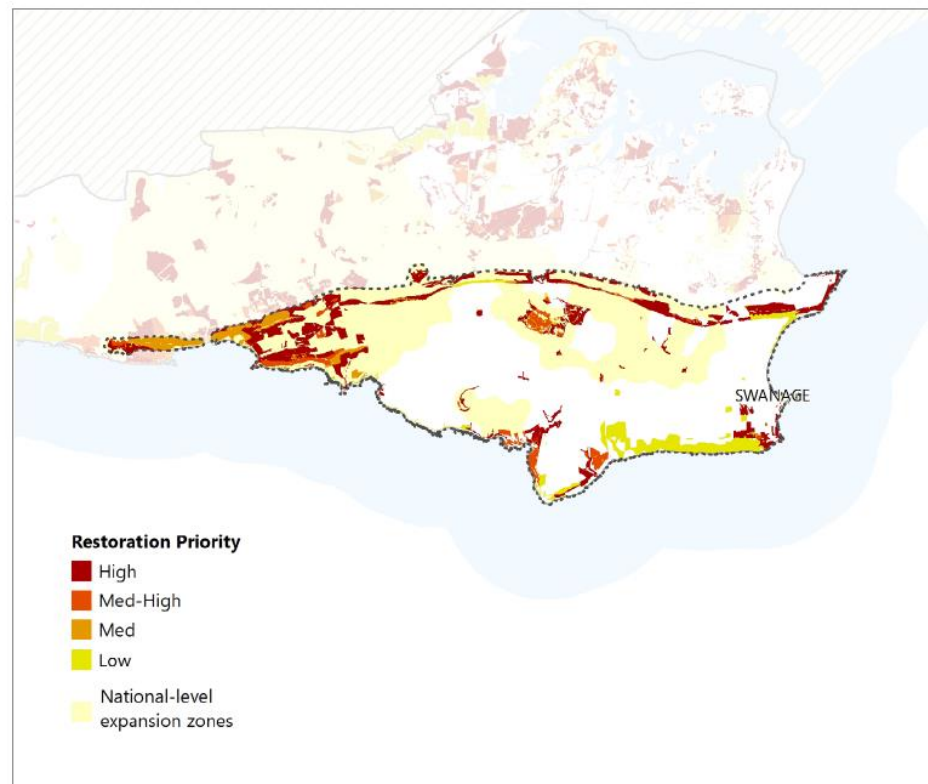
Thriving Plants & Wildlife

2. Areas for Investigation & Action: Woodland

Sites for enhancement and restoration

1. Site selection

Land parcels **most suitable for woodland restoration**:
- Bracken
- Semi-improved grassland
- Plantations on Ancient Woodland
- Scrub

Restoration Priority
- High
- Med-High
- Med
- Low
- National-level expansion zones

Existing woodland core and stepping stone sites

Current Sites
- Super-core (>40ha)
- Core Habitat
- Stepping Stone

2. Prioritisation

Parcels close to existing 'core' sites: **High**

Parcels within locally produced habitat expansion zones: **Medium-High**

Parcels within nationally produced and broader habitat expansion zones: **Medium**

Remaining parcels: **Low**

After each stage, very small parcels and those on high grade agricultural land were moved down one priority level

Note: the opportunities presented in the map may conflict with opportunities presented for other broad habitats. Any actions should be taken after consideration of these other opportunities and what is best for the landscape as a whole.

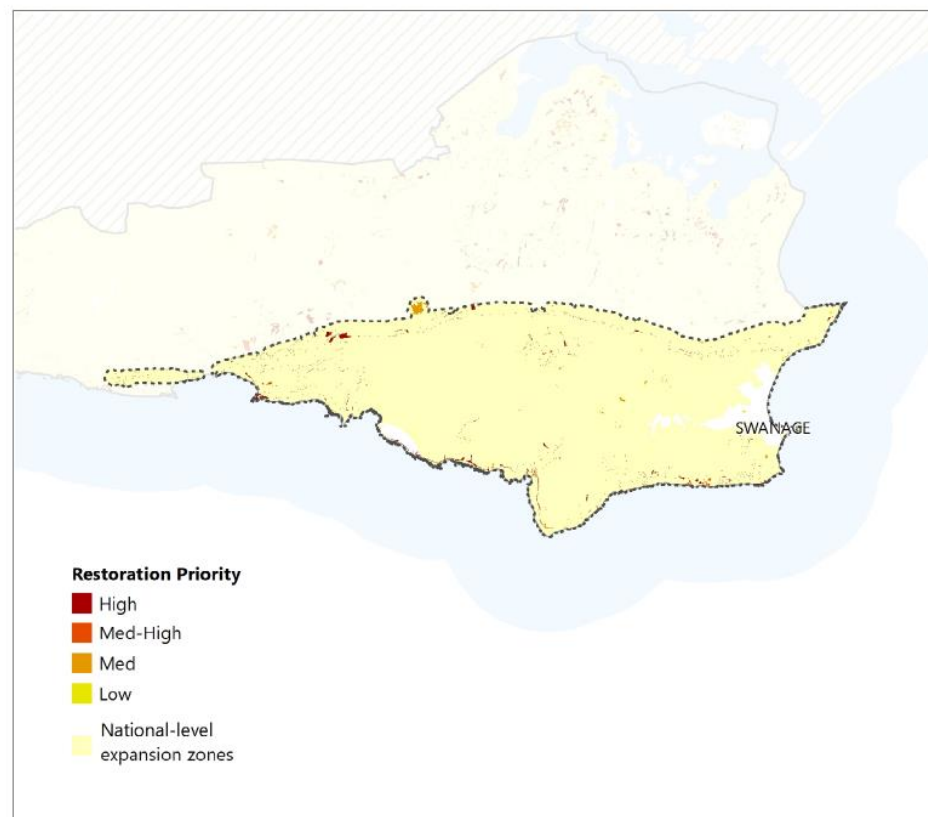| Datasets used in analysis	Level	Res.	Date
Dorset habitat map – selected land covers	L	●	●
Dorset core and stepping stone sites	L	●	●
Local habitat expansion zones	L	●	●
Natural England Habitat Networks	N	●	●
Agricultural Land Classification	N	●	●

Thriving Plants & Wildlife

2. Areas for Investigation & Action: Grassland

Sites for enhancement and restoration

1. Site selection

Land parcels **most suitable for grassland restoration**:
- Bracken
- Semi-improved grassland (which is not already a core grassland site)

Restoration Priority
- High
- Med-High
- Med
- Low
- National-level expansion zones

Existing grassland core and stepping stone sites

Current Sites
- Super-core (>40ha)
- Core Habitat
- Stepping Stone

2. Prioritisation

Parcels close to existing 'core' sites: **High**

Parcels within locally produced habitat expansion zones: **Medium-High**

Parcels within nationally produced and broader habitat expansion zones: **Medium**

Remaining parcels: **Low**

After each stage, very small parcels and those on high grade agricultural land were moved down one priority level

Note: the opportunities presented in the map may conflict with opportunities presented for other broad habitats. Any actions should be taken after consideration of these other opportunities and what is best for the landscape as a whole.

Datasets used in analysis	Level	Res.	Date
Dorset habitat map – selected land covers	L	●	●
Dorset core and stepping stone sites	L	●	●
Local habitat expansion zones	L	●	●
Natural England Habitat Networks	N	●	●
Agricultural Land Classification	N	●	●

Datasets used in maps: OSV, AONB, OSBL, LCA, DHM, CSS, LHN, NEHN, ALC. See page 54 for full references.   22
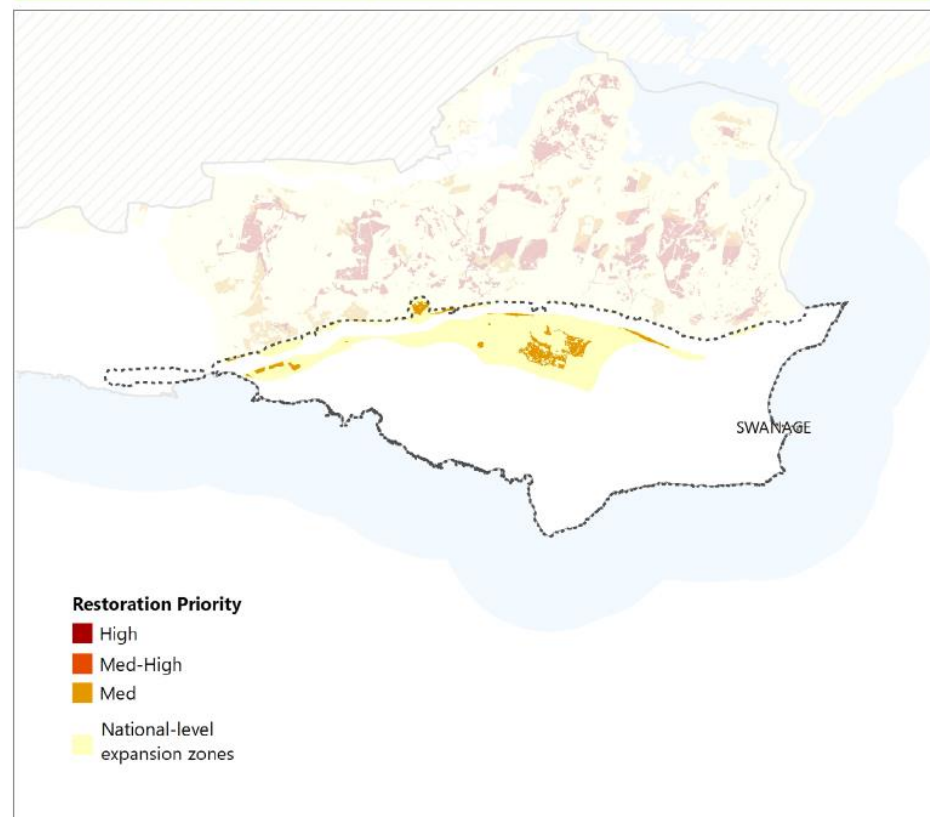
Thriving Plants & Wildlife

2. Areas for Investigation & Action: **Heathland**

Sites for enhancement and restoration

1. Site selection

Land parcels **most suitable for heathland restoration**:
- Bracken & scrub
- Semi-improved grassland
- Coniferous plantations (not on ancient woodland)

SWANAGE

Restoration Priority
- ■ High
- ■ Med-High
- ■ Med
- National-level expansion zones

Existing heathland core and stepping stone sites

SWANAGE

Current Sites
- ▦ Super-core (>40ha)
- ▦ Core Habitat
- ▨ Stepping Stone

2. Prioritisation

Parcels close to existing 'core' sites: **High**

Parcels within locally produced habitat expansion zones: **Medium-High**

Parcels within nationally produced and broader habitat expansion zones: **Medium**

Remaining parcels: **Removed** (would not meet specific heathland restoration criteria)

After each stage, very small parcels and those on high grade agricultural land were moved down one priority level

Note: the opportunities presented in the map may conflict with opportunities presented for other broad habitats. Any actions should be taken after consideration of these other opportunities and what is best for the landscape as a whole.

Datasets used in analysis	Level	Res.	Date
Dorset habitat map – selected land covers	L	●	●
Dorset core and stepping stone sites	L	●	●
Local habitat expansion zones	L	●	●
Natural England Habitat Networks	N	●	●
Agricultural Land Classification	N	●	●

Thriving Plants & Wildlife

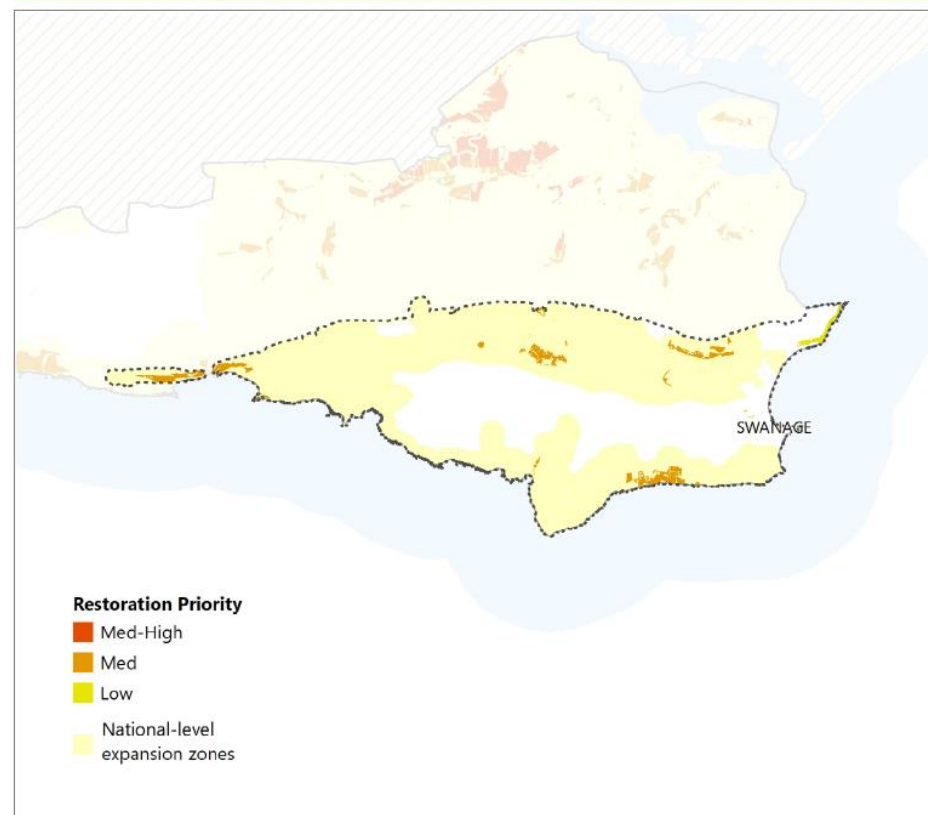## 2. Areas for Investigation & Action: Wetland

Sites for enhancement and restoration

1. Site selection

Land parcels **most suitable for wetland restoration**:
- Semi-improved grassland
- Coniferous plantations (not on ancient woodland)
→ *Only parcels fully/partly **within the floodplain** taken forward as suitable for wetland restoration*

Restoration Priority
- Med-High
- Med
- Low
- National-level expansion zones

Existing wetland core and stepping stone sites

SWANAGE

Current Sites
- Super-core (>40ha)
- Core Habitat
- Stepping Stone

2. Prioritisation

Parcels close to existing 'core' sites: **High**

Parcels within locally produced habitat expansion zones: **Medium-High**

Parcels within nationally produced and broader habitat expansion zones: **Medium**

Remaining parcels: **Low**

After each stage, very small parcels and those on high grade agricultural land were moved down one priority level
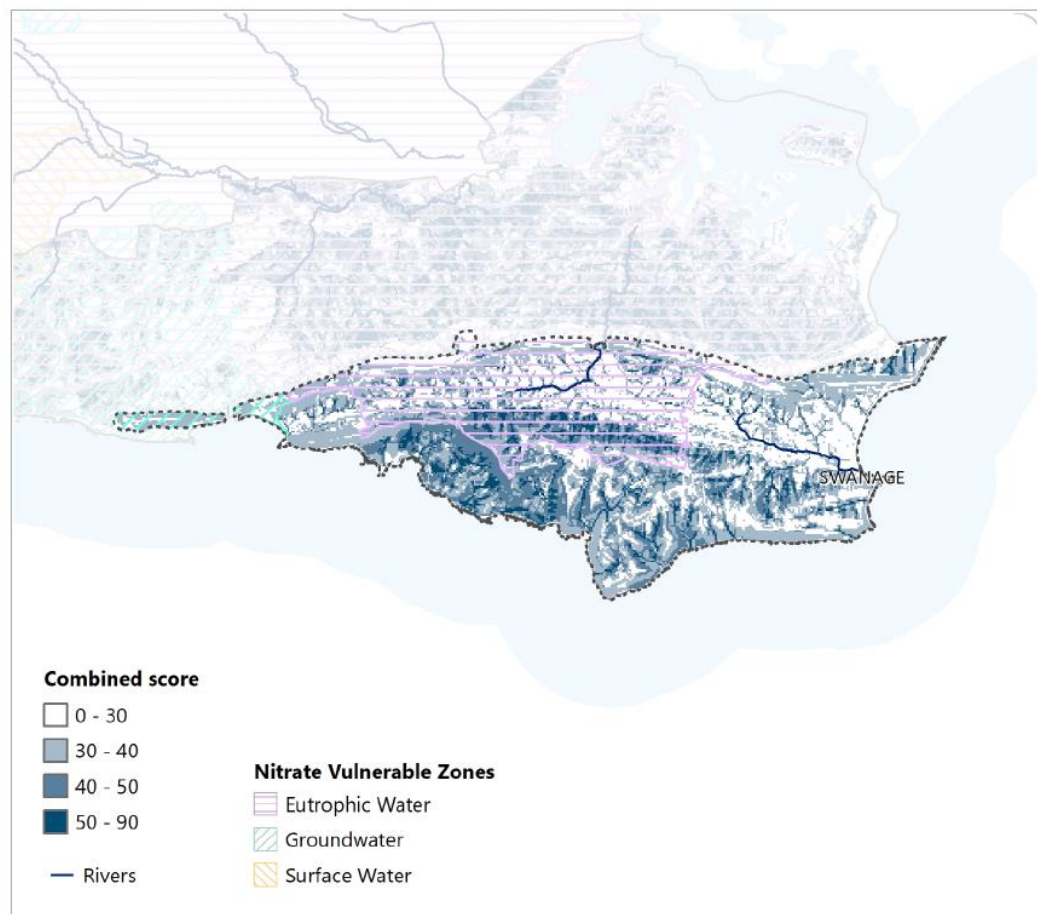
Note: the opportunities presented in the map may conflict with opportunities presented for other broad habitats. Any actions should be taken after consideration of these other opportunities and what is best for the landscape as a whole.

Datasets used in analysis	Level	Res.	Date
Dorset habitat map – selected land covers	L	●	●
Dorset core and stepping stone sites	L	●	●
Local habitat expansion zones	L	●	●
Natural England Habitat Networks	N	●	●
Agricultural Land Classification	N	●	●
Flood zone 2	N	●	●

Clean & Plentiful Water

2. Areas for Investigation & Action

The land areas that play a key role in regulating water quality as water moves through the landscape can be identified by mapping a series of indicators of inherent water quality risk. The map below shows where areas of risk occur and coincide, with darker shades showing areas of land where there is a greater risk of water quality being degraded in the catchment. These areas will be investigated further at a local level and then targeted for action through ELMS.

The map on this page shows the **combined risk score** across a grid of 'pixels'. The Dorset AONB area has been analysed at a 50m scale. The table below describes the factors considered in the analysis, and Appendix 2 shows the full scoring system.

Combined score
- ☐ 0 - 30
- 30 - 40
- 40 - 50
- 50 - 90
- — Rivers

Nitrate Vulnerable Zones
- Eutrophic Water
- Groundwater
- Surface Water

Areas of risk & description	Dataset	Level	Res.	Date
Land use risk Some land uses inherently pose more of a risk of diffuse pollution. Arable land typically poses more risk to water quality than more natural habitats.	Dorset habitat map	L	🟢	🟡
Slope Slope is a risk factor that poses a threat to water quality.	OS 50m Terrain Model	N	🟡	⚫
Soil type Some soils are particularly prone to run-off/erosion, while others represent a risk due to rapid leaching of pollutants in solution.	NATMAP soils	N	🟡	⚫
Hydrological connectivity [6] In some locations water is more likely to run over the surface due to the shape of the land. These suggest where there may be pathways for contaminated water.	OS 50m Terrain Model	L	🟡	⚫
Proximity to watercourse Areas in the 'riparian corridor' are more likely to be connected to the watercourse.	OSMM Water Network	N	🟢	🟡
Nitrate Vulnerable Zones (not used in scoring, but overlaid onto map) Areas designated as being at risk from agricultural nitrate pollution	Nitrate Vulnerable Zones	N	🟢	🟡

Datasets used in map: OSV, AONB, OSBL, LCA, NVZ, DHM, DTM5, DTM50, NAT, OSWN.
See page 54 for full references.

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