

a helpful set of tools— now to see them put to use



January 2023 saw the launch of Natural England's Green Infrastructure Framework.¹ A key commitment of the 25 Year Environment Plan is 'to deliver more and better-quality green infrastructure to enhance towns and cities, and create attractive, healthy and investable places',² and the Green Infrastructure Framework, which has taken several years to develop, supports this endeavour.

There has been a long-standing set of challenges associated with the delivery of green infrastructure—for example, our own research at UWE (University of the West of England) has found considerable uncertainty over 'what good looks like'. This uncertainty is exacerbated by inconsistency in planning policies between local authorities, and even across different planning policies within the same local authority (for example where policies have developed at different times, or address only a relatively narrow aspect of green infrastructure, such as open space).^{3,4} Even where policy is strong and consistent, additional challenges come into play, including the following:

- The plethora of guidance and tools are time-consuming and difficult to navigate, and each often prioritises one particular function.
- There is a lack of skills and knowledge in the built environment sector.
- The 'champions' of green infrastructure (GI) are often involved in a scheme only for a relatively short time in the development process, with the result that aspirations are eroded between initial outline planning and delivery.
- Green infrastructure is seen as expensive and at odds with the delivery of other priorities for development, such as zero-carbon homes or affordable housing.
- There is uncertainty and concern over maintenance and management.^{3,4}

The result is that the green infrastructure delivered in new developments is often disappointing. In too

many places it is generic, does not respond to the needs of the area, and is not what was initially promised in planning applications. Crucially, it often does not help to form a multi-functional network (and I would argue therefore cannot even be considered as green infrastructure), either within the development or at scale. What this means is that the key benefits of green infrastructure for health and wellbeing, nature conservation, climate adaptation and resilience, and so on are not being realised in either new or existing green infrastructure.

Although not explicit in the framework, it does appear to have been developed with at least some of the stated challenges in mind. These are hinted at in the stated purposes of the framework, which include to 'help increase the amount of green cover to 40% in urban residential areas',² to support 'the greening of our towns and cities and connections with the surrounding landscape as part of the Nature Recovery Network', to 'help local planning authorities and developers meet requirements in the National Planning Policy Framework', and to 'target the creation or improvement of GI'.¹

Like many others I have been awaiting the publication of the new framework to see how it addresses these challenges. So, how does it do?

Taking these challenges in turn, let us first consider the inconsistency in planning policies. The framework should help to address this. It provides a set of 15 principles⁵ covering the 'what, why and how' of green infrastructure in terms of its purpose (the why), characteristics (the what), and process for planning, design and delivery (the how) (see Fig. 1).

In addition to these high-level principles, there is also a suite of standards,⁶ including the updated Accessible Greenspace Standards and the Urban Greening Factor Standard, a design guide,⁷ and a process journey for local authorities wanting to develop a green infrastructure strategy or policy. Taking the suite of guidance into policies should help to counter the current inconsistency, particularly with regards to the accessibility of green infrastructure and the amount of greening, as these numerical standards provide a basis for policy. There is also a suite of maps that present the progress towards some of the standards—for example, the areas meeting the different Accessible Greenspace Standards.



Fig. 1 Fifteen green infrastructure principles

Source: 'Green infrastructure principles wheel', from 'Green Infrastructure Principles'. Webpage. Natural England. <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx>

As ever, the more qualitative aspects are more difficult to prescribe, but adopting the principles and the examples for different 'area types' in the design guide could ensure some consistency here. The main challenge will be more dependent on whether local authorities use the framework in their policies. Here I see a few issues.

First, it is voluntary. However, given that it does address many of the challenges we heard about from local authorities in our research, I would imagine that most would be keen to make use of it where possible.

Second, planning policies are not updated frequently, and many local authorities already have Local Plans and other policies (including supplementary planning policies) in place, so it is likely to be some years before the details within the framework are mainstreamed. Related to this, I would like to know how frequently the framework itself will be updated—there are

references throughout to emerging evidence and technologies, and the extent of research and development under way in this area means that there is a danger of the documents being out of date before many places update their policies.

Third, the under-resourcing of planning teams means that they are often unable to prioritise new policies or those associated with healthy places, as they are lower down the 'to do list' compared with others, such as affordable housing.

Fourth, although some standards are provided, others require development by local authorities—for example, the Urban Tree Canopy Cover Standard needs to be developed locally, requiring further resourcing.

However, the framework provides a useful set of principles, standards and guidance for those local authorities wishing to develop a green infrastructure strategy or policy, and the breadth of functions

considered may mean that the resulting policy could replace several existing documents, thus improving consistency within an area.

The different components of the framework also provide a helpful 'one-stop shop', which may also overcome the plethora of (sometimes overwhelming) guidance and tools available. However, there is a lot of it! Together, the principles, standards, design guide and process journeys amount to over 300 pages, in addition to the documents associated with the maps. But this is still far less reading material than the vast array of guidance currently available, and the design guide and the standards document provide handy links across to other tools (for example Green Flag Award criteria) where necessary—although this does mean more pages!

The illustration of how green infrastructure integrates with the National Design Guide's ten characteristics of well designed places is very helpful, and a signposting document to link to other tools is also planned, which I would imagine will also be useful. I particularly like the summaries of the different 'building blocks' of green infrastructure in the design guide and the examples of the different standards being applied to different area types (for example urban, suburban, linear features).

The principles and the design guide provide a very helpful resource for use in tackling the lack of skills and knowledge in the sector, and training is planned for the future. They also provide important counters to the perception that green infrastructure is simply a 'nice to have', and the range of building blocks presented demonstrate the array of solutions available—making it very clear that we are not just talking about open space. There is also an opportunity for educators to use the principles and the design guide in teaching—which I will be doing in my urban greening module. But much of the information presented is not referenced, which hampers the ability to go and find out more. This is particularly frustrating given that one of the principles is focused on using evidence.

The shortcomings with many developments in terms of the green infrastructure that is provided responding to the needs of the area, the lack of a multi-functional network and the concerns over maintenance and management are tackled in three of the principles. The process documents, aimed at local authorities, developers and neighbourhood planning groups, along with the maps, provide guidance on how to ensure that the green infrastructure considers local priorities and context.

One of the principles is focused on the creation of a multi-functional network, and the various functions of green infrastructure are returned to across the

standards, principles and design guide. However, I feel that an opportunity to illustrate how such networks might be achieved in the different area types has been missed—the illustrative examples could have indicated how the green infrastructure on site could contribute to the continuation of an existing network, or how a network is formed from the different building blocks depicted. Indeed, the importance of looking beyond the red-line boundary of a development site is implied rather than reinforced throughout. Similarly, the principle on working with multiple stakeholders is valuable, but an emphasis on identifying champions of green infrastructure and ensuring that they stay on project teams through to completion would be beneficial.

Overall, the framework provides a valuable suite of tools to tackle many of the challenges associated with the delivery of high-quality green infrastructure in England. I look forward to seeing it used in policy and practice.

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Notes

- 1 See Natural England's 'Introduction to the Green Infrastructure Framework – Principles and Standards for England' webpages, at <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx>; and 'Natural England unveils new Green Infrastructure Framework'. Press Release. Natural England, 2 Feb. 2023. www.gov.uk/government/news/natural-england-unveils-new-green-infrastructure-framework
- 2 'Natural England unveils new Green Infrastructure Framework' (see note 1)
- 3 T Calvert, D Sinnett, N Smith, *et al.*: 'Setting the standard for green infrastructure: the need for, and features of, a benchmark in England'. *Planning Practice & Research*, 2018, Vol. 33(5), 558–73. www.tandfonline.com/doi/full/10.1080/02697459.2018.1531580
- 4 D Sinnett and T Calvert: 'The translation and use of green infrastructure evidence'. *Proceedings of the Institution of Civil Engineers – Water Management*, 2018, Vol. 171(2), 99–109. www.icvirtuallibrary.com/doi/10.1680/jwama.16.00112
- 5 *Natural England Green Infrastructure Principles (Detailed Version, Date January 2023)*. Natural England, Jan. 2023. <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Principles/GIPinciples.aspx>
- 6 *Green Infrastructure Standards for England – Summary: Green Infrastructure Framework – Principles and Standards for England*. Natural England, Jan. 2023. <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/GIStandards.aspx>
- 7 *Green Infrastructure Planning and Design Guide*. Natural England, Feb. 2023. <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/DesignGuide.aspx>