

Placemaking and Blue Green Infrastructure for Liveable, Resilient Places (PhD research)



Sarah Crowe, The University of Dundee



Introduction

Waterfront areas encompass a range of uses, bringing social, environmental, wellbeing, cultural and economic benefits.

The impacts of climate change pose an increased risk from coastal and river flooding, threatening these mixed-use spaces.

Scientists claim we are already experiencing the impacts of climate change with extreme weather events increasing, leading to widespread flooding.

We need to increase our resilience to these impacts.



Stonehaven waterfront: Own Image



Grey infrastructure solutions to water management: the problem

Our traditional solutions to water management are being overwhelmed by climate change, urbanisation and population growth.

This compounds flood events



Grey infrastructure solutions to flooding: the problem

- Interventions such as sea walls, though effective against flooding, are at risk of being overwhelmed by climate change related sea level rise.
- Building ever higher walls can have a negative impact on a place, in addition to harmful environmental impacts.



Canvey Sea Wall

England, S. (2022) *Canvey Sea Wall Graffiti Leaves Residents Disgusted*. Available at (<https://www.echo-news.co.uk/news/19978678.canvey-sea-wall-graffiti-vandals-leave-residents-disgusted/>)

Grey infrastructure solutions to flooding: the problem

They can also attract anti-social behaviour.

These factors have led a reluctance among communities to accept such measures.

Grey infrastructure: resistance from communities



Musselburgh Flood Protection scheme



Sign our petition

Get our voices heard

- We're asking East Lothian Council to press pause on the scheme and work with geoscientists to explore other nature-based solutions.

Sign now

Email your councillor

Give them your views

- The council appear keen to push the scheme through. Join us in asking them to release their research into nature-based solutions and give a democratic voice to Musselburgh residents.

Contact details

Lend us your time

Help make a difference

- We're always looking for volunteers to raise awareness in a positive, responsible way. If this sounds like you, we invite you to join our growing group of friendly volunteers.

Contact us below

Donate

Help fund our activity

- We're all volunteers who live in Musselburgh. All donations will be used to produce our printed flyers and posters etc

Donate



Image Kelly Via Pexels

We need a more integrated approach to flood and wider water management that brings benefits for people, place and the environment.

An approach that sees water as an asset.

Something to work *with*, not against and contributing to a sense of place.

A placemaking approach to climate adaptation

A placemaking approach to climate adaptation can lead to responsive solutions which can bring benefits for people, place and the environment.

However, there is a limited understanding of how this can be achieved.

Developing this understanding is particularly pressing in Scotland, where policy is steered towards a placemaking approach to achieving blue green, water resilient cities.

This makes such an approach not a desire, but a requirement for all local authority areas in Scotland.

Main aim of my research

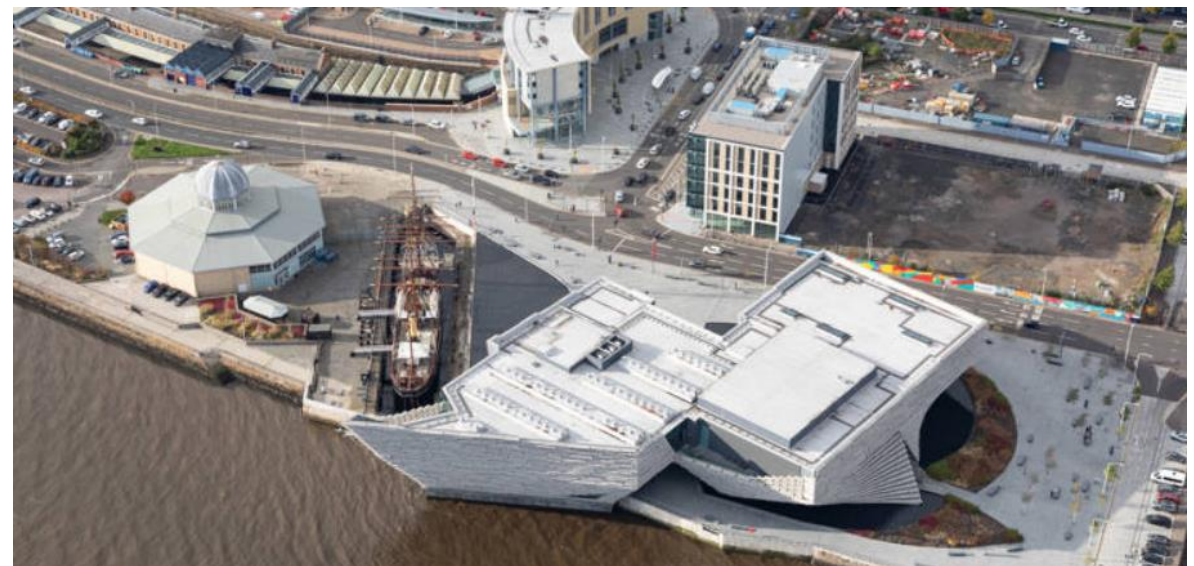
My research investigates how placemaking and BGI can combine to develop flood resilience in ways which bring benefits for people, place and the environment.

It has a focus on Dundee and Broughty Ferry in Scotland.



Broughty Ferry

Stockman, T. (nd) *Area Focus-Living in Broughty Ferry*. Available at <https://tspc.co.uk/area-focus-living-in-broughty-ferry/>



Dundee waterfront

Scottish Development International (nd) *Dundee Waterfront*. Available at (<https://www.sdi.co.uk/invest-in-scotland/invest-in-projects/dundee-waterfront>)

Overview

Dundee City scores highly on the Scottish Indices of Multiple Deprivation and faces flooding from a range of sources, bringing a complex set of challenges.

This brings a need to address flood risk in an integrated way to deliver multiple benefits.

My research brings together flood analysis to estimate level of risk, policy analysis, stakeholder interviews and co-creation workshops to develop a holistic methodology.

The remainder of this presentation introduces the findings from the stakeholder interviews with regards to some of the challenges in implementing placemaking and BGI.

I will also outline how these findings have shaped my approach to community engagement.

Semi-Structured interviews- approach:



24 people interviewed.



Interviews lasting from 45 minutes to 1 hour.



Participants included local authority staff (flood management, climate change, community engagement, greenspace management) and community members.



All participants were asked to share their experiences of flooding and place a pin on a digital map to highlight locations of flooding.

Interview questions

- Opening questions asked, “what impact do you feel placemaking can have?” and “what impacts do you feel BGI can have?”.
- Kept deliberately broad to allow participants to answer from their own perspective.
- Follow up questions based on salient findings from the literature review acted as a prompt to generate a deeper insight.

Follow up questions:

1. On the built environment
2. On the economy
3. On the environment
4. On health and wellbeing
5. What benefits to communities do you feel placemaking/BGI can bring?
6. Have you experienced any barriers to placemaking/BGI activity
7. Have you experienced any negative impacts of placemaking/BGI

Placemaking Challenges

Placemaking governance:

- Planning has a resourcing issue which impacts on placemaking efforts.
- Placemaking terminology used by professionals can be a barrier to implementation.
- Placemaking efforts need staff consistency.
- Silo working can hinder placemaking.

Defining the purpose:

- Placemaking needs to activate a space.

Community engagement:

- Placemaking need to take the local community into consideration.
- Community input isn't acted upon.



Potter, D. (2002) *Jargon*. Available at (<https://www.grammarly.com/blog/how-to-overcome-plain-language/>)

Placemaking Challenges

Maintenance:

- Maintenance can impact on the use of a space.
- Maintenance does not equate to long-term care of a place.



Rotterdam Water Square: Own Image

Placemaking Challenges

Suspicion:

- Placemaking projects can be met with suspicion. This can encourage opposition.
- Placemaking projects can be met with anxiety.



BGI Challenges:

Apathy and disconnection:

- There is an apathy and disconnection to the climate emergency.
- People don't see they are part of a bigger picture.
- The language around climate change makes people feel disconnected from it.
- It can be hard to engage people – only those motivated to take part will.
- People don't care when flooding doesn't affect them.



Rosenburg, J. (2022) *The Effects of Apathy on the Psyche*. Available at <https://psychologicalhealingcenter.com/effects-of-apathy-on-the-psyche/>



BGI Challenges

Trees:

- Trees can obstruct people's view.
- People complain about trees causing unwanted shade.
- People complain about leaves making the ground slippery.

BGI Challenges

Perception of BGI

- BGI can be viewed as greenwashing .
- BGI can cause disruption and access restrictions.
- SUDS ponds pose a health and safety risk.
- People worry that BGI will attract anti-social behaviour.



Maintenance-related barriers

- Not clear who is responsible for maintaining BGI.
- There is no money to maintain BGI.
- Maintenance can impact the approval of BGI.
- Maintenance can impact success of BGI.



BGI Challenges

Community engagement:

- Not codesigning solutions with the community to ensure they are relevant to their context.
- Feedback from community engagement isn't acted upon.
- **A preference for grey infrastructure** among local communities and practitioners. Grey infrastructure is viewed as having an instant impact.
- The **economic impacts can be hard to quantify** meaning the business-as-usual solution can take precedence.

Overcoming challenges to a placemaking approach to achieving blue green, resilient places:

Overcome silo working

We need to overcome silo working to ensure a joined-up approach to delivery to obtain multiple impacts for people, place and the environment.

Develop a shared vision for place-based BGI projects which provides clarity on the role of each stakeholder.

Overcoming
challenges to a
placemaking
approach to
achieving blue
green, resilient
places:

Maintenance

Maintenance needs to be planned at an early stage in the process and incorporated in an ongoing plan.

Maintenance costs should be as clear as possible from the outset.

Maintenance needs the involvement of a range of partners to ensure the longevity of the project in terms of its climate resilience and placemaking impacts.

Overcoming challenges to a placemaking approach to achieving blue green, resilient places:

Communities at the heart of the process

Fully engage communities and act on their input to ensure their ambitions are reflected in placemaking and BGI delivery.

Engaging with communities may also help to overcome, resistance suspicious and anxiety about the placemaking and BGI process.

Overcoming
challenges to a
placemaking
approach to
achieving blue
green, resilient
places:

**Local scale,
relatable dialogue
and action**

Keep the message around the impacts of climate change relatable and at the local scale to avoid apathy and disconnection which can impact on acceptance of and engagement with place-based BGI interventions.

Avoid jargon and complex terminology.

Tailor the communication method to the audience

Overcoming
challenges to a
placemaking
approach to
achieving blue
green, resilient
places:

Education and information

Showcase exemplar projects to highlight the multiple benefits they bring and to encourage community acceptance and openness to move away from grey infrastructure

Engage young people about the benefits of BGI to instil an early preference for these interventions in their communities.

Overcoming
challenges to a
placemaking
approach to
achieving blue
green, resilient
places

**A properly resourced planning
sector is key!**

**The planning sector needs to be
properly resourced to ensure we
can achieve a placemaking
approach to blue green climate
resilient places.**

Benefits of the research beyond academia:

Contribute to furthering the aims of the NPF4 through using BGI and placemaking to create sustainable and liveable places.

I have developed a workshop which for working with communities to generate ideas for place based BGI in their communities. This process can be used by key agencies to work with communities to create solutions which tackle flood risk in ways which bring multiple benefits.

Ties in with priorities of Dundee Council (Tackle climate change and build resilient and empowered communities).

Helps towards the aims of Scottish Government's Water Resilient Places Strategy as it shows how places can be made resilient to future flooding and how a "placemaking approach to achieving blue-green cities and water resilience" can be utilised.

Thanks

For further information & updates, please
contact sycrowe@dundee.ac.uk

www.hydronationscholars.scot/scholars/
(add scholar name)



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