

Planting Trees for Our Future

Brighton & Hove City Council Tree Planting Strategy 2022 - 2027

Introduction and Background

This Tree Planting Strategy sets out Brighton & Hove City Council's tree planting vision for Brighton & Hove.

Residents who responded to the Open Spaces Strategy consultation in 2017 indicated that trees as the most important asset within the city's open spaces – they are arguably one of the most positive subjects which the public are strongly connected to and protective of.

It could also be argued that trees are the most valuable, cost effective and loved asset that the council manages. Trees are valued by most stakeholders and this strategy sets out a plan of action for preserving this asset. Managing this asset is extremely important, not just for the city, but also its residents, visitors and wildlife.

The successful management of a tree population is by, its very nature, a long-term process and this Strategy reflects this. The approach needs to be iterative, responding to changing environmental factors, new research and new technologies. However, it also needs to look to the long-term future of planning to preserve and expand the city's tree stock. The plan will be subject to a full review every five years.

Adoption of this plan will ensure trees gain the recognition and protection they deserve for being, both individually and collectively, highly valuable and beneficial contributors to the local environment. They provide many invisible yet crucial ecosystem services that make our city liveable e.g. creating healthy soils, cleaning our air, providing shade and cooling against the urban heat island effect and providing habitats and food source for our local wildlife populations to name just a few.

Evidence clearly shows that connection with nature such as trees in our landscape contribute significantly to improving our mental and physical health "*reducing depression and anxiety, especially when combined with exercise..... decreasing... levels of the stress hormone cortisol and increases people's sense of wellbeing.*"¹. The benefits provided by trees to the community should not be underestimated. A list of some of the main benefits provided by trees in an environment such as Brighton & Hove can be found in Appendix 1.

In the face of tree diseases, such as Ash Dieback (ADB) and Elm disease, the challenge to replace and extend our tree stock is significant. To illustrate this, the average loss of trees per year, since 2016 has been 421 (see Appendix 2). This excludes ADB. The council has invested in the Arboriculture Team, in tree preservation and tree planting.

In 2021/22 425 new trees were planted alongside 2400 whips. The council plans to accelerate planting further over the coming years with a view to a net gain in tree cover over time. However, this will be very challenging to achieve considering the level of tree disease that the city is currently faced with.

¹ [Celebrating our trees, parks and green spaces for World Mental Health Day | Trees for Cities](#)

Vision

The vision for tree planting vision is to increase canopy cover whilst ensuring the right tree is planted for the right place, securing the long-term protection of the tree's natural life cycle. The aim is to create a diverse tree stock that maximises biodiversity, connects up the city's landscape, and has greater resilience to the threats of climate change and future pests and diseases. Trees play a pivotal role in helping the council achieve its 2030 carbon neutral programme objectives and helping sustain a liveable planet.

The council wishes to engage residents in improving their local communities and local food production through the process of tree planting and tree care.

This vision will be achieved by:

- Preserving trees and maintaining their health and longevity as far as is possible.
- Reversing the decline in street tree numbers by planting more trees than are removed
- Removing and replacing existing street tree stumps with new trees where possible and appropriate
- Increasing tree numbers in areas of low tree cover and high deprivation
- Planting the right tree for the right location
- Preserving our National Elm Collection by continuing to plant elm trees where appropriate
- Increasing our tree stock resilience to pests, diseases, and climate change
- Increasing biodiversity
- Linking up habitats through creating corridors aligned to nature recovery networks and landscape scale recovery
- Maximising the ecoservice benefits of the trees we plant which includes prioritising the planting of large growing, shade trees where appropriate
- Increasing community engagement in planting trees
- Investing in fit-for-purpose tree pits and innovative tree planting solutions, allowing health growth of trees whilst preventing damage to street infrastructure.
- Effective aftercare with three years of watering and maintenance for all newly planted trees
- Thoughtful and well-considered planting in the city's parks as part of a larger landscape design strategy aligning to connectivity for people and nature
- Creating new woodland and seeking additional woodland opportunities where appropriate, utilising the best available data to maximise secondary benefits such as enhancing ground water quality and minimising unintentional risks such as impacting on local water catchments or releasing stored soil carbon
- Aligning with Ash Dieback Action Plan to regenerate all woodland areas affected by ash tree removal
- Allocating land for fruit and nut tree planting where appropriate, assisting with food security issues

Where are we now?

The council is currently managing two major tree diseases that have led to an on-going decline in tree numbers throughout the city.

Elm Disease

Elm Disease is a major cause of elm tree losses and has led to a significant reduction in the council's elm stock since it was introduced to the UK. Over the last six years, an average of 189 elm trees (Appendix 2.2) were lost per year, with 2020 being especially bad resulting in 496 elm trees lost.

Many of the elm trees lost on the highway are large and have caused extensive root damage to our streets and pavements. The high cost associated with removing these trees and repairing the damage to the highway, as well as budget constraints, has prevented the council from being able to replace lost trees immediately resulting in many stumps remaining in situ.

One-off funding has been made available to specifically tackle stump removals, replacing them with new tree planting in 2020/21 and 2021/22. However, the year-on-year tree stump count on the city's streets continues to rise at present as the number of tree removals required has exceeded on-street tree replanting capacity.

Ash Dieback

Ash Dieback is a significant health issue to our native ash trees and has led to large numbers of trees being removed from our woodlands for public safety reasons.

The recovery from Ash Dieback is outlined in the Ash Dieback Action Plan (ADAP) and includes a tree planting strategy specifically for woodlands affected by Ash Dieback. Tree losses due to Ash Dieback will be counted in the thousands unfortunately, and this will be the main cause of canopy loss in our woodlands. The impact of this, and the recovery, will be managed and resourced as part of the wider Ash Dieback programme whereby all woodland affected will have a bespoke plan to improve these areas in terms of diversity of species, habitat/biodiversity and resilience.

Other challenges

In addition to the challenges presented by major tree diseases, tree management in Brighton & Hove faces several other issues, including:

- Limited footway widths in the city preventing new street tree planting
- Competition for space with underground utilities and services
- Proximity to buildings
- The need to conserve rare habitats such as chalk grassland over new woodland planting
- The exposed south westerly aspect of Brighton & Hove which prevents many salt and wind intolerant trees from thriving in the city's coastal locations
- Brighton & Hove's high PH chalk soil which prevents the planting of many alkaline intolerant species

Delivery of the vision

The challenging conditions limit the variety of trees that will thrive in this city. As such, the choice of species needs to be carefully considered if the council is to maximise the benefits our trees provide. Choosing the 'right tree for the right location' is vital for maximising the lifetime benefits gained from a tree.

Resilience in our tree stock should be a major consideration when deciding upon a species for any given location. As has been seen historically from the large numbers of trees lost in a relatively short period of time to Elm Disease or Ash Dieback, maintaining a tree stock with a bias towards a single family, genus or species can result in vulnerability to pests and diseases. Therefore, to protect against the impacts of "new" pathogens or outbreaks of "old" pathogens, the council's urban forest should aspire to contain no more than:

- 30% of trees from any family
- 20% of trees from any genus
- 10% of trees from any species

(NB: Family/genus/species are identification classifications used to describe how all organisms have evolved, how they are genetically connected and are a family tree of sorts)

The current approach is for all new street and parks/green spaces trees to consist of no more than 20% elm. Over time, this will gradually reduce the proportion of elm trees managed (see Appendix 3.3) to improve resilience to potential future pathogens and assist more effective control of Elm Disease to protect the collection as a whole. Practices such as planting trees from an alternative genus, to elm, upon streets lined with elm trees helps to 'break the chain' of root grafts. This prevents Elm Disease from quickly infecting multiple trees in one location, all of which would require immediate removal and disposal.

Ways of increasing biodiversity gains and ecosystem service benefits are important considerations when deciding which trees to plant where. The council is committed to finding the best possible tree planting solutions to mitigate biodiversity loss, restore nature, and maximise ecosystem benefits in a responsible way.

Biosecurity is a major consideration when importing trees from outside of the city limits for planting within. The Council advises that biosecurity assessments should be carried out on all nurseries providing tree stock to the city and all contractors, residents and businesses planting within Brighton & Hove should make biosecurity a priority.

Street trees

Tree planting on an urban street has a unique set of challenges that need to be considered for such a planting programme to be successful. The street environment is an extremely hostile place for establishing trees with conditions such as drought, root constriction, light deprivation, urban wind tunnel effect and elevated pollution levels being the norm.

Suitable species selection and tree sizes, healthy rooting environments, and sufficient aftercare are important factors in establishing newly planted trees, especially street trees.

Street trees are the most expensive trees planted in the city. They may require: the previous tree stump to be fully ground out, the highway root damage to be repaired and reinstated, as well as a new tree pit to be constructed. However, these trees are in highly populated areas where the benefits (see Appendix 1.0) they can provide to the community over their lifetime are most effective.

Brighton & Hove has many valuable, large, historic elm trees situated on its streets; and as such our street tree numbers have been heavily affected by Elm Disease. Elm trees are often shallow rooted, and the root system can be extensive, so damage to the highway caused by these trees can be acute. The costs associated with replacing these trees has meant the council has historically been unable to plant new elm trees on the streets to equal those that have been lost annually; and an on-going yearly depreciation in tree numbers on the highway has been experienced.

A major barrier to planting on the highway is pavement width. Many of Brighton & Hove's pavements are not a sufficient width to allow the passage of all pedestrians past a street tree within a suitably sized tree pit, so either replacing removed trees or planting in new locations in those areas is not possible. The assessment of the suitability of any given footway, with respect to width and existing underground services, where tree planting has been proposed is performed by City Transport.

A set pricing model for street tree planting is being explored for the various scenarios following recent extensive planting schemes. It is likely that providing a set price for tree planting in hard surfacing, rather than bespoke quotes as has been done recently, will increase the current average cost to account for difficulties that occasionally happen regarding excavations and working close to underground services plus costs for all civils type work are expected to rise due to the current economic forecast. Providing a range of possible costs for the more complex operations (i.e. tree pits in hard surfacing) may well provide best value to the council and potential donors alike, followed by specific quotes from contractors for specific schemes once confirmed as feasible.

Set prices for planting into soft surfaces (such as grassed verges) may be more appropriate and possible to provide to those wanting to raise funds. All future costing models for tree planting will need to include planting, tree/sundry purchasing, tree pit installation and initial maintenance (including watering) costs given the recent increased scale of tree planting and the resources needed to ensure trees are given the best chance of establishment.

To maintain tree numbers on the city's streets, the following principles will be adopted:

- All trees removed on the highway should be replaced, where there is space to do so
- Investigating alternative solutions where pavement width prevents new tree planting, such as 'build outs'
- Investigating and trialling solutions to mitigate future damage to highways infrastructure
- Creating effective and innovative tree pit designs that meet highways best practice guidelines
- Ongoing identification and assessment of new planting locations on the public highway (and carriageway) that meet Highway best practice guidelines

- Tree pits must at least 1m² due to pavement width requirements and the proximity of underground services (i.e. electrical, gas, water, telecoms)
- Continued delivery of programmes of stump removals and highway reinstatements, in-line with budget provisions

Trees in parks

Park trees should be considered as part of a citywide, contiguous, design process. Successional planting is vital to ensure the city's tree canopy cover is future-proofed for years to come as older, larger trees are lost due to safety concerns or disease.

The council will continue to deliver and support tree planting in our parks by:

- Administrating the memorial and donation tree scheme and organising planting ceremonies, where appropriate
- Collaborating with friends' groups to greater engage volunteers and communities with tree planting in our parks
- Working towards increasing biodiversity, connectivity (Nature Recovery Networks) and resilience in our tree stock by managing species choices and locations centrally via our dedicated Tree Planting Officers
- Advising on biosecurity best practice for new planting schemes.

Trees in woodlands

Creating new woodland complex sites is an essential part of the plan to deliver the tree planting vision. The following principles will be adopted to achieve successful new woodland creation:

- Encouraging natural regeneration under low grazing pressure to produce the best woodlands in the long term, with some planting to provide seed sources for native species that would not otherwise easily colonise the site
- Maintaining a balance between closed canopy, shrub and scrub layer, and open glades is important (not all of the sites should be planted, light grazing helps with this), along with a diversity of species and age structures.
- Where possible, planting woodland edges with smaller understory species such as hazel, yew, elder, holly, hawthorn, blackthorn
- Including fruiting species, particularly where members of the public might be likely to forage
- Including a variety of native species to maximise benefits to local wildlife species, with consideration also given to those that may not cope well with climate change.
- Including species that are not native but might better cope with climate change (as long as they don't have the potential to be invasive) and assuming they provide same nutritional value for wildlife and equivalent biodiversity benefits.
- Including a good variety of species as insurance against future diseases.
- Avoiding plantation monocultures of trees, and age / habitat structure.
- Valuing of dead wood resource for biodiversity

The recovery from Ash Dieback is going to be one of the greatest challenges of the plan but it is also where the council has the greatest chance of improving and changing the landscape of the city's woodlands. The council aims to increase the biodiversity across all the woodlands, creating areas of enhanced habitat structure and species richness of greater resilience, safeguarding the city's woodlands for the future.

Trees on housing land

Trees on housing land are managed and funded by Housing, with assistance from Cityparks. The Housing Department funds the maintenance of their tree stock which includes tree removals and replacement tree planting.

Trees on housing land are often located in areas of high deprivation and therefore new tree planting can be well placed to offer multiple positive social benefits.

The council was successful in applying for external funding to plant over 100 trees in these deprived areas in 2021-22 (see Appendix 4) and will continue to apply for funding as it is made available.

To achieve the tree planting vision, the council aims to:

- Increase tree numbers in areas of high deprivation low tree cover where appropriate
- Utilise the wellbeing advantages associated with trees through greater community engagement
- Plant trees to encourage interest in food production such as orchards and help raise awareness of biodiversity and nature connection.

Tree planting and new developments

Tree planting in new developments within Brighton & Hove should be designed in-line with the guidance set out in Brighton & Hove City Council's Local Development Framework SPD 06. The Framework aims to improve standardised tree planting specifications.

The Framework guidance states the following in relation to tree planting on new developments:

- *Landscape design should be considered an integral part of urban design, as the appearance and treatment of spaces between and around buildings is often of comparable importance to the buildings themselves.*
- *Developers should anticipate the need to accommodate trees and shrubs within a development, whether through the retention of existing trees and shrubs, the planting of new trees or shrubs or through the provision of private space for future occupiers to carry out their own planting of the same.*
- *Developers are encouraged to produce layouts and master plans for discussion, prior to the submission of details at the application stages. Such plans should be prepared with professionally qualified Arboricultural and landscape design input. Noting ecological expertise is also key.*
- *If developments are to achieve the high standards of design required by the Brighton & Hove Local Plan, an early survey of the proposed development site is essential, particularly if the design is to successfully integrate existing trees, shrubs and new planting into the landscape and character of the area. The design and*

layout of a proposed new development should flow from a detailed assessment of the trees and other natural features existing on the site.

- *British Standard 5837 (2005): ‘Trees in Relation to Construction – Recommendations’ provides extensive advice on planning for trees and development. It sets out guidance on the identification of trees suitable for retention, their protection during construction and on the successful integration of existing and newly planted trees within the development. It also provides detailed information on the potential impact of development on trees, and of trees on buildings, and gives guidance on how to minimise that impact. Developers, their design team and builders are strongly advised to familiarise themselves with this British Standard.*

The Environment Act 2021 brings in new requirements including mandating the requirement for measurable Biodiversity Net Gain to be delivered through new developments. Tree planting can be a suitable tool for developers in delivering Biodiversity Net Gain. The council has produced the [Biodiversity & Nature Conservation SPD](#) to help guide developers.

Local Nature Recovery Strategies (LNRS) are also a new mandatory system of spatial strategies for nature established by the Environment Act 2021. They are designed as tools to encourage more coordinated practical and focused action and investment in nature. Again, well placed and considered tree planting and woodland creation should form a key part of this strategy.

Tree Preservation Orders (TPO) and tree loss

The council has approved funding of a Statutory Tree Enforcement Officer, primarily to bolster and strengthen the council’s response and enforcement of TPO legislation. This will enable the council to investigate, challenge and ensure breaches of the legislation involving the loss of these special trees are better dealt with and any replacement tree planting is consistently enforced and completed. This would also extend to the replacement of TPO trees lost due to valid reasons such as safety concerns or disease, which is permitted within the legislation if specific conditions are met.

Working with communities to make a difference

The council will continue to engage with councillors, residents, communities, volunteers and local businesses, to raise, coordinate and deliver funding bids for new tree planting.

The council is currently working with the following groups:

Plant your Postcode (PYP)

- PYP is a not-for-profit organisation that assists local residents, communities and businesses with raising external funding for planting projects within the city.
- The council has successfully completed planting projects throughout the city made possible by PYP collating funding from multiple sources for each project.

- The council will continue to work in partnership with PYP and streamline processes further to ensure funding is efficiently matched to tree planting opportunities, where possible.

CPRE Sussex

- The CPRE Sussex and the council have worked together on raising funding bids with Trees for Cities for planting new trees on BHCC land in areas of high deprivation and low tree cover.
- Our partnership will continue into the 2022/23 with raising further funding bids to support tree planting in the areas of the city that need it most.
- The council will work with CPRE Sussex to engage local businesses in funding further tree planting projects.

The Tree Forum

- The council will continue to facilitate tree planting discussions and engagement via the Tree Forum between internal and external stakeholders and the council.
- This group is a subgroup of the Green Spaces Forum specifically dedicated to sharing tree planting ideas and best practice.

Brighton Permaculture Trust

- The council is now working in partnership with The Brighton Permaculture Trust to facilitate the planting of community orchards throughout the city.
- The aim is to utilise their expertise in community orchard planting.
- The council is committed to raising joint external government funding bids in the future.
- The aim is to engage local communities in tree planting and tree care, as well as increase local food growing sustainability within communities.

Friends Of Groups

- The council continues to work with Friends of Groups to facilitate externally funded tree planting projects where the council's long term landscape design plans for the specific site or parks are incorporated within the proposals.

Memorial and donation tree scheme

- The council continues to offer planting services for memorial and donation trees in specified council run parks through the Tree Donation Scheme managed and delivered through City Parks.

Whip planting volunteer sessions

- The council continues to work with volunteers and residents to plant whips at new woodland and hedgerow creation sites.
- The council is currently completing the Carden Hill woodland creation scheme and will continue to look for new locations to plant with volunteers and local community groups.

Community planting days

- Where external funding has been made available, the council will continue to run local community volunteer tree planting days.
- NB: Community planting days are only suitable for parks and green spaces located away from the highway, and only following the completion of service searches and health and safety checks conducted by the council

Governance and Review

This is a live document which will be constantly reviewed and updated in light of changing information, tree management methods, environmental pressures and changes in the needs of the city and feedback from residents, visitors, community groups and staff.

The council will also review the performance and practices of other similar cities and their approaches to managing tree planting both in the UK and abroad.

Delivery of the strategy will be monitored by quarterly reviews of the action plan.

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Appendix 1: the benefits of trees

Environmental benefits

1. Trees remove CO₂ to create a carbon sink:
 - *“Trees act as a sink for carbon dioxide (CO₂) by fixing carbon during photosynthesis and storing excess carbon as biomass. CO₂ sequestration refers to the annual rate of CO₂ storage in above- and below-ground biomass. Increasing the number of trees can therefore slow the accumulation of atmospheric carbon, a contributor to climate change” (FCRP026.pdf (forestresearch.gov.uk))*
2. Trees support wildlife and increase biodiversity.
 - *For example, Brighton’s Elm collection is valuable habitat for the rare Hairstreak butterflies.*
3. Trees create valuable nature corridors between areas of green space
4. Trees moderate temperatures:
 - *“Through a combination of reflecting sunlight, providing shade and evaporating water through transpiration, trees serve to limit the ‘urban heatisland’ effect.”. The Forestry Commission - A Case For Trees*
5. Trees intercept rainwater helping to prevent localised flooding (see below for more details)

Health benefits

1. Trees provide a positive impact on mental health and wellbeing, especially as they can be the only connection with nature in some built up areas of Brighton and Hove.
 - *“Wooded environments are known to calm people, relieve stress and provide a spiritual value that supports improved mental health and wellbeing. When they can see trees from their beds, patients’ recovery times are faster as well”. The Forestry Commission - A Case for Trees*
2. Trees help to decrease the urban heat island effects
 - *During heat-waves the increase in urban temperatures can not only cause people to feel uncomfortable but for vulnerable groups such as young children and the elderly, it also poses a serious health risk which may lead to health problems such as exhaustion, respiratory illness, and heat stroke.*
 - *As our climate changes, it is expected that in the UK, heat-waves will happen more often, last longer, and be more intense. It is therefore important that we take action now to reduce the intensity of the Urban Heat Island.*
 - *Healthy urban trees are known to have a cooling benefit. They do this through the release of water vapour, in the process of evapotranspiration. Trees also provide cooling through the provision of shade and because they reflect more solar radiation and store less energy than many artificial surfaces such as concrete and asphalt.²*
3. Trees help lower risk of skin cancer by providing shade.

² [What do we know about how trees can cool our towns and cities? - Forest Research](#)

- “Shading from harmful ultraviolet (UV) radiation is another benefit attributed to street trees. This could be expected to reduce eye cataracts and morbidity and mortality from skin cancer” [Health Benefits of StreetTrees \(forestresearch.gov.uk\)](http://forestresearch.gov.uk)
 - “...where many large street-tree crowns block much of the sky, high level protection from UV is achieved for pedestrians, even in spots with direct sun through gaps between crowns” [Health Benefits of StreetTrees \(forestresearch.gov.uk\)](http://forestresearch.gov.uk)
4. Trees help improve air quality reducing the chances of asthma and other respiratory conditions by removing harmful particles.
 5. “Trees absorb considerable quantities of airborne pollutants and the resulting cleaner air cuts asthma levels” From The Forestry Commission - A Case for Trees
 6. Increasing exercise participation.
 - “The presence of trees often encourages people to exercise, thereby reducing the incidence of heart attacks and Type 2 Diabetes”. From The Forestry Commission - A Case for Trees

Social benefits

1. In a recent consultation of 3,500 residents in Brighton and Hove ([Future of our parks and open spaces \(brighton-hove.gov.uk\)](http://brighton-hove.gov.uk)) trees were voted highest value asset in front of grassy open spaces in survey.
2. Trees provide a heightened sense of pride in a place.
3. Trees provide seasonal interest through their flowers, fruit, autumn colour and dormancy.
4. Trees provide an educational resource.
5. Digital geo-spacial mapping and labelling is currently work in progress but will help improve knowledge about BHCC street trees
6. Trees have been credited in United States to have reduced crime in some towns.
 - [Environment and Crime in the Inner City: Does Vegetation Reduce Crime? - Frances E. Kuo, William C. Sullivan, 2001 \(sagepub.com\)](http://sagepub.com)
7. The preservation of a unique Elm collection in the UK of which many can be found on the streets of Brighton and Hove.
 - [National Elm Collection \(brighton-hove.gov.uk\)](http://brighton-hove.gov.uk)

Economic benefits

1. Fuel poverty:
 - *“Trees moderate local microclimates – urban areas with trees are cooler in summer and warmer in winter and can help to alleviate fuel poverty. Well-positioned trees also improve the environmental performance of buildings by acting as a buffer or 'overcoat', reducing thermal gain in summer”* From The Forestry Commission - A Case for Trees
2. Contributing indirectly to local economies (From The Forestry Commission - A Case for Trees)
3. Trees can increase the desirability of business to locate within a city.
4. Retail areas with trees perform better.

5. The presence of Street trees can increase property values by up to 15%.
6. Urban trees improve the health of local populations, reducing healthcare costs.
 - *“The general health dividend provided by trees has been scientifically proven – Dutch research shows neighbourhoods with good tree cover are, statistically speaking, significantly healthier than less green urban areas”*
(From The Forestry Commission - A Case for Trees)

Stormwater flooding mitigation

1. Brighton is ranked number eight in the country regarding flood risks.
2. In the UK two thirds of flooding was as a result of surface water run-off
3. A Guardian investigation revealed that raw sewage had been pumped into English rivers via storm overflows more than 200,000 times in 2019. In November, Surfers Against Sewage (SAS) published data showing that untreated wastewater was discharged on to English and Welsh beaches on 2,900 occasions in a year.
4. In 2019 Brighton seafront was one of the worst-affected areas, with 220 reported spills from five overflows.
5. The Guardian reported that the health impact is highlighted in 153 reports of sickness from people using the bathing waters affected in 2020. The worst locations were in Southern Water areas, including at Hove Lawn beach, where water quality is supposed to be “excellent”. ([Raw sewage dumped into English and Welsh beaches '2,900 times this year' | Water | The Guardian](#))
6. In Brighton, the rise in impermeable surfaces such as roads, pavements and driveways reduce the ability of rainfall to infiltrate into the soil and increase the speed at which it moves over the surface. This increases surface water runoff and peak discharge rates and raises the likelihood of flood events. Urban trees and woodlands regulate stormwater by intercepting and storing rainfall on their leaves, which either subsequently evaporates, or reaches the groundwater more slowly as a result of gradual release as throughfall. ([FCRP026.pdf](#) (forestresearch.gov.uk))
7. Trees are known to reduce surface water run-off compared to asphalt by up to 80% (figures taken from Woodland Trust www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/flooding).
8. **Conclusion:** Street trees in fit-for-purpose tree pits can help to manage surface water run-off and ultimately mitigate instances of raw sewage leaking into the sea. This can help protect residents from illness ultimately caused by surface water run-off.
9. Pollution prevention and supporting the health of the ground water aquifer.
10. All of the city’s potable water comes from the aquifer within the South Downs that also extends into the city. Trees can reduce the amount of pollution found in surface water that would otherwise impact the aquifer and our city’s water supply. For further detailed information refer to: [The Aquifer Partnership](#).

Appendix 2: Tree Felling Data

2.1 Breakdown of the number of trees removed by Brighton & Hove City Council per year

NB: This does not include woodland trees felled due to Ash Dieback as the replanting for this is to be dealt with via the Ash Dieback Action Plan

NB: Elm disease has been split into a separate category

	2016	2017	2018	2019	2020	2021	Average
HIGHWAY TREES	100	73	48	69	89	133	85
NON-HIGHWAY TREES	83	71	86	550	289	175	209
ELM DISEASE HIGHWAY	27	34	25	35	67	42	38
ELM DISEASE NON-HIGHWAY	44	53	31	67	268	64	88
TOTAL ALL TREES	254	231	190	721	713	414	421

** This data includes trees removed on BHCC land only*

** Fells are for all work specs created within those years*

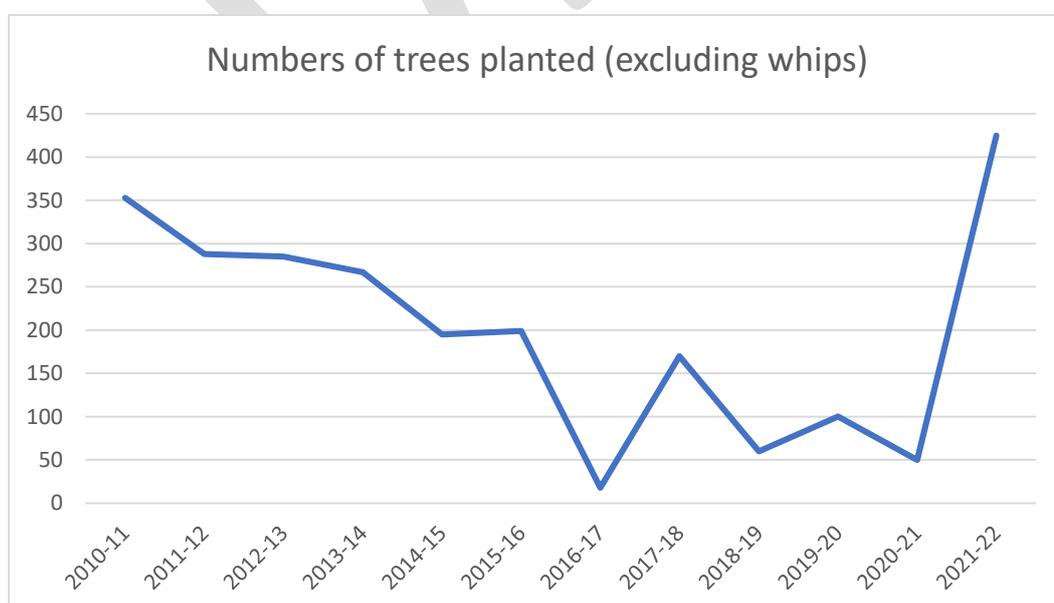
** Data compiled from current Arbortrack records*

** Elm disease fells are taken from analysis of EDRS system of logging elm disease and NOT Arbortrack*

- Elm disease loses in the city over the last six years

	2016	2017	2018	2019	2020	2021	Average
All	79	102	91	153	496	211	189
BHCC	71	87	56	102	335	106	126

2.2 Standard Trees Planted by Brighton and Hove (excludes whip trees)



Appendix 3: Tree Stock Data 2021-22

- Current number of recorded trees outside of woodlands: **28496**
- Current number of trees on the public highway: **12809**
- Breakdown of BHCC tree genus in Brighton & Hove 2020-21

Genus	Number	Percent
<i>Ulmus</i> spp	9116	32%
<i>Acer</i> spp.	4795	17%
<i>Prunus</i> spp.	2453	9%
<i>Sorbus</i> spp.	1638	6%
<i>Fraxinus</i> spp.	954	3%
<i>Tilia</i> spp.	919	3%
<i>Aesculus</i> spp.	798	3%
<i>Betula</i> spp.	700	2%
<i>Crataegus</i> spp.	671	2%
<i>Malus</i> spp. & cvs.	663	2%
<i>Fagus</i> spp.	588	2%
<i>Quercus</i> spp.	510	2%
<i>Platanus</i> spp.	509	2%
<i>Alnus</i> spp.	460	2%
<i>Ilex aquifolium</i>	370	1%
<i>Pyrus</i> spp.	280	1%
<i>Sambucus nigra</i>	253	1%
<i>Corylus</i> spp.	239	1%
<i>Cupressus</i> spp.	190	1%
<i>Taxus</i> spp.	179	1%
<i>Carpinus</i> spp.	173	1%
<i>Cuprocyparis</i> spp.	169	1%
<i>Populus</i> spp.	146	1%
<i>Pinus</i> spp.	143	1%
All others	1576	6%
Total	28492	

Appendix 4: Tree planting stats 2021/22

- Street tree stump replacements: **93 Trees**
- BHCC Housing Land: **112 trees**
- Parks donation trees: **30 trees**
- Resident/Community/Green spaces forum-led schemes: **190 trees**
- New woodland creation whip planting: **2400 whips**
- **Total: 425 trees, 2400 whips**

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