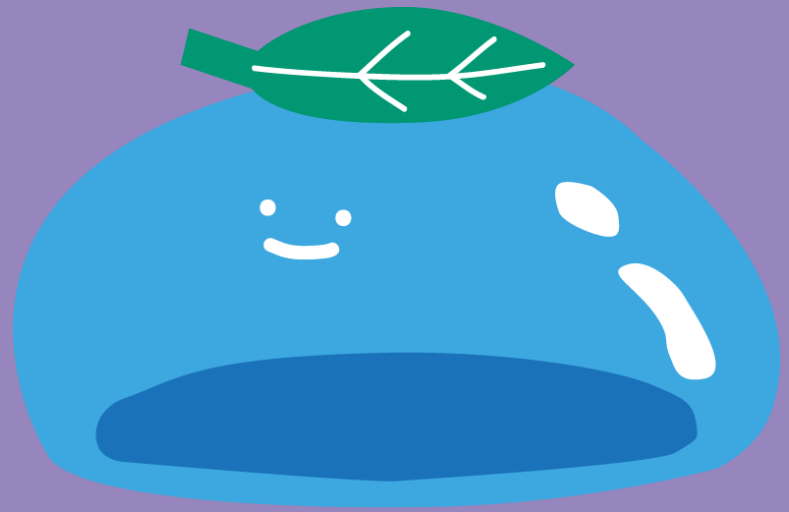
# SuDS+

## Community-led futures

ARUP

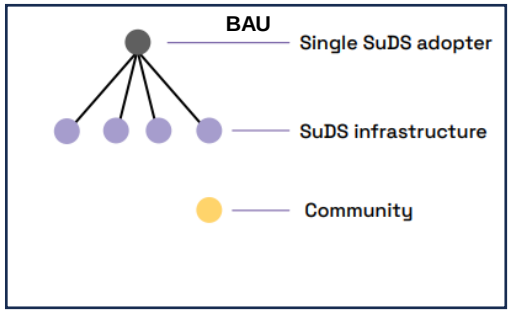
## Update on the adoption framework



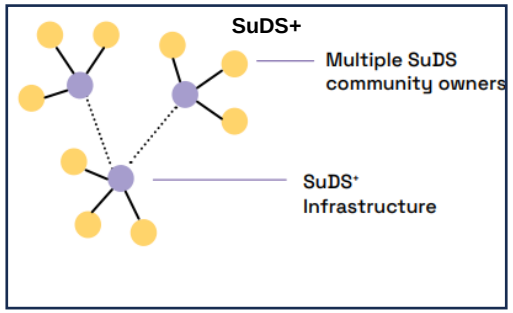
12th March 2023

# Aim of the adoption framework

The aim of the community adoption framework is to develop a **mechanism** for the on-going community adoption of the SuDs+ assets which sustains the **community group** through **the transfer of value generated** by SuDS infrastructure from traditional asset owners to the people of Stanley.




Centralised top-down




Distributed bottom-up

# Objectives of the adoption framework

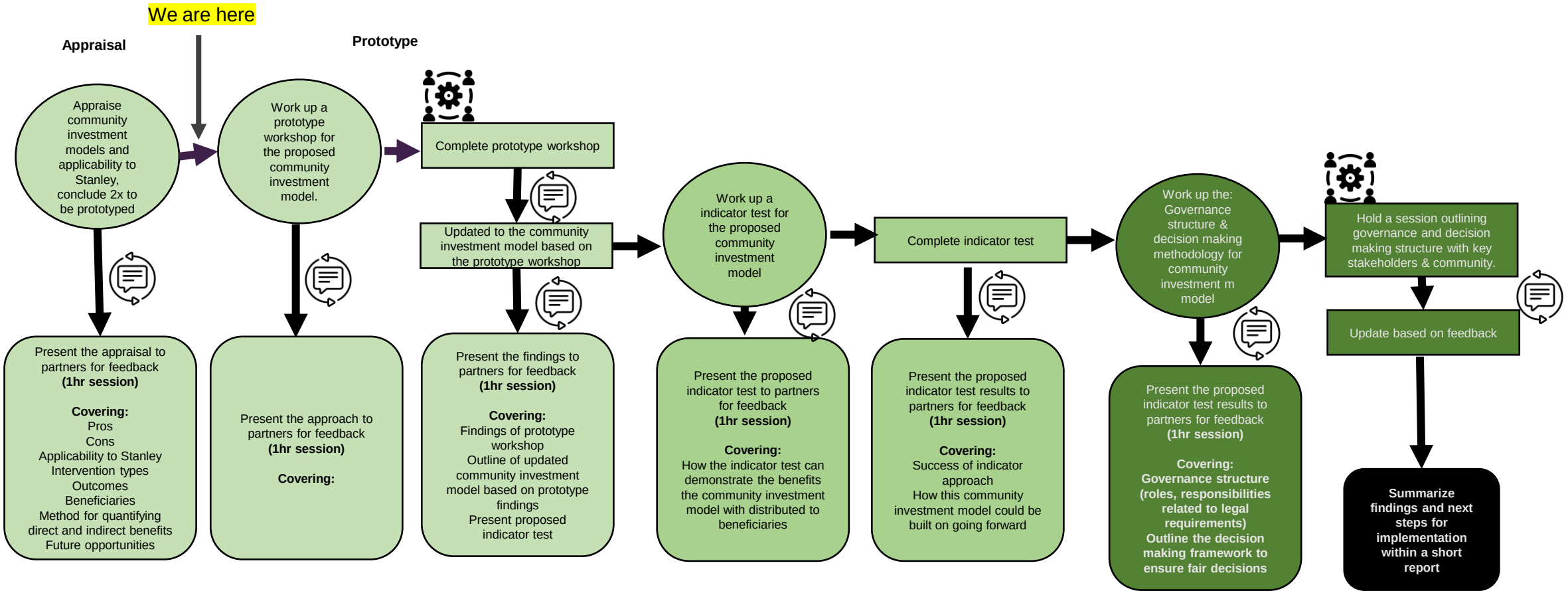
This adoption framework will deliver this aim through achieving the following objectives:

1. Develop governance models that support the delivery of co-benefits via SuDS.
2. Develop a clear service proposition for the adoption of SuDS in Stanley.
3. Get support from both the community and stakeholders (EA, NWG, DCC etc) to ensure the long-term viability of co-benefits.
4. Develop a model for prototyping SuDS in place to enable community governance and decision making.
5. Outline the tools required to enable this community governance mechanism. Please note that the outputs might not be financial. Other value instruments may include improving trust, feelings of ownership and governance in local place.
6. Deliver a draft SuDS+ ‘blueprint’ that combines learnings to apply elsewhere.
7. Summary of key work package activities and outcomes.

# Agenda

1. Progress on the proposed approach
2. Recap phase 1: Vision statements
3. Recap phase 1: Partnership principles
4. Recap phase 1: Partnership typologies
5. Literature review findings & feedback
6. Interview findings & feedback
7. Protype suggestions & feedback

# Progress on the proposed approach




Broken further into two parts (will converge):

1. maintenance & monitoring governance (community)
2. Finance and funding (Partners BNG credits funds)

| Discovery and define | Approach development | Design |
|---|---|---|

# Recap phase 1: Vision statements

Vision Statement 1:
**Enhance community resilience to flooding**

1.1 Help to provide information and tools about flooding and responses

1.2 Help to mobilise communities to respond to flooding events

1.3 Empower communities to access local and wider networks and support systems

Vision Statement 2:
**Create a sense of pride and ownership over the local environment**

2.1 Encourage respect and care of the area and help to prevent littering and antisocial behaviour

2.2 Encourage curiosity in local life and inspire people to shape their local community

2.3 Give people a stake in the community to foster connection with the public realm

2.4 Celebrate the local sense of pride in the place, community spirit, its histories and local stories

Vision Statement 3:
**Create beautiful, vibrant and diverse public spaces accessible to all**

3.1 Create modern, attractive and welcoming spaces and activities for people of all ages and all needs

3.2 Make the area beautiful, clean, tidy and well-maintained

3.3 Revitalise existing nature sites and provide access to new ones on the community's doorstep

Vision Statement 4:
**Strengthen local community-led networks, groups and services**

4.1 Support community and volunteer groups to continue to be inventive, and grow their resilience

4.2 Create new community-led services that are tailored to local needs

4.3 Pilot community decision-making processes in everyday life

4.4 Grow the community capacity to support and lead community initiatives

Vision Statement 5:
**Provide training and education for the workplaces of the future**

5.1 Encourage children and young people to become agents of change

5.2 Educate and train community members to become SuDS champions and experts

5.3 Work with existing partners to create new training and education programmes

Vision Statement 6:
**Help to create local job opportunities and support existing and new businesses**

6.1 Create rewarding and secure careers that are available locally

6.2 Inspire new businesses and ideas and give them an initial leg up

Vision Statement 7:
**Support affordable living costs and improve the quality of housing**

7.1 Help to reduce the impact of rising costs of heating and food

7.2 Help to provide fit-for-purpose and healthy housing

The adoption framework should try help the scheme meet all the proposed vision statements either directly or indirectly. However, the **focus of the adoption framework** will be on directly achieving vision statements: **2, 4, 5 and 6.**

# Recap phase 1: Partnership principles

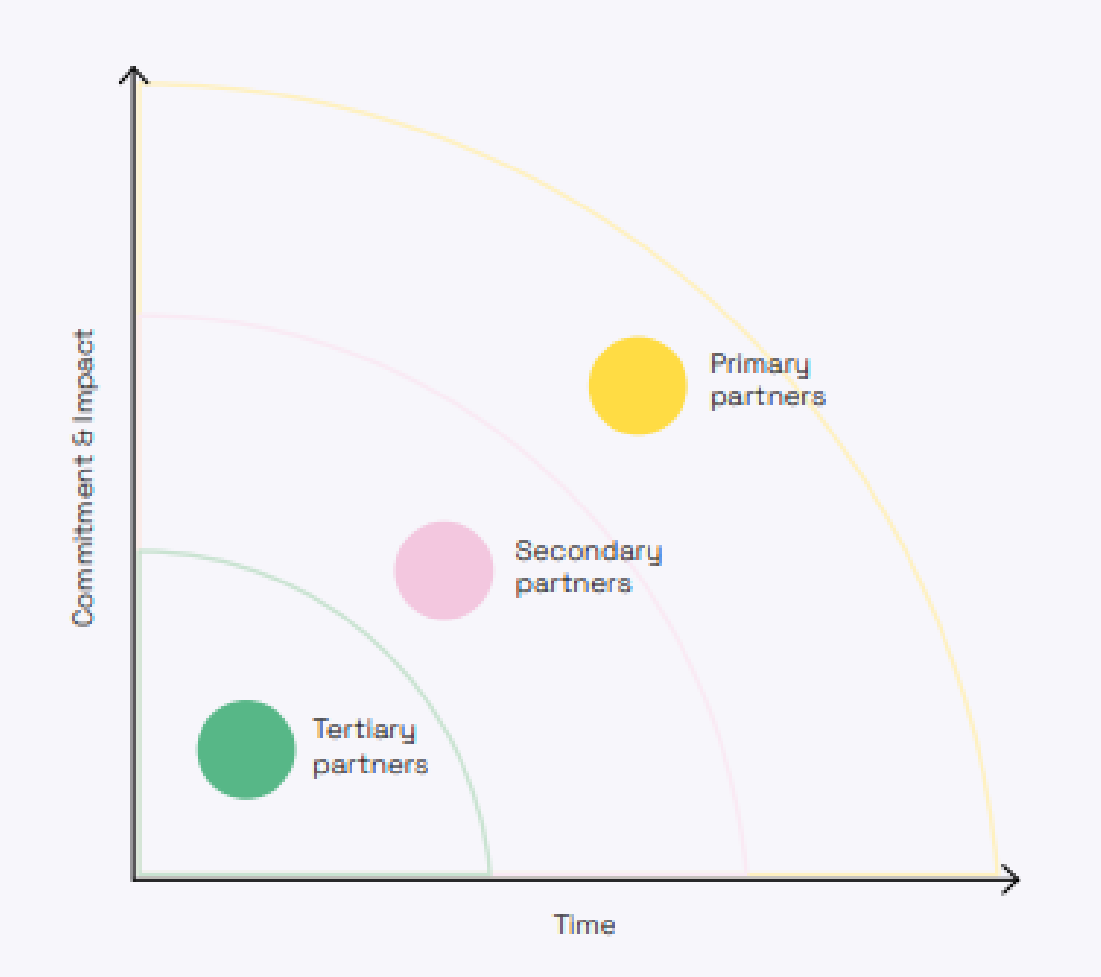
The partnership principles generated during phase 1, are deemed also appropriate principles to underpin and influence decisions for the adoption framework.

The literature review has appraised each case study against these principles.

The proposed adoption frameworks to be prototyped will be further mapped against the partnership principles.

**Do you feel we are missing anything?**

# Recap phase 1: Partnership typologies

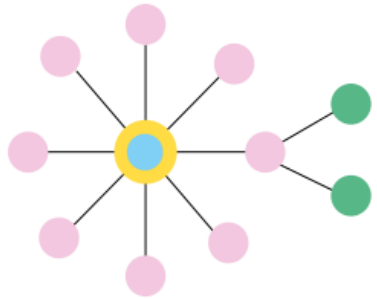



In a simplified form, these parts of the structure can be described in three categories: **Primary, Secondary and Tertiary partners.**

**Primary partners** are anticipated to be the most committed to the project, with a broader range of responsibilities and ongoing involvement. In contrast, **secondary** and **tertiary partners** can be involved only briefly and with a lesser anticipated impact

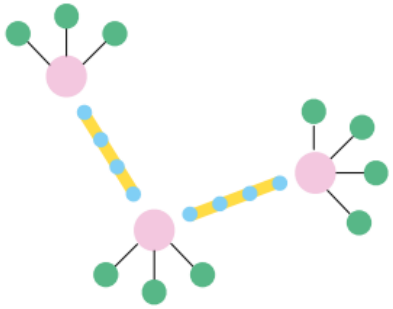
# Recap phase 1: Partnership typologies

**Typology 1:**
Epicentre



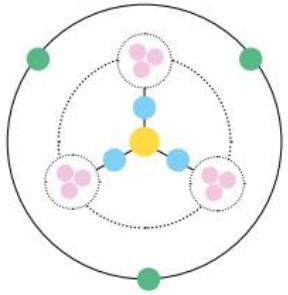
*Centred around an existing local partner with established connections, it brings a network of supporters under a shared goal of generating and amplifying social value for the community.*

**Typology 2:**
Platform



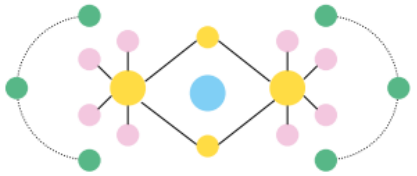
*A dynamic partnership that is formed at different points in time through community events and activities that make use of the distributed SuDS+ infrastructure and amenities.*

**Typology 3:**
Orbit



*While overseen by a single governing entity, smaller partnership are formed around specific SuDS+, as they come together to co-design facilities, use them, and share upkeep responsibilities.*

**Typology 4:**
Balanced



*Formed of an equal partnership between the local community and institutions, this model plays on the strengths of both sides.*

The literature review maps the case studies to one of the four partnership typologies developed by SuDS+ (if appropriate).

The proposed adoption frameworks to be prototyped will be further mapped against the adoption typologies.

# Adoption definitions

- Alongside these principles there is a need for transparent definition around adoption, to ensure all of those involved in the adoption development understand the meaning and importance of definitions.
- **Engagement** is defined as the active involvement, participation, or interaction with a group or individual. Engagement involves being attentive, responsive, and actively participating in conversations, activities, or relationships. Engagement is important as it fosters connection, collaboration, and a sense of belonging.
- **Community** is defined as a collective of people who share an interest in the social, cultural, or environmental wellbeing of a locality (in this case, Stanley). The strength of a community lies in the relationships and mutual support among its members.
- **Monitoring:** is defined as the activities required to observe, record, and check the performance of SuDS over a specific period (this period is to be agreed).
- **Monitoring agreement (contract):** is an agreement which requires the organisation/group or individuals responsible for SuDS monitoring to adhere to.
- **Maintenance** is defined as the activities required to ensure SuDS are preserved to an agreed design and functionality standards. If the SuDS design changes both the SuDS design (and functionality standards) will need to be updated.
- **Maintenance agreement:** is an agreement which requires the organisation/group or individuals responsible for SuDS monitoring to adhere to.
- **Adoption** refers to the process of accepting, embracing, and/or taking soft ownership of a particular asset or responsibility as a collective effort. This can happen when a community decides to assume the care, maintenance, or management of a public resource that was previously under the responsibility of another entity, such as a government or private organization.
- **Community adoption** of assets often involves active participation, collaboration, and engagement from community members to ensure the proper upkeep, utilization, and improvement of the asset. This can include tasks such as maintenance, monitoring, or implementing sustainable practices. The goal is to create a sense of ownership, pride, and collective responsibility within the community, fostering a stronger connection and investment in the asset's utility.

**Any feedback on these definitions?**

# Adoption roles and responsibilities

- **SuDS+ Owner:** This organisation or individual is the legal owner responsible for ensuring that the SuDS feature performs its intended flooding resilience function. They provide monitoring of SuDS + performance, remedial maintenance, such as repairs due to damage, replacement of the equipment, and any significant maintenance activities which cannot be completed by SuDS+ adopters.
- **SuDS+ Adopter:** It is a formal role responsible for ensuring that the SuDS feature performs its intended flooding and community resilience function. They provide monitoring of SuDS+ performance, remedial maintenance, such as repairs due to damage, replacement of the equipment, and vegetation management.
- **End user:** these are all people and groups that will be benefiting from the future SuDS+ amenities. These could be local residents, that use it daily, or occasionally, or be visitors.
- **Local connector:** They are the main mediator between the local community and other project partners, bringing different parties together. They are local and are acting as a face and point of contact of the project, especially during early stages. They communicate the value of SuDS to local people contextualising it through local examples and speaking to relevant issues.
- **Community coach:** They are groups and organisations that support local residents by providing capacity building, life skills, counselling, and education programmes, helping with issues around mental health, confidence and employment.
- **Nature Steward** They are individuals of all ages that create and look after the living habitats, whether planting flowers, building a bug hotel in a rain garden, or keeping the local riverside free of litter. They watch and sense the health of the living environment and attend to it when needed.
- **SuDS+ technical expert:** As industry specialists, they know SuDS technology inside and out. They provide technical expertise throughout all stages, from visioning to monitoring.
- **SuDS+ Designer:** This hybrid role is most likely to be performed by a range of specialists, covering civil engineering, hydrology, landscape design, product design and urban planning disciplines.
- **SuDS+ Builder:** Contractors that perform the construction and landscaping of SuDS and related amenities.
- **Practical benefactor:** They are local and external businesses that can provide practical skills, materials, and resources.
- **Sponsor:** They are the financial benefactors of the SuDS+ amenities and activities. Their monetary contribution can range from a small personal donation to a large grant or bigger investment.

**Any feedback on these definitions?**

# Literature review findings & feedback

# *Community-owned natural swimming ponds*

## East London Waterworks Park, UK

Transforming an East London industrial site into **community-owned natural swimming ponds and biodiverse park**. Diverse group of people with one thing in common: passionate about enhancing the environment and ensuring that as many people as possible can enjoy nature.

Community have come together to realise their vision for land that used to be filter beds providing clean drinking water to people of East London. Want the concrete-covered depot to, once more, play its part in supporting the health and well-being of the local community.

**OPPORTUNITIES**

- Improvements to well-being, biodiversity, air quality, as well as circular economy and the ability to generate renewable energy (generating solar power from solar panels and hydropower from the river).

**MODEL**

- *. Crowd funding*

**OUTCOMES**

- *Swim free all year round in rainwater cleaned by reed beds and aquatic plants.*
- *Be able to meet people and develop ideas in beautiful and affordable community spaces.*
- *Be able to give different aspects of sustainable living a go.*
- *Forest school space.*

**CHALLENGES**

- Planning permission required.
- Need for community to 'buy-in' to be able to purchase.
- Current brownfield site, potential contamination.

https://www.crowdfunder.co.uk/p/elwp

# *Community Rain Gardens, Waltham Forest*

## Waltham Forest, London

First SuDS scheme in Waltham Forest was installed back in October 2021. First phase of many across the borough, aiding in the reduction of flooding, as well as bringing nature to people's doorstep.

Both **local residents and schools** joined up to assist with some of the **planting, learning about the species planted**, and the importance the rain gardens have on their homes. The borough is also working closely with the residents to **assign gardening 'stewards'** to care for them in the future.

Inclusive approach empowered the community. Residents can participate in planning, planting and maintenance, becoming garden stewards.

**MODEL**

- . *Community SuDS scheme (Partnership scheme)*

**OUTCOMES**

- *Network of **22 rain gardens** covering over 280 square metres, these green spaces boast a diverse array of plant species.*
- *The gardens incorporate trees and **aromatic herbs like Sage** and **Rosemary,** enabling the local community to enjoy not only the beauty of nature but also the benefits of a **sustainable and edible landscape.***

**CHALLENGES**

- Identification of the location of the gardens – to fit in with the urban fabric

**OPPORTUNITIES**

- Promoting sustainable drainage systems and flood reduction.
- Enrich urban well-being by reducing stress, improving air quality, and providing spaces for relaxation and contemplation.

https://www.meristemdesign.co.uk/community-rain-gardens-waltham-forest

# *Eigg Electric*

## Eigg Island, Scotland

Eigg Electric is a **community-owned, managed and maintained company that provides electricity for all island residents from renewable sources**, comprising 110 kW hydro projects, 24 kW wind turbines and a 20 kW solar PV plant, totalling 184 kW. Renewable sources have provided around 95% of the island's electricity since the scheme was first switched on in 2008.

MODEL

- ***Co-operative ownership*** *of community wind, solar and hydro system.*
- ***£1.66m funded by EU regional development fund*** *as well as by national bodies and islanders.*

OUTCOMES

- *Provision of* ***95% of the island's electricity since 2008.***
- *Sometimes Eigg Electric produces more electricity than it can use,* ***excess heats community buildings.***
- ***Community agreed on every aspect*** *of the system – inc pricing.*

CHALLENGES

- *Technically challenging and unique project.*
- *Success is owed to all specialists and the* ***collaborative effort*** *which delivered the scheme.*

> *The maintenance team includes the island's baker, gardener and knitter*

*Solar panels provide a boost to Eigg's other sources of power, particularly during the long summer days (Credit: Alamy)*

https://www.bbc.com/future/article/20170329-the-extraordinary-electricity-of-the-scottish-island-of-eigg

# *Sea Ranger Service*

## Piloted in The Netherlands since 2018; scaled internationally from 2021 through a social franchising programme co-created with partners. Launched in UK – 10/01/2024

The Sea Ranger Service is a social enterprise that has pioneered a model which simultaneously creates social and environmental impact. It is on a mission to affect social-economic regeneration of coastal regions whilst improving conservation of the world's oceans.

The Sea Ranger Service has three primary activities to achieve this mission:

- **Training young people to become Sea Ranger**s as a start to their maritime career
- Carrying out **sustainable offshore services and ocean conservation** work at sea
- Constructing **purpose-built sailing work vessels** to carry out this work cost-effectively and clean

MODEL

- *Entrepreneurial approach*

OUTCOMES

- *Approach combines services in youth engagement, shipbuilding, offshore services and environmental conservation to tackle youth unemployment, create modern seafaring jobs and regenerate marine biodiversity globally.*
- *Trains young people from predominantly deprived coastal regions to become ocean conservationists, while paying them a salary.*

CHALLENGES

- Engaging young people, making them aware of the importance of the task in-hand.
- Rigorous recruitment programme.

OPPORTUNITIES

- Tie in with other successful existing projects such as Project Seagrass.
- Aimed at young people who haven’t gone to university or gained the right qualifications to go into a conservation career.

https://searangers.org/

# *Applicability to Stanley?*

| Case Study Example | What from this approach could be applied in Stanley? |
|---|---|
| Osney Lock Hydro | Set up by local residents, **community owned.** |
| Buan Citizen Power Generation | Local NGO set up, **partnership project**. |
| Eigg Electric | **Community-owned,** electricity generation. |
| Creacombe Solar Farm | Within parishes, fit in with surrounding area, use of land with previous **low ecological value.** |
| Braemar Hydro Scheme | Located within community, community in mind with **creation/design.** |
| Settle Hydro Scheme | **Community shares/investment**. |
| Community-owned natural swimming pools | **Community generated initiative**, multiple benefits, well-being of locals. |
| Neen Sollars Community Hydro | **Owned by local people**, ecological benefits. |
| Community Rain Gardens, Waltham Forest | SuDS, **partnership between locals and schools**, stewardship opportunities, inclusivity. |
| Bangweulu Wetlands | Designed to benefit local community, **educational opportunities**. |
| Sea Ranger Service | Young person involvement in conservation, **poverty-action, deprivation.** |

# *Governance of the schemes?*

| Case Study Example | Legally responsible | |
|---|---|---|
| Osney Lock Hydro | Community interest companies (CIC) is **a kind of non-charitable limited company that's set up primarily for the benefit of a** community. (Orbit) | On 31 December Osney Lock Hydro Limited ceased to trade. All assets and liabilities were taken over by **Oxford Community Renewables Limited** under the transfer of engagements arrangement available to registered societies. |
| Buan Citizen Power Generation | | Led and owned by **Buan Citizen Power Generation**, a local NGO set up in 2006. |
| Eigg Electric | | Eigg is owned by the **Isle of Eigg Heritage Trust** who have managed it on behalf of the community since the community buyout of 1997. |
| Creacombe Solar Farm | **Partnership (balanced)** | Creacombe Solar Farm is a community owned asset held by **Community Owned Renewable Energy Partners (CORE) and Yealm Community Energy (YCE).** |
| Braemar Hydro Scheme | **CIC** (Orbit) | **Braemar Community Limited** – responsible for several projects in Braemar including the Braemar Hydro Scheme. |
| Settle Hydro Scheme | **CIC** (Orbit) | Settle Hydro is owned by **Settle Hydro Limited**, a registered society under the Co-operative and Community Benefit Societies Act 2014. The Society is managed by a group of voluntary Directors who are appointed by the Society's Members (Shareholders) at Annual General Meetings. |
| Community-owned natural swimming pools | **NA** | **Not yet in operation** – funding still being raised; awaiting planning permission. |
| Neen Sollars Community Hydro | **Cooperative shares (Platform)** | The project is funded by a **co-operative share issue** and owned by local people. |
| Community Rain Gardens, Waltham Forest | **Council owns Local residents manage (Balanced)** | Managed by the local resident group but **owned by the London Borough of Waltham** Forest. |
| Bangweulu Wetlands | **Partnership (balanced)** | The Bangweulu Wetlands Project is overseen through a collaboration between **African Parks, the Department of National Parks and Wildlife (DNPW), and six Community Resource Boards (CRBs).** These entities work together to manage the wetlands, involving local communities in landscape management. |
| Sea Ranger Service | **Charity** (Epicentre) | **Sea Ranger Foundation** with board of trustees. |

# Interview findings & feedback

Based on applicability to the SuDS+ Project, case studies were short-listed for further investigation, to understand more from the people involved via informal interviews. Four case studies were short-listed for interviews, with key findings presented.

1. Community owned natural swimming ponds
2. Community rain gardens
3. Eigg Electric
4. Sea Rangers

Any questions? Thoughts?

| Case study | Key findings |
|---|---|
| Community-owned natural swimming ponds | • **Defending Green Spaces**: The community actively wants to protect and preserve their green areas.<br>• **Benefits of Enhancement**: Community enhancement is seen as valuable, offering opportunities for "ecological" design, outdoor education, and cleaning up local rivers using Sustainable Drainage Systems (SuDS) like filtration beds.<br>• **Collective Excitement**: While individuals may not receive direct personal returns, the project creates something exciting for the entire community |
| Community rain gardens in Waltham Forest | • **Rain Garden Maintenance**: Meristem maintained the rain gardens for 6 months and then handed over the responsibility to a group of resident stewards with horticultural interests.<br>• **Community Engagement**: The community engagement was led by 'What If' and encouraged through leaflets.<br>• **Interest in Edible Plants:** Residents expressed interest in having 'edible' plants, including herbs. |
| Eigg electric community owned renewables | • **Community Involvement**: The community unanimously supports the provision of electricity, emphasizing group decisions over individual ones.<br>• **Profit Reinvestment**: Although no profit has been made yet, any future profits will be reinvested back into the community for their benefit.<br>• **Community Ownership**: The ethos is community ownership, where the community knows best what needs to be done, following a bottom-up approach. |
| Sea ranger service | • **Role and Pride**: The role of a Sea Ranger comes with a uniform, instilling pride, a sense of belonging, and self-worth.<br>• **Maritime Opportunity**: Sea Rangers address an unemployment crisis in Port Talbot, leveraging the strong maritime heritage. They provide an entry point into the maritime profession, supported by the government.<br>• **Intergenerational Training**: Employing veterans from the Royal Navy to train young sea farers fosters intergenerational knowledge transfer and contributes to environmental jobs |

# Protype suggestions & feedback

**Prototype focused on: Monitoring and maintenance of SuDS**

To note: The following funding and financing mechanisms need to be investigated further before taking to the community. The following mechanisms to be investigated: CIC, Partnership and cooperative shares. Currently modelling the costs and income from BNG for each site. To then know which mechanism if any of them are appropriate. Approach assumes to follow a co-design workshop completed in the am

Attendees: ' primary, secondary and tertiary potential partners essential to each site.

Activity 1

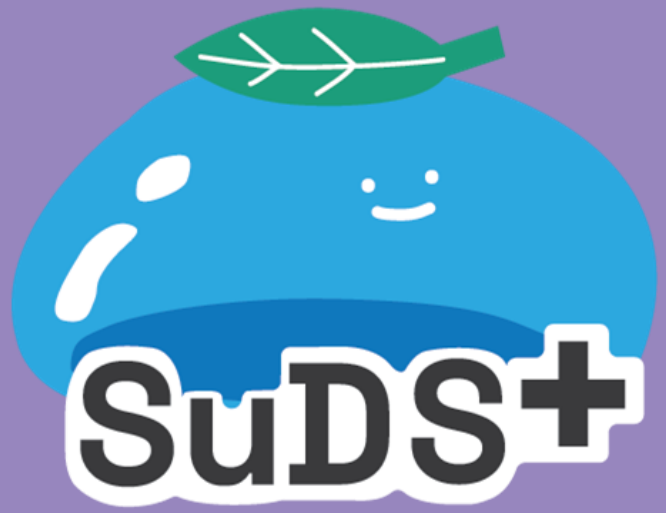
Using the **designs developed (am)** the community to use posits to map on the **proposed design monitoring and maintenance requirements, including owners** (existing engaged groups and adoption roles), and **timescales** (linking into existing events).

Activity 2

Outline an **exemplary maintenance** and adoption and review whether anything further can be added to proposed **maintenance and monitoring suggested by community**

Any Thoughts?

# Thank you




Environment Agency
Northumbria University NEWCASTLE
Durham County Council
WEAR Rivers Trust
NORTHUMBRIAN WATER living water
Stanley Town Council
Teesside University
Viridian Nature • Logic
ARUP
isle
Department for Environment Food & Rural Affairs