



BLUE-GREEN CITIES IN THE SPOTLIGHT: KENT

An introduction to Blue-Green Infrastructure pilot projects in the county of Kent, England

By Kent County Council and Bax & Company

In Kent, Blue-Green Infrastructure (BGI) connects urban hydrological functions with urban nature, landscape design and planning. Put simply, it's about combining green spaces and good water management.

BGI reduces flood risk by using a more natural approach to water management within the urban environment. This is typically done by utilising existing green assets and infrastructure e.g. parks, rather than building grey infrastructure e.g. new piped drainage. Not only can the utilisation of green assets reduce flood risk, but it can also create multifunctional spaces. Blue-Green Infrastructure typically provides more amenity value to local residents and increases the resilience of urban spaces to climate change, while improving the liveability for the wider community. In particular, small 'orphaned' (underutilised) urban green spaces, such as Pocket Parks and Village

Greens, present a unique opportunity to manage floodwater, improve the ecological value and enhance the amenity of the local areas.

In Kent, the increased frequency of intense rainfall events, often associated with summer thunderstorms, has led to more frequent flooding of residential and commercial properties across the county. The existing urban environment and infrastructure don't have the capacity to deal with unprecedented climatic events, which presents challenges for reducing flood risk.

Heavy rainfall events are anticipated to increase in severity and frequency. Climate change is expected to reduce the liveability of our urban environments for communities across Kent. Kent County Council is one of six European partners of the three year BEGIN (Blue Green Infrastructure through Social Innovation) Interreg North Sea Region project (northsearegion.eu/begin).

BEGIN has funded two pilots projects in Kent. One in Sittingbourne and another in Margate.

The objectives of these pilots are to:



- Trial the delivery of BGI projects in Kent
- Engage Kent residents within the BGI design
 - process using social innovation techniques
 - Identify the social, environmental and economic benefits that can be achieved for the local communities.



Co-designing with communities

BELL ROAD, SITTINGBOURNE

At Bell Road, 12 residential properties were frequently flooded during heavy rainfall events, due to the highway drainage system becoming overwhelmed. A large urban green space adjacent to Bell Road provided the opportunity to divert water away from the highway into an attenuation soakaway. The soakaway has a capacity of 300,000 litres with the surface water stored within the system draining to the chalk below.





GEORGE PARK, MARGATE

At George Park a scheme has been designed to divert surface water from the surrounding roads into the park. Previously excess surface water within this area would have discharged into the combined sewer causing flooding due to the capacity constraints. As a result of the BGI pilot project the water will now enter the park through swales and will then be is discharged into ponds in the park. Over time the water will slowly and naturally filter into the chalk below.

These two pilot projects in Kent have delivered significant landscaping improvements for the local community. For example, the creation of wildflower meadows, swales and ponds, as well as the planting of new trees within the existing Council green spaces.

The projects have provided KCC with their first-ever opportunity to work with local communities in co-designing BGI spaces. This has been done by working in partnership with the local community through the support of the *Places Team*, *Kent Wildlife Trust, Isle of Thanet Trees and Woodland Initiative* and *Swale in Bloom*. The two pilot projects have demonstrated that:

Blue-Green Infrastructure provides a viable solution to managing urban flood risk, whilst utilising the existing green infrastructure within our urban environments and across Kent county.



Working with the community to co-design BGI creates spaces which communities can have greater ownership of and contribute to the long-term maintenance.

Previously, public green spaces had only provided one single function. Retrofitting BGI within Local Authority existing assets and spaces can deliver a multifunctional place and space with multiple social, environmental, and economic benefits for both KCC and communities across Kent.

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