



CLIMATE ACTION

Belfast City Reflections on Key
Innovative NbS and Highlights in the
Engagement Process

Debbie Caldwell, Climate Commissioner

➤ www.belfastcity.gov.uk/climate-change

The Belfast NBS Demonstrator



2022

Site unmanaged grassland hosting events

2025

City demonstrator for nature based solutions



Queen's University Soil Research Testing

Site investigations and soil testing of post industrial land.



Soil research testing of mustard and clover and no dig urban gardening techniques.



09/02/2026

Habitat Enhancement Works

In 2024 site was cleared and wetland scrapes created.

Part of area hydroseeded to create and planted to create species rich meadow.

Part of site planted with cores extracted from local mature meadow. Oversewn with yellow rattle.

Local volunteers involved at every step.



Habitat Enhancement Works - Biodiversity

Summer 2025 rich meadow performing well and bringing pollinators into the gardens.



Surveys to check levels of biodiversity, invertebrates etc.



Habitat Enhancement Works - Sustainable Urban Drainage Solution

Path flooding in 2023 prior to wetland creation in 2024.

Winter 2025 wetland performing well with and paths no longer flooding.

Winter 2026 wettest in 149 years.



09/02/2026

Agroecological Community Garden

Setup in 2024, the garden has enjoyed one full growing season.

Permaculture design training of volunteers and council staff has enabled no dig, chemical free, nature friendly techniques to be used.

Social space incorporated through closed and non food growing space.

Opportunities to grow, share, cook, learn etc.

Food grown used in local veg boxes and donated within the neighbourhood.



Agroecological Community Garden

Growing space community led from outset to build ownership.

Trialling of off grid solutions for low impact and increased resilience of garden.

Solar PV – increases use of garden in winter and provides pump for watering. Avoids need for grid connection.

Rainwater harvesting in use.

Compostable toilet avoids need for chemicals and/or needing mains connection.



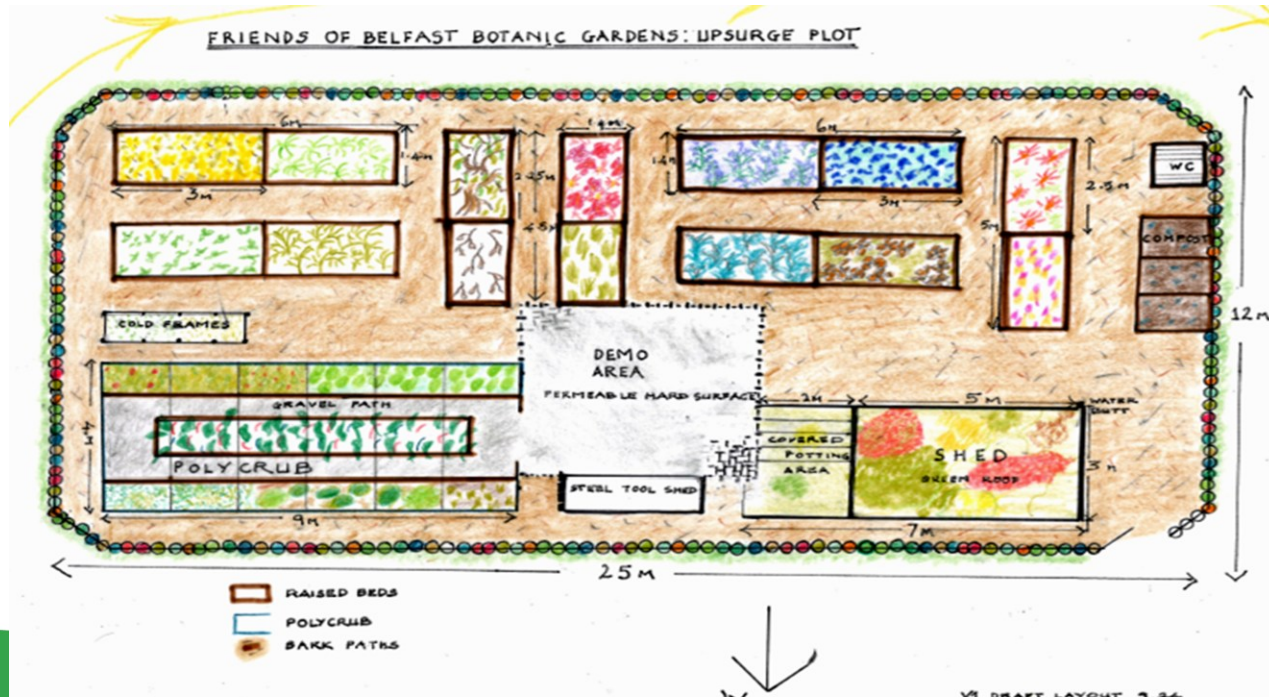
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Climate Resilience Garden



Climate resilience garden almost operational, testing resilience of different plants to flooding, overheating, drought etc.

Currently seeking research partner for 3-4 years.



Satellite Sites

Sharing learning from main demonstrator site to satellite growing spaces across the city.

Visits between gardening sites to learn from each other and main site.

Bringing nbs to sites across city to test further and increase resilience.



Range of Engagement/Place Lab events

Sharing learning from main demonstrator site to satellite growing spaces across the city.

Visits between gardening sites to learn from each other and main site.

Bringing nbs to sites across city to test further and increase resilience.



Codesign process, followed up with involvement in delivery, maintenance and learning by doing. Involvement in key neighbourhood events, outreach and bringing people to site.



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Thank You

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