

## SuDS+ Community-Led Futures

### Presenter and authors

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### The SuDS+ Community-Led Futures (SuDS+) approach

A 5-year innovation project (2022-2027) is underway in the town of Stanley in North Durham to develop and test the SuDS+ Community-Led Futures (SuDS+) approach<sup>1</sup>. This project is funded by Defra as part of the £150 million Flood and Coastal Resilience Innovation Programme which is managed by the Environment Agency to develop and test new approaches to resilience tailored to local communities<sup>2</sup>.

The SuDS 'Plus' (+) approach de-prioritises drainage as the primary driver for the implementation of SuDS and instead considers it **equally** with all other potential SuDS benefits (e.g. community resilience, amenity, health and wellbeing, biodiversity, education, employment, housing) creating a **co-benefit** framework by which to inform SuDS development<sup>3</sup>. These benefits extend significantly beyond the traditional Four Pillars of SuDS which are the mainstay of current SuDS benefit assessment<sup>4</sup>. The participation of communities is integral to SuDS+ as their needs and aspirations underpin the co-benefits framework for the implementation of SuDS in their local area. The SuDS+ approach consists of four phases:

1. **Vision Setting** where the community identify the key challenges that they face, and their goals and aspirations for their place. These inform the co-benefits framework and ultimately guide the design and delivery of the SuDS interventions.
2. **Opportunity Mapping and Prioritisation** where the community identify opportunities for improvement and investment (locations and ideas for new infrastructure, resources, and activities, not limited to SuDS) that will deliver multiple co-benefits aligned to the benefits framework. A prioritisation exercise identifies which community opportunities can be delivered as SuDS schemes.
3. **Designing interventions together** where the community and specialists co-design the SuDS schemes to achieve the co-benefits, and monitoring is established to ensure robust evaluation of all co-benefits.
4. **Legacy** where ongoing community participation in SuDS maintenance and monitoring will create sustainable co-benefits.

The SuDS+ approach is multifaceted and involves the myriad of stakeholders typical of surface water management schemes, so it is being delivered by a partnership of local academia (Northumbria University, Teesside University), the local county council (Durham County Council), the local rivers trust (Wear Rivers Trust), the Environment Agency, Defra, the local water company (Northumbrian Water) and design, modelling and innovation consultants (Arup, Isle, Viridian Logic) in conjunction with a wide range of community groups and local stakeholders. SuDS+ also engages with stakeholders less familiar with flood risk management to ensure wider benefits and cross-cutting themes are identified and realised, and the '+' opportunities are maximised.

## **SuDS+ in the community of Stanley**

The SuDS+ study area of Stanley South is approximately 7 km<sup>2</sup> and is located to the south of the town of Stanley in the north of County Durham<sup>1</sup>. It is a collection of former mining settlements and includes the urban areas of South Stanley, South Moor, and East Stanley and the semi-rural villages of Craghead, Quaking Houses and The Middles (Figure 1).



*Figure 1. The SuDS+ study area of Stanley South consisting of four sub-areas*

The four sub-areas of the study area represent semi-independent hydrological catchments and distinct urban areas. The increased urbanisation seen throughout the 19<sup>th</sup> century reduced the natural drainage capacity of the catchment resulting in several flood events following heavy rainfall in the last decade impacting residents' properties, public spaces and local roads. The network and type of communities, mix of urban and available green space and risk of surface water flooding in Stanley South provide the right conditions to develop and test the SuDS+ approach.

Phase 1 (Vision Setting) was completed in 2023. Through a series of interviews and workshops, surveys and information points in community centres, seven vision statements were created<sup>5</sup>, validated and prioritised by the community (highest to lowest priority):

1. Help to create local job opportunities and support existing and new businesses
2. Support affordable living costs and improve quality of housing
3. Provide training and education for workplaces of the future
4. Create a sense of pride and ownership over the local environment
5. Create beautiful, vibrant and diverse public spaces accessible to all
6. Strengthen local community-led networks, groups and services
7. Enhance community resilience to flooding

In Phase 2 (Opportunity Mapping and Prioritisation) the community identified 383 opportunities where investment could be undertaken (Figure 2) during walking tours, workshops and in person mapping exercises. The ideas included parks, green spaces, reducing litter, wildflowers, forest schools, community-led facilities and activities for all.

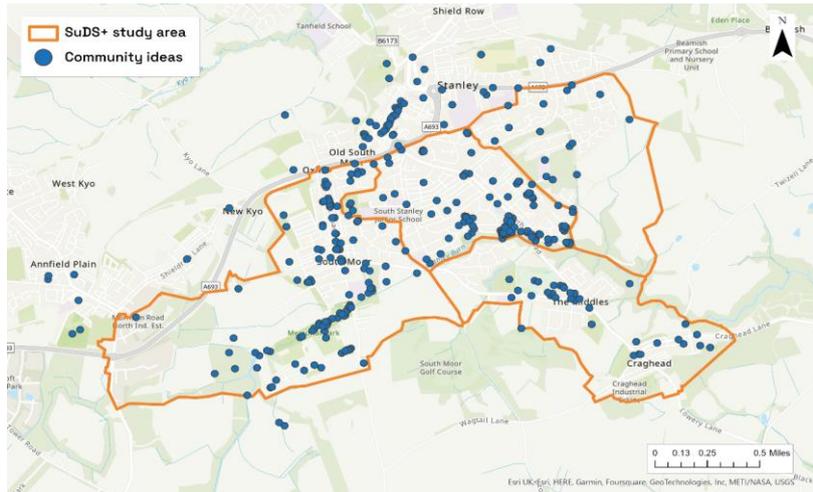


Figure 2. The SuDS+ community opportunity map (an [interactive map](#) is available on the project website)

A shortlist of 12 SuDS+ concepts (Figure 3) was determined from the 383 opportunities using the SuDS+ filter methodology that applied criteria such as idea frequency, land use, land ownership and flood risk reduction potential.

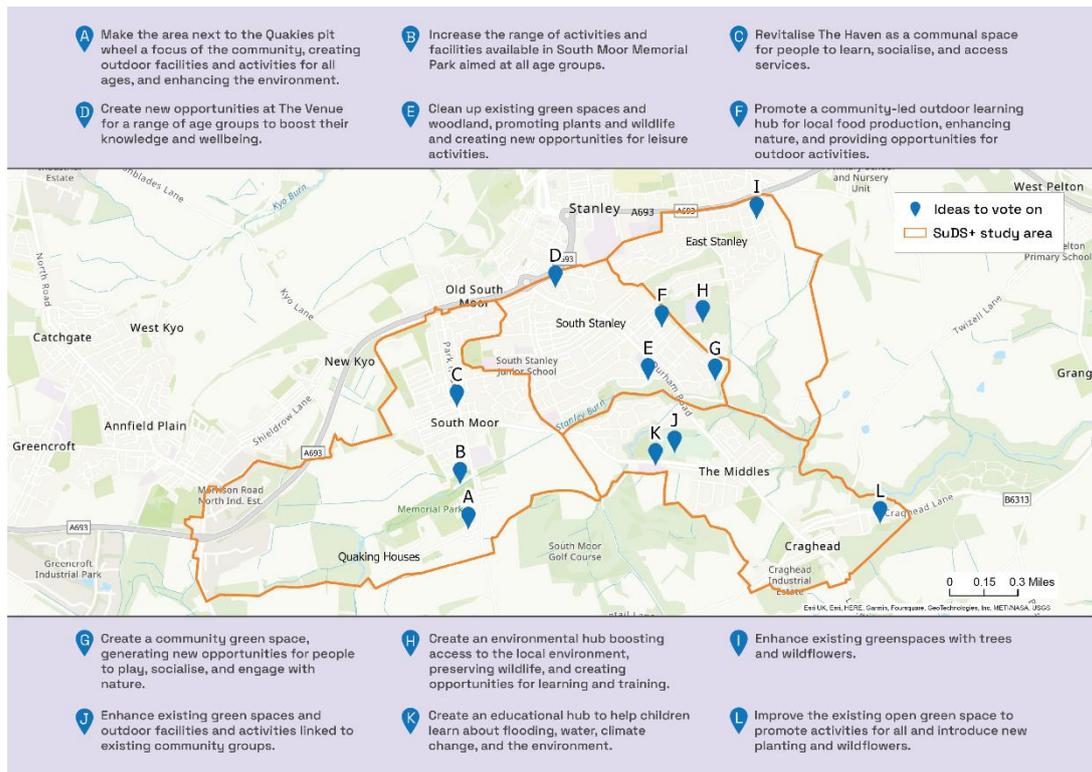


Figure 3. The 12 SuDS+ concepts incorporating multiple co-benefits

The community voting on the 12 SuDS+ concepts is due for completion in December 2023 and will prioritise which concepts are taken forward to Phase 3 (designing interventions together) and Phase 4 (legacy) in 2024. The challenge in the design phase is to create SuDS schemes that provide the co-benefits desired by the community and that can be adopted by the community. The legacy phase will create a vehicle for ongoing participation of the community and lasting creation of co-benefits. The design challenge was explored during

Phase 1 (vision setting) where the project facilitated co-design workshops with the community to identify aspirational SuDS ideas to meet the community needs<sup>5</sup> (Figure 4). Four concepts were identified:

- **Edible SuDS** which are places for community groups to grow food and to run educational and health and wellbeing community activities.
- **SuDS Learning Trails** which are a network of nature trails weaving through water bodies that invites local residents and visitors of Stanley South to discover and learn about the nature and heritage on their doorstep.
- **Sensory SuDS** which are a multipurpose playgrounds that are integrated with SuDS and encourages play with water.
- **SuDS Demonstrator** which is a learning centre and a botanical garden for showcasing SuDS+ technology and its environmental, social and economic benefits.

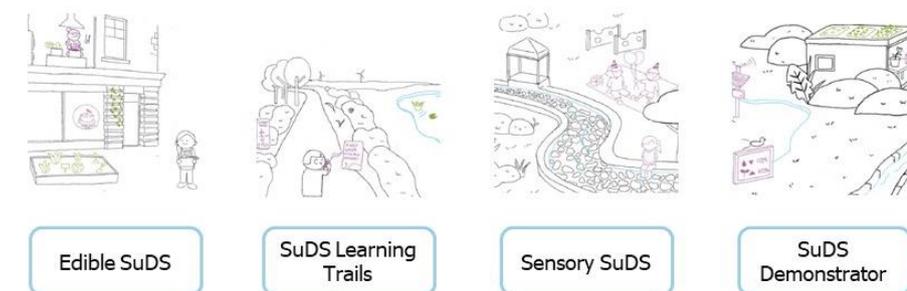


Figure 4. Community co-design ideas for Stanley South

## **Conclusion**

A key finding in Stanley South is that flooding is not a priority for residents, despite ongoing fluvial, surface water and sewer flooding issues in the study area. Their top priorities are job opportunities and affordable homes. The opportunity mapping also identified a large range of community ideas, most outside of the context of flooding. This validates the need for a SuDS+ approach<sup>3</sup> which considers these types of aspirations as equal to, not additional to, flood risk reduction, which not only enables community-led flood resilience but provides multiple co-benefits to local residents.

To learn more about the project or if you are interested in participating in the design and monitoring phase please contact [caitlin.rogers@isleutilities.com](mailto:caitlin.rogers@isleutilities.com) and visit the project website <https://stanleysuds.co.uk/>.

## **References**

1. SuDS+ Community-Led Futures. <https://stanleysuds.co.uk/>
2. Flood and Coastal Resilience Innovation Programme. <https://engageenvironmentagency.uk.engagemthq.com/innovation-programme>
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