layer name	description	derived from
Open Habitat network 500m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 500m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. <500m dispersal distance relevant to e.g. many invertebrates, vascular and lower plants	Cost distance modelling using Open habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)
Open Habitat network 1000m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 1000m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. 500m - 1000m dispersal distance relevant to e.g. butterflies like small blue, small mammals such as stoat.	Cost distance modelling using Open habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)
Open Habitat network 5000m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 5000m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. 1000m - 5000m dispersal distance relevant to e.g. butterflies like large blue & marsh fritillary, birds such as skylark.	Cost distance modelling using Open habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)
Woodland Habitat network 500m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 500m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. <500m dispersal distance relevant to e.g. many invertebrates, vascular and lower plants	Cost distance modelling using Wooded habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)
Woodland Habitat network 1000m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 1000m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. 500m - 1000m dispersal distance relevant to e.g. some moths, small mammals such as dormouse.	Cost distance modelling using Wooded habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)
Woodland Habitat network 5000m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 5000m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. 1000m - 5000m dispersal distance relevant to e.g. passerines	Cost distance modelling using Wooded habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)

Woodland Habitat network 10000m connectivity	Modelled distance that a generic model species (sometimes called generic focal species) with a dispersal distance of 5000m could move into a landscape which has been coded with a cost to movement for each habitat or land use type. The costs are tailored for each ecological network. Gives an indication of the current level of connectivity between core habitat patches of the network in question. 1500m - 10000m dispersal distance relevant to e.g. larger birds such as birds of prey.	Cost distance modelling using Wooded habitat network permeability layer and Open habitat network core habitat (any patches with less than 10m gap between them are considered as a single patch)
Open Habitat Network Core Habitat	core habitat = priority habitat: Lowland meadow, Lowland calcareous grassland, Lowland dry acid grassland, Lowland heathland	Relevant habitats extracted from Gloucestershire habitat inventory. Any patches with a gap of 10m or less between them are merged into one patch.
Wooded Habitat Network Core Habitat	Core habitat = all semi-natural woodland	Relevant habitats extracted from Gloucestershire habitat inventory. Any patches with a gap of 10m or less between them are merged into one patch.
Water and wetland core habitats	Core habitat = all rivers and streams, standing open water and wetland habitats	Relevant habitats extracted from Gloucestershire habitat inventory.
Glos NRN v1.2 Beta (Open and Wooded elements)	Opportunity mapping for open and wooded habitat ecological networks combined into a single layer using conditional statements to determine priorities. Please Note: this map should be considered indicative only. It is generated from best available data and may not always reflect the true picture on the ground. Care should always be taken to prevent degradation of any existing valued habitats, network connections or geological or historical features. Prioritisation of network restoration based on the bigger and better elements of the Lawton principles. High = 20% increase in core habitat area, Medium = a further 10% increase, Low = the rest.	Open habitat opportunity mapping and Wooded habitat opportunity mapping for details of how these layers were produced see the methodology.
Glos NRN Wetland opportunities v7	Opportunity mapping for freshwater wetland habitats based on ecological and topographical parameters only, does not take into account urban or built infrastructure restrictions. Does not currently include data for soil drainage type so may indicate wetland opportunity where soil drains too freely to allow such habitat to develop. This will be improved in future iterations.	Freshwater wetland connectivity (at 500m, 1km, 5km), Topographical Wetness Index, Floodzone 3 and slope. Opportunity scores of 12 or greater are selected as priorty zones for wetland restoration.

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Open habitat network core patch sizes	The viable patch size categories used here are estimated from various studies: 1ha (various butterfly papers), 3ha (Somerset Wildife Trust report, estimate based on a range of species data) 5ha (large blue butterfly in SWT report and pe'er et al 2014), 30ha NERR081 for invertebrates of heathland. Many patches are below the 1ha minimum threshold and so will support a much reduced suite of species.	
	This shows the summed area of core patches within each functionally connected open habitat network within a 500m cost distance (dispersal distance). The Southwest Naturemap methodology states that a viable metapopulation needs 10 x minimum viable patch area, therefore the core patch area categories used in "Open habitat network core patch sizes" are multipled by 10 to provide the categories used in this layer, except for 70ha which is the lower estimate for marsh fritillary butterfly given in the Somerset Wildlife Trust Ecological Networks Report). The lowest category are considered to be unviable networks.	
Woodland network core patch sizes	The NE Nature Networks Handbook (NERR081) lists various examples of viable patch sizes for different species/groups associated with woodland. The patch size categories used in this layer illustrate those suggested thresholds. Many patches are below the lower 1.5ha threshold and so will support a much reduced suite of species.	
	This shows the summed area of core patches within each functionally connected wooded habitat network within a 500m cost distance (dispersal distance).The NE Nature Networks Handbook (NERR081) recommends woodland wildlife sites should be at least 40ha and preferably 100ha in size. Here that is intrepreted as total woodland core habitat within a functionally connected woodland network. Many of the networks are below the 40ha minimum treshold given for maximising the species richness of lower and higher woodland plants and vertebrates. 100ha is given as the threshold to support wider ranging species and those with specialist requirements.	