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11/11/2024

Local Nature Action Plan

Version 7

Several thin, curved lines in shades of purple and grey originate from the bottom left and sweep upwards and to the right, creating a sense of movement and organic form.

Climate & Nature Emergency Working Group
DODINGTON PARISH COUNCIL

Version	Details	Editor(s)	Date
6.0-Draft	Compiled document for review by working group	Paul Hulbert	16/05/2022
6.1-Draft	Incorporating feedback from working group on version 6.	Climate & Nature Emergency Working Group (CNEWG)	14/09/2024
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Dodington Parish Local Nature Action Plan v7

This document outlines the Dodington Parish Council (DPC) Local Nature Action Plan (LNAP). It draws on the structure of the Yate Town Council (YTC) LNAP and examples of content from other Town and Parish Councils.

This document was adopted by Dodington Parish Council in May 2022. It should be read in conjunction with Dodington Parish Council's Climate Action Plan.

1. Introduction

- 1.1 Dodington Parish Council made a declaration in 2021 recognising the climate and ecological emergency we are facing. A Local Action Plan has been drawn up to help us to work together as a community with South Gloucestershire to tackle the decline in biodiversity. This is an eight-year plan.
- 1.2 **Please note: apart from those maps already included in the appendices, all other maps can be found on Google My Maps for DPC at: [Dodington Parish Council LNAP](#)**
- 1.3 Dodington is a mixed urban and rural area, with the urban area covering 160 hectares and the rural area 1480 hectares. It only covers the parish of Dodington (see layers 1 and 2 on Google My Maps).
- 1.4 **The purposes of a Local Nature Action Plan** are to:
 - **IDENTIFY** the effects on the natural environment from Climate Change and the pressures of human-driven activity such as building development
 - **ENHANCE** the ecological value of core areas within the parish by promoting the extent and diversity of wildlife species and habitats
 - **FOCUS** efforts on key habitats such as orchards, increasing tree cover, ponds, wildflowers and species-rich grassland.
 - **DEVELOP** integrated natural habitat webs - plants, ferns, lichens, fungi, trees, insects, birds, mammals, amphibians etc
 - **CONNECT** environmentally valuable areas by developing and enhancing connecting corridors to produce interconnected wildlife networks
 - **INCREASE NATURE RELEVANCE** to local residents by publicising the LNAP, encouraging participation in the proposed LNAP actions, related citizen science projects, and educational initiatives for all age groups.
- 1.5 This document aims to pull together key sources and information and suggest an approach to achieving these goals.

2. Partnership: Doing it together

- 2.1. This draft action plan is led by Dodington Parish Council, as a first step towards a parish wide action plan owned and drafted by the community using its insights into our environment.
- 2.2. To deliver this plan will require active support from a wide range of organisations, groups and individuals, including South Gloucestershire Council, both to identify opportunities and deliver them.
- 2.3. **Key partners** for delivering the LNAP:

Partner group	Role	Contact
Local Government: Those bodies with responsibilities and powers to manage public services within the area.		

Dodington Parish Council	Coordinator, maintain strategic alignment, funding support & guidance, impact assessments, communications.	01454 866546 clerk@dodingtonpc.org.uk
Yate Town Council	Delivery partner, strategic input, funding support & guidance, communications as necessary.	01454 866506 info@yatetowncouncil.gov.uk
Chipping Sodbury Town Council	Delivery partner, strategic input, funding support & guidance, communications as necessary.	01454 321336 enquiries@sodburytowncouncil.gov.uk
South Gloucestershire Council	Guidance and specialist advice. Action on SGC land.	Commons and Biodiversity Manager: nature@southglos.gov.uk Streetcare: 01454 868000 beta.southglos.gov.uk/contact-us/
Action Groups: Existing community groups with specific focuses on nature and climate action that can work together with other groups as the plan progresses.		
Wapley Bushes Conservation Group [wildlife group]	Ideas, feedback, volunteers, work, surveys, ongoing site support.	Tim Fairhead tim.uk@lycos.com
Sustainable Sodbury and Yate [digital community]	Ideas, volunteers, communications, feedback.	sussodburyandyate@gmail.com
Climate Action Yate and Sodbury [digital community]	Ideas, volunteers, communications, feedback.	climateactionyocs@gmail.com
Sodbury and Yate Clean Up [digital community]	Ideas, volunteers, communications, feedback.	sussodburyandyate@gmail.com
Other Groups: Existing community groups with other focuses that may undertake action aligned to the LNAP, or who have interests in co-benefits from taking aligned actions, such as where those actions may improve outcomes for arts, culture, heritage, religion, sports, or socio-economic groups.		
Dodington Allotments Association		
Residents groups [Abbotswood as the example]		
'Friends Groups' [Kingsgate Park as the example]		
Local Institutions: Those organisations that may undertake action aligned to the LNAP, or who have interests in co-benefits from taking aligned actions.		
Schools		
Businesses		
Public Sector Bodies		
Other Partners/ Users: Those private organisations, or persons, not otherwise covered by the previous groups who may have interest in co-benefits from taking aligned actions.		
Landowners		
Individual residents		
Site users		

Table 1: List of key partners and stakeholders by group.

2.4. An interest grid has been prepared to support the different types of interaction DPC will need with the key partners for delivery. Wherever a partner starts in this grid, the aim is to encourage more and more people to become interested and want to work with the groups who will be at the centre of taking this forward.

		Keep satisfied	Work closely with
POWER	High	<ul style="list-style-type: none"> • Site Users • Residents • Digital Communities • Residents Groups • Youth groups/ schools 	<ul style="list-style-type: none"> • Wildlife Groups • Friends Groups • South Gloucestershire Street Care • Neighbouring Town & Parish Councils on joint issues
	Low	<ul style="list-style-type: none"> • Land/ large building owners/employers • Schools as landowners • Other Local Organisations 	<ul style="list-style-type: none"> • South Gloucestershire Councillors • SGC Biodiversity Officer
		Monitor	Keep informed
		Low	High
	INTEREST		

Table 2: Stakeholder interest grid.

2.5. A broader communications plan has also been developed, with specific communications products needed for those initiatives that are Parish wide, and those that are aligned to the geographical phases.

Communications Plan				
Stakeholder	Comms Objective(s)	Comms Message(s)	Delivery Method(s)	Timeline
Parish Councillors / staff	Secure support for action for nature on all Parish Council grounds and help the working group to engage with local	<p>Council has agreed its commitment to the LNAP.</p> <p>Reinforce current commitment.</p>	<p>DPC website to include:</p> <ul style="list-style-type: none"> - information from LNAP, - progress reports, and, - budget discussions. 	Updates from Climate & Nature Working group, including LNAP actions, to Full Council.

	residents and organisations.			
South Glos Ward Councillors	Secure general support for overall programme and specific projects. Grant access to Member Awarded Funding. Garner active support from Councillors in target neighbourhoods.	Explanation of the importance of this work, the of type support, including resource, that is needed and the type of actions proposed.	Progress reports via email.	Updates from Climate & Nature Working group, including LNAP actions, to Full Council.
SGC Biodiversity Officer	Secure general support for overall programme and specific projects. Maintain access to SGC knowledge/ expertise bank.	Completed LNAP proposals with specified requests for support where necessary.	Documentation for the draft and final versions of the LNAP. Progress reports via email.	6 monthly once final version agreed. (nature@southglos.gov.uk)
Friends and interest groups	Secure general overall programme and specific projects. Seek advice, information and resource sharing.	Explanation of plan, openly receive feedback so the plan can be maintained or revised where appropriate, including on levels of support needed Consultation on approach.	Presentations to groups and feedback sessions. Social media contacts.	Ongoing.

Table 3: Communications Plan for the LNAP.

3. Land Ownership

3.1 The geographic area the LNAP covers includes land owned, leased, licensed by a range of stakeholders. The tables in this section of the LNAP provide details on the range of stakeholders and the type of land owned to support decisions on the type of action that may need to occur in those areas.

3.2 Table 4 shows DPC controlled (owned, leased or licensed) land. The Climate and Nature Working Group, through the LNAP, has a high degree of influence over activities that occur on these sites. The map showing these sites is on Google Maps layer 3. Sites in Appendix 1 are shown red for DPC ownership and blue for DPC leased/licensed sites.

Site Name	DPC Owned	DPC Leased, or Licensed, from SGC	Google My Maps Layer Reference
DPC Allotments: Site 1		Leased	7
DPC Allotments: Site 2	Owned		8
Goldcrest Park and Play Area		Licensed (under negotiation)	3
Lilliput Park and Play Area		Leased	1
Numerous small plantings and hedges		Licensed	N/A - Appendix 4
Parish Hall grounds		Leased	2
QE2 Playing Field and Memorial Garden – Kelston Close	Owned		
St Peters Churchyard and Burial Ground	Closed Churchyard: Managed Burial Ground: Owned		9
Wapley Bushes	Owned		6
Woodchester Park and Play Area		Leased	4

Table 4: DPC controlled land, including type of control and map layer reference.

3.3 Table 5 shows South Gloucestershire Council (SGC) owned sites within the LNAP boundary. The Climate and Nature Working Group, through the LNAP and as part of contributing to the unitary authorities' own actions for nature, has a high degree of influence over activities that occur on these sites. The map showing the relevant sites is included in Appendix 1. Many are also Designated Local Green Spaces, shown on layer 5 of Google My Maps; details for these sites are included in section 4 of the LNAP.

Site Name	Nature
Dodington Allotments: Site 1	Allotments with mature hedges; leased to DPC.
Dodington Parish Hall grounds	Garden strips around Parish Hall; leased to DPC.
Embankment: 'The Birds' to Kennedy Way	Open grassland; part sloping.
Goldcrest bank	Large sloping grassland and shrub area.
Goldcrest Park and Play Area	Play area with grassland. Mature hedge on railway line edge; leased to DPC and bordering Chipping Sodbury.
Goldcrest to Slimbridge Close	Large linear shrub area.
Green space: 57 – 63 Chedworth	Open grassland in front of houses.
Green space: Witcombe to Brockworth	Open grassland with individual mature trees; bordering Yate.
Highway Verges	Mainly grassland with individual trees.
Lilliput Park and Play Area	Recreation grassland containing streams, mature hedges and strip woodlands.; leased to DPC and bordering Chipping Sodbury.
Mallard Close to Elswick Park	Open grassland including established and recently planted trees; bordering Chipping Sodbury and Yate open space.
Merlin Way 'Tump'	Grassland with some mature hedges and modern tree planting; bordering Chipping Sodbury.

Numerous small plantings	Decorative shrubberies included in Appendix 4; DPC managed, licensed from SGC.
Open spaces along footways and pavements	Mainly grassland with individual trees.
Poco Strip (Ashtrack)	Mature strip woodland and scrub. Track of former sidings, returned to nature when Slimbridge Close was built. Excellent example of natural regeneration.
Robin Way allotments verges	Grass strips running alongside the allotments; bordering Chipping Sodbury.
School Fields	Largely in active use for sports but smaller areas alongside may afford biodiversity planting and educational work opportunities.
Wapley Rank, Orchard	Historic orchard with additional modern fruit tree planting.
Woodchester Park and Play Area	Play area and grassland with individual trees and short lengths of hedge; leased to DPC and bordering Yate.

Table 5: SGC controlled land, including relevant notes on nature-based assets.

3.4 Other types of land owned by South Gloucestershire Council include:

- Highway Verges - the verges range from small slithers of land to more significant patches, or connectors, and there is not always a clear rationale for the designation. DPC does not have any detailed maps of these Highway Verges, however, participation by SGC as a key landowner is crucial to the delivery of a strategic network of wildlife improvements through the urban areas. There are also many “green corridors” of South Glos land connecting larger open spaces in the North West and North East wards.
- Amenity grassland - South Gloucestershire Council has been leaving parts of some verges to become wilder while other parts still get mowed and, while that is welcome, it does not necessarily produce a quick improvement. Amenity grassland mixes are available, often marketed as flowering lawn mixes, that contain grass mixtures like red fescue and crested dogstail with wildflowers that can tolerate mowing such as red clover, bird's foot trefoil and selfheal. Mixes like that are better for wildlife than pure barren swards of standard rye grass: <https://wildseed.co.uk/mixtures/view/56>.

3.5 Specific area management plans for South Gloucestershire Council sites can be obtained by engaging the services of professional ecological services such as Wessex Ecological Consultancy (Bristol) and Wild Service (Gloucestershire) to provide surveys and management plans. It is all very well having an excellent management plan for a wildlife area, but it is no good if the landowner concerned does not actually implement the management prescriptions that preserve and enhance the wildlife value of the area. There have been management lapses during the Covid pandemic, including (but not limited to) areas managed by South Gloucestershire Council. That is understandable given the circumstances concerned but situations do need to improve now to avoid habitat degradation in the longer term.

3.6 There has been an increase in the number of South Gloucestershire Council sites using bat boxes. The best approach for identifying further sites for installation is to carry out summer bat surveys with specialist experts who can tell precisely what bat species are present at the site concerned. Suitable and appropriate bat boxes can then be provided for the relevant species of bats in residence. Bat boxes that have higher bat occupancy rates are more expensive, but are more effective. Examples of good bat boxes can be seen here: <https://www.wildlifeservices.co.uk/bats.html>.

3.7 Table 6 shows those areas of land within the LNAP boundary, that are controlled by third parties. These sites are considered as areas of land where DPC has low influence over the decisions for what activities occur, but can choose whether to influence landowners or managers in their decisions, so as to better support collective actions.

Site Name	Details	Map Layer
Businesses	Employers with sites that have significant wildlife boundaries / land holdings. Examples include: Shire Way club, Phase 5 nursery, Springs Farm businesses, Wishing Well pub at Codrington, Players Golf Club, Dodington Estate and associated landholdings, various farms.	Google My Maps – Layer 4.
Community Buildings	Small areas of land that may have an array of uses and are associated with Churches or other Community Buildings that are not included under ‘Businesses’ or ‘Gardens’.	Google My Maps layer 4
Former Landfill Sites	Codrington Quarry; Shire Way.	Google My Maps layer 4
Gardens	Around 2900 in the urban (North West and North East) wards and about 130 in the rural South Ward.	Google My Maps layer 4
Housing Association	Housing development at Kelston Close.	Google My Maps layer 4
Railway	Network Rail land adjoining railway along southern boundary of urban area.	Google My Maps layer 4
Robin Way allotments – bordering Chipping Sodbury	Historically typical "railway allotments" that are now in private ownership	Google My Maps layer 4
Rural Areas	Approximately 1480 hectares i.e., 90% of the landmass, managed over around 90 properties, (70 or so in rural area, and 22 at Beanwood Park Showmen’s Site), including the private estate at Dodington Park, for the purposes of farming and other activities.	Some shown on Google My Maps layer 4

Table 6: Third-party controlled land within the Dodington LNAP Boundary.

3.8 In choosing to influence private landowners or managers in their decisions, with the aim of supporting collective actions and overall improved outcomes, the following resource from the Farming and Wildlife Advisory Group can provide those rural landowners or managers with advice about how to make farms more wildlife-friendly whilst remaining productive:

<https://www.fwagsw.org.uk/Pages/Category/gloucestershire>

3.9 As there are two former landfill sites included within the LNAP boundary, the following information is provided for reference.

- Codrington Quarry has been locked off for many years, with apparently no further active landfill. The company overseeing operation was Biffa Waste and work was supposed to finish in 2014. The latest planning application, PK04/3974/RVC, was a revision of PK03/2026/F, to allow for retaining Great Crested Newts. Thread-Leaved Water Crowfoot was also present on site. It is

anticipated that the lack of disturbance will have encouraged a variety of wildlife. The site is listed as a Regionally Important Geological Site, with several Public Rights of Way across the site. The status of the rights of way, including whether these have been retained or diverted, following formalization of recording through Defra, will need to be checked.

- Shire Way Community Association land was landfilled for restoration as a playing field, and there is supposed to be a nature conservation area along the top of the Shire Way bank. Land ownership has changed since and may affect future land use.

4. Sites Designated for Nature Importance

4.1. There are already many externally designated sites for nature within National guidance, including for example, Areas of Outstanding Natural Beauty (AONBs) and Sites of Special Scientific Interest (SSSIs). These designations identify locations that are recognised for a range of factors, including:

- The site provides opportunities for people to experience and enjoy some of our most spectacular and beautiful land and seascapes.
- The site safeguards vital elements of our natural and cultural heritage.
- The site provides people with essential services like clean water, climate regulation, beautiful places for recreation, and opportunities to learn about nature.
- The site forms parts of living and functional landscapes, continuing to adapt and change within this wider context.
- The site forms a national asset.

The range of designations can be viewed on the Defra owned interactive map. See <https://magic.defra.gov.uk>.

4.2. The data from Defra indicates that there are already a range of designated habitats, protected species and associated land management schemes within the Parish and LNAP boundary. It may be the case that an identified area of land has more than one designation associated with it, or that a smaller parcel of land, within a designated area, has its own additional designation.

Identified designations within the parish include:

- Ancient Woodland
- Countryside Stewardship [*Land management scheme and agreement*]
- Deciduous Woodland [*Priority Habitat Inventory*]
- Good Quality Semi-Improved Grassland [*Priority Habitat Inventory*]
- Grey Partridge [*Priority Species*]
- Groundwater Vulnerability Map
- Higher Level Stewardship Target Areas [*Land management scheme and agreement*]
- Higher Level Stewardship Theme Areas [*Land management scheme and agreement*]
- Lapwing [*Priority Species*]
- National Forest Inventory
- National Habitat Network
- Open Mosaic Habitat [*Priority Habitat Inventory*]
- *Other Local Designations & Strategies*
- Public Rights of Way
- South Gloucestershire Biodiversity Action Plan
- South Gloucestershire Local Plan

- Traditional Orchards [*Priority Habitat Inventory*]
- Woodland Grant Scheme 2 [*Land management scheme and agreement*]
- Woodland Grant Scheme 3 [*Land management scheme and agreement*]

4.3. The DPC LNAP will need to recognise and adopt the national guidance for consistency, and the creation of the LNAP is also an opportunity to consider widening designations where appropriate to local conditions. The later paragraphs cover the designations relevant to the LNAP boundary in more detail.

4.4. Sites of Nature Conservation Interest and Regionally Important Geological Sites recorded in the Local Plan have some protection within the planning process.

4.5. There are no internationally designated locations within the Parish boundaries.

4.6. Priority Habitat Inventory designated areas.

There are several Priority Habitat Inventory designated areas, each with its associated management proposal set out in the UK Biodiversity Action Plan (BAP), within the Parish, including:

- Deciduous Woodlands on the Dodington Estate, Hawkes Tynning Clump and Gorse covert, Players Golf Club woodlands, Wapley Bushes Local Nature Reserve, Beanwood Farm and Wychwell Farm Wood.
- Good Quality Semi-Improved Grassland at Church Fields and Wapley Bushes Local Nature Reserve.
- Open Mosaic Habitat at Codrington Quarry and Shire Way Landfill Site.
- Traditional Orchards at or near Bean Farm, Chescombe Farm, the Old Rectory, Thornton House Codrington, Wapley Common, Wapley Farm, Wapley Rank.

4.7. Local Nature Reserves.

There is one formal local nature reserve within the LNAP boundary. An informal local nature reserve also borders the LNAP boundary. These are:

- Wapley Bushes [Formal designation]
- Eastern part of Kingsgate Park [informal designation]

Due to the identification of Ash Dieback Disease within the Wapley bushes Local Nature Reserve, and the activities associated with managing the spread of the disease, there are felling licences in place on parts of Wapley Bushes and on parts of the Dodington Park estate.

Woodland grants apply to parts of the Wapley Bushes Local Nature Reserve, Beanwood Farm and a small area in Codrington.

4.8. Forests.

The whole of the area governed by the Parish Council lies within the Forest of Avon Community Forest as defined by the Forest of Avon Trust Ltd: <https://forestofavontrust.org>.

4.9. Species.

Land designations for protected species of national interest within the DPC LNAP boundary include:

- The entire Parish for lapwings, as a protected species.
- The western and eastern quarters of the Parish for Grey Partridge, as a protected species.

A range of species, including traditionally common species such as sparrows, bats, owls and hedgehogs are particularly vulnerable locally as a result of the rapidity of urban change alongside wider environmental change.

4.10. Green Corridors – [*Other Local Designations & Strategies*].

There are many green spaces and green corridors within the parish that could be improved to provide wildlife corridors to link existing but isolated areas.

- In the urban area this is mainly South Glos owned land. Verges and gardens can play an important role here, and it also fits neatly with Buglife's B-Lines project which runs through the parish. This has also been identified as a target action within the BAP.
- Wildlife corridors are useful because they join up habitats so reducing habitat fragmentation and population isolation. They can provide transit routes, food sources and useful cover for wildlife. They can range from 15 metres to, for example, 60 metres in width but, crucially, they must provide useful wildlife habitat along the way, i.e. not just be sterile amenity grassland that is of limited value.
- It is also important to co-ordinate work with neighbouring parishes to establish links across parish boundaries as well as within the parish itself.

4.11. Hedgerows – [*Other Local Designations & Strategies*].

Significant cover is also provided by mature rural hedges, railway embankments and short stretches of motorway embankment, as can be seen via the Habitat > Woodlands layers within the Defra data.

- These more linear features provide both habitat and connecting wildlife corridors and could link to Buglife's B-Lines project.
- Where possible hedges could be laid instead of flailing them, or the cut could be reduced to 1/3 each year across each site to reduce disturbance to wildlife.

4.12. Orchards

There were 16 orchards marked on the 1912-1922 OS maps of the parish. Only 8 small orchards remain today but their total area is much smaller, representing a loss of over 90%.

- Identifying locations for new traditional orchards has been identified as a target action within the BAP.
- Improving these figures would be a valuable project, as it can provide benefits in terms of community engagement alongside those of wildlife food sources and habitats and additional tree cover.

4.13. Ponds – [*Other Local Designations & Strategies*].

Water is crucial to wildlife and hugely improves the biodiversity of life around it, but many ponds have disappeared over the years.

- Ponds support an extraordinary two thirds of all freshwater species, and creating clean new ponds is one of the simplest and most effective ways to protect freshwater wildlife. However, to form viable populations, many creatures need not just a single pond but a network of them. Great crested newts for example need at least three ponds within ½ mile of each other to complete their lifecycle. Such ponds will not only provide habitat for the newts though, they will also be of benefit to many other amphibian, insect, bird, bat and human populations.
- Pond creation can be expensive and may need to be on privately-owned land, however even a simple "scrape" could be beneficial. Pond habitat improvements are possible – e.g.

the Top Pond at Wapley Bushes – but they would require funding in the order of thousands of pounds.

4.14. South Gloucestershire Tree Asset Management Plan (2018) – [*Other Local Designations & Strategies*].

The plan identifies that across the whole of the South Gloucestershire area, tree cover is low at 11% compared to the Independent Panel on Forestry's target of 15% by 2060. This sets a recommended target of increasing tree cover by 4% - which would be the equivalent of 40 hectares per Parish within the South Gloucestershire area.

- A survey carried out using the i-Tree Canopy online tool (*See Appendix 2*), based on 500 random data points, estimates the tree cover within Dodington Parish as 17.4% (with an accuracy +/- 1.7%). This is more than the Independent Panel on Forestry's target of 15% but still needs to be increased to compensate for more urban parishes. The LNAP process will support that.
- The effect of the tree cover is significant. Every year the Parish trees sequester (store away) 874 tonnes of carbon (i.e. £3,205 tonnes of CO₂) for an approximate worth of £221,000.
- The total stored away over the years the trees have grown is 21,956 tonnes of carbon (80,505 tonnes of CO₂) worth £5,555,000. Each year our parish's trees stop 46,000 tonnes of water running off (compared to soil without tree cover) and evaporate 311,421 tonnes of water. (Source: i-Tree Canopy calculations)
- Most of the parish's tree cover is deciduous species. A considerable proportion is in the major woodlands in the South Ward such as Dodington Estate (Dodington Wood, Frenchpiece Wood etc), Hawkes Tynning Clump and Gorse Covert, the woodlands near the Players Golf Club, Wapley Bushes Local Nature Reserve, Bean Wood, Wychwell Farm.
- In the North West and North East Wards there are significant strip deciduous woodlands on the former railway embankments and trackbeds near Shire Way.

4.15. Tree Preservation Orders (TPOs) – [*Other Local Designations & Strategies*].

TPOs apply to large parts of the parish as a result of blanket TPOs made during developments and Local Nature Reserve designations.

4.16. Wildflowers – [*Other Local Designations & Strategies*].

There has been a significant decline in wildflower meadows and species-rich grassland across the country generally and the parish. Some 90% has been lost country-wide since the beginning of the 20th century.

- The meadows at Wapley Bushes Local Nature Reserve are examples of wildflower meadows, and Wapley Bushes Conservation Group is working to increase the species diversity on the 'Orchard for the Future' at Wapley Common. [**NB:** Wapley Common is a local designation and not a legally designated common.]

4.17. Public Rights of Way

The South Ward is criss-crossed by legal rights of way. Most of these are field footpaths, but a few, such as Burbarrow Lane, are wide bridle paths that might lend themselves to improvement as wildlife corridors without affecting their designated uses. For mapping see

<https://www.outdoorswest.org.uk/map/>

4.18. South Gloucestershire Biodiversity Action Plan

The habitats and species listed in the 2016 – 2026 South Gloucestershire Biodiversity Action Plan (See Appendix 1), when read with the South Gloucestershire Local Plan, act as a material consideration in the planning process. These are given in image 1, below.

**South Gloucestershire Biodiversity Action Plan (2006 – 2015):
Priority Habitat and Species list**

Local Priority Habitats	Priority species	Local Priority Species
Arable farmland	Bullfinch	Adders tongue spearwort
Broadleaf woodland	Dormouse	Barn owl
Hedges, dry stone walls and field margins	Great crested newt	Bath asparagus
Old meadows and pastures	Hedgehog	Bithynian vetch
Orchards	Song thrush	Glow worm
Ponds, rhines, rivers and water bodies	Tassel stonewort	Slow worm
Saltmarsh/coastal grazing floodplain	White clawed crayfish	Wild service tree
	Lesser horseshoe bat	

Image 1: Extract of the priority habitats and species as listed in the South Gloucestershire Biodiversity Action Plan.

4.19. South Gloucestershire Local Plan

The Adopted South Gloucestershire Local Plan: Policies, Sites and Places (PSP) Plan (2017) gives some official protection to some sites through the planning process.

- Appendix 10 of the PSP Plan shows which spaces are Designated Local Green Spaces. This does not include all local green spaces and some of these green spaces were identified earlier, in section 3, paragraph 3, Table 5.
- Those local green spaces protected in the Local Plan are shown at Google My Maps layer 5.
- Table 7 restates these sites with the associated local plan green space code and the historical and cartographical (map based) evidence to support the designation also included.

South Gloucestershire Green Space Code	Site Name	Historical and Cartographical Evidence
LGSD068	Dodington Allotments: Sites 1, 2 & 3	Site 1 - the northern part of the western landholding - is clearly visible on the 1882 map. The W, S and E boundaries are on historic lines. Site 3 - the southern part of the western landholding - is a recent subdivision of a farm field.
LGSD075	Goldcrest Park and Play Area	Remnant of field between Wapley Depot sidings and main railway line. The railway line edge (SE) is 1900-1910 GWR railway boundary and the treeline appears to date from that period.
LGSD069	Green space: 57 – 63 Chedworth	The NW (railway edge) boundary was established by the time of the 1903 map, but there is little historic evidence of the NE boundary.

LGSD070	Green space: Witcombe to Brockworth	Historic hedgerows along E and S boundaries, which are visible on the 1882 map.
LGSD076	Lilliput Park and Play Area	All boundaries very clear on 1882 map. Historic hedges and other natural and man-made features.
LGSD077	Mallard Close to Elswick Park	Boundaries shaped by Sea Stores fence on W (so presumably plum trees are wartime), 1960s housing and road development. Little left of pre-war boundaries.
LGSD074	Merlin Way 'Tump'	Eastern boundary on 1882 map; SW boundary on 1882 map, but probably few trees left; NW boundary established between 1924 and 1955, probably wartime.
LGSD071	Poco Strip (Ashtrack)	Track of former sidings, returned to nature when Slimbridge Close was built (approx. 1990). Excellent example of natural regeneration.
LGSD073	QEII Playing Fields, Kelston Close	Historic hedgerows along N, W and S boundaries, which are visible on the 1882 map.
LGSD078	Robin Way allotments verges	Typical "railway allotments". Land parcel was established during railway construction (W section established by 1903, when railway was under construction). Date when allotments were established is uncertain - possibly wartime?
LGSD672	Wapley Common, Nature Reserve and Community Orchard	The whole property is clearly visible on the 1882 map. Ancient woodland with historic boundary features such as bank and ditch. The outer boundaries of the property are also clear on the 1882 map, with historic hedges with bank and ditch feature. The most recent hedge - the northern boundary alongside the railway - was established around 1903.
LGSD067	Wapley Rank, Orchard	Historic orchard (shown as orchard on 1882 map) associated with miners' cottages. Boundaries and boundary hedges are of similar age.
LGSD072	Woodchester Park and Play Area	East boundary is visible on 1882 map. The other boundaries are within an open 1882 field. The other boundaries are from around 1970 when the estate was built, though individual trees may be much older but not part of a boundary feature.

Table 7: South Gloucestershire local green space designations within the LNAP boundary, with associated historical and cartographical notes.

5. Water Features

- 5.1. The high-water table and ground conditions make flooding and water conditions significant to any action plan. Making small changes in drainage significant to hydrology: the flood mapping for the parish is linked from Appendix 3 showing surface water and river flood risk mapping. Significant parts of the parish are areas of high groundwater vulnerability.

- 5.2. Two rivers rise within Dodington Parish. The River Frome rises within Dodington Park and flows via Old Sodbury, Chipping Sodbury and Yate towards Bristol. The River Boyd rises near Sands Farm, passes near Codrington and flows under the M4 Motorway, being joined by various stream along the way. The Boyd then flows via Pucklechurch, Wick and Bitton to join the River Avon at the pontoon near Avon Riverside Station on the Avon Valley Railway. See Google My Maps layer 6 for relevant parts of the rivers.
- 5.3. The local flood risk map and surface water risk maps can be found at: <https://check-long-term-flood-risk.service.gov.uk/map>
- 5.4. According to the maps, much of the urban area is vulnerable to flooding, particularly in the North West Ward. There has been little evidence of this happening over the past 40 years, but climate change may affect this.
- 5.5. In the North East Ward the streams in Lilliput Park are prone to winter flooding. These are fed by two aqueducts across the railway line – they drain the agricultural land around Claypit Hill and Mousewell Farm.
- 5.6. In the South Ward there is localised surface flooding associated with a tributary of the River Frome running from Cliff Farm towards Westerleigh. This results in localised winter flooding in the eastern end of Besom Lane. There is also flooding on the fringe of Wapley Common near Pool Farm.
- 5.7. As neighbourhood plans are developed, these maps will need to be checked as they will affect wildlife and habitat opportunities but may also present opportunities for improving surface water drainage. The levels of risk and areas affected will increase as climate change worsens, so this will need to be regularly checked.
- 5.8. Table 8 lists the water features within the LNAP boundary, as show in Google My Maps layer 6.

Site Name & Feature	Ownership & Key Stakeholders	Ecological Notes
Cliff Farm towards Westerleigh Frome Tributary	Private farmland. Various key stakeholders including Bristol & Avon Rivers Trust (BART), South Gloucestershire Council (SGC) and Environment Agency (EA).	Drains towards the River Frome.
Lilliput Park East-West Stream	Leased by Dodington Parish Council (DPC). Various key stakeholders including, BART, SGC, EA.	Fed from private farmland south of railway line via aqueduct near Chipping Sodbury School, then by culvert into the park.
Lilliput Park South-North Stream	Leased by DPC. Various key stakeholders including, BART, SGC, EA.	Fed from Lilliput Park East – West stream and Robin Way stream. Drains towards the River Frome.
River Boyd and tributaries	Various key stakeholders including, BART, SGC, EA.	Rises in Codrington. Various tributaries cross the motorway and flow south towards the River Avon.

River Frome	Various key stakeholders including, BART, SGC, EA.	Rises on Dodington Estate, flows into Old Sodbury.
Robin Way Stream	SGC Various key stakeholders including, BART, SGC, EA.	Fed from private farmland south of railway line via aqueduct at south end of stream.
Wapley Bushes Eastern Edge Stream & Nature Reserve Ponds	Owned by DPC. Various key stakeholders including, BART, SGC, EA.	Draining farmland south of Wapley Bushes down to railway drains and onwards to Shire Way culverts, towards the River Frome.
Wapley Common Western Ditch	Owned by Pool Farm.	Drains into ditch on southern edge of Wapley.
Wapley Common Southern Ditch	Owned by DPC.	Drains towards Cliff Farm tributary and roadside verges.

Table 8: List of local water features, including ownership and ecological notes.

6. Resources

- 6.1. As each neighbourhood is developed in the Local Nature Action Plan an action plan will be developed which will include proposals for funding. The Parish Council will provide core resource to support the development of the plans, and general project costs, and will seek funding from MAF funds, CIL money, s.106 monies, business, external grants and local friends group fundraising.
- 6.2. A key challenge for the Action Plan will be finding the expertise to map what is present and to advise on actions beyond the basic ones. This resource challenge will be managed by adopting an opportunity creation approach, and ensuring the basics are done, focusing expertise on areas that require special help. In adopting an opportunity creation approach, co-designing possible initiatives with members of the community will be a means of also managing resources.
- 6.3. Co-designing with communities is a collaborative approach that brings together diverse groups of stakeholders—including local residents, organisations, and experts—to jointly create solutions that address shared challenges. This method emphasizes building trust, inclusivity, respect and partnerships, creating a participatory environment where everyone contributes to designing interventions that truly reflect the needs and aspirations of the community and ensuring that all voices are heard and valued throughout the process. By leveraging the unique knowledge and experiences of community members, co-designing fosters a sense of ownership and accountability, resulting in more sustainable and effective outcomes.

7. Proposed Programme

- 7.1. The five areas of strategic focus for the proposed programme were given in paragraph 1.4, and for completeness, these covered activities to identify, enhance, develop, connect and increase the relevance of, nature and the natural environment within the LNAP boundary.
- 7.2. The approach for undertaking the programme consists of a mix of Parish wide projects, which can be considered as one tier for evaluation purposes, and contributing projects organised by neighbourhood, which can be considered as another tier with a comparative rollout period,

allowing for lessons learned to be identified, captured and shared as new neighbourhoods are included.

7.3. Parish Wide Approach

The aim of the Parish wide approach is to support and enhance smaller initiatives, increasing the quantity of, and improving the quality of biodiversity within, the green spaces and buildings that are crucial to connecting the larger green spaces within the geographical landscape. Incorporating an overall approach for the Parish provides a baseline set of activities that can be undertaken in each neighbourhood and a common set of variables that can be measured as indicators of progress.

- 7.4. The Parish already supports existing local initiatives that focus on specific species, or actions. Examples of such support includes activity for Bees' Needs week, and the supply of wildflower mixes during Parish events.
- 7.5. Wider Parish commitments, either through activities undertaken by the Parish staff or requirements for contractors working on Parish ground include:
- not using chemicals, herbicides, pesticides, or other harmful materials,
 - composting or reusing materials,
 - responding to suggestions for tree planting, wildflower planting, installation of bird and bat boxes, and,
 - working with those suggesting ideas to deliver them.
- 7.6. The Parish will continue to include the commitments included in paragraphs 7.4 and 7.5 on a responsive basis outside of the neighbourhood approach.
- 7.7. Additional potential commitments that could be included within the Parish approach include:
- requiring suppliers of plants and trees for the Parish to have been grown using peat-free compost,
 - investigating, and if suitable, promoting the use of alternative biodegradable tree guards. Details for current research may be found in section 9 of this document.
- 7.8. A further four Parish wide initiatives relate to connected corridors for wildlife. These corridors run throughout the LNAP area and form a structure for other activities within the Parish and Neighbourhood approaches. These initiatives are given below.
- Connecting Corridors: Gardens – A SGC initiative focused on the gardens of private residences. The initiative encourages people to think about how private gardens can contribute to connecting corridors. It builds upon experience such as the Bedminster Back Gardens project which worked with local schools, and other examples being undertaken by regional branches of the Wildlife Trust, to encourage residents to think about how groups of gardens can provide crucial wildlife corridors. The aim of the initiative is to encourage more residents to take part, and to think about the connections between gardens. Other initiatives that focus on specific species or actions, as referenced in paragraph 7.4, such as hedgehog highways, pollinator planting, tree and shrub support, pesticide free promotions, no mow and no tidying for winter projects will provide additional contributions. DPC is aware that many residents are taking action in the way they manage their gardens; incorporating the SGC initiative can provide additional help and guidance for residents, that might, for example, consist of a mixture of physical talks,

library displays, leaflets and e-leaflets.

- Connecting Corridors: Green Spaces - A SGC smaller green spaces initiative. This initiative will establish a clear, simple and quick process by which groups of residents can take over and enhance South Gloucestershire open spaces close to them – whether as community gardens, community allotments or biodiversity areas – providing the advice and support people need. Some residents have open spaces licences already and are improving stretches for nature. DPC has identified other key stretches of open space land that will be valuable for inclusion.
- Green Ring – an initiative with neighbouring parishes to designate and enhance a green ring around the built-up area for biodiversity so that wildlife can move around and into the town at key points. Once created and mapped the aspiration is to enhance accessibility and interpretation opportunities.
- Road Verges for Wildlife – SGC is in the process of investigating how it will better manage its road verges for wildlife. DPC has already raised individual additional highways planting opportunities requested by residents with SGC and will push to be a pilot area for the project.

7.9. An additional approach that the Parish may incorporate as part of its regular activities would be to use its input into the planning process to influence decisions for planning applications, with the aim of preserving and giving priority to habitats. The LNAP, alongside working with the Wildlife Trusts and other organisations to identify those areas that would generate the greatest co-benefits, provides an opportunity to increase the weighting of this factor during the planning process.

7.10. Neighbourhood Approach

The DPC LNAP has adopted an approach based on neighbourhood zones over an ownership-based approach. This is because the movement and protection of wildlife, and the protection and enhancement of habitats within a geographical or landscape level area, crosses many ownership boundaries. While it's recognised that the activity is cross-cutting, the splitting of the Parish into neighbourhoods is done for the purposes of providing a focus for activity over an 8-year basis. This also supports the wider monitoring activities covered in paragraph 7.3.

7.11. The neighbourhoods are based on the human communities already in place. This choice was made to maximise the opportunities for engagement based on these geographical communities, with recognition that some communities of interest or the need for certain species expertise will be cross-boundary. In practice, this means that while DPC may hold an engagement session with one neighbourhood on hedgehogs, for example, the local hedgehog group would be asked to advise across all neighbourhoods.

7.12. It is further recognised that species do not have the same perception of space and that significant habitats may exist at the neighbourhood zone borders, however human geographical communities have been chosen for two reasons:

- to strengthen the importance of engagement and interpretation in the local context, and,
- to strengthen the importance of building community engagement to deliver the proposed connecting corridors part of the programme.

7.13. Within each neighbourhood, the core group will work with residents and interest groups to develop the action plans for the respective neighbourhood. The action plan will be refreshed

after 4 years within the overall 8-year cycle. This allows for any future need to adjust the timelines for better synergies with new national or county council level initiatives, as well as provide time for the work within the action plan, which may need to be spread over a number of years depending on the initiative, to be implemented.

7.14. Work on each neighbourhood is proposed to start with checklist site surveys and preparing a matrix of interested people/ stakeholders – residents, users, landowners and wildlife groups. The core group will then investigate what can be done on SGC and other third-party land to develop the corridors which are crucial to linking up the green spaces to facilitate natural movement of wildlife and the opportunities on key sites, before bringing the gathered information together to develop the action plan for the neighbourhood.

7.15. Each ‘Neighbourhood Action Plan’ project will set out the actions, timelines, funding and the role of stakeholders. Each project will:

- develop a map of existing/known features, including ecological information, designations and initiatives,
- bring together stakeholders to identify opportunities for actions or areas,
- identify the role of verges, green space corridors and gardens in connecting the areas,
- consider a checklist of species, habitats and opportunities,
- identify core area initiatives/proposals,
- secure landowner consents where necessary,
- consult the wider public,
- identify required resources,
- draw up the implementation plan, including responsibilities,
- prepare progress reports as appropriate.

7.16. **Implementation Phases and Neighbourhoods**

The implementation of programmes of work usually occurs over a series of stages to manage resources, evaluate activity and apply the learning from previous activities to later stages. For the purposes of the DPC LNAP, these stages are called phases, and the choice of order is based around both the neighbourhood and the level of influence DPC has for the land within a neighbourhood. In practice, this means that areas of DPC owned or controlled land is generally targeted first for initiating actions within a neighbourhood, with wider neighbourhood activity following. Furthermore, the first phase of the programme will focus on DPC owned land, where more detailed information is already available, allowing for quicker progress, earlier.

7.17. The precise order of later phases will depend on funding and other opportunities, to maximise impact. The phasing has been developed from looking at the ecological and community opportunities, and it broadly adopts the approach of doing areas next to each other in turn so that connections can be made. The precise neighbourhood boundaries may be adjusted as each phase commences should this prove beneficial.

7.18. Each phase will be looking at species, wildlife, habitat opportunities, interpretation and engagement opportunities, food supplies, problems such as light pollution, water course vulnerability and the sustainability of proposals.

7.19. The phases, as associated with the respective neighbourhoods and supporting reasoning, are

proposed as:

- Phase 1: Dodington Parish Council owned or leased land – DPC already has more detailed information for this neighbourhood and has the highest level of influence over activities that can take place.
- Phase 2: Dodington North-West Ward – this neighbourhood covers the Parish ward where work by South Gloucestershire for tree removal and replanting to manage Ash Dieback disease will be completed first. Considerable amounts of land, owned by South Gloucestershire, is included within this neighbourhood.
- Phase 3: Dodington North-East Ward – this neighbourhood covers the second Parish ward where work by South Gloucestershire for tree removal and replanting to manage Ash Dieback disease is due to be completed. A practical amount of land, owned by South Gloucestershire, is included within this neighbourhood.
- Phase 4: South Ward – this neighbourhood can be considered as the most complex due to the size of the area in question and the level of influence over the land within the area. This neighbourhood has the least amount of DPC owned or controlled, and South Gloucestershire owned land, within the boundary, meaning action will need to be co-ordinated across a greater range of stakeholders. Due to the complexity and greater challenge in co-ordinating action, it may be beneficial to divide the region into sub-neighbourhoods following assessment of earlier phases.

7.20. There will be project updates provided during the progress of each Neighbourhood Action Plan to monitor impact. Preparations for the refresh for each plan, including identifying future needs, and incorporating learning from the phases, will begin after 3 years to ensure the plan is refreshed for the fourth year.

7.21. The LNAP programme is a guide to drive forward action. It is recognised that the availability of resources, from volunteers and project team members, to funding, will change over time. If projects need to be extended into other years, this is not a failure, it is adaptation to acknowledge resource availability. Conversely, some years may experience an abundance of resource, allowing initiatives within the action plan to be bought forward or sped up.

8. Toolkit for Possible Initiatives

8.1. To support both the activities within paragraph 7.15 and the initiatives that may be put forward within the Neighbourhood Action Plans that will be developed, this section of the LNAP provides a toolkit for use by the project team and stakeholders. This toolkit can be added to as the work develops and lessons are learned about which initiatives work best for the local area.

8.2. Mapping.

In initially reviewing an area, it is recommended that the project team uses an aerial view such as through Google Maps, to look not just at the immediate area but also the surround area to gauge land use and possible connecting corridors.

Available Mapping Tools:

- Google My Maps
- Defra MAGIC Map
- iTree Canopy

- ArcGIS (Paid Service)

Mapping Tasks:

- Identification of existing, and potential, connecting corridors.
- Identification of areas for enhancement.
- Identification of key stakeholders within the Neighbourhood Action Plan boundary.
- Overlaying of ownership onto the map
- Overlaying of Rights of Way, or gaps, onto the map.

8.3. Surveying.

Once an initial visual map has been prepared for the neighbourhood action plan, a survey of sites ought to be conducted to build up an on the ground picture. While including stakeholders at all stages is useful, including local groups at this stage can be particularly valuable for the knowledge and resources that can be shared for common purposes. The South Gloucestershire Council's 'Local Nature Action Plan Field Guide' is useful for generating initial ideas and is included within section 9 of this document; further possible ideas are given below.

Surveying Tasks:

- Cross checking of species lists from existing management plans; creation of an anticipated species list where one does not already exist.
- Monitoring of species. Usage of the iNaturalist tool to support identification and encouraging residents to send in photos can be combined with other 'Bioblitz' events.
- Installation of trap cameras
- Reviewing data held by the Bristol Regional Environment Records Centre (BRERC).
- Transect and quadrant monitoring

8.4. Stakeholder Involvement.

Including stakeholders at all phases, to foster collaboration and develop the innate reasoning that exists within communities and groups, is a key activity for both developing and implementing local nature action plans. Possible actions for increasing engagement and sharing resources between local groups are given below.

Stakeholder Engagement Activities:

- Social media campaigns
- Leaflet drops within neighbourhood zones
- Events/ talks with other local organisations, including local ecological groups.
- Events/ talks at schools within the neighbourhood zones
- School Citizen Assemblies

8.5. Planning Applications.

Action of a more strategic nature can be taken by both DPC and residents when preparing comments on local planning applications.

Application Input:

- Encouraging the application process to consider incorporating wildlife features, such as bee bricks or swift nesting bricks, into new builds, renovations or refurbishments.

- Encouraging, or actively supporting, planning applications that include eco-architecture building innovations, such as green bus shelter roofs, moss walls, or natural flood management solutions.
- Encouraging, or actively supporting, applications with more green spaces, or that have shown consideration of wildlife corridors and species planning.
- Discouraging the use of 'fake grass' by providing information on alternative species that grow more slowly and low to the ground, in recognition that for some residents the choice is related to other factors such as disability limitations.

8.6. Practical Activities and Tasks.

A large amount of practical work is already being carried out on DPC's own properties, including:

- Continued ash dieback tree surgery and replanting work.
- Existing management of Dodington Parish Council's properties.
- Work specified in the existing Wapley Bushes Local Nature Reserve Management Plan.
- Other Wapley Bushes Local Nature Reserve projects.
- Wapley Wellbeing Area.
- Activities included in the management plans for Lilliput Park and for Wapley Churchyard and Burial Ground.

Other possible activities that have been identified from sources contained in section 9, include:

- Fauna specific activities – actions orientated around cornerstone, protected, or target fauna species, such as hedging for nesting birds, planting for pollinators, bird and bat boxes, bug hotels, amphibian and insect log piles, or a hedgehog recovery programme – hedgehog homes, holes in fences, log piles.
- Flora specific activities - actions orientated around cornerstone, protected, or target flora species such as tree planting, wildflower planting, strip orchards, hedge planting or grassland management.
- Landscape specific activities – actions orientated around cornerstone, protected, or target landscapes, including green screens between development and transport corridors, conservation grazing as a means to manage land, development of new land management plans, building ponds or scrapes for natural flood management, considering the movement of animals after dark.
- Community based activities – actions orientated around areas of community interest, such as litter picking, reducing food waste, securing more land or implementing a Town/ Parish arboretum.
- Socially based activities – actions orientated around social leverage points, such as encouraging wild gardening, connecting with nature, improving access for nature, discouraging the use of pesticides, or taking part in initiatives such as green pledges, no mow may, plastic free July, refill revolution, hedgerow heroes, or eco-themed holidays.
- Business based activities – actions orientated around influencing business decisions, such as encouraging sustainable food production, or supporting businesses that meet higher environmental, social, governance or circular economy standards.

8.7. Events and Information.

Events are a useful means of organising a greater amount of action, and sharing a larger amount of knowledge, in a shorter space of time.

- Events – possible events could include a 'Bioblitz' (where as many species as possible are found and identified during a timed event) in a new neighbourhood, Nature Treasure

Hunts within a new neighbourhood, or guided/species specific events at local green spaces. Local conservation groups already hold similar events, such as owl prowls at Wapley bushes. Such events will of course act as a mechanism to share information.

- Information – DPC already has several channels for sharing information, including its meetings, information boards around the parish, twice yearly newsletter and its website; these channels can be utilised for the sharing of information for the LNAP.

8.8. Examples from other organisations

There are a wide range of other organisations that the DPC LNAP can also look to for inspiration, including:

- Emersons Green – runs an ‘Earthfest’ festival over a month; also created a community nature reserve through emailing its residents to set aside areas of gardens.
- Knutsford Town Council – has implemented a range of ideas, including annual bulb planting, writing to planning applicants to encourage replacement planting, and a ‘Plant a tree for every resident – some by us, some by you’ scheme.
- Thornbury Town Council – operates a points scheme which needs further investigation.

The commonality between many of the initiatives is the aim of encouraging greater participation by local residents.

9. Useful Online Links

9.1. This section of the LNAP includes the links to various organisations and resources that have been referred to throughout this document for quick reference.

9.2. The links are included in alphabetical order:

- Bioblitz examples: National Geographic – <https://www.nationalgeographic.org/projects/bioblitz/>; RSPB – <https://www.rspb.org.uk/helping-nature/what-you-can-do/activities/bioblitz>.
- Bristol Regional Environment Records Centre (BRERC): <https://recording.brerc.org.uk/>.
- Forest of Avon Community Forest – <https://forestofavontrust.org>.
- Frampton Cotterell Parish Council: Ecology Report – <https://tinyurl.com/ecologicalFC>; Species List – <https://tinyurl.com/specieslists>.
- Google My Maps: Dodington LNAP – <https://www.google.com/maps/d/edit?mid=1T5OQihOPoBVZmPOwgyD0TGHyiwmpLrc&usp=sharing>.
- Google My Maps – <https://mymaps.google.com>.
- Historic Maps – <https://maps.nls.uk/geo/explore/side-by-side>.
- iNaturalist – <https://www.inaturalist.org/>.
- Innovative Citizen Participation – <https://www.oecd.org/en/topics/sub-issues/open-government-and-citizen-participation/innovative-public-participation.html>.
- i-Tree: Canopy tool – <https://canopy.itreetools.org/>; general tool – <https://www.itreetools.org/>.
- Knutsford Parish Council - <https://www.knutsfordtowncouncil.gov.uk/natureactionplan>.
- Liberating Structures Workshop Tools – <https://www.liberatingstructures.com/>.
- MAGIC Habitat Inventory – <https://magic.defra.gov.uk>.
- Open Policy Making Toolkit – <https://www.gov.uk/guidance/open-policy-making-toolkit>.

- School Citizens Assemblies – <https://schoolcitizenassemblies.org/>.
- South Gloucestershire: Local Nature Action Plan Guidance – <https://beta.southglos.gov.uk/wp-content/uploads/Local-Nature-Action-Plans-guidance-for-town-and-parish-councils.pdf>; Tree Asset Management Plan – <https://www.southglos.gov.uk/environment-and-planning/conservation/trees-and-hedges/tree-asset-management-plan/>.
- Woodland Trust – <https://www.woodlandtrust.org.uk/about-us/what-we-do/research-and-evidence/plastic-tree-guards/>.

9.3. DPC Google My Maps LNAP Map Layers

The DPC LNAP map includes several layers for reference. Other layers can be added if needed, such as Habitat Map, Opportunities for Nature, Climate Opportunities, etc. The current map view includes the following layers:

- Layer 1: Dodington LNAP boundary.
- Layer 2: Parish Ward Boundaries.
- Layer 3: Parish Properties.
- Layer 4: Third Party land – Housing Association, Businesses, Railway.
- Layer 5: Designated and Protected Local Green Spaces.
- Layer 6: Water features.

10. Acknowledgements

10.1. In preparing this document, DPC has worked alongside many other organisations. This section is prepared with grateful thanks to everyone who has contributed to the plan and commented on the drafts. Specific thanks are given to:

- Yate Town Council for sharing its draft local nature action plan.
- South Gloucestershire Council for its local nature action plan guidance and field guide.
- Tytherington Parish Council for its local nature action plan.
- Frampton Cotterell Parish Council for its local climate and nature action plan.
- Emersons Green Town Council for its climate emergency action plan.
- Sodbury Town Council for its climate and local nature action plans.

11. Glossary

11.1. Many acronyms and technical terms are used throughout this document. This section provides further explanations and will be updated as the document develops.

- Biodiversity: The variety of plant and animal life in a particular habitat or the world as a whole.
- Carbon Footprint: The total amount of greenhouse gases produced directly and indirectly by human activities, typically measured in metric tons of carbon dioxide.
- Conservation: The protection and preservation of natural environments and resources.
- DPC: Dodington Parish Council
- Ecosystem: A community of living organisms and their physical environment, interacting as a system.
- Greenhouse Effect: The process by which radiation from a planet's atmosphere warms the planet's surface to a temperature above what it would be without this atmosphere.
- LNAP: Local Nature Action Plan
- Pollution: The introduction of harmful substances or products into the environment, causing adverse effects.
- Renewable Energy: Energy from natural sources that are replenished at a faster rate than they are consumed, such as solar, wind, and hydro power.
- Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

12. Appendices

Appendix 1: South Gloucestershire Managed Land Screenshots

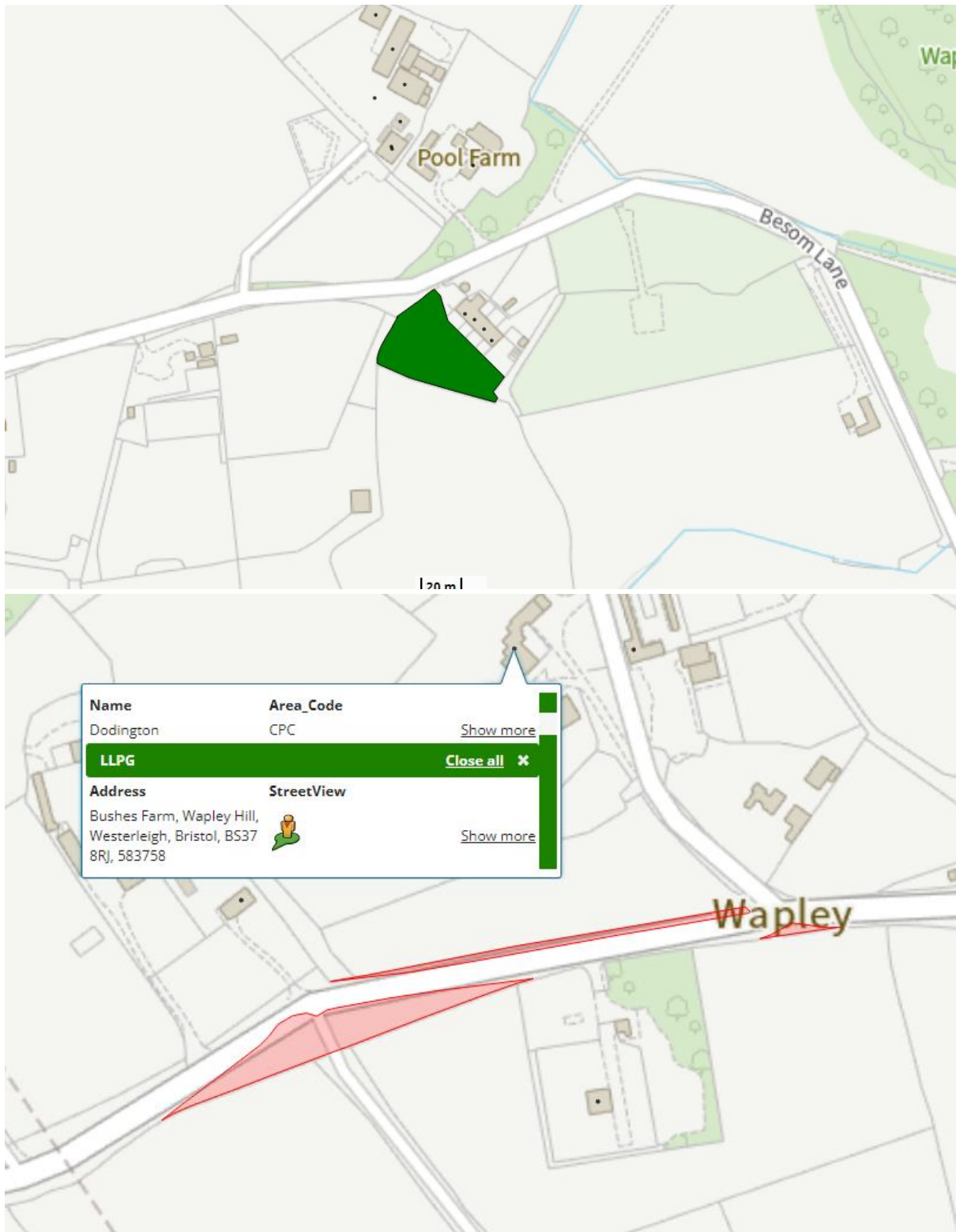
North-West Ward



North-East Ward



South Ward



Appendix 2: Tree Cover

A survey carried out using the i-Tree Canopy online tool, based on 500 random data points, estimates the tree cover within Dodington Parish as 17.4%, with an accuracy of +/- 1.7%.

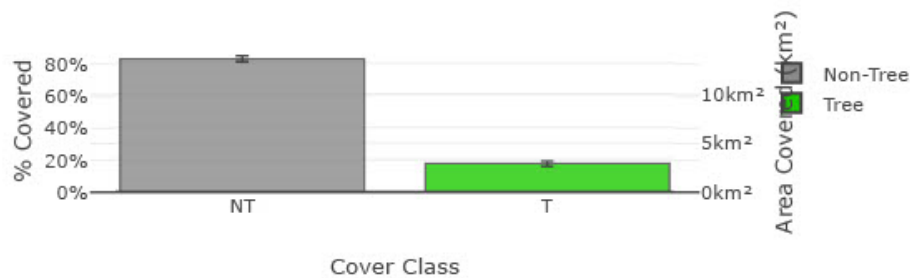
i-Tree Canopy v7.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 1/14/2022



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (km ²) ± SE
NT	Non-Tree	All other surfaces	413	82.60 ± 1.70	13.56 ± 0.28
T	Tree	Tree, non-shrub	87	17.40 ± 1.70	2.86 ± 0.28
Total			500	100.00	16.42

Tree Benefit Estimates: Carbon (Metric units)

Description	Carbon (t)	±SE	CO ₂ Equiv. (t)	±SE	Value (GBP)	±SE
Sequestered annually in trees	874.27	±85.19	3,205.64	±312.35	£221,189	±21,552
Stored in trees (Note: this benefit is not an annual rate)	21,956.11	±2,139.37	80,505.74	±7,844.35	£5,554,896	±541,260

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 306.000 t of Carbon, or 1122.000 t of CO₂, per km²/yr and rounded. Amount stored is based on 7684.808 t of Carbon, or 28177.630 t of CO₂, per km² and rounded. Value (GBP) is based on £253.00/t of Carbon, or £69.00/t of CO₂ and rounded. (Metric units: t = tonnes, metric tons, km² = square kilometers)

Tree Benefit Estimates: Air Pollution (Metric units)

Abbr.	Description	Amount (kg)	±SE	Value (GBP)	±SE
CO	Carbon Monoxide removed annually	423.08	±41.22	£405	±39
NO2	Nitrogen Dioxide removed annually	8,757.73	±853.34	£1,646	±160
O3	Ozone removed annually	29,438.43	±2,868.43	£27,323	±2,662
SO2	Sulfur Dioxide removed annually	1,155.95	±112.63	£75	±7
PM2.5	Particulate Matter less than 2.5 microns removed annually	1,488.88	±145.07	£45,641	±4,447
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	5,943.52	±579.13	£200,374	±19,524
Total		47,207.59	±4,599.83	£275,464	±26,841

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in kg/km²/yr @ £/kg/yr and rounded:

CO 148.082 @ £0.96 | NO2 3,065.275 @ £0.19 | O3 10,303.677 @ £0.93 | SO2 404.591 @ £0.06 | PM2.5 521.119 @ £30.65 | PM10* 2,080.278 @ £33.71 (Metric units: kg = kilograms, km² = square kilometers)

Tree Benefit Estimates: Hydrological (Metric units)

Abbr.	Benefit	Amount (kl)	±SE	Value (GBP)	±SE
AVRO	Avoided Runoff	46,019.30	±4,484.05	£71,325	±6,950
E	Evaporation	311,421.71	±30,344.45	N/A	N/A
I	Interception	312,884.17	±30,486.95	N/A	N/A
T	Transpiration	2.45	±0.24	N/A	N/A
PE	Potential Evaporation	2,030,949.14	±197,892.55	N/A	N/A
PET	Potential Evapotranspiration	1,561,593.40	±152,159.25	N/A	N/A

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in kl/km²/yr @ £/kl/yr and rounded:

AVRO 16,107.111 @ £1.55 | E 109,000.007 @ N/A | I 109,511.880 @ N/A | T 0.857 @ N/A | PE 710,847.907 @ N/A | PET 546,569.768 @ N/A (Metric units: kl = kiloliters, km² = square kilometers)

About i-Tree Canopy

The concept and prototype of this program were developed by David J. Nowak, Jeffery T. Walton, and Eric J. Greenfield (USDA Forest Service). The current version of this program was developed and adapted to i-Tree by David Ellingsworth, Mike Binkley, and Scott Maco (The Davey Tree Expert Company)

Limitations of i-Tree Canopy

The accuracy of the analysis depends upon the ability of the user to correctly classify each point into its correct class. As the number of points increase, the precision of the estimate will increase as the standard error of the estimate will decrease. If too few points are classified, the standard error will be too high to have any real certainty of the estimate.

Appendix 3: Flood Risk

Relevant maps are available from South Gloucestershire Council's consultation on their Local Flood Risk Management Strategy 2022-27

<https://consultations.southglos.gov.uk/FloodriskStrat/consultationHome>

The relevant documents are:

Catchment 1 - River Frome (source to confluence Laddon Brook)

Catchment 10 - River Boyd (source to confluence River Avon)

These documents each have maps of:

- Historic flood risk
- Surface water flood risk (possibly the most useful for LNAP)
- Working with Natural Processes

Note that AEP stands for Annual Exceedance Probability or AEP. For example a 0.2 AEP flood has a 20% chance of occurring in any given year, and this corresponds to a 5-year recurrence-interval flood.

The maps cannot be reproduced here for reasons of copyright.

Appendix 4: Hedges and Small Plantings maintained by DPC on South Glos Council land

Mallard Close, Chipping Sodbury (near no 25)
Tern Inn Hedge, Chipping Sodbury
Goldcrest Road, Chipping Sodbury (near no 64)
Goldcrest Play Area hedge, Chipping Sodbury
Lilliput Park shrub bank, Chipping Sodbury
Blaisdon, Yate (near no 51)
Blaisdon, Yate (hedge near no 170)
Blaisdon, Yate - pyracantha (near no 184)
Blaisdon, Yate – escallonia (near no 177)
Maisemore, Yate – pyracantha (by electric sub-station)
Maisemore, Yate – (shrub bed by no 134)
Kingscote, Yate – (shrub bed by no 100)
Shire Way, Yate – (shrub beds before Badgeworth)
Badgeworth Shops, Yate – native hedge
Badgeworth Shops, Yate – escallonia hedge
Brockworth, Yate – substation hedge (off road, right after Edgeworth)
Rodborough, Yate – (hedge near no 15/16)
Witcombe, Yate – (hedges near no 39, 295 & 148)
Witcombe, Yate – (by sub-station near no 183)
QEII Playing Fields gateways, Kelston Close, Yate
Parish signs – (Kennedy Way, Scott Way, Shire Way A432)
Harescombe, Yate – (near no 125-128)
Parish Council Office, Finch Road - border
Planters located on B4465 (4)