Interreg Euro-MED

Co-funded by the European Union

URWAN

Thematic workshop on Green infrastructure, biodiversity, and health for school:

experiences from NAWAMED and URWAN projects

Anacleto Rizzo
IRIDRA

RE-ACT Schools 1st Interregional Thematic Workshop
Lucca | 26 June 2025

IRIDRA srl: an engineering firm with a multidisciplinary team

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Nicola Martinuzzi.
Mechanical Engineer

Fabio Masi,
PhD Chemist

Giulio Conte
Biologist

Riccardo Bresciani,
Env. Engineer

Ivano Filippini
Land Surveyoir

Barbara Bonadies
Architect

Anacleto Rizzo
PhD Hydraulic Engineer

Giordano Fossi
Agronomist

Linda Sabatini
Administration and Tenders

Paolo Armanasco
Agronomist

Kathryin Rivai
Env. Engineer

Chiara Sarti
PhD Chemist

Chiara Zurli
Envi. Engineer

Michela Galletti
Landscape architect

Ilaria Principi
Phd Biologist

Riccardo Cilia
Landscape architect and Codesign expert

Francesco Leone
Civill Engineer

Leonardo Magherini
Phd Env. Engineer

Ippolito Tarantino
Architect

Sarine Agopian
Urban planner / landscape architect

URWAN – Urban Regenerative Water Avant-garde(N)

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9 partners across 7 countries

- Regional Association of Italian Towns in Lazio – ANCI Lazio (IT)
- IRIDRA s.r.l. (IT)
- EuroMediterranean Center for the Sustainable Development – SVIMED (IT)
- Make it Better, Association for Innovation & Social Economy (PT)
- MedCities (ES)
- Scientific Research Centre Bistra Ptuj (SI)
- Larnaka Municipality (CY)
- Energy and Water Agency (MT)
- City of Sarajevo (BA)

18 Associated partners from 9 countries

Total budget
€ 2,836,118.00

Project duration
33 months

Interreg Funds
€ 2,268,894.40

URWAN

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The URWAN project demonstrates how **multifunctional NbS offer a shared response** by decision-makers, technicians, and citizens to create climate-resilient living spaces

Address the impacts of resource use, high temperatures, biodiversity loss, soil sealing, and increased vulnerability to extreme events like heatwaves, flash floods, and heavy rainfall

NbS contribute to the aesthetic redesign of public space, integrating urban furniture and greenery irrigated with treated greywater and harvested rainwater

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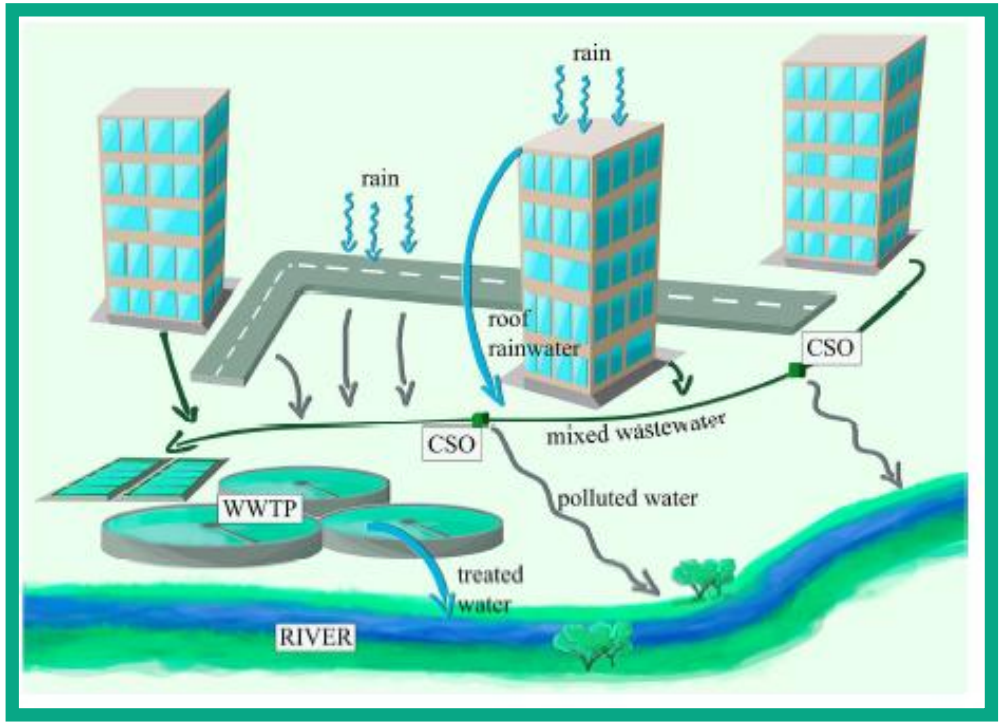
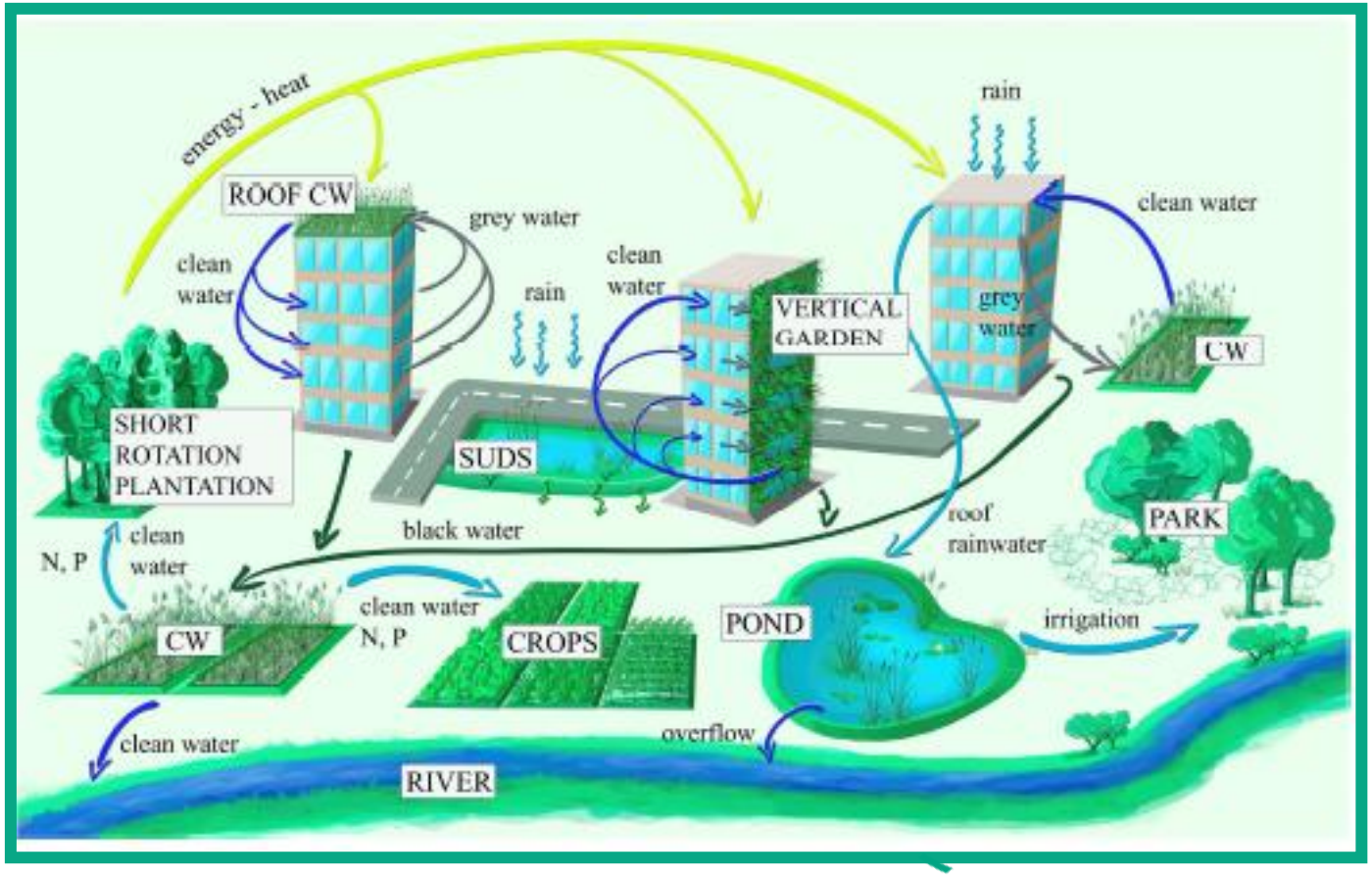
Nature-based Solutions

NBS as urban green infrastructures: a new state of mind



Conventional approach



New approach

URWAN main activities and results

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Target: SCHOOLS

Harmonise knowledge on Nature-based Solutions (NBS)

- Nature-Based Solutions URWAN Catalogue for final users: recognising the vital link between NbS and water

Experimental solutions for regenerating urban spaces and enhancing climate change adaptation

- NbS-based pilot interventions in Rome (IT), Cuba (PT), and Larnaka (CY) to increase the area's resilience

Co-designing processes for planning and investing in multifunctional NBS for the urban regeneration

- Decision Support System to inform local authorities on change-related challenges and NbS implementation tested in Ferla (IT), Ptuj (SI), and Sarajevo (BH)
- Collaborative and design-based methodology for designing multifunctional interventions implemented in Ferla, Cuba, Rome, Larnaka, Ptuj, and Sarajevo

URWAN Amplification Strategy

- Three transnational living labs to jointly find solutions for mainstreaming tested NbS
- Tailor-made training kits delivered to the six partners' municipalities

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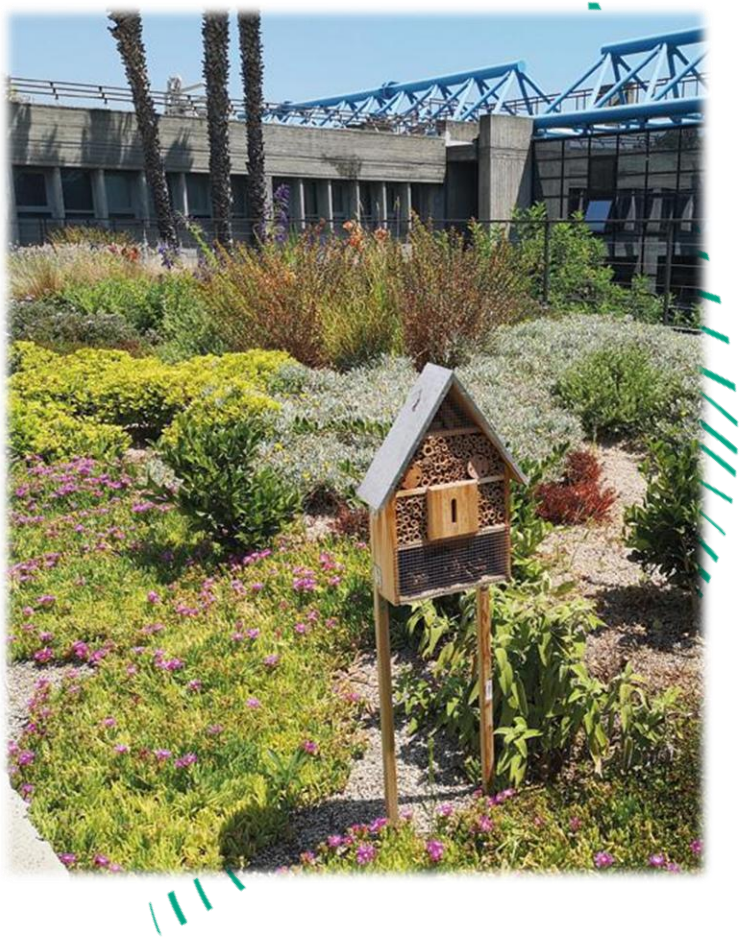
The greening of urban areas needs water

The greening of urban areas needs water >>> water scarcity, and extended dry periods in summer months, especially in the Med area, shall be considered when designing green spaces <<<



Urban green interventions must be multipurpose
>>> the design of urban space shall enhance the provision of ecosystem services <<<

The Pilots and the NbS

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Rome, IT

Regenerating a school entrance while reducing potable water consumption.

Alternative water resources:

Rainwater from the roofs and the parking area

Solutions:

(i) **Raingarden** to collect rainwater from roofs and paved areas, (ii) **Two bioretention areas**, (iii) **De-paving** of surfaces, (iv) **Storage tank** for water reuse

Cuba, PT

Regenerating a public building space and the surrounding urban area

Alternative water resources:

(i) **Rainwater** from the roofs and the parking area, (ii) **Blackwater** from the nearby sewage network

Solutions:

(i) **Raingarden** collects rain from roofs and paved areas, (ii) **Constructed wetland** to treat the blackwater, (iii) **Storage tank** for water reuse, (iv) **Extensive** green roof

Larnaka, CY

Regenerating a public and tourist area while reducing potable water consumption.

Alternative water resources:

Greywater collected from showers and hand basins

Solutions:

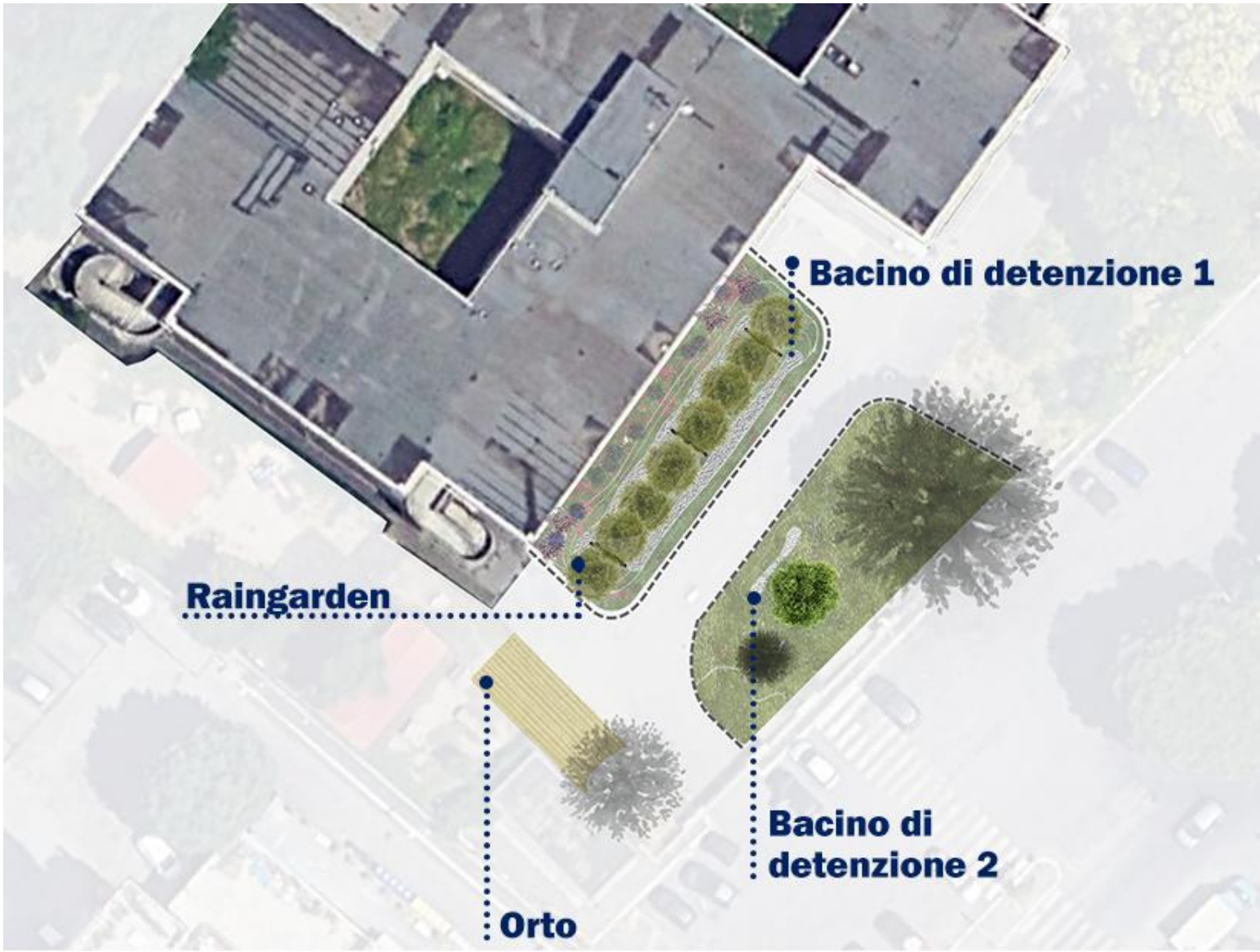
(i) **Water recycling green façade,** (ii) **Water recycling living wall,** (iii) **Storage tank** to allow for water reuse

Transforming buildings and public facilities in water producers

Rome, District Council IX, IT

Elementary school

The investment addresses the impacts of **resource consumption**, **high temperatures, biodiversity loss**, **soil sealing**, and vulnerability to extreme climate events, such as **heatwaves**, **flash floods**, and heavy precipitation. It aims to **reduce potable water use** and increase the availability of non-conventional water resources for greening and irrigation, helping to cool the area during the summer.
The entire community of District Council 9 in Rome, comprising approximately 182,000 inhabitants, will benefit from this intervention.



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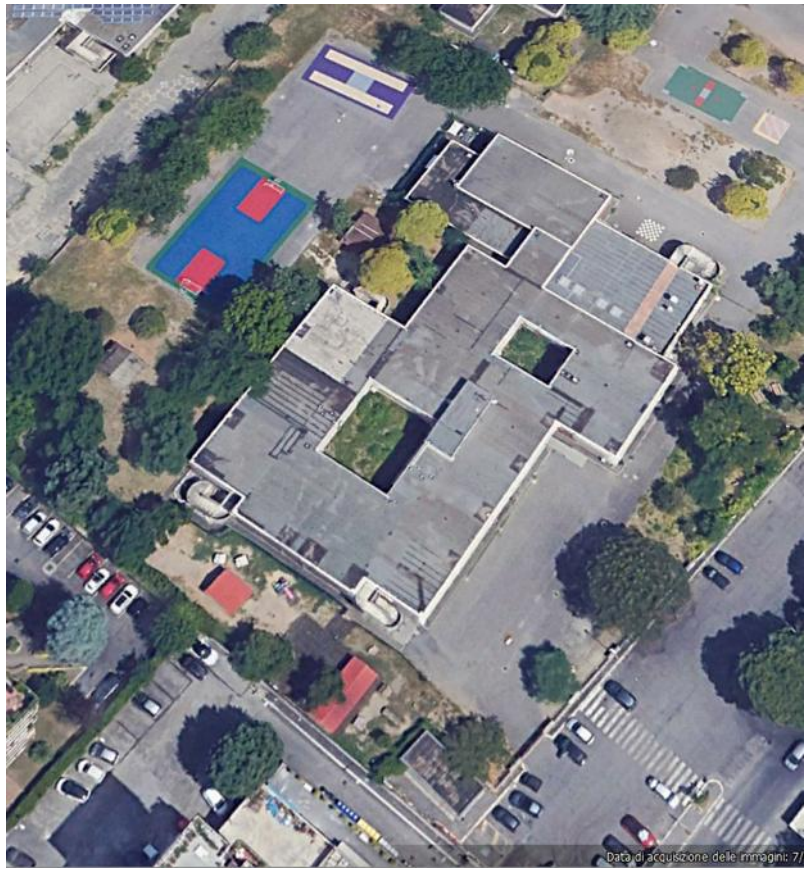

Rome

State of the play

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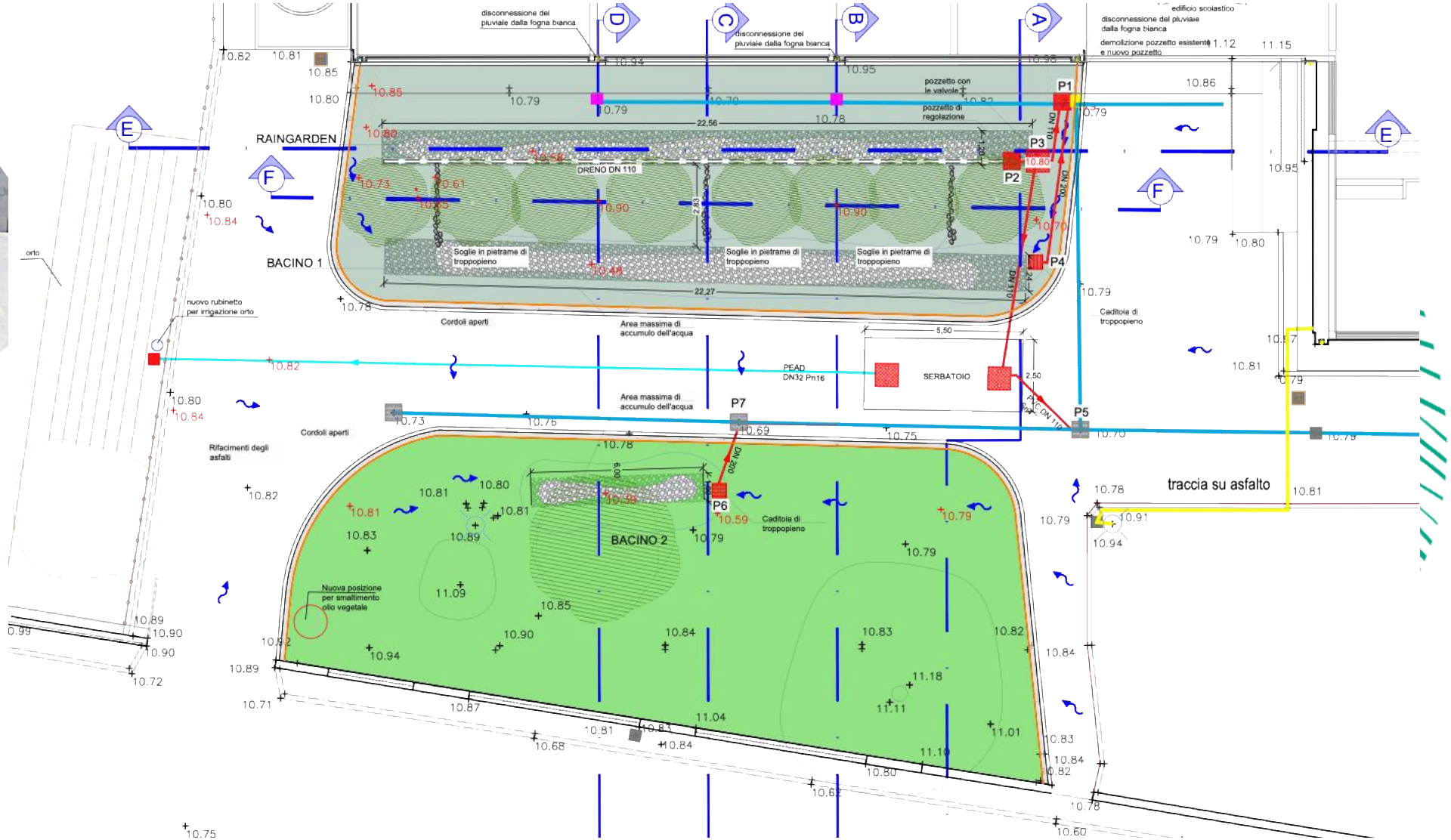
The new school entrance


Raingarden
Bacino di detenzione 1
Orto
Bacino di detenzione 2


RAINGARDEN
BACINO 1
BACINO 2
DRENO DN 110
Soglie in pietrame di troppopieno
Cordoli aperti
Area massima di accumulo dell'acqua
nuovo rubinetto per irrigazione orto
PEAD DN32 Pn16
SERBATOIO
Caditoia di troppopieno
Rifacimenti degli asfalti
Nuova posizione per smaltimento olio vegetale
traccia su asfalto
pozzetto con le valvole
pozzetto di regolazione
disconnessione del pluviale dalla fogna bianca
demolizione pozzetto esistente e nuovo pozzetto
edificio scolastico
P1
P2
P3
P4
P5
P6
P7

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Experiences from NAWAMED project

NAWAMED focused on urban water management by demonstrating and promoting innovative, sustainable, decentralised, and low-cost treatment technologies, replacing the use of potable water with good quality Non-Conventional Water

ENI CBC MED Programme

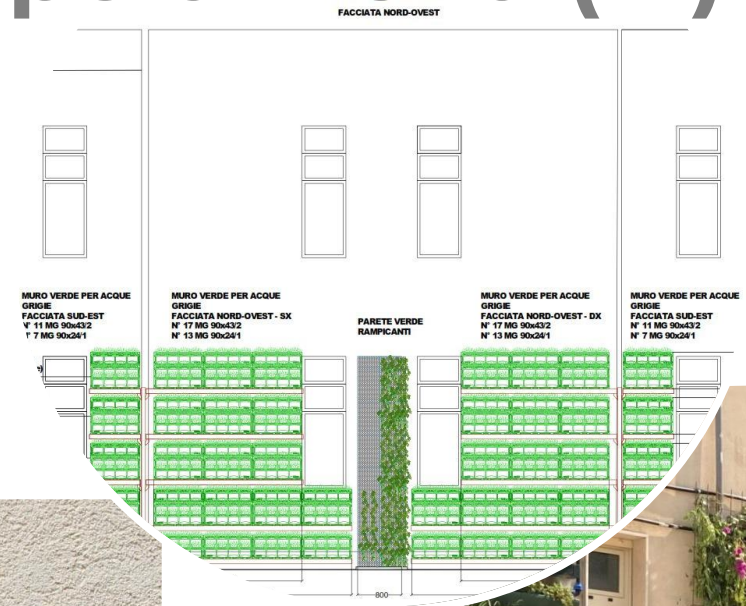
7 partners from 5 EU and Non-EU countries

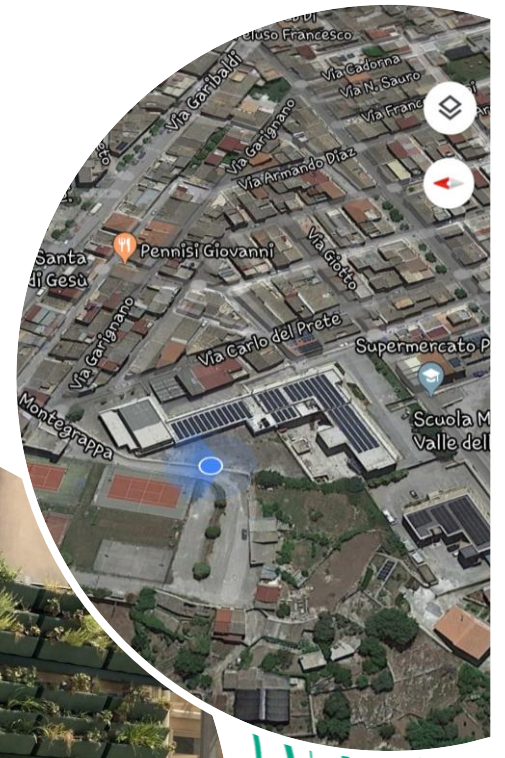
Budget: 3.2 Million total budget

Duration in months: 48 months (ended 09/23)

NAWAMED PILOT:
Istituto Valle dell'Anapo di Ferla (IT)

- Sources of grey water: wash basins
- Reuse: toilet flushing
- Surface: 30 m2 W2W anchored to building walls
- Treating volumes: 1,3 m3/day – 260 m3/y (Approximately 1,000 litres of drinking water saved per student per year)






arena


ellesse


OFFICIAL SELECTION
Bio Film Festival
2023
OFFICIAL SELECTION
SEMANA ¡VIVA EL CINE!
2023
OFFICIAL SELECTION
Xenia Festival
2023
OFFICIAL SELECTION
ZERO PLUS International Film Festival
2023
OFFICIAL SELECTION
Steve Aronson International Film Festival
2023
OFFICIAL SELECTION
GEOFILMFESTIVAL
2023
GOCCE DI RUGIADA
IDERIO PULEO REGIA DI GIANPAOLO GELATI & ALESSANDRO MELCHIONDA
FONICO PRESA DIRETTA LUCA ERNANDES MUSICHE ALESSANDRO BORIA
CON MARTINA SAMMARCO & MATTEO DE MOJANA & JARA DIOP


ENI CBCMED
NAWAMED
E DI RUGIADA

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Collaborative and design-based methodology for designing multifunctional interventions:

Gamification of the design process

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Codesign event with the students of the “Istituto Valle dell’Anapo di Ferla (IT)”

START PARK

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URWAN

Urban Regenerative Water Avant-garde(N)

Ferla co-creation workshop event

14 May

Valle dell' Anapo Comprehensive Institute and Aldo Moro Square

Visit our website https://urwan.interreg-euro-med.eu

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www.pareteverdeferla.it

“Gocce di Rugiada” (Drop of Dew):
https://youtu.be/_768uccvlCU