Dodington Parish Local Nature Action Plan v6

This document is based on the structure of Yate Town Council's LNAP and incorporates some content from a range of others.

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 (under preparation)

INDEX TO LOCAL NATURE ACTION PLAN

SECTIONS

ONLINE MAPS - Layers on Google My Maps

Various other layers can be added if needed, such as Habitat Map, Opportunities for Nature etc, Climate Opportunities? (as on Frampton Cotterell map https://tinyurl.com/FCmapping)

APPENDICES

1. INTRODUCTION

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.

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)

Please note: all the maps referred to, apart from those in the appendices can be found on Google My Maps at:
https://www.google.com/maps/d/edit?mid=1T5OQihOPoBVZmPOwgyD0TGHyiwmqpLrc&usp=sharing

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
- **MAKE NATURE RELEVANT** 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.

This document aims to pull together key sources and information and suggest an approach to achieving these goals.

2. PARTNERSHIP: DOING IT TOGETHER

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.

2.1 Stakeholders

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:

	Role	Contact
Dodington Parish Council	Coordinator, seeking funding, committee structure	01454 866546 clerk@dodingtonpc.org.uk
South Gloucestershire Council	Guidance and specialist advice Action on SGC land	Commons and Biodiversity Manager nature@southglos.gov.uk Streetcare
Action Groups	Ideas, feedback, volunteers, work, surveys, ongoing site support	These include existing wildlife and Friends groups, residents groups and residents we will bring together into local working groups as the plan progresses.

Stakeholders

- Local wildlife groups
    - Wapley Bushes Conservation Group
    - Avon Wildlife Trust Southwold Group
- Digital communities including:
    - Sustainable Sodbury and Yate
    - Climate Action Yate and Sodbury
    - Sodbury and Yate Clean Up
- Friends Groups for specific areas including:
    - Dodington Allotments Association
    - Abbotswood Action Group
- Other Site Users/ affected residents
- Residents Groups

- Landowners
- Businesses and public sector bodies owning buildings
- Schools
- Local Organisations who are not wildlife focused - including youth, church, heritage, arts, sports and culture.
- Individual Residents – via social media, noticeboards and newsletters Parish Facebook Page
- Parish Councillors and Staff
- South Gloucestershire Councillors
- SGC Biodiversity Officer

2.2 Stakeholder interest grid

Wherever people start in this grid, we hope more and more people will become interested and want to work with the groups who will be at the centre of taking this forward.

<table>
<tr><td rowspan="4">POWER</td><td>High</td><td>Gather input and keep satisfied
Site User
Residents
Digital Communities
Residents Groups
Youth groups/ schools</td><td>Work closely with
Wildlife Groups
Friends Groups
Town Council
South Gloucestershire Street Care
Neighbouring Parishes on joint issues</td></tr>
<tr><td>Low</td><td>Monitor
Land/ large building owners/employers
Schools as landowners
Other Local Organisations</td><td>Keep informed
South Gloucestershire Councillors
SGC Biodiversity Officer</td></tr>
<tr><td></td><td>Low</td><td>High</td></tr>
<tr><td></td><td colspan="2">INTEREST</td></tr>
</table>

2.3 Communication plan

Communication Plan				
Stakeholder	Objectives	Message	Delivery method	Timeline
Parish Councillors / staff	Support action for nature on all PC grounds and help us to engage with all residents and businesses	Reinforce current commitment	Council has agreed LNAP commitment Information to go on PC website Progress reports Budget discussions	End of 2021 Update reports from LNAP group to Climate Emergency Working Group
South Glos Ward Councillors	General support for project Gain access to Member Awarded Funding Active support from Councillors in target neighbourhoods	Sales pitch – explanation of support needed, type of resource, type of actions proposed, importance of this work	Progress reports	End of 2022 Update reports from LNAP group
SGC Biodiversity Officer	General support for project Access to SGC knowledge/ expertise bank	Completed LNAP proposals	Draft LNAP Signed off LNAP Progress reports	(Month) 2022 (Month) 2022 6 monthly (nature@southglos.gov.uk)

Friends and interest groups	General support for project Advice, information and help	Sales pitch – explanation of plan, feedback so plan can be revised, and levels of support needed Consultation on approach	Presentation to groups and feedback Social media contacts	Initial consultation resolved by (Month) 2022. Ongoing

There will be specific communication requirements for each geographical phase and parish wide initiative.

3. Land Ownership

3.1 Dodington Parish Council

DPC controlled (owned, leased or licensed) (HIGH Influence). The map showing these sites is on Google Maps layer 3. Sites in Appendix 1 are shown red for DPC ownership and blue for leased/licensed sites.

Site Name	DPC Owned	DPC Leased or Licensed from SGC	Reference on Google My Maps layer 3
Wapley Bushes	Owned		6
St Peters Churchyard and Burial Ground	Closed Churchyard managed Burial Ground owned		9
DPC Allotments Site 2	Owned		8
QE2 Kelston Close Playing Field and Memorial Garden	Owned		5
Woodchester Park		Leased	4
Lilliput Park		Leased	1
DPC Allotments Site 1		Leased	7
Parish Hall grounds		Leased	2
Goldcrest Park		License under negotiation	3
Numerous small plantings and hedges		Licensed	See Appendix 4

3.2 South Gloucestershire Council Owned (High Influence)

South Gloucestershire Council owned sites (HIGH Influence). The map showing these sites is not on Google Maps - a copy of it is attached at Appendix 1

Participation by South Gloucestershire as a key landowner is crucial to the delivery of networked wildlife improvements in the urban area. In addition there are South Gloucestershire Highway Verges for which we do not have detailed maps. There is not always a clear rationale for the differences, and they range from very small slithers to significant areas or significant connectors.

Key sites are as follows. As well as appearing in Appendix 1, many of them are also Designated Local Green Spaces and shown on layer 5 of Google My Maps, supported by details under the South Gloucestershire Local Plan section on pages 16 to 17.

Site Name	Nature
2. Wapley Rank, Orchard	Historic orchard with modern additional modern fruit tree planting
3. Dodington Allotment site 1	Allotments with mature hedges. Leased to Dodington Parish Council.
4. Green space in front of 57 - 63 Chedworth	Open grassland
5. Green space between Witcombe/Brockworth, Yate	Open grassland with individual mature trees
6. Poco Strip (Ashtrack)	Mature strip woodland and scrub. Track of former sidings, returned to nature when Slimbridge Close was built (1990?) - an excellent example of natural regeneration.
7. Woodchester Park and play area, Yate	Play area and grassland with individual trees and short lengths of hedge. Leased to Dodington Parish Council.
9. Merlin Way "Tump", Chipping Sodbury	Grassland with some mature hedges. Modern tree planting.

10. Goldcrest Park and play area, Chipping Sodbury	Play area with grassland. Mature hedge on railway line edge. Leased to Dodington Parish Council.
11. Lilliput Park and play area, Chipping Sodbury	Recreation grassland, streams, mature hedges, strip woodlands. Leased to Dodington Parish Council.
12. Mallard Close, Chipping Sodbury/Elswick Park, Yate open space	Open grassland
Verges alongside Robin Way allotments Chipping Sodbury	Grass strips
Dodington Parish Hall grounds	Garden strips around parish hall. Leased to Dodington Parish Council.
Numerous small plantings	Decorative shrubberies - Dodington Parish Council managed, licensed from S Glos – see Appendix 4.
School fields	Largely in active use for sports, but smaller areas may afford biodiversity opportunities - planting opportunities alongside the sports uses, and good chance for educational work
Open spaces along footways and pavements	Mainly grassland with individual trees
Highway verges	Mainly grassland with individual trees
Goldcrest bank	Large sloping grassland and shrub area
Goldcrest / Slimbridge Close	Large linear shrub area
Embankment between the Birds and Kennedy Way	Open grassland, part sloping

There are also many “green corridors” of South Glos land connecting larger open spaces in the North West and North East Wards.

The role of amenity grassland - South Gloucestershire Council has been leaving parts of some verges to become more wild 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 wild flowers 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

Specific area management plans 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.

However 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 said wildlife 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 circumstance concerned but situations do need to improve now to avoid habitat degradation in the longer term.

Bats and bat boxes – the best approach for these is to carry out summer bat surveys with specialist experts who can tell precisely what bat species are present at the site concerned. Then suitable and appropriate bat boxes can be provided for the bats that are actually there. Effective bat boxes that have higher bat occupancy rates are more expensive but they are the ones to get. Examples of good bat boxes can be seen here:
https://www.wildlifeservices.co.uk/bats.html

3.3 Third Party (Low Influence)

Site Name	Details	Mapping / details
Housing Association	Housing development at Kelston Close	Google My Maps layer 4
Businesses	Employers with sites that have significant wildlife boundaries / land holdings Examples: 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
Gardens	Around 2900 in the urban (NW and NE) wards and about 130 in the rural South Ward. Also areas around churches and other community buildings	Google My Maps layer 4
Robin Way allotments Chipping Sodbury	Typical "railway allotments", now in private ownership	Google My Maps layer 4
Railway	Network Rail land adjoining railway along southern boundary of urban area	Google My Maps layer 4
Rural Activities	Approximately 1480 hectares i.e., 90% of the landmass, with around 90 properties, (70 or so in rural area, and 22 at Beanwood Park Showmen's Site) Private estate at Dodington Park	Farming and other activities Some shown on Google My Maps layer 4

The Farming and Wildlife Advisory Group can provide farmers with advice about how to make their farms more wildlife-friendly whilst remaining productive farms: https://www.fwagsw.org.uk/Pages/Category/gloucestershire

It is worth pointing out that there are two landfill sites within the Parish (also on Google My Maps layer 4):

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

The lack of disturbance will have encouraged all sorts of wildlife. It is listed as a Regionally Important Geological Site. There were several Public Rights of Way across the site – need to check whether they were diverted.

Shire Way Community Association land is currently being landfilled for restoration as playing fields. This has been going on in fits and starts for many years. There is supposed to be a nature conservation area along the top of the Shire Way bank.

4. SITES DESIGNATED FOR NATURE IMPORTANCE

These identify locations that are designated externally for species or habitat reasons. See **https://magic.defra.gov.uk**. The Local Action Plan will need to recognise and adopt national advice, but is also an opportunity to consider widening designations where appropriate.

The are no internationally designated locations within the Parish boundaries.

Community Forest
The whole Parish Council area lies within the **Forest of Avon Community Forest** – see https://forestofavontrust.org

https://magic.defra.gov.uk identifies within the parish:
Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority)
Ancient Woodland
Deciduous Woodland
National Forest Inventory
Traditional Orchards
National Habitat Network
Open Mosaic Habitat
Species - Lapwing (whole area)
Species - Grey Partridge (western and eastern quarters of parish)
Countryside Stewardship Agreement Management Areas
Higher Level Stewardship Target Areas
Higher Level Stewardship Themes

Woodland Grant Scheme 2
Woodland Grant Scheme 3
Groundwater Vulnerability Map

Priority Habitats

- **Deciduous Woodlands** - Dodington Estate (Dodington Wood, Frenchpiece Wood etc), Hawkes Tyning Clump and Gorse Covert, the woodlands near the Players Golf Club, Wapley Bushes Local Nature Reserve, Bean Wood, Wychwell Farm
- **Open Mosaic Habitat** at Codrington Quarry and Shire Way Landfill Site
- **Good Quality Semi Improved Grassland** – at Church Fields, Wapley
- **Traditional Orchards** – Wapley Common, Wapley Rank, Beanwood Farm, Old Rectory, Bushes Farm, Thornton House Codrington (2), East of Chescombe Farm

Management proposals for these are set out in the UK Biodiversity Action Plan.

Species of particular national interest in this area (protected)

- The entire Parish is in area of Priority Species for targeting for lapwings
- About half of the Parish is in areas of Priority Species for targeting for Grey Partridge (western and eastern quarters of parish)

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.

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

Local nature reserves (formal and informal)

- Wapley Bushes
- Eastern part of Kingsgate Park (outside of the parish)

Mainly because of Ash Dieback 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 Wapley Bushes, Beanwood Farm and a small area in Codrington.

Other local designations and strategies

Tree cover and hedgerows:

Tree Preservation Orders apply to large parts of the parish, as a result of blanket TPOS made during development and Local Nature Reserve designation.

The **South Gloucestershire Tree Asset Management Plan** (2018) identifies that across the whole of South Gloucestershire area tree cover is low at 11% compared to the Independent Panel on Forestry's target of 15% by 2060. It sets a target of increasing tree cover by 4% - which would be the equivalent of 40 hectares per parish.

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 +/- 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 our parish's trees sequester (store away) 874 tonnes of carbon (i.e. £3,205 tonnes of CO2) - apparently this is worth £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 Tyning Clump and Gorse Covert, the woodlands near the Players Golf Club, Wapley Bushes Local Nature Reserve, Bean Wood, Wychwell Farm.

Significant tree cover is also provided by mature rural hedges, railway embankments and short stretches of motorway embankment – see https://magic.defra.gov.uk Habitat / Woodlands layers. 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.

In the North West and North East Wards – largely ignored by magic.defra.gov.uk – there are significant strip deciduous woodlands on the former railway embankments and trackbeds near Shire Way.

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.

Wildflowers:

There has been a huge 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 are significant 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.

Green Corridors:

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

Ponds:

Water is crucial to wildlife and hugely improves the biodiversity of life around it, but many of our 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.

South Gloucestershire Local Plan:

The **Adopted South Gloucestershire Local Plan: Policies, Sites and Places Plan** (2017) gives some official protection to some sites through the planning process. Appendix 10 of the PSP Plan shows the spaces which are Designated Local Green Spaces under PSP4. This does not include all local green spaces.

Some of these appeared earlier in this document as South Glos Council owned spaces, but other sites are owned or leased by Dodington Parish Council.

The history of the sites is included because it affects their current ecology and future management.

S Glos Green Space Code	Name of Space	HISTORICAL AND MAP EVIDENCE
LGSD672	1. Wapley Common , Nature Reserve and Community Orchard for the future	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	2. Wapley Rank, Orchard	Historic orchard (shown as orchard on 1882 map) associated with miners' cottages. Boundaries and boundary hedges are of similar age.
LGSD068	3. Dodington Allotment sites 1, 2 and 3 Wapley	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.
LGSD069	4. Green space in front of 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	5. Green space between Witcombe/Brockworth, Yate	Historic hedgerows along E and S boundaries, which are visible on the 1882 map.
LGSD071	6. Poco Strip	Track of former sidings, returned to nature when Slimbridge Close was built (1990?) - an excellent example of natural regeneration.

LGSD072	7. Woodchester Park and play area, Yate	E 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.
LGSD073	8. QEII Playing Fields, Kelston Close, Yate	Historic hedgerows along N, W and S boundaries, which are visible on the 1882 map.
LGSD074	9. Merlin Way "Tump", Chipping Sodbury	Eastern boundary on 1882 map; SW boundary on 1882 map, but probably few trees left; NW boundary established between 1924 and 1955, probably wartime
LGSD075	10. Goldcrest Park and play area, Chipping Sodbury	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.
LGSD076	11. Lilliput Park and play area, Chipping Sodbury	All boundaries very clear on 1882 map. Historic hedges and other natural and man-made features.
LGSD077	12. Mallard Close, Chipping Sodbury/Elswick Park, Yate open space	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.
LGSD078	13. Robin Way allotments Chipping Sodbury	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?

South Gloucestershire Biodiversity Action Plan:

The species and habitats listed in the 2016 – 2026 South Gloucestershire Biodiversity Action Plan (appendix 1) when read with the Local Plan act as a material consideration in the planning process.

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	

COMMONS and PROTECTED LOCAL GREEN SPACES

The local green spaces protected in the Local Plan are shown at Google My Maps layer 5.

Wapley Common is a local name and not a legally designated common.

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/

5. WATER FEATURES

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.

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.

The local flood risk map and surface water risk maps can be found at: https://check-long-term-flood-risk.service.gov.uk/map?easting=371247&northing=181153&map=SurfaceWater

According to these 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.

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.

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.

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.

Local water features are shown at Google My Maps layer 6:

Feature	Ownership
Robin Way stream	South Glos green area. Various, BART, SGC EA as key stakeholders. Fed from private farmland south of railway line via aqueduct at south end of stream.
Lilliput Park East-West stream	Leased by Dodington PC. Various, BART, SGC EA as key stakeholders. 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 Dodington PC. Various, BART, SGC EA as key stakeholders. Fed from Lilliput Park East – West stream and Robin Way stream. Drains towards the River Frome.
Frome tributary from Cliff Farm towards Westerleigh	Private farmland. Various, BART, SGC EA as key stakeholders. Drains towards the River Frome.
Streams on eastern edge of Wapley Bushes Local Nature Reserve and ponds within the Reserve.	Owned by Dodington PC. Various, BART, SGC, EA as key stakeholders. Draining farmland south of Wapley Bushes down to railway drains and onwards to Shire Way culverts, towards the River Frome.
Ditch on western edge of Wapley Common	Owned by Pool Farm. Drains into ditch on S edge of Wapley.
Ditch on southern edge of Wapley Common	Owned by Dodington PC. Drains towards Cliff Farm tributary and roadside verges.
River Frome	Rises on Dodington Estate, flows into Old Sodbury. Various, BART, SGC, EA as key stakeholders.
River Boyd and tributaries	Rises in Codrington. Various, BART, SGC, EA as key stakeholders. Various tributaries cross the motorway and flow south towards the River Avon.

6. Resources

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

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.

7. Proposed 8 Year Programme

7.1 Our strategy has five prongs:

- **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
- **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
- **MAKE NATURE RELEVANT** 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.

7.2 Our Neighbourhood Approach

Our approach will adopt a mix of neighbourhood and parish wide projects

Neighbourhood:

As wildlife does not know about land ownership, we have adopted a neighbourhood rather than ownership-based approach, splitting the parish into neighbourhoods for the purposes of providing a focus for activity over an 8 year basis. The neighbourhoods are based on natural human communities to maximise the opportunities for geographical community engagement, but will be cross cut by the communities of interest and expertise in particular species and habitats e,g, the hedgehog group will be asked to advise in all the zones.

We recognize that species do not have the same perception of space, and that there are potentially significant habitats at the borders of these zones.

But we have opted for human geographical communities for two reasons:

- The importance of interpretation / engagement in the local context
- The importance of building community engagement to deliver the proposed connecting corridors part of the programme.

Within each neighbourhood the core group will work with residents and interest groups to develop action plans for each zone. The work in implementing the action plan may be spread over a period of years depending upon the proposals.

7.3 Parish Wide Approaches

Whilst the neighbourhood approach forms the warp of our Plan, the weft is the Parish wide initiatives. These include:

1. **Supporting existing local initiatives** that focus on species, or specific actions. such as the Bees' Needs initiative. The Parish Council will support and promote the initiatives and encourage new ones.

2. **Parish wide Parish Council commitments**
   The Parish Council has a longstanding commitment to:
   - not using chemicals, herbicides, pesticides, or other harmful materials;
   - composting and reusing materials;
   - responding to suggestions for tree planting, wildflower planting, bird and bat boxes, hedgehog and bug hotels
   - working with those suggesting ideas to deliver them.
   These will continue on a responsive basis outside of the neighbourhood approach.
   Potential additional commitments could be:
   - to require sources of plants and trees to use peat-free compost
   - to investigate alternative biodegradable tree guards – see research being carried out by the Woodland Trust:
   https://www.woodlandtrust.org.uk/about-us/what-we-do/research-and-evidence/plastic-tree-guards/

Four new key parish wide initiatives relate to connected corridors and will run throughout the process:

- **Connecting Corridors: South Gloucestershire owned** smaller green spaces– this initiative will establish a clear, simple, quick process by which groups of

residents can take over and enhance S Glos open spaces close to them – whether as community gardens, community allotments or biodiversity areas – providing the advice and support people need as well as a simple process. Some residents have open spaces licences already and are improving stretches for nature. We have identified other key stretches of open space land that will be ideal to improve.

- SGC are in the process of investigating how they will better **manage all their road verges for wildlife**. Whilst we have already raised individual additional highways planting opportunities requested by residents with South Gloucestershire, we hope to be a pilot area for that project.

- **Connecting Corridors: The Back Gardens Project.** This initiative will encourage people to think about how their back gardens can contribute to connecting corridors. It will work with South Gloucestershire Council to build upon experience such as the Bedminster Back Gardens project, and then work through local schools to encourage residents to think about how groups of back (and front) gardens can provide crucial wildlife corridors. We have lots of individual residents who are taking action in the way they manage their gardens. The aim of this initiative is to encourage more to take part, and to think about the connections between gardens. Initiatives such as hedgehog highways, pollinator planting, tree and shrub support, pesticide free promotions, no mow and no tidying for winter projects will be part of this.

  The Back Gardens Project is a good idea as it can provide additional and useful wildlife habitat areas but residents who want to help this way will need guidance on how to do this. That might, for example, consist of a mixture of physical talks, library displays, leaflets and e-leaflets.

- **The Green Ring** – an initiative with neighbouring parishes to designate and enhance a green ring around the whole 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.

Trying to influence the planning process: the Parish Council regularly submits planning objections designed to try to preserve and give priority to habitats, working with AWT members and others. The LNAP gives an opportunity for increasing that pressure.

The aim of these town wide initiatives is to support and enhance initiatives to increase the biodiversity of green spaces and buildings that are crucial to connecting the bigger green spaces.

7.4 Phases and Neighborhoods

The phases and neighbourhoods are related to the Parish Wards and Parish Properties set out in layers 2 and 3 on Google My Maps. Each phase may consist of a number of neighbourhoods.

Phases and reasons

Phase 1 – Dodington Parish Council owned and leased land
Most detailed information available, highest level of influence

Phase 2 – Dodington North West Ward
First ward where South Glos ash dieback tree removal and replanting will be completed. Considerable amounts of South Glos land.

Phase 3 – Dodington North East Ward
Second ward where South Glos ash dieback tree removal and replanting will be completed. Useful amounts of South Glos land.

Phase 4 – Dodington South Ward Area with least influence and arguably the most complex. Least amount of South Glos land.

Larger phases may be divided into a number of neighbourhoods.

The precise order of phases will depend on funding and other opportunities, to maximise impact. The phasing has been developed 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 can be adjusted as each phase commences.

The plan anticipates that each year we will start work on another neighbourhood, starting with checklist site surveys, then developing a neighbourhood action plan with a matrix of interested people/ stakeholders– residents, users, landowners and wildlife groups. The Neighbourhood Action Plan will 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. Each Neighbourhood Action Plan will set out the actions, timelines, funding and identify the role of stakeholders. Implementation of each neighbourhood plan is likely to spread over more than one year.

There will be project updates/ refresh for each neighbourhood after 3 years, to monitor impact, identify future needs and learn from phases.

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.

The programme is a guide. The availability of volunteers and project team members 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. In some years there may be a glut of availability and resources so projects can be bought forward or speeded up.

Frampton Cotterell Parish Council's Ecology Report https://tinyurl.com/ecologicalFC is an excellent example of an ecological survey of a wide area.

Neighbourhood Approach

For each neighbourhood the project will:

- Map existing known features,
- Map designations
- Map existing initiatives
- Bring together stakeholders to identify opportunities
- Consider a checklist of species, habitats and opportunities
- Identify core area proposals
- Identify the role of verges, open space corridors and gardens in connecting those areas
- Secure landowner consents
- Consult the wider public
- Identify resources
- Draw up implementation plan including responsibilities

8. Toolkit of possible initiatives

A good first approach to an area is to look at Google Maps Aerial View – not just the immediate area to be considered but the surrounding area as well, looking at land use, connecting corridors etc,

An on-site investigation can then use South Glos Council's "Local Nature Action Plan Field Guide" to generate initial ideas.

Mapping tools

- Google My Maps
- iTree Canopy

Mapping tasks

- Identify connecting corridors – existing and potential
- Identify areas for potential enhancement
- Map land ownership
- Identify key geographical stakeholders
- Rights of Way – and gaps

Surveying tasks

- Species lists from existing management plans
- Monitor species spotted, such as on iNaturalist during bioblitz events and encourage residents to send in photos of species sightings.
  See Appendix 1 of South Glos LNAP Action Plan Guidelines
- Trap cameras
- Transects
- Bat survey iNaturalist
- BRERC

Involvement

- Interested residents recruited by social media/ leaflets
- In addition to the wide network of local ecological groups

Practical work

Lots of practical work is already being carried out on Dodington Parish Council's own properties, for example:

- 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 LNR projects
- Wapley Wellbeing Area
- Management Plans have been commissioned for Lilliput Park (in draft) and for Wapley Churchyard and Burial Ground

South Gloucestershire Council's Local Nature Action Plan Guidelines Appendix 1 https://beta.southglos.gov.uk/wp-content/uploads/Local-Nature-Action-Plans-guidance-for-town-and-parish-councils.pdf has a good list of "Ideas to get you started":

- Hedgehog recovery program – hedgehog homes, holes in fences, log piles
- Tree planting
- Nesting birds
- Green screens
- Grassland management
- Go pesticide free
- Log piles
- Litter picking
- Conservation grazing
- Town or parish arboretum

- Access for nature
- Night corridors
- More land

Other ideas:

- Pollinator planting
- Hedge planting
- Strip orchards
- Wildflower planting
- New management plans
- Birds and bats - fauna poles/towers, nest boxes
- Wild Gardening
- Connecting with Nature
- No Mow May
- Refill Revolution
- Plastic free July
- Food growing and waste
- Land management
- Greener businesses
- Eco Halloween/Bonfire
- Eco Christmas
- Local action/opportunities
- Pond or scrape creation

Events and information:

- Bioblitz (an event that focuses on finding and identifying as many species as possible in a specific area over a short period of time)
- Nature Treasure Hunt
- Walks and other current Wapley events
- Meetings
- Information Boards
- Web pages (DPC and Wapley Bushes)
- Allotment agreements

Knutsford Parish Council https://www.knutsfordtowncouncil.gov.uk/natureactionplan has some interesting ideas such as:

- "Plant a tree for every resident – some by use, some by you"
- Identify open spaces where hedges can replace fencing
- Starting writing to planning applicants to encourage tree planting / replacement planting
- Launched a Tree Planting Mission
- Organising an annual bulb planting programme
- Launching a campaign to promote hedgehog holes

- Working with landowners to create a wildlife corridors
- Identifying ponds for planting improvement schemes
- Encouraging landowners to plant trees and hedges to connect wildlife corridors

Many of these are initiatives aimed at engaging local residents.

9. Useful online links

South Gloucestershire Local Nature Action Plan Guidelines
https://beta.southglos.gov.uk/wp-content/uploads/Local-Nature-Action-Plans-guidance-for-town-and-parish-councils.pdf
For example:
Appendix 1 – Ideas to get you started, with lots of detail
Appendix 2 – More information – lots of links to detailed guides

South Gloucestershire Tree Asset Management Plan -
https://www.southglos.gov.uk/environment-and-planning/conservation/trees-and-hedges/tree-asset-management-plan/

BRERC - Welcome to BRERC Online Recording
https://recording.brerc.org.uk/

iNaturalist - A Community for Naturalists
https://www.inaturalist.org/

Bioblitz (National Geographic and RSPB)
https://www.nationalgeographic.org/projects/bioblitz/
https://www.rspb.org.uk/fun-and-learning/for-teachers/schools-wild-challenge/activities/bioblitz/

Google My Maps (general)
https://mymaps.google.com

Google My Maps (Dodington LNAP)
https://www.google.com/maps/d/edit?mid=1T5OQihOPoBVZmPOwgyD0TGHyiwmqpLrc&usp=sharing

i-Tree (general and Canopy tool)
https://www.itreetools.org/
https://canopy.itreetools.org/

iNaturalist
https://www.inaturalist.org/

Forest of Avon Community Forest
https://forestofavontrust.org

MAGIC Habitat Inventory (DEFRA)
https://magic.defra.gov.uk

Historic Maps – National Library of Scotland
https://maps.nls.uk/geo/explore/side-by-side

10. Acknowledgements

Yate Town Council

Draft Yate Local Nature Action Plan

South Gloucestershire Council

Local Nature Action Plans: Guidance for town and parish councils

Local Nature Action Plan Field Guide

Tytherington Parish Council

Tytherington Local Nature Action Plan

Frampton Cotterell Parish Council

Local Climate & Nature Action Plan - in particular see:

Species lists link: https://tinyurl.com/specieslists

Ecology report link: https://tinyurl.com/ecologicalFC

Emersons Green Town Council

Climate Emergency Action Plan

Sodbury Town Council

Climate Action Plan and Local Nature Action Plan

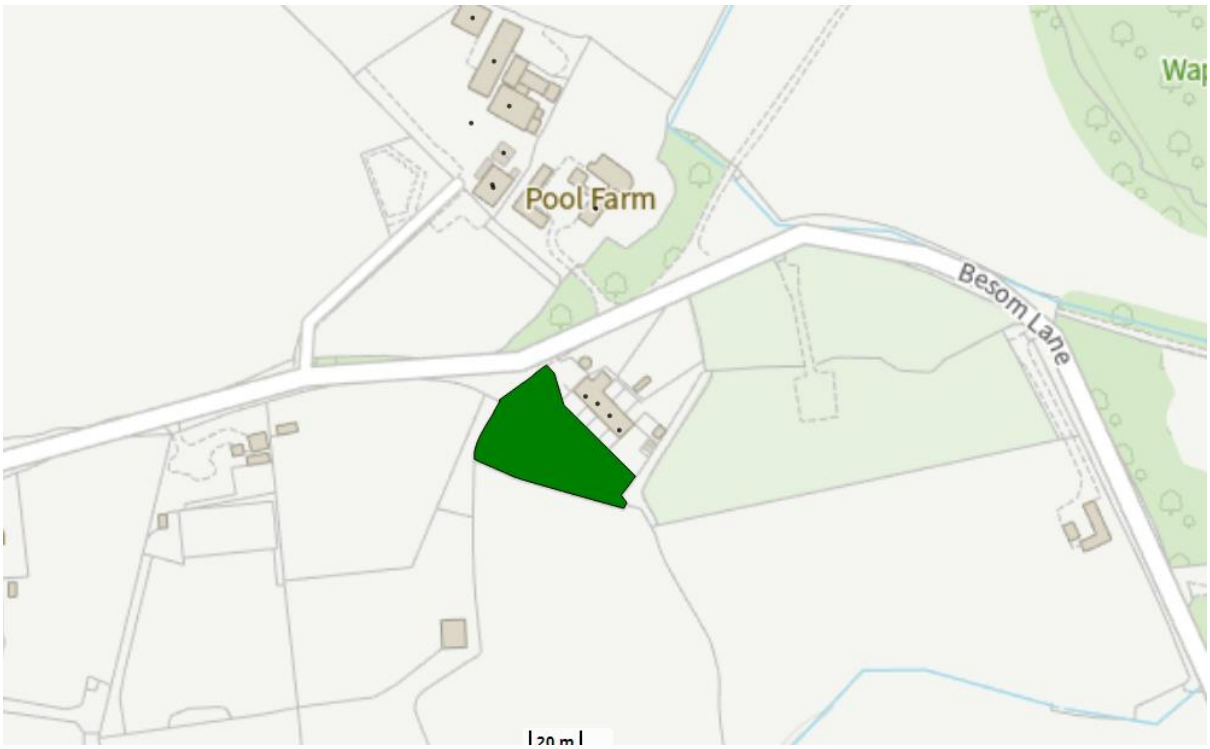
With grateful thanks to everyone who has contributed to the Plan and commented on the drafts.

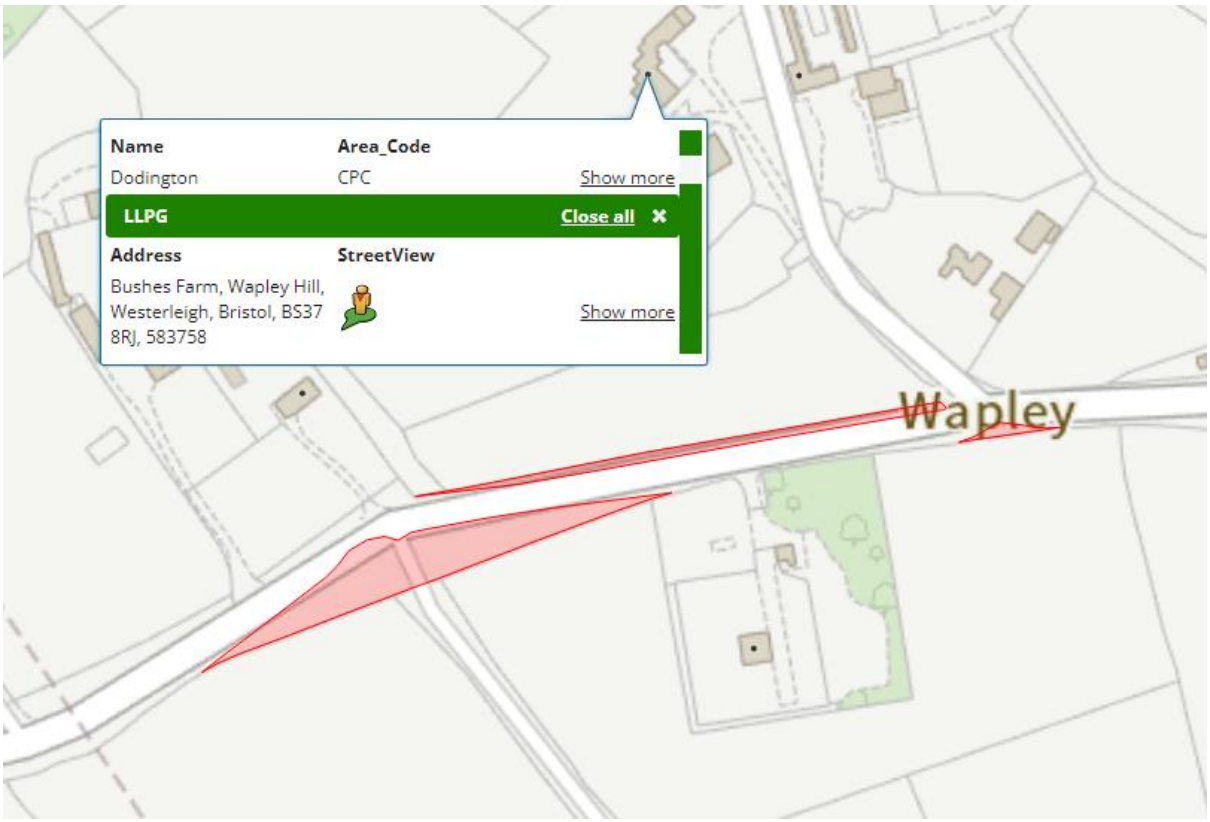
Appendix 1: South Gloucestershire Managed Land
(Note all other plans are on Google Maps)

North West Ward

North East Ward

South Ward


Pool Farm
Besom Lane


Name
Area_Code
Dodington
CPC
Show more
LLPG
Close all
Address
StreetView
Bushes Farm, Wapley Hill, Westerleigh, Bristol, BS37 8RJ, 583758
Show more
Wapley

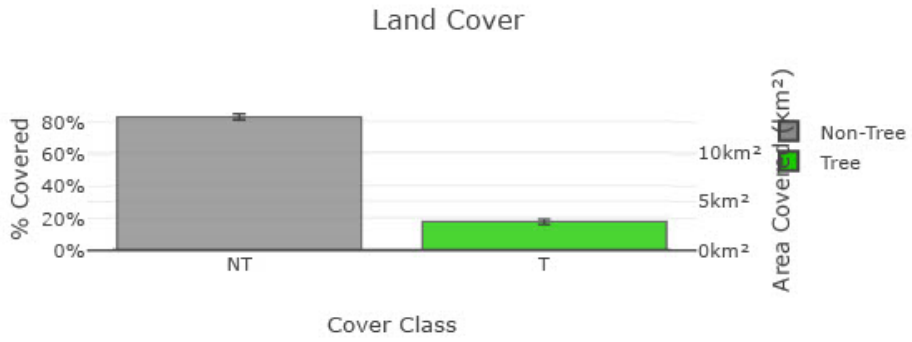
APPENDIX 2 – Tree Cover

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 +/- 1.7%).

i-Tree Canopy v7.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 1/14/2022



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (km²) ± 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 CO_2, per km²/yr and rounded. Amount stored is based on 7684.808 t of Carbon, or 28177.630 t of CO_2, per km² and rounded. Value (GBP) is based on £253.00/t of Carbon, or £69.00/t of CO_2 and rounded. (Metric units: t = tonnes, metric tons, km² = square kilometers)

1 of 2 14/01/2022, 14:05

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 Dodington Parish Council 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)