D4RUNOFF

Data driven implementation of hybrid nature-based solutions for preventing and managing diffuse pollution from urban water runoff

D6.4 Initial progress report on the actions carried out in the case studies

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D 6.4 Initial progress report on the actions carried on in the case studies	
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R=Document, report; **DEM**=Demonstrator, pilot, prototype; **DEC**=website, patent fillings, videos, etc.; **OTHER**=other
PU=Public, **SEN**=Sensitive, limited under the conditions of the GA

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Executive Summary

Polluted urban water runoff is a significant threat to public health and biodiversity. Changing rainfall patterns causing storm overflows and the discovery of new contaminants are only increasing the problems caused and it is important for urban planners, policy makers and water utilities to work together into order to mitigate the effects of diffuse pollution. One potentially scalable method of mitigation is implementing hybrid Nature Based Solutions (NBS). By identifying and monitoring water pollutants, their sources, and impacts, NBS can be scaled based on social needs, policy, and urban design. The synergies formed, knowledge gained and insights from the three pilot locations will be instrumental in developing hybrid NBS as scalable solutions.

This document reports on the stakeholder engagement activities carried out in the first 18 months of the D4RUNOFF project in the three case study sites - Odense (Denmark), Santander (Spain), and Pontedera (Italy). The objectives are to enhance interaction and communication with local audiences to maximize impact, keep stakeholders informed, improve understanding of urban runoff impacts, and promote project results.

Key activities include:

- Local engagement in case studies through collaborations with authorities and institutions on implementing nature-based solutions (NBS)
- Co-design of AI platform user experience through surveys, interviews and workshops with stakeholders (60 engaged)
- Open Day in Santander with Climate Fresk workshop, presentations, site visit of NBS, and co-design workshop (50+ participants)
- Initial work on gamification challenge and educational game for children
- Social media campaigns to raise awareness on urban runoff (example posts shown)

Key outcomes are increased awareness of urban runoff issues, input to platform development, and ongoing collaborations to implement NBS solutions. Engagement will continue with upcoming Open Days, gamification challenge, educational game session, and social media campaigns. The approach enhances interaction with stakeholders and transfers knowledge on sustainable solutions for urban water management.

1 Table of Contents

List of Figures

2 Introduction

2.1 Purpose of the document

This document describes and reports on the stakeholder engagement activities that have taken place in the first 18 months of the project at local level in the 3 case study sites in Odense (Denmark), Santander (Spain), and Pontedera (Italy). It also addresses specific objective (SO) 7 – knowledge transfer and engagement with stakeholders, including civil society.

2.1.1 Scope of the document

This document will cover the following elements:

- Stakeholder engagement objectives in the case study sites
- Implemented activities from M1-M18
- Future activities

3 Project Overview

Climate change is having far reaching and unforeseen impacts on our environments. Changing weather cycles mean increased rainfall in many areas that aren't equipped for unseasonal and high-density rainfall.

This leads to overworked and inefficient wastewater systems, allowing pollutants and contaminants to infiltrate the surrounding environment. In Europe, 75% of the population live in urban areas and the health implications of this is massive. The overall goal of D4RUNOFF is to create a novel framework for preventing and managing diffuse pollution from urban water runoff.

D4RUNOFF is a three-and-a-half-year project coordinated by VandCenter Syd. The consortium consists of 13 organisations from Denmark, Spain, Portugal, France, and Italy, with leading experts in innovative water management systems, healthy water environments, civil engineers, interdisciplinary scientists and AI specialists.

4 Stakeholder engagement activities

4.1 Objectives

D4RUNOFF's approach in engaging with stakeholders in the case study sites is based on two principles: consultation and information. A two-way consultation and participatory process (WP4) included local stakeholders to contribute to the development of thr AI-assisted platform, directly affecting the direction of its functionnaliries and user experience.

Case study leaders informed stakeholders of decisions, progress and status of the project and the solutions/technologies to be implemented in their case study (WP3 and WP5). An informative approach was also undertaken with the organisation of an Open Day event, which included a Climate Fresk Workshop, presentations and a site visit (WP6).

The objectives of these stakeholder engagement activities are to enhance interaction and communication with local audiences to maximise the impact of the project, ensuring local stakeholders are kept informed of the case study developments regarding technical aspects, and

improved understanding and awareness of the impacts of urban runoff, and promote the results and outputs of the project.

4.2 Implemented Activities from M1-M18

The D4RUNOFF project employed a comprehensive stakeholder engagement process, involving mapping, interviews, promotion, consultation and co-design activities across case studies in Denmark, Italy, and Spain. Stakeholders from previous and ongoing initiatives related to D4RUNOFF were invited to contribute with insights to activities addressing stormwater runoff awareness, pollution prevention, and understanding the impacts of human activities on the quantity of pollution in urban areas.

Key stakeholders, including technical operators, policymakers, scientists, and citizens, were identified during the initial mapping phase. Subsequent interviews, totalling 16 for each stakeholder group, explored practical expertise, policy visions, research-backed perspectives, and nuanced daily experiences. This understanding set the stage for 3 co-design workshops in Odense, Pontedera and Santander, structured as sprints to achieve specific objectives such as project review and prioritization.

Co-design workshops served as dynamic convergence points, fostering collaboration and channelling collective wisdom to shape sustainable solutions for urban water management. Pre- and post-co-design, various consultation activities, including local awareness-raising initiatives and open days, acted as bridges between collaborative efforts and the wider community. Open days provided stakeholders and the public a chance to witness the evolution of ideas, while local engagement activities enriched ongoing dialogue.

In addition, during this 18-month period, initial work on the development of the gamification challenge and on the educational game for children has started and will continue during the following period with their design, testing and implementation.

In summary, the engagement methodology, a journey from mapping to co-design and follow-up, ensured a comprehensive understanding of stakeholder perspectives. This holistic approach demonstrated a commitment to collectively reshaping urban waterscapes for a sustainable future, with a specific focus on addressing stormwater runoff challenges in three case studies.

4.2.1 Local engagement in the implementation of case study objectives

In the following section the local stakeholder engagement regarding the implementation of NBSs for the treatment of urban runoff is described. The context and local typology of engagement in each case study area is laid out especially focusing on the collaboration with local authorities and science institutions. Finally, examples of stakeholder engagement during the past 18 months regarding NBSs is listed.

4.2.1.1 Odense (Denmark)

Engagement in Odense - context

Various testing sites around Odense support the mission of the D4RUNOFF project, which focuses on addressing stormwater runoff challenges. One notable initiative in Skibhus, Denmark, led by Klimaklar, involves collaborative efforts with residents to manage rainwater

in specific areas. The emphasis is on mitigating the effects of everyday rain, intensified by climate change, and the resulting strain on the sewer system. Despite encountering legal and funding constraints, the project strives to implement effective stormwater solutions.

Crucial to the success of this initiative is citizen participation, requiring homeowners to disconnect rainwater from the sewer system and manage it on their properties to minimize the risk of basement flooding. The project guides for residents to contribute by implementing rain solutions or redirecting rainwater to the road through established channels.
The third phase of the project focuses on redirecting rainwater in Thorkildsgade, Helsingborggade, and Bøgebjergvej, aiming to enhance greenery, improve traffic conditions, and effectively manage rainwater in the area. Residents can access plans for the street transformation, including details about the types of plants to be introduced in rain beds.

Collaboration between VandCenter Syd and the municipality is pivotal in delivering these solutions. This aligns in the municipal action plan to become the greenest city in Denmark, which incorporates blue-green infrastructure as a measure. Their joint efforts involve transforming conventional grey asphalt roads into green spaces, contributing to both aesthetics and functionality by supporting traffic calming and the sewer system.
In Dalum, streets like Fruens Bøge Allé and Gurlis Allé have already collaborated with VandCenter Syd. This collaboration resulted in the renewal and beautification of streets, contributing to traffic calming. Residents committed to managing rain on their properties, actively participating in alleviating the strain on the sewer system.

VandCenter Syd implements Low Impact Development Sustainable Drainage Systems (SUDS) in the form of roadbeds, incorporating greenery to serve as traffic-calming features and effectively manage rainwater. Residents play a crucial role by disconnecting from the sewer system and managing rain on their properties, collectively contributing to alleviating the sewer system and preventing basement flooding.

The collaborative approach extends beyond the community, involving researchers to gather additional data about the impact of these nature-based solutions. This research-driven approach ensures a more comprehensive understanding of the effectiveness of stormwater management initiatives, contributing to the ongoing efforts to reshape urban waterscapes sustainably.

Stakeholder engaging activities in the case study area are pending on the start of WP5. Among these planned activities is an open day event which will take place post M25.

In addition, a stakeholder event related to Bolbro Rende another project of Odense municipality involving blue-green infrastructure in the area will be arranged by the municipality in early fall 2024. This event will include a presentation of related projects such as D4RUNOFF and include a session focussing on the interests of stakeholder with regards to the future planning of the neighbourhood.

4.2.1.2 Santander (Spain)

Engagement in Santander - context

In Santander, a practical approach to nature-based solutions is taking place. The University of Cantabria collaborates with water companies, civil society organisations, and the municipality

to assess NBS' impact on environmental challenges, in addition to work performed in the D4RUNOFF project.

The Santander Future Habitat Plan 2055 integrates NBS into the city's long-term strategy. A notable example is the Parque de las Llamas, providing habitat for around 150 bird species in an urban setting. However, challenges like plastic waste in wetlands persist. The Santander Future Habitat 2055 proposal aims to address these challenges and enhance biodiversity conservation. It serves as a communal space actively used by citizens. Organised tours inform the public about this NBS, fostering awareness and community engagement in sustainable urban development. This aligns with Santander's commitment to creating a resilient and environmentally conscious city for the future.

While NBS's popularity is rising, rigorous evaluation remains a focus. Investing in knowledge acquisition is crucial for understanding contaminant origins in air and soil. A comprehensive analysis of contaminant life cycles is underway, with a focus on sustainable drainage, green filters, and marsh vegetation. Systematic measurement of their impact on water filtration and air quality is essential.

Under the ongoing NextGeneration project, the Santander Natural Capital initiative is testing NBS' effectiveness. Collaborative efforts highlight Santander's commitment to maximizing the positive impact of NBS.

Several meetings have taken place to communicate, disseminate and inform local stakeholders of the work carried out in the D4RUNOFF project.

On 29 November 2022, representatives from D4RUNOFF partners AQUALIA and the University of Cantabria and the Santander City Council met at the Civil and Environmental Engineering School of the University of Cantabria. The objectives of this meeting was to collaborate on the initial stages of the project, distribute the photos from the visit to the Odense Case Study conducted during the Kick-off Meeting (to share knowledge about the activities implemented in terms of NBS), engage in conversations about the key stakeholders involved in the decision-making process (information crucial for Work Packages 3 and 4), and coordinate the planning for the Open Day in Santander scheduled for March 2023, in addition to addressing the project's General Assembly Meeting.

A followup meeting was held on 9 January 2024 at the University of Cantabria involving AQUALIA and the Santander City Council to provide updates on the project status, including work accomplished since March 2023, such as D3.1 and tasks completed in WP3. Also discussed was the monitoring programme for the Case Study in Llamas Park, addressing the preparation of the site for the sensors currently under development in WP1. Additionally, a comprehensive review of the key actions associated with WP5 took place during the meeting.

A meeting with SEO BirdLife, an organisation working on the conservation of birds and their habitats, is planned for February to exchange on what will be done in the project.

The University of Cantabria has also engaged with students to foster awareness and community engagement in sustainable urban development. Various visits to the Nature-Based Solutions (NBS) facilities situated in Las Llamas Park, Santander were organised.

These visits primarily catered to student groups, notably in May 2023 with eight students from the Master's programme in Civil Engineering (comprising Spanish students from diverse regions as well as students from Chile, Peru, and Italy). Another visit occurred in November 2023, involving 14 students from the Erasmus Mundus Master's Degree in Sustainable Design, Construction, and Management of the Built Environment. This group represented a global mix of students from Bangladesh, Brazil, Mexico, Egypt, Portugal, Thailand, Pakistan, Lebanon, Iran, and Bhutan.

Figure 1 Visit of students of Las Llamas Park

In the next months, more visits are planned. For example, in May 2024 15 students from the Senior Programme (retirees in the region who are studying at the University of Cantabria) will visit the facilities.

4.2.1.3 Pontedera (Italy)

Engagement in Pontedera - context

In Pontedera, a collaborative effort is made by the Municipality, water companies, consultancies and research teams from the University of Pisa and Florence. This collective approach aims to address challenges related to stormwater runoff and improve water management practices in the region.

The Municipality of Pontedera plays a central role in coordinating this collaboration. Working closely with water companies, municipal authorities are fostering a comprehensive understanding of the local water landscape and application of nature-based solutions. Research teams from the University of Pisa and Florence contribute valuable insights and knowledge regarding water pollutants.

Key stakeholders, including citizens and civil society, actively participate in decision-making processes shaping Pontedera's future. The Municipality of Pontedera is currently formulating the new Municipal Operational Plan, there is a proactive vision for citizen participation and

engagement from civil society. While the existing plan may not explicitly address the prevention of water pollution from urban stormwater runoff, there is recognition of its significance.

A proposal is on the table to incorporate measures for stormwater runoff prevention through a parallel pathway facilitated in collaboration with the D4RUNOFF project. This parallel initiative provides an opportunity to align municipal plans with sustainable practices advocated by the D4RUNOFF initiative and examples of good practices from other two case studies.

The ongoing joint decision-making process for the Municipal Operational Plan underscores a commitment to inclusive governance. Over the next couple of years, an organized consultation process is set to unfold. This process is designed to inform and engage various stakeholders, ensuring that their perspectives are valued in shaping policies related to water management and stormwater runoff prevention in Pontedera.

Among the collaboration initiatives with the authorities and institutions during the first 18 months are:

A collaboration with Pontedera Municipality for the selection of an existing NBS in the town area to be considered in projects activity and on defining authorization procedures for sampling activities in public areas has taken place.

During a two hour teach in at the master's program in "L'innovazione al servizio del miglioramento continuo della pubblica amministrazione" for managers and employees of Tuscany Region, taking place at the of University of Florence on D4RUNOFF was discussed by the partner responsible for the case study area. The topic of the class was 'Stakeholder Engagement – The Experience of Acque SpA'.

4.2.2 Co-design of ai-assisted platform user experience

Task 4.1 "Co-design of AI-Assisted Platform user experience" was led by Three o'clock (3OC) and took place from September 2022 (M1) and until April 2023 (M8). The task focused on the design of the best user experience in the AI-assisted platform for relevant stakeholder types such as policymakers, technical operators, the scientific community, civil society and citizens. The lessons learnt and recommendations from this task informed the consecutive tasks of the same WP on the users' views of the best scenarios and strategies for specific and calculated cases of prevention, risks and mitigation measures. The co-design methodology, key results and valuable outcomes are outlined in deliverable 4.1.

The knowledge about the trends and tendencies that define urban planning, wastewater management and prevention of water pollution in studied urban areas in which target stakeholders live or engage with daily, has also been acquired through discussions with all relevant stakeholders and confirmed in follow-up desktop research and internal meetings with case study "owners".

In total, during this task, there were **60 stakeholders engaged in interviews and workshops** and **51 wider audiences were reached through a public survey**.

For each stakeholder type, key organisations and individuals were mapped that were relevant in the 3 local case studies. The collection of data on the stakeholders' needs, habits, perceptions, understanding and knowledge about stormwater pollution has been gathered through surveys (>50 responses), 16 interviews and 3 in-person workshops.

D4RUNOFF has identified firstly three types of stakeholders for the case studies such as technical operators, policymakers, citizens and civil society as future users of the D4RUNOFF platform. After further consideration of the platform development, the direct application of scientific knowledge and the necessity for ongoing updates indicated that scientists and researchers are interested and could be regular users, too. Therefore, they were included in the co-design process.

Collecting feedback directly from potential users is a direct engagement with stakeholders, gaining feedback and insights into their needs. The project will keep these stakeholders informed of the project's outputs and the rollout of the platform.

4.2.3 Open days

Three Open Days are planned to be organised, one in each case study site. The objective of these Open Days is to inform and engage local stakeholders with the D4RUNOFF project and present its objectives and expected results, and to raise awareness of the urban runoff issue and the solutions, through NBS, to tackle this problem.

- The first Open Day has taken place in Santander in Feb-March 2023.
- The Open Days in the second and third case studies (Odense and Pontedera) will be held later in the project (expected dates 2024-2025), when the NBS solutions selected in the project have started to be implemented. This approach was chosen to maximise visibility and knowledge transfer, by organising site visits with local stakeholders and citizens to really show what has been achieved and how it works. Additional activities are planned to be held during these Open Days with the development of an educational game for kids that will be distributed and played during a live session, and a gamification challenge to test the social module in the AI-assisted platform and collect feedback to further improve it. Other activities such as Lego Serious Play session may take place if pertinent.

4.2.3.1 Open Day in Santander Case Study

The first Open Day event was held at the case study in Santander and lasted two days, on 28 February and 1 March 2023. The University of Cantabria hosted several activities:

- A Climate Fresk workshop with university students
- Presentations of D4RUNOFF project to students, citizens and local partners, such as the city council
- A visit of the case study site of Las Llamas Park and view first-hand the various nature-based solutions in place
- A co-design workshop for the AI-assisted platform with local stakeholders and project partners

4.2.3.1.1 Climate Fresk

A Climate Fresk workshop was organised for students at the University of Cantabria (UC). The Climate Fresk is a collaborative, scientific and fun way to learn about climate change. Through a card game, participants can learn how climate 'functions' and are empowered to make their own informed inferences about climate change.

This workshop goes beyond conventional climate change discussions. It's a creative mix of scientific insights and collaborative thinking, designed to make the complex issue of climate change accessible and intriguing. Drawing from the research of the Intergovernmental Panel on Climate Change (IPCC), it explores the cause-and-effect relationships that drive climate imbalances. What sets it apart is its capacity to convey this complex information in a manner that is both enlightening and entertaining. This is an important aspect of the project as it engages with the local community on a grass roots level.

Figure 2 Climate Fresk workshop

The workshop involved 12 students (bachelor, master and PhD students) during 4 hours.

4.2.3.1.2 Presentations

The next day kicked off with the D4RUNOFF Open Day presentations. Speakers and attendees were welcomed at the Civil and Environmental Engineering School of the University of Cantabria, by Jorge Rodríguez Hernández (GITECO Research Group, UC), who also leads WP3.

Figure 3 Open day presentations

This session gathered more than 50 participants and included:

- researchers (from universities and research centres)
- regional authorities (e.g. MARE, the regional public organisation in charge of the water cycle)
- local authorities (e.g. technicians from different departments of Santander city council),
- companies (water utilities, regional environmental and engineering companies)
- public organisations (e.g. local police and civil protection) and non governmental organisations (e.g. SEO BirdLife).

Figure 4 Photos of Open day presentations

Along with Jorge, the project was then presented by Margarita Rojo (Counselor of Environment, Santander City Council), Milagros Canga (Vice-Director of the Civil and Environmental Engineering School, UC), and José Ramón Vázquez Padín (Head of Quality in R+D, Aqualia). During the introduction, these representatives spoke about the importance of Nature Based Solutions (NBS) to the revitalisation efforts of Santander and specifically, the wetlands of Las Llamas Park.

José Vázquez Padín presented the context of the D4RUNOFF project to the attendees. The presentation concluded with a summary of the visit to the other case study site, Odense, Denmark.

Next, Roberto Soto (Architect at the Projects and Works Department, Barcelona Municipal Institute of Urban Planning) covered the urban runoff challenges faced by the city and the subsequent issues of diffuse pollution. Using a variety of before and after photos and sketches of NBS, he illustrated the drastic change in the liveability of the city at different sites across the city. By incorporating a NBS design approach to urban planning, the city is greener and is successfully tackling water pollution due to urban runoff.

Luis Ángel Sañudo Fontaneda (Professor, University of Oviedo) presented next on maximising the opportunities and benefits of surface water management through Sustainable Urban Drainage Systems (SUDS). SUDS provide multiple benefits associated with four categories – quantity, quality, comfort or quality of life and biodiversity. Only when these four categories are addressed can it considered SUDS. While there are some challenges associated with this approach, like the impact of climate change on hydrological design parameters, including SUDS in educational programmes and increasing social awareness can help to alleviate some of the challenges.

Next, Diego Cicero (Phytobatea and RIA Association) presented a new technology for the creation and operation of floating wetlands – Phytobatea. From the Greek “Python” (plant), and “batea” (wooden floating platforms), the Phytobatea® is a modular device with high mechanical and chemical resistance and a long service life, designed for the construction and management of floating plant crops.

Ivan Blanco (Aqualia) rounded off the morning session with Aqualia’s innovative approach to surface runoff solutions, highlighting the NICE project. The project includes the implementation of a range of NBS like artificial wetlands for the treatment of sewage overflow, integrating landscaping in urban environments through planting a diversity of flora and utilising different designs based on the rainfall patterns of the area. Apart from the apparent benefits, these solutions also trap CO2, limit soil erosion and promotes biodiversity.

4.2.3.1.3 Visit to Las Llamas Park


Figure 5 Open Day visit of Las Llamas Park

Next on the agenda was the visit to the Las Llamas Park nearby. To understand the need for the revitalisation of the city, Pablo Ruiz (Parks and Gardens, Santander City Council) and Nacho Fernandez (SEO BirdLife) explained the dynamic growth of the city and its effects. The site visit began at the permeable car park, right beside the Las Llamas Park. Here, porous, and permeable pavements are being trialled to assess their capacity and resilience to sediment clogging. Situated underneath the park is an integrated water management system and wastewater pumping station run by Aqualia that was visited at the end of the tour. The NBS solutions and what is aimed to be achieved in the D4RUNOFF project was presented and explained to the participants of the visit.

4.2.3.1.4 Co-design workshop

In the afternoon, consortia members and external stakeholders, broke up into groups as part of the co-design workshop for the development of the D4RUNOFF AI-assisted decision-support tool. The workshop's objectives and outcomes were clearly stated with the focus of developing the user experience.

The participant's tasks were to discuss and validate the proposed platform's functionalities and co-develop prototypes of the user experience for each selected functionality. Split over two exercises, participants were first asked to prioritise three out of 15 functionalities most relevant to their profile, then choosing two functionalities per stakeholder type. Participants then worked in their groups to co-design a storyboard of the user experience and a framework mock-up for a key phase in the functionality.

Once completed, each group presented their storyboard to the wider audience, explaining their process and the results.

35 participants were involved in this workshop. The outcomes of this workshop and feedback collected directly fed into WP4 and the development of the platform. They are described in detail in deliverable 4.1.

Figure 6 Co-design workshop

4.2.4 Gamification Challenge

A Gamification challenge will be organised at the last Open Day event to get direct feedback from citizens on the social module of the AI assisted-platform.

Several options are being considered, from the use and validation of the Serious Games that are being developed for the case studies, to the combination of this with a Gyncana, walking around the case study site. In this case, different challenges related with NBSs will be proposed to small groups of citizens (e.g. families), with a view to explain the benefits and the environmental services they offer.

Figure 7 Draft of gamification challenge

At least +50 participants are foreseen to participate.

This activity is expected to take place between M24-M36.

4.2.5 Educational Game

An educational game aimed at Elementary school children is being developed as part of WP6. A benchmark of educational games on the broad topic of the environment has been carried out, identifying over 30 games.

The next steps include a thorough analysis of the games and an ideation session to select the format of the game and the overall concept. The game is planned to be designed and manufactured around M36. A live playing session of the game and its distribution to local schools are planned in the next Open Days in Odense and Pontedera.

4.2.6 Social Media Campaign

Social media campaigns are planned to take place between M18-24 with dedicated content for each case study. They will target citizens to raise awareness of polluted urban runoff and its impact on the environment. Solutions developed in the D4RUNOFF project will also be showcased as a way to tackle this challenge.

Through short videos, and visuals, such as infographics, these campaigns will inform and engage the public in this topic, making it more widely known at local level.

General awareness raising on urban water runoff content has already been produced and distributed through D4RUNOFF's social media channels. Examples are illustrated below.

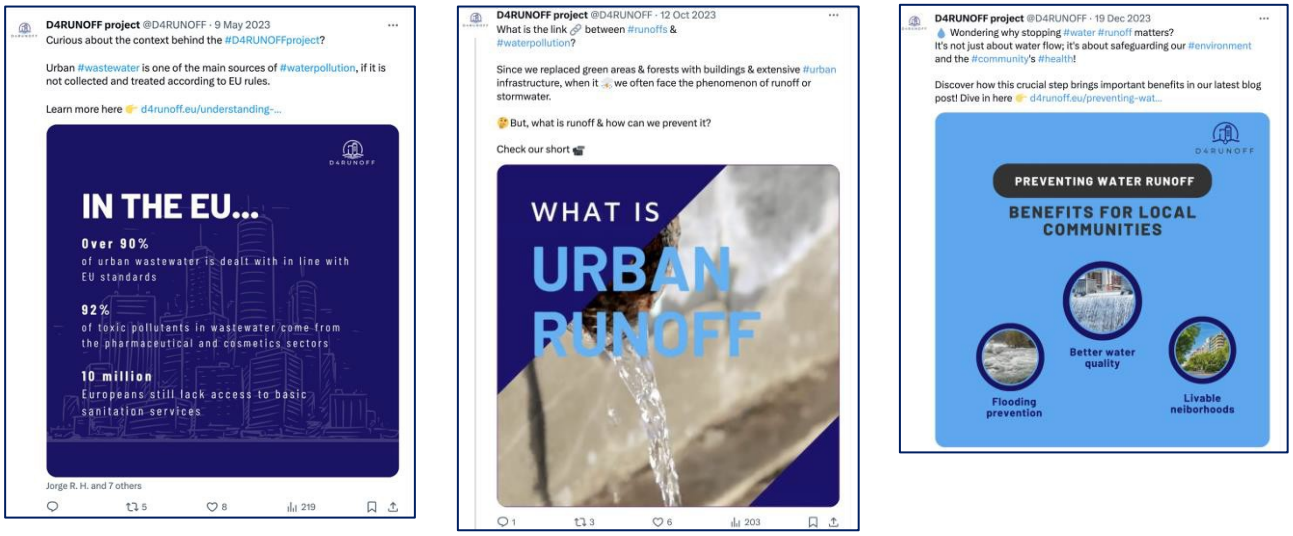

Figure 8 Screenshots of awareness posts on social media

5 Conclusions and next steps

In this document we described and reported all the stakeholder engagement activities that have taken place in the first 18 months of the project at local level in the 3 case study sites in Odense (Denmark), Santander (Spain), and Pontedera (Italy).

Our approach in engaging with stakeholders in the case study sites was based on two main principles: consultation and information. This two-way consultation and participatory process included local stakeholders to contribute to the development of the AI-assisted platform in WP4, directly feeding the direction of its functionalities and user experience.

Case study partners informed stakeholders of decisions, progress and status of the project and the solutions/technologies to be implemented in their case study and an Open Day event, which included a Climate Fresk workshop, presentations and a site visit was organised in Santander.

The main objective of these stakeholder engagement activities was to enhance interaction and communication with local audiences to ensure local stakeholders are kept informed of the case study developments regarding technical aspects, and raise awareness of the impacts of urban runoff, and start the promotion of the results and outputs of the project.

In the next period, continued and new activities are planned in each case study. In Odense, an event in collaboration with another project of the municipality will be organised in the fall of 2024 to present D4RUNOFF and the interests of stakeholders in the future planning of the neighborhood. An Open Day is also planned to take place.

In Santander, the University of Cantabria will continue engaging with local authorities, NGOs, and other projects to inform and share their work and updates, and promote the positive impact NBS. Site visits will continue to raise awareness with students and local stakeholders.

Finally, in Pontedera, an Open Day will be held in September, featured engaging activities such as a Climate Fresk workshop to raise awareness and boost local engagement. This event will be organised by 3OC and the pilot partners. It will target to attract a diverse audience including citizens, students, universities, research centers, local associations, NGOs, municipalities, and local water management companies. Additionally, sister projects have been invited to participate in this event.