PURPOSE: Key decision

MEETING: Cabinet

DATE: 08 February 2022

<table>
<thead>
<tr>
<th>TITLE</th>
<th>Tree Strategy and Tree Planting Plan</th>
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<tbody>
<tr>
<td>Ward(s)</td>
<td>All</td>
</tr>
<tr>
<td>Author:</td>
<td>Richard Ennion</td>
</tr>
<tr>
<td>Job title:</td>
<td>Parks Development Manager</td>
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<tr>
<td>Cabinet lead:</td>
<td>Councillor Ellie King, Deputy Mayor with responsibility for Communities, Equalities and Public Health</td>
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<tr>
<td>Executive Director lead:</td>
<td>Stephen Peacock, Executive Director Growth and Regeneration</td>
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<tr>
<td>Proposal origin:</td>
<td>BCC Staff</td>
</tr>
<tr>
<td>Decision maker:</td>
<td>Cabinet Member</td>
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<td>Decision forum:</td>
<td>Cabinet</td>
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Purpose of Report:

1. To approve the preparation of a Bristol Tree Strategy and Tree Planting Plan that set out how the city will help respond to both ecological and climate emergencies through its ambition to double its tree canopy cover. The Strategy will drive our approach, direct and inform partners and stakeholders and identify how funding will be achieved. The Planting Plan will set out where trees can be located, ensuring all communities experience the environmental and health benefits that trees afford.

Evidence Base:

1. The One City Plan includes a target to increase Bristol’s tree canopy by 25% by 2035 and to double it by 2046, from a baseline given by the 2018 [i-Tree Eco](#) study which stated Bristol’s tree canopy at around 12%. Doubling Bristol’s tree canopy to 24% is highly ambitious and transformational – for our streets, green spaces and neighbourhoods and will require a massive and sustained tree planting programme.

2. Trees provide a wealth of benefits valued at over £279 million to the city [i-Tree Eco](#). Increasing tree cover will be significant in helping to mitigate the effects of climate change, particularly urban heat stress, support nature recovery and promote health and wellbeing, particularly where social need is greater.

3. Bristol’s current tree cover is un-evenly distributed, ranging from 9-27% across wards, with more deprived areas typically having a lower tree cover.

4. Table 1 shows (simplistically) that achieving a 24% tree canopy is equivalent to adding 660 hectares canopy cover, requiring around 1.7 million trees or 110,000 trees if planted as specimens, where each tree on average contributes around 60m² tree canopy when mature. These projections do not account for failures or loss of canopy due to removal of trees. Capital costs are illustrative and require detailed modelling, including revenue implications. Tree planting in streets is substantially more expensive compared to planting in open ground.
Table 1 – Tree planting target and cost

<table>
<thead>
<tr>
<th>Number of trees</th>
<th>£ Cost (capital)</th>
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</thead>
<tbody>
<tr>
<td>1,650,000 trees</td>
<td>£14 M</td>
</tr>
<tr>
<td>110,000 trees</td>
<td>£33 M</td>
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</tbody>
</table>

5. If Bristol’s trees are worth around £279 million, and doubling adds a similar value, the investment costs to double canopy to 24% outlined would be dwarfed by the value added.

6. Trees take time to grow, whether planted or from natural regeneration. A tree planted in a woodland will typically be around a metre tall, or up to 3m in a street. It takes decades for a tree to mature and make a meaningful contribution to tree canopy. Doubling tree canopy cannot be achieved in a matter of a few years, rather we need to plant at the required rate and use a canopy contribution metric to project the eventual contribution trees will make to tree canopy as they mature.

7. Tree planting is usually expressed in numbers of trees, but canopy contribution differs significantly according to the type of planting and eventual size of tree. For example, woodlands are established by planting trees at close spacing, say 2,500 trees per hectare, and a proportion of these trees are sacrificial as the woodland matures. The eventual canopy contribution of these 2,500 trees is limited to 1 hectare. But if 2,500 trees were planted as specimen trees, say along streets, their eventual canopy contribution will be much greater. To illustrate this, 1,000 specimen trees planted by the Council in 2020/21 have a projected canopy contribution of around 16 hectares, whereas 1,000 trees planted as woodland have a projected canopy contribution of just 0.4 hectares. The point is that despite higher unit costs to plant specimen trees, these will make the biggest contribution to canopy and can be planted where people live and work i.e. where trees are most needed.

8. BCC has in place several active and successful tree planting programmes, albeit reliant on external funding, including One Tree Per Child, s.106 funded tree planting through the Area Committees, grant led investment (‘Urban Tree Challenge Fund: Bristol Greenstreet’s’, and for 2021/22 ‘Trees for Climate Fund’), tree sponsorship and various capital programmes. These programmes are very well supported by the community and all One Tree Per Child tree planting (and maintenance) is undertaken by volunteers. BCC has been awarded Trees for Climate fund grant for planting 2021/22 – value £134,294. Further rounds of Trees for Climate funding are available until 2025.

9. A 660 ha increase in tree canopy by 2046 – just 24 years from now, will require planting of around 28 ha/yr. In 2020-21 across all BCC’s tree planting programmes, the projected canopy contribution was around 20 ha. This planting rate is higher than recent years, in that it included a £XM Urban Tree Challenge Fund grant, boosting specimen tree planting to c. 1,000, double the average number. The 20 ha figure is a gross contribution, it does not account for tree removal or planting by others, for which there are no reliable data.

10. To date, no comprehensive study of the potential to plant trees in Bristol has been undertaken. Reflecting current planting rates, costs, land available and impact on the city, it is not clear that a 24% tree canopy target is achievable. A 660 ha increase is equivalent to around half the area of
accessible parks and green space – much of which is already covered in trees and in use for other benefits. Whist green space can still contribute to the target, other city land will need to come into play including streets and associated ‘grey space’ and private land, including gardens.

11. A Bristol tree strategy and tree planting plan is required to set out the right approach to tree canopy aspirations for the city, to set out where trees can be located, to inform and direct partners and stakeholders and to identify how the required funding may be achieved. Such a plan would be informed by the West of England Green Infrastructure Strategy and accompanying West of England Tree and Woodland Strategy, alongside a Bristol Green Infrastructure Strategy, Liveable Neighbourhoods Strategy, Parks and Green Space Strategy and Climate and Ecological Emergency Strategies.

12. A Bristol Tree Planting Plan will be a comprehensive assessment of tree planting opportunity across all city land types and ownership, including Council land. The Planting Plan will consider the impact and benefits of tree planting on access to green space, habitat and the nature recovery network, landscape heritage and quality, resilience to climate change including mitigating heat, tree species and age structure. It will integrate tree planting aspirations and objectives with other land use objectives – for example sport and recreation, food growing, low carbon energy production and surface water management.

13. It is important that in pursuing the tree canopy objective, the ecological/ecosystem, health, placemaking and landscape benefits, either existing or potential, are enhanced and not compromised. Opportunity mapping will consider this before making recommendations about right tree, right place. We know that meeting our ecological and climate emergency obligations will be met through a variety of measures of which tree planting is one.

14. In developing a Bristol Tree Strategy and Tree Planting Plan:

**Already in place:**
- a. West of England Tree and Woodland Strategy (2021)
- b. Tree cover mapped across the city (needs updating)
- c. BCC tree assets mapped (not all tree assets)
- d. BCC tree management policies
- e. Active and scalable tree planting programmes
- f. A tree sponsorship scheme (800 + locations available for planting)
- g. Policies and capacity to protect trees through the planning process
- h. The Bristol Tree Replacement Standard and associated s.106 arrangements
- i. Mapped tree planting opportunities within the Nature Recovery Network
- j. Partial mapped potential tree planting locations across a ¼ of the city (limited older data)
- l. Collaboration with Trees for Street to increase private and corporate tree sponsorship and allow residents to propose tree planting locations (due to be introduced 2022).
- m. Ash-dieback survey

**Required:**
- n. Citizen survey to explore attitudes to trees and support for tree planting
- o. Tree planting strategy incorporating opportunity mapping
- p. Neighbourhood tree planting targets
- q. Tree planting action plan
r. Resources matched to ambition

15. In addition the Strategy and Planting Plan must have flexibility such that new research on potential planting locations – such as new habitat information – is able to influence and change original proposals if required.

16. The UK is experiencing the impact of ash dieback, an imported disease of ash trees which causes severely infected trees to die. To help plan for this impact, to boost the city’s tree planting rates and make a start on delivering our tree canopy aspirations it is recommended that the Council creates a new budget that will add to existing funding sources – S106, grants and sponsorship. This will deliver an enhanced 2022/23 planting programme ahead of the Tree Strategy launch and increase our work with partners and volunteers. A capital budget of £50K for the first year is recommended, with a revenue uplift to develop local tree planting plans and deliver ongoing community input tree planting.

17. Funding requirements for an enhanced tree planting programme for 2022/23 and to develop the Tree Strategy and Tree Planting Plan are given below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Funding required 22-23</th>
<th>Funding source 22-23</th>
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<tbody>
<tr>
<td>Tree planting delivery, planning and community engagement.</td>
<td>£75K</td>
<td>Ecological Emergency Reserve</td>
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Cabinet Member recommendations:

That Cabinet:
1. Notes the development of a Bristol Tree Strategy and Tree Planting Plan as outlined in this report.
2. Notes the use of the Ecological Emergency Reserve to deliver an enhanced tree planting programme for 2022/23.

Corporate Strategy alignment:
1. Quality of life and addressing disadvantage

City Benefits:
1. Increase in tree canopy and associated city climate resilience
2. Contribution to nature recovery within the West of England Nature Recovery Network
3. Quality of life benefits in areas of greatest need
4. Support community nature-action
5. Support education through One Tree Per Child

Consultation Details:
1. Communities will be consulted on tree planting schemes.

Background Documents:
N/A

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<thead>
<tr>
<th>Revenue Cost</th>
<th>Source of Revenue Funding</th>
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<tr>
<td>£40,000</td>
<td>Ecological Emergency Reserve (£20K). Parks revenue (£20K).</td>
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<tr>
<td>Capital Cost</td>
<td>Source of Capital Funding</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>£75,000</td>
<td>Ecological Emergency Reserve</td>
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<table>
<thead>
<tr>
<th>One off cost</th>
<th>Ongoing cost</th>
<th>Saving Proposal</th>
<th>Income generation proposal</th>
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**Required information to be completed by Financial/Legal/ICT/HR partners:**

1. **Finance Advice:**
The report seeks approval to utilise £95k from the Ecological Emergency Reserve to fund both the Bristol Tree strategy and planting plan. The balance of funding of £20k is to come from the Park’s revenue budget or Grants where it is possible to secure such external funding. The strategy will address the issue of long-term sustainable funding of the tree planting plans, as well as the source of such funding, so there are no additional financial implications for the Council.

**Finance Business Partner:**

2. **Legal Advice:**
There are no specific legal implications for this report.

**Legal Team Leader:**
Husinara Jones, Solicitor/Team Leader – Commercial & Governance Team, 17th January 2022.

3. **Implications on IT:**
I can see no implications on IT in regards to this activity.

**IT Team Leader:**
Gavin Arbuckle – Head of Service Improvement and Performance, 18th January 2022

4. **HR Advice:**
There are no HR implications evident

**HR Partner:**
Celia Williams, HR Business Partner – Growth and Regeneration, 17th January 2022

<table>
<thead>
<tr>
<th>EDM Sign-off</th>
<th>Stephen Peacock</th>
<th>31 January 2022</th>
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<tbody>
<tr>
<td>Cabinet Member sign-off</td>
<td>Councillor Ellie King</td>
<td>24 January 2022</td>
</tr>
<tr>
<td>For Key Decisions - Mayor’s Office sign-off</td>
<td>Mayor’s Office</td>
<td>31 January 2022</td>
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- **Appendix A** – Further essential background / detail on the proposal
  - NO
- **Appendix B** – Details of consultation carried out - internal and external
  - NO
- **Appendix C** – Summary of any engagement with scrutiny
  - NO
- **Appendix D** – Risk assessment
  - YES
- **Appendix E** – Equalities screening / impact assessment of proposal
  - YES
- **Appendix F** – Eco-impact screening/ impact assessment of proposal
  - YES
- **Appendix G** – Financial Advice
  - NO
- **Appendix H** – Legal Advice
  - NO
- **Appendix I** – Exempt Information
  - NO
- **Appendix J** – HR advice
  - NO
- **Appendix K** – ICT
  - NO
- **Appendix L** – Procurement
  - NO