

# **WORSHIPFUL COMPANY OF WATER CONSERVATORS**

## **SUBMISSION TO THE HOUSE OF COMMONS SELECT COMMITTEE ON ENVIRONMENT FOOD AND RURAL AFFAIRS**

### **IN RESPONSE TO THE CALL FOR EVIDENCE IN ITS INQUIRY INTO URBAN GREEN SPACES**

**20<sup>th</sup> October 2023**

1 The Worshipful Company of Water Conservators ('WCWC'), is a City of London Livery Company, focussed on the long-term health of our water resources and the broader environment. Our members include senior professionals from water, environmental and related industries and regulators, along with others who share our concern for water and the environment. Our experience and knowledge ranges from the complexities of environmental sciences, through the application of engineering to deliver the goals identified by those sciences, and the subsequent management of the assets created. The Company's purpose is *Promoting a diverse and sustainable environment.*

2 The WCWC is a community of professionals active in water and the environment. The Company actively encourages its members to consider how they regard climate change in both their personal and professional lives.

3 The Company is responding to the Inquiry because of its professional roles in water and climate change policy, mitigation and adaptation. It is a member of the City of London Livery Climate Action Group.

#### **OVERVIEW**

4 The number of people who live in urban areas in the UK is expected to increase over the next decade, while the total provision of green spaces is expected to substantially decline, as infrastructure increases to meet the needs of a growing population.

5 The Inquiry (<https://committees.parliament.uk/call-for-evidence/3252/>) will explore how green spaces in built-up areas can help meet the environmental and associated health challenges of urban living. The Government has estimated that parks and green spaces in England alone deliver an estimated £6.6 billion of climate change, environmental and health benefits every year. With the important environmental role green spaces play, any loss of these spaces will come at an environmental and social cost. It will focus on the ecological, environmental and human benefits of green space, and will explore the most effective solutions to making cities greener and nature rich.

6 The WCWC welcomed this Inquiry and supports the aspiration to make urban green spaces add further to the general well-being of society. Green spaces provide considerable health and mental wellbeing benefits and green space management is an excellent example of the much-vaunted policy of Nature-based solutions (NBS).

7 Green spaces need to be considered as part of an integrated environmental and social system, rather than pulling out, say, 'flooding' as a separate and discrete issue. They offer

many environmental benefits, and also some social advantages. Mental health of local residents and other users is an area where there is documented advantage. In terms of flooding, for instance, these areas can be used as part of a flood management system, but they also offer respite from high levels of air pollution, reduce solute entry to watercourses, enhance biodiversity, and improve the aesthetics of neighbourhoods and improve mental health. From there, there is a link to reduced health costs. There is excellent work going on these issues, in London and elsewhere.

8 There is a lot of research in this area now, beyond the sometimes formerly nebulous assertions about these benefits. However, the WCWC stresses that decisions should be based on scientific and social scientific evidence, rather than on mere assertion. Defra should consider the value of these benefits and the cost to the NHS/health service generally if they are to be reduced in number/area or simply lost. This links in with the NHS' increasing focus on 'population health' and the 'prevention of ill health'.

9 The WCWC reiterates its previous submissions that there is a need for more 'joined up' policy and practice It is aware that the broader concepts refer to the benefits of green and blue spaces ([https://www.thelancet.com/article/S0140-6736\(23\)00096-X/fulltext](https://www.thelancet.com/article/S0140-6736(23)00096-X/fulltext))

10 It suggests therefore that the title of the Inquiry should include blue spaces and the conclusions should embrace the value of the water environment in this context. (<https://www.eea.europa.eu/publications/who-benefits-from-nature-in>).

11 The WCWC suggests that any initiative on blue spaces should be linked to the concepts of catchment management which are central features of the Government's' Water Plan (<https://www.gov.uk/government/publications/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water/plan-for-water-our-integrated-plan-for-delivering-clean-and-plentiful-water>).

12 These concepts apply equally, but perhaps differently in urban and rural environments, in that catchment plans all need integration of land and water management, but in ways which suit the needs of each catchment. So, using London as an example, the Serpentine Lake in Hyde Park and the London Wetland Centre are excellent examples of the beneficial value of blue spaces.

13 As Water Conservators, the Company's aim is to see overall environmental improvement, right across all the areas listed, and certainly including air quality and waste reduction as well as water issues.

14 Quantifying the health savings from green spaces in cost and benefit terms is important as this will illustrate the economic impacts that green spaces have. For example, comparing the impact of a reduction in urban green space against maintained or enhanced green space. Consider the effect of no reduction in or enhanced green urban space provision on a baby living a healthy life until, say, 80 years making a positive contribution to society in terms of earning a living and supporting a family financially, making contributions to the cost of their community and incidentally to the GDP. Compare this with a baby born in the same year, living with reduced or lost green spaces, higher levels of air pollution arising from greater proximity to roads and diseases and trauma (e.g., having increased pedestrian accident risks). This will require more visits to health practitioners, possible hospitalisation and perhaps a weakened immune system allowing that person to be vulnerable to a wider range of diseases

and declining health over many years. The cost of providing green urban spaces (which if calculated on a per acre/hectare basis could then be used also for the savings of reducing them and providing housing in their stead) will need to be calculated by the department covering planning (Department for Levelling Up, Housing and Communities) and for the comparative health costs it would be the Department of Health and Social Care. Health costs will need to take account of the change in potential diseases, including cancer/mutation of body cells, respiratory illnesses, infectious diseases and how they are likely to change over the 80 years, along with dementia and other diseases of ageing, using actuarial data.

## **RESPONSES TO QUESTIONS**

### **Q1 How successfully are the Government and Local Authorities protecting and increasing urban green spaces, and what trends can be seen in the extent and quality of those spaces?**

15 The WCWC cannot comment on the successes or failures per se. However, the WCWC observes that there are pressures between infrastructure development, including housing in relation to water quality planning, as evidenced by the ongoing issue of nutrient neutrality. The planning arms of government and local authorities must take a proactive view in ensuring that green and blue spaces are not put at risk in development control. The WCWC suggests that this is another requirement for any review of the Planning Framework. Green spaces provide considerable health and mental wellbeing benefits which are well known to Town Planners and to practitioners in the health services.

16 Where inland waters, blue spaces, within green spaces are of a high quality, this enhances the physical and mental health benefits generated by the green spaces. Singapore's ABC (Active, Beautiful, Clean) Cities programme, started in 2006 is a useful example. ABC concentrated on integrating water with human life, maximising the access to attractive water habitats by softening rivers and canals through adding natural features wherever possible. As well as providing green spaces and attractive waterways, the improved quality of the water makes it suitable for discharge into the city's reservoir network for treatment and potable use. The inclusion of more green areas in the city areas has also lowered surface run-off after periods of heavy rain.

### **Q2 What environmental challenges are urban areas facing, and how could wider access and inclusion to green spaces (including dog-friendly spaces) address these challenges? Areas to consider but not limited to:**

17 As a general comment, the WCWC observes on the basis of past experiences of its members the quality of streetscapes plays a very important role in the lives of people in densely populated urban environments. The immediate concerns of residents are not with the bigger issues of the environment but more prosaic matters like litter, fly-tipping, graffiti, discarded drug paraphernalia, dog's faeces etc. The more neglected the environment, the less residents care about it, and this is most certainly true for green spaces. Community involvement and security are therefore very important.

18 As green spaces are intended to encourage urban dwellers more, measures to optimise ambient air quality in these places needs to be considered. This includes measures to limit vehicle emissions in their vicinity.

### **Increased temperatures and the ‘urban heat island’ effect**

19 There is considerable evidence that nature-based solutions (NBS, tree planting in particular) reduces ambient urban temperature. To be effective, interventions need to be of a suitable scale. Interventions across a neighbourhood of at least 1 km<sup>2</sup> (range 0.15 – 5 km<sup>2</sup> depending on circumstances) are needed to have a meaningful impact. The more of the potential area that is planted, the greater the impact this has.

### **Flooding risks and water quality in urban watercourses**

20 Nature-based solutions and sustainable urban drainage systems (SUDS) have a key role in improving urban inland water quality and flood resilience by mitigating the impact of urban hard standing.

21 The mandatory inclusion of SUDS in new developments from 2024 is to be welcomed. Retrofitting other developments also needs to be encouraged. The use of NBS (reed beds in particular) in marginal habitats surrounding urban watercourses both assists flood resilience and lowers the runoff of contaminants into these watercourses. When using these approaches, both need to take into account who is responsible for maintaining them and how this will be financed.

22 The Environment Agency has for many years been promoting the use of urban grass sports fields and parks for the natural management of flood events, and the subsequent gradual return of these waters to the rivers from which they came. The loss of the green space during a flood event is temporary. Flood management must be part of the retention and enhancement of green spaces, not an alternative.

23 The pressure to develop river flood meadows and potentially lose green spaces has to be resisted. Research is needed to look at the comparative costs of keeping green spaces and their use/loss from development including health costs.

24 Dog-friendly spaces may result in the run off of dog urine and faeces and impacts water quality. There is a need for behavioural change here, as too many people let their dogs run freely in a park and on sports pitches where small children also play and don't clear up after their dogs.

### **Climate change and carbon storage**

25 Natural and modified reedbeds are effective tools for carbon storage. Water reuse and resource recovery (nutrients, energy and heat) from effluents needs to be encouraged, both for maintain river flow and to ensure water utility carbon neutrality.

### **Pressures on biodiversity and ecosystems in urban centres**

26 Since 1990, the greatest improvements in inland water ecosystem health (as measured by the presence of indicator species) have been in urban rather than rural areas. This has been due to improvements in sewage treatment compared with increased nutrient loadings from agriculture. This progress has stalled since 2000-10, in part due to population growth and urbanisation, along with increased rainfall intensity. Three factors are of concern here: [1] the operation of sewage treatment works (dry weather discharges, for example), [2] combined

sewer overflows and, [3] pollution from road surfaces (petrochemicals and tyre dust). Effective monitoring and remediation are needed for these.

### **Resource and waste management**

27 Water reuse and resource recovery (nutrients, energy and heat) from effluents needs to be encouraged, both for demand management and to ensure water utility carbon neutrality.

### **Q3 To what extent will Government initiatives such as the Green Infrastructure Framework, the levelling up parks fund and urban tree challenge fund adequately address the issues associated with a lack of green space in towns and cities?**

28 In terms of ‘joined up government’, these must be linked to a number of other initiatives in the Water Plan such as the Water Restoration Fund. The WCWC suggest that the current government policy dated 2014 (<https://www.gov.uk/guidance/open-space-sports-and-recreation-facilities-public-rights-of-way-and-local-green-space>) needs review and this should take account of the outcome of the Inquiry.

### **Q4 Will the Government achieve its aims to increase the amount of green cover to 40% in urban residential areas? What other additional measures should the Government take to increase green urban space?**

29 The experience of Sheffield City Council should be noted. A programme of over-zealous healthy tree removal from 2014-18 was replaced by a strategy aiming to double the original number of trees in the city over 15 years. Policies are needed to ensure that the felling of healthy urban trees can only be justified in exceptional cases and that this is linked with replacement planting on at least a two for one ratio.

30 The WCWC repeats that the Planning Framework must protect and enhance Green and Blue Spaces.

### **Q5 Is access to urban green spaces equally distributed across all sectors of society? Do the environmental and associated health risks disproportionately impact certain groups? What barriers to access exist and how can they be addressed?**

31 The WCWC suggest that communities who would most benefit from the well being offered by Green and Blue Spaces often have the least opportunity to realise the benefits of those spaces. The WCWC emphasises that a major impediment is maintaining the quality of spaces, so community involvement is crucial, including behavioural change/improvement.

32 Thus more support is needed for Volunteering organisations and Green Space Wardens. (<https://www.cityoflondon.gov.uk/things-to-do/green-spaces/epping-forest/volunteer-at-epping-forest>)

33 One aspect not often mentioned is the value of community gardens and allotments and government policy on these needs integrating, as local examples of integrated natural resources management (<https://www.gov.uk/apply-allotment>). An example of this is the London National Park City initiative, which enjoys Mayoral support. (<https://nationalparkcity.london>).