



WES-BCA Kick-off Meeting

C_1-N-LB-2: Design of NBS in a Pilot area in Lebanon

5 August 2025

online



WES-BCA Kick-off Meeting

C_1-N-LB-2: Design of NBS in a Pilot area in Lebanon

Project Overview

5 August 2025

online

Presented by:

Ms Suzan TAHA, Water Key Expert, WES-BCA

WES-BCA in a snapshot



- WES-BCA aims to improve the protection of the environment, the restoration of biodiversity and the management of scarce water resources, while enhancing the resilience to climate change in the Mediterranean region, strengthening the formulation and enforcement of the relevant policies of the Partner Countries and the two regional political frameworks, namely the Union for the Mediterranean (UfM) and the Barcelona Convention.
- It strives to enhance the capacity of relevant stakeholders in order to support them in formulating and or implementing policies in the issues mentioned above.
- It is meant to raise awareness, increase knowledge and improve public understanding, stimulating behavioural changes needed for appropriate climate action and environmental protection.

WES-BCA is the continuation of the WES project and therefore capitalises on the experience of previous successful EU funded regional projects (SWIM-Horizon2020 SM, SWIM SM; Horizon 2020 CB/MEP).

WES-BCA Identity



Partner Countries: 8 Countries in North Africa and the Middle East



Duration: November 2024 - November 2027



Budget: 7.000.000 Euros



Team Leader: Professor Michael Scoulllos, scoulllos@wes-med.eu

Environment Expert: Mr Anis Ismail, a.ismail@wes-med.eu

Water Expert: Ms Suzan Taha, taha@wes-med.eu

Communication Expert: Ms Lisa Papadogeorgaki, lpa@ldk.gr

Stakeholders Engagement Expert: Dr Emad Adly, wes.gc@raednetwork.org

WES-BCA Consortium



LDK CONSULTANTS S.A. (Leader)



Arab Network for Environment and Development (RAED)



Association of Cities and Regions for Sustainable Resource Management (ACR+)



Mediterranean Agronomic Institute of Bari (CIHEAM Bari)



Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE)



MedWaves, the Regional Activity Centre of UNEP/Map for Sustainable Consumption and Production

WES-BCA Components

The project will be implemented through **two** complementary, closely related and mutually supportive **Components**:

- **Component I - focusing on Water, Biodiversity and Environment. Topics Addressed**

Topic 1: Prevention & reduction of pollution (urban and industrial solid waste)

Topic 2: Curbing Plastic Pollution & Marine Litter

Topic 3: Promoting the Water-Energy-Food-Ecosystems (WEFE) Nexus approach

Topic 4: Water Efficiency

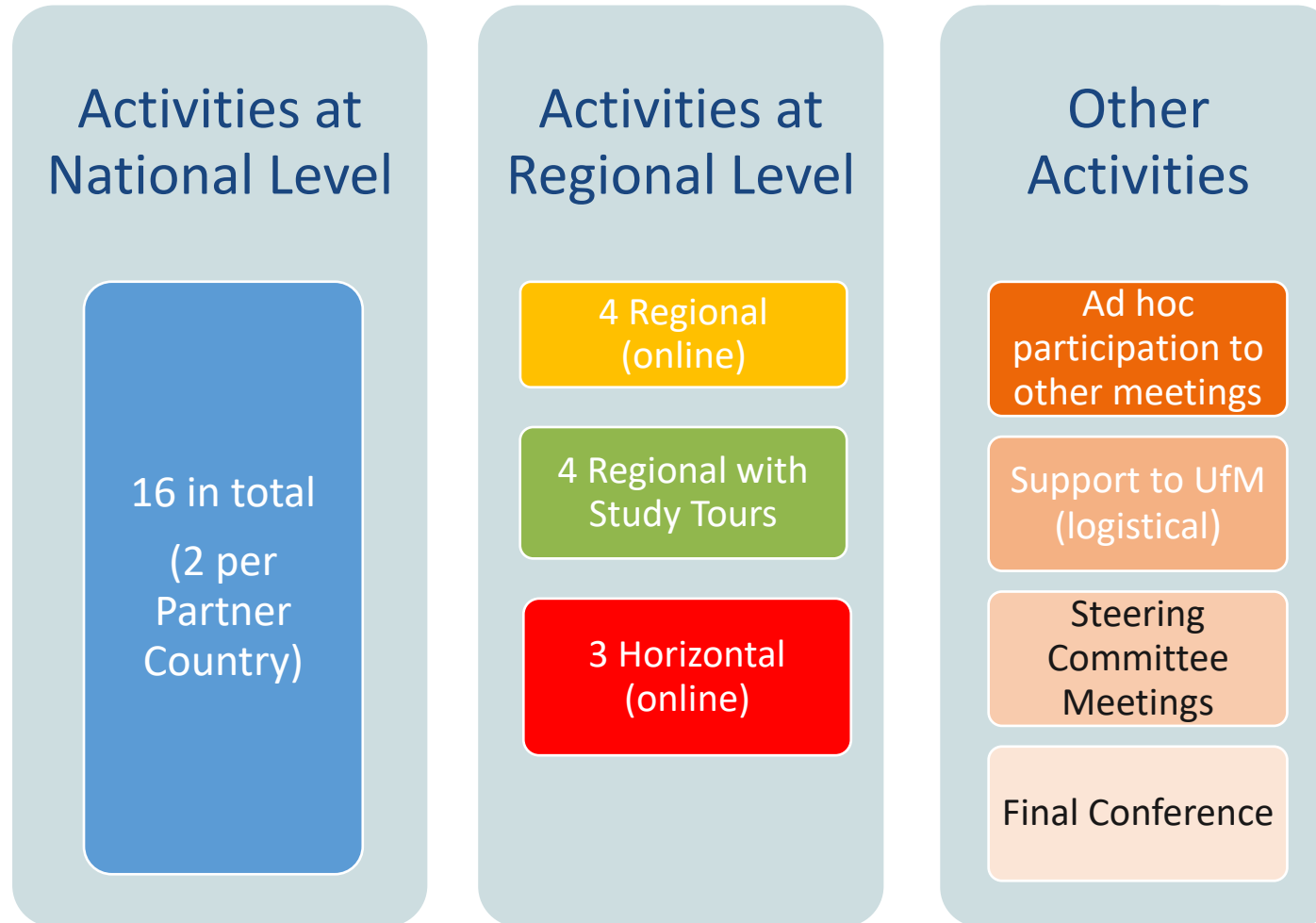
Topic 5: Climate Change mitigation and adaptation actions

Component II - focusing on Communication and Outreach

Under **Component II**:

The project aims to raise awareness and improve understanding by the general public (and specific segments of the population), including youth and women, stimulating adoption of appropriate behaviours and attitudes towards improved **Climate Action** and effective **Environmental Protection**.

Expected outputs of Component I on capacity building and technical assistance on water, biodiversity and environment



Workplan for activities under Topics 3, 4 and 5

Regional and Horizontal Activities



Country	Code	Topic	Activity
Regional (Training & Study Tour)	C1_REG/ST-5	Topic 3: WEF E Nexus	WEFE Nexus BPs in Agriculture - Learning from practical approaches of Northern Mediterranean countries
Regional (Training & Study Tour)	C1_REG/ST-6	Topic 5: Climate Change mitigation and adaptation actions	Adaptation measures for floods and storms management
Regional (online)	C1_REG-7	Topic 5: Climate Change mitigation and adaptation actions	Assess BAT for WWTR incl. evaluating the feasibility of integrating different RE options with various WWT technologies & providing guidelines for integrating RE with WWTPs
Regional (online)	C1_REG-8	Topic 5: Climate Change mitigation and adaptation	Climate-resilient planning and practices in agriculture including efficient water management techniques to help equip irrigation managers/ extension officers/WUAs with the knowledge and skills to adapt to CC impacts
Horizontal (online)	C1_HOR-1	Topic 3: WEF E Nexus	Demonstrating the implementation of the WEF E strategy at national level
Horizontal (online)	C1_HOR-2	Topic 5: Climate Change mitigation and adaptation	Climate Change adaptation in the Mediterranean coastal area: catalysing financing/the role of the private sector



WES-BCA
Water and Environment Support -
Biodiversity and Climate Action
in the Neighbourhood South region

Thank you for your attention!



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General Context and actions proposed in support of the activity

5 August 2025

online

Presented by:

Ms Mona FAKIH, Water Focal Point WES-BCA,

Director of Water, General Directorate of Hydraulic and

Electric Resources (MoEW)

About the Main Partner: Ministry of Energy and Water (MoEW) in Lebanon



MoEW responsible for: strategic planning, policy formulation, regulation and oversight of Lebanon's water and energy sectors.

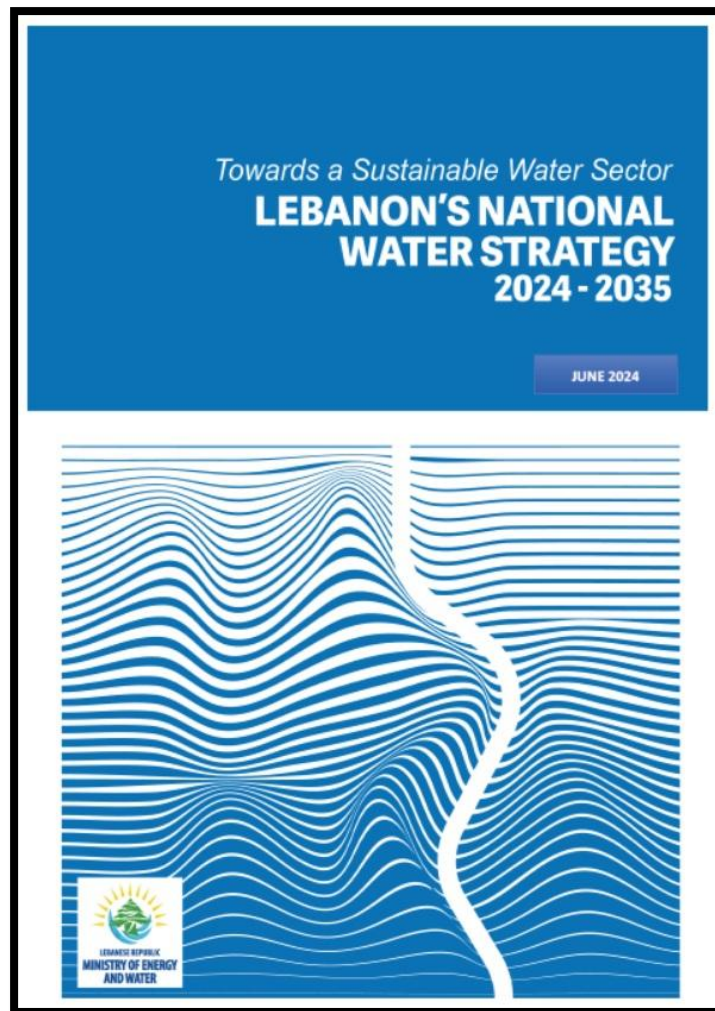
Mandated Roles and Responsibilities (primarily defined by Law 221/2000 and its amendments (Laws 241/2000, 377/2001,

- **Water Policy and Planning:** Develop and oversee national strategies and master plans for potable water, irrigation, wastewater, and stormwater (Art. 2, Law 221/2000).
- **Regulation and Licensing:** Issue water-use permits, define quality standards, and regulate activities affecting water resources (Art. 2 and 4).
- **Infrastructure Development:** Design, supervise, and implement major national water infrastructure projects, including dams, water networks, and wastewater treatment plants (Art. 3).
- **Data Collection and Monitoring:** Monitor, study, and assess the status of surface and groundwater resources through hydrological surveys and reports (Art. 2).
- **Institutional Oversight:** Supervise and coordinate the work of the four Regional Water Establishments (North, South, Bekaa, Beirut/Mount Lebanon) and ensure alignment with national policy.

Legal and strategic frameworks

- ❑ **Water Sector Restructuring** (2000) through Law 221 (and 241, including amendments and a number of by-laws) so as to reflect the new vision of water resources management based on an IWRM approach;
- ❑ **National Water Sector Strategy** (NWSS, 2012) that aligns with IWRM principles.
- ❑ **Law 192/2020** that promotes IWRM at river basin level and consolidates the laws governing the ownership, appropriation, utilization, exploitation, development, conservation and protection of water resources.

Legal and strategic frameworks



Lebanon's National Water Strategy (2024-2035) that defines key strategic objectives and Priorities for Action based on a thorough assessment of sector's needs and shortcomings.

The Strategy is articulated in 4 key pillars:

1. Enhanced water security
2. Improved provision of public services
3. Sustainable Utilities
4. Good Governance and Leadership

About the Main Partner: Ministry of Energy and Water (MoEW) in Lebanon



In addition to its statutory functions:

- **Inter- Ministerial Coordination Group:** MoEW promoted cross-sectoral collaboration through the WEFE Inter-Ministerial Group, established in 2023, leads coordination among various Institutions, Ministries , Research Centers, and agencies involved in water resource use, Regional Water Establishments, Litani River Authority, Agriculture, Environment, Transport and public works, Industry, Tourisme, LARI, CNRS.. This group regularly addresses shared challenges, improving planning and resource management. Its success could serve as a model for the future National Water Council under the new Water Law, enhancing inter-ministerial cooperation.
- **Stakeholder and Donor Engagement:** MoEW Acts as national focal point for water-related donor programs and international partnerships, including EU, UN agencies, and development banks.
- **Public-Private Partnerships (PPP):** Participates in PPP project development for infrastructure service delivery where feasible, including through its General Directorate of Hydraulic and Electric Resources.

Strategic Framework Supporting Nature-Based Solutions (NBS) in Lebanon



National Water Sector Strategy (NWSS) 2020–2035:

- Promotes integrated and decentralized water management approaches
- Recognizes the measures for storm water management, identify stakeholders' responsibilities , highlights the need to develop a storm water management and aquifer recharge plan
- Encourages use of Non-Conventional Water Resources (NCWR) including stormwater reuse
- Highlights importance of cost-effective, scalable, and sustainable infrastructure

Relevance to NBS: Supports shift toward low-impact development and green infrastructure, especially in water-stressed and flood-prone areas

National Biodiversity Strategy and Action Plan (NBSAP) – (2016 Update) Under the Convention on Biological Diversity (CBD)

- Emphasizes ecosystem-based approaches to land and water management
- Promotes restoration of degraded habitats, especially in urban and peri-urban settings
- Calls for mainstreaming biodiversity into water and infrastructure sectors

Relevance to NBS: explicitly supports biodiversity protection while delivering water management co-benefits

Complementary National and Sectoral Policies

Updated Intended Nationally Determined Contribution (I-NDC, 2020) under the UNFCCC

- Targets increased resilience of infrastructure and ecosystems to climate risks
- Calls for Nature-Based and Ecosystem-Based Adaptation (EbA) solutions
- Highlights urban flood risks and need for local adaptation measures
- Supports: Use of stormwater-focused NBS to reduce flood risks and enhance climate resilience

National Land Use Master Plan (2011, SDATL)

- Identifies need to protect floodplains and green corridors
- Prioritizes low-impact development in land use planning
- Supports reduced soil sealing and erosion control

Other Relevant Frameworks

- Forestry Strategy (MoA): Includes reforestation and erosion control priorities
- Lebanon's SDG Implementation Plan: SDG 6 (water), SDG 13 (climate), SDG 15 (life on land)

The Need for Nature-Based Solutions (NBS) in Lebanon



Increasing Stormwater Risks

- Seasonal and intense rainfall leads to **urban flooding, erosion, and runoff pollution**
- Over 80% of coastal land in Beirut is now **sealed**, limiting infiltration (MoEW, 2020)
- Deteriorated drainage infrastructure and unregulated development worsen flood hazards

Climate Change and Ecosystem Degradation

- Rising climate variability is intensifying storm events, droughts, and heatwaves
- Loss of vegetated cover due to deforestation, fires, and poor land use is reducing natural resilience
- Urban ecosystems are increasingly fragmented or degraded

Untapped Potential of Stormwater

- Rainwater is a neglected water resource in Lebanon
- Few operational stormwater retention, infiltration, or reuse systems exist
- NBS can enable managed aquifer recharge, support biodiversity, and reduce pollution

NBS Offer a Cost-Effective, Scalable Response

- Low-energy, green infrastructure alternatives to costly grey systems
- Aligns with national strategies on water, biodiversity, and climate (NWSS, NBSAP, I-NDC)
- Enables co-benefits: flood risk reduction, groundwater recharge, habitat creation, urban cooling

From National Priorities to Action: Launching the NBS Pilot



In view of the above challenges and national priorities, the Ministry of Energy and Water requested the implementation of the WES-BCA activity titled:

“Design of Nature-Based Solutions (NBS) in One Pilot Area in Lebanon”

This activity aims to:

- Demonstrate how NBS can be effectively designed and applied in a selected site
- Improve stormwater and rainwater management
- Support biodiversity and environmental restoration
- Strengthen Lebanon’s resilience to climate change impacts



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Presentation of the activity and general discussion

5 August 2025

online



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C_1-N-LB-2: Design of NBS in a Pilot area in Lebanon

Introducing the activity and the implementing team

5 August 2025

online

Presented by:

Ms Suzan TAHA, Water Key Expert, WES-BCA

Team of WES-BCA experts



The activity will be conducted by a team of four experts:

- **SNKE1 Mr Ioannis Vasilakos**, Senior Civil/Environmental Engineer, WES-BCA
- **JNKE2 Mr. Stelios Vavoulogiannis**, Junior Water Resources Engineer/Hydrologist, WES-BCA
- **SNKE3 Dr Abbas Fayad**, Senior Local Hydrologist/Water Resources Expert , WES-BCA
- **SNKE4 Mrs. Eleni Avramidi**, Biodiversity Expert, WES-BCA

The activity will be carried out under the leadership of **Team Leader Prof. Michael Scoullas**, the coordination and management of the **Key Expert on Water Ms Suzan Taha**, with contributions from the **Key Expert on Communication Ms. Lisa Papadogeorgaki** and the **Stakeholder Engagement Expert Dr. Emad Adly**.



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Presentation of the WES Technical Assistance Activity in Lebanon

5 August 2025

online

Presented by:

Mr Ioannis VASILAKOS, Senior Civil/Environmental Engineer, WES-BCA

Dr. Abbas FAYYAD, Senior Local Hydrologist/Water Resources Expert, WES-BCA

Ms Eleni AVRAMIDI, Biodiversity Expert, WES-BCA

Mr. Stelios VAVOULOLOGIANNIS, Junior Water Resources Engineer/Hydrologist, Expert, WES-BCA

Objectives of the activity and overview of the proposed actions



Overall objective:

Enrich knowledge and know-how of NBS for storm and rainwater management

environment/biodiversity enhancement.

Presentation of best management practices (BMPs) for NBS.

Learn from the experience achieved from designing NBS in one pilot case in Lebanon at the feasibility level

Specific objectives

➤ Engage institutional and local stakeholders in the identification and validation of a pilot area for NBS implementation based on technical, environmental, and institutional feasibility.

➤ Conduct hydrological and ecological assessments and develop a shortlist of one or more suitable NBS options tailored to the selected pilot area.

➤ Develop a Pre-Feasibility Study for the selected intervention(s), integrating stormwater management functions with biodiversity support and implementation considerations.

➤ Enhance knowledge of BMPs in NBS and promote their adaptation for arid and semi-arid contexts.

➤ Strengthen stakeholder capacities for planning, implementing, and maintaining NBS in Lebanese urban environments, through a series of consultations and a concluding workshop.

Proposed actions/tasks

Task 1: Site Selection and Identification of Suitable NBS Intervention(s) (in coordination with local stakeholders)

Task 2: Development of Pre-Feasibility Study

Task 3: Concluding workshop



Funded by
the European Union

Target beneficiaries and stakeholders involved



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

Main Counterpart

- ✓ Ministry of Energy and Water (MoEW)

Main Beneficiaries and stakeholders

- ✓ Ministry of Environment (MoE)
- ✓ Ministry of Agriculture
- ✓ Ministry of Public Works and Transport
- ✓ Local farmers and agricultural cooperatives
- ✓ Union of Municipalities (relevant to the selected pilot area)
- ✓ Lebanese Agricultural Research Institute (LARI)
- ✓ Lebanese University / American University of Beirut (AUB)
- ✓ Local NGOs



Proposed actions & Expected Results

Task 1: Site Selection and Identification of Suitable NBS Intervention(s) (in coordination with local stakeholders)

- Preselection of candidate sites
- Review studies, maps, and data to support informed site validation and consultation
- Collect and analyse primary data
- Conduct field visits to assess drainage, green cover, habitat features, and environmental risks. Verify spatial data and identify any legal or technical constraints on-site
- Final Selection of the priority site – engaging local stakeholders from each candidate area to discuss runoff/flooding challenges, suitability of sites, and community support
- Selection of one or more NBS options for the chosen site - discussions with stakeholders to evaluate possible interventions
- Validation workshop

Results

- 2–3 technically and institutionally viable candidate sites preselected through consultations, data review, and field visits
- One pilot site selected based on agreed technical and local feasibility criteria
- Shortlist of one or more technically suitable, locally accepted, and preliminarily feasible NBS options
- Site selection report prepared including site selection criteria, candidate site characteristics, and selection process including data analysis, stakeholder engagement outcomes and the rationale for shortlisting one or more suitable NBS options
- Organisation of a half-day validation workshop (hybrid mode) confirming the selected site and proposed NBS option(s)
- Final report revised based on workshop feedback and finalized for submission

Tools for deployment:

- Interviews & site visits
- GIS & Spatial Analysis Tools
- Hydrological Screening & Field Assessment Checklists
- Stakeholder Engagement Instruments (agendas, feedback forms, and validation protocols for institutional and local inputs)
- Design Reference Material & Best Practices Catalogues
- Feasibility Review Templates

Task 1 - Role Per Expert



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Expert	Key Roles in Task 1
NKE3 – Senior Local Hydrologist	▪ Lead field-based assessment and local coordination ▪ Assess runoff, drainage, green cover, and risks ▪ Defines hydrological site selection criteria and validate hotspots ▪ Assesses site-specific feasibility and risks ▪ Recommend hydrologically suitable NBS options ▪ Drafts technical sections of the site selection report
NKE1 – Senior Civil/Environmental Engineer	▪ Reviews spatial and institutional feasibility data ▪ guides integration of hydrological and biodiversity inputs ▪ contributes to NBS shortlisting and BMP framing ▪ leads economic pre-feasibility analysis ▪ coordinates and synthesizes expert inputs into the site selection report
NKE2 – Junior Hydrologist	▪ Supports hydrological data organization and analysis ▪ Prepares supporting maps, technical tables, and visuals ▪ Assists in workshop preparation, including the concept note, agenda, and presentations.
NKE4 – Senior Biodiversity Expert	▪ Provides biodiversity/ecosystem criteria for site selection ▪ Advises on ecological co-benefits of NBS ▪ Supports NBS shortlisting by identifying ecosystem constraints and biodiversity enhancement opportunities ▪ Lead the environmental and ecological assessment of the proposed NBS options ▪ Draft biodiversity sections of site selection report

Proposed actions & Expected Results

Task 2: Development of a Pre-Feasibility Study

- Hydrological and hydraulic analysis - Estimation of stormwater retention volume
- Conceptual layouts and functional design focusing on Natural Water Retention Measures (NWRM) - Integration of biodiversity/ecosystem
- Assess technical, environmental, and ecological feasibility of proposed interventions
- Adapt NBS designs to local site conditions, urban layout, and land use
- Maintenance and implementation phasing
- Drafting of Pre-Feasibility incl. recommendations addressing implementation viability, risks, and potential for replication

Results

- Pre-Feasibility Report including
 - description and justification of selected NBS/NWRM measures
 - conceptual layouts and functional design details
 - considerations for maintenance, and phasing of implementation,
 - preliminary assessment of technical, environmental, and biodiversity feasibility, based on site conditions and design requirements
- Recommendations for implementation pathways, including permitting needs, local coordination with stakeholders.

Tools for deployment:

- Conceptual Design Templates
- Hydrological & Hydraulic Estimation Tools
- Biodiversity Integration Guidelines
- Feasibility Review Matrix
- Cost Logic Frameworks
- Stakeholder Feedback Templates

Task 2 - Role Per Expert

Expert	Key Roles in Task 1
NKE1 – Senior Civil/Environmental Engineer	- Leads the Pre-Feasibility Study - Translates hydrological analysis into conceptual NBS designs - Ensures integration of BMPs and Mediterranean-relevant features with considerations for scalability, safety, and maintenance.
NKE3 – Senior Local Hydrologist	- Leads hydrological and hydraulic analysis - Estimates retention volumes, infiltration rates, and runoff behavior based on field conditions - Provides key technical inputs and sizing parameters to support NBS design tailored to site conditions.
NKE2 – Junior Hydrologist	Provides technical support through hydrological calculations, mapping, and data visualization to convert runoff volumes into site-specific NBS design parameters.
NKE4 – Senior Biodiversity Expert	- Advises on integrating biodiversity goals into NBS design - Recommends habitat-enhancing elements such as native planting - Ensures ecological considerations are reflected in the interventions and maintenance plans.

Proposed actions & Expected Results

Task 3: Development of a Pre-Feasibility Study

- Preparation of a synoptic workshop Concept Note and the agenda
- The required presentations
- Workshop moderation and facilitation
- Preparation of the workshop report according to the WES-BCA model.
- Finalization of the respective deliverables reflecting the results of the workshop as applicable.

Results

- The results of the activity are presented (in a one-day national consultation workshop) and evaluated and one or more priority NBS option(s) are identified.
- A dialogue between the different stakeholders is established and a set of possible actions is selected that the country could implement during and/or beyond the lifetime of the project.
- Guidelines/criteria for the selection of the appropriate site of NBS systems.

Tools for deployment:

- Workshop Concept Note & Agenda Template
- Presentations
- Guidelines & Criteria for the selection of the appropriate site of NBS systems.
- Stakeholder Action Planning Sheets
- Workshop Report Template (WES-BCA model)
- Evaluation Forms

Task 3 - Role Per Expert

Expert	Key Roles in Task 1
NKE3 – Senior Local Hydrologist	▪ Leads local engagement and moderates workshop discussions ▪ Contributes field-based and hydrological content to presentations ▪ Provides site-specific validation during dialogue ▪ Supports drafting the workshop report.
NKE1 – Senior Civil/Environmental Engineer	▪ Coordinates integration of team inputs into the final Pre-Feasibility Report ▪ Ensure incorporation of stakeholder feedback and design refinements from the concluding workshop.
NKE2 – Junior Hydrologist	▪ Prepares the Concept Note and agenda ▪ Supports development of technical presentations and visuals ▪ Drafts the workshop report and coordinates expert inputs ▪ Assist with documentation.
NKE4 – Senior Biodiversity Expert	▪ Contributes biodiversity-related input to the Concept Note, agenda, and presentations ▪ Highlights ecosystem benefits of NBS ▪ Supports the workshop report as needed.

Biodiversity Considerations

Across all tasks

NKE 4

- Biodiversity and ecosystem service criteria are considered in the site selection process
- Identification and integration of ecological co-benefits into NBS planning
- Identification of ecosystem constraints and biodiversity enhancement opportunities
- Environmental and ecological assessment of the proposed NBS option(s), ensuring alignment with biodiversity protection goals and national ecological regulations.
- Advise on how NBS can support biodiversity goals, recommending habitat-enhancing elements, such as native planting schemes and ensuring ecological considerations are reflected in the proposed intervention(s) and long-term maintenance plans.

Workplan –Schedule of tasks

Task	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
TOR preparation												
TOR approval by EC (up to 3 weeks)												
Contracting												
Task 0: Kick off meeting												
Task 1: Site Selection and Identification of Suitable NBS Intervention(s)												
Task 2: Development of a Pre-Feasibility Study												
Task 3: Concluding Workshop												



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Reference Case: Jordan NBS Activity-Summary of previous work on NBS carried out in Jordan under the WES project

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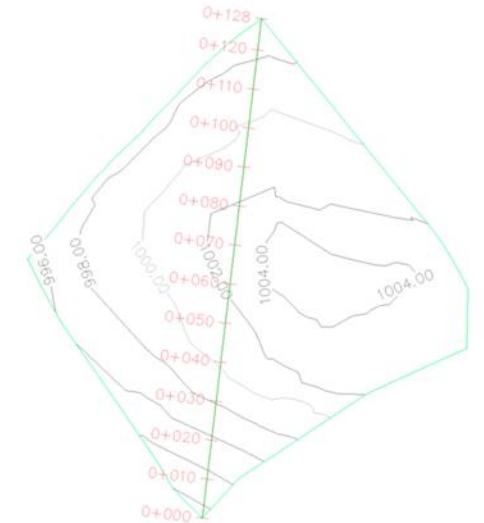
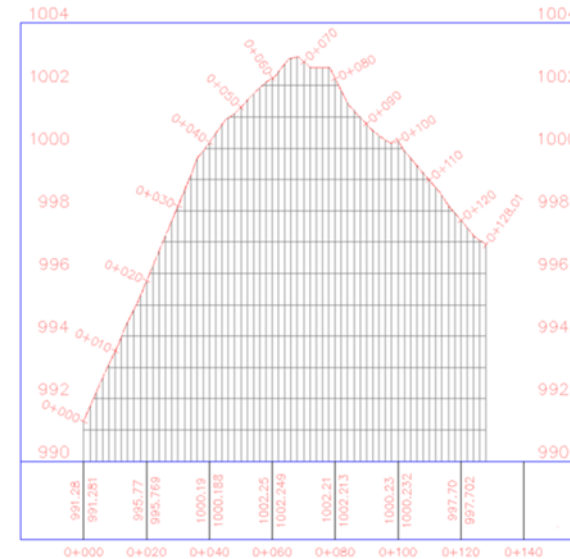
online

Presented by:

Stelios VAVOULOGIANNIS, Junior Water Resources Engineer/Hydrologist, WES-BCA

WES - Storm Water Management and Natural Water Retention Measures in Jordan (N-W-JO-2)

Ajloun Case



Ajloun population: 194,700

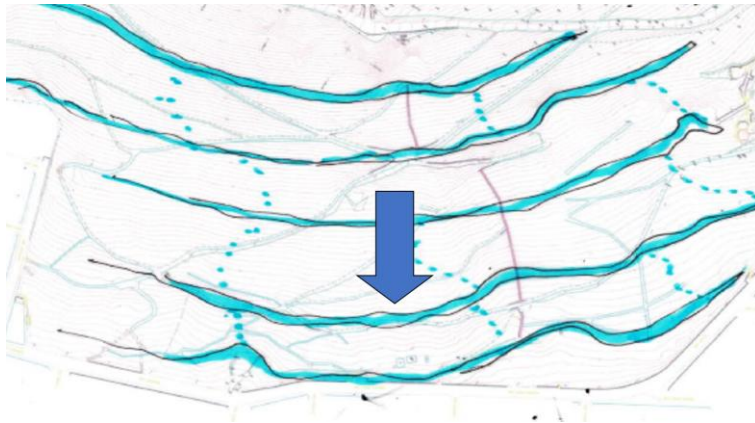
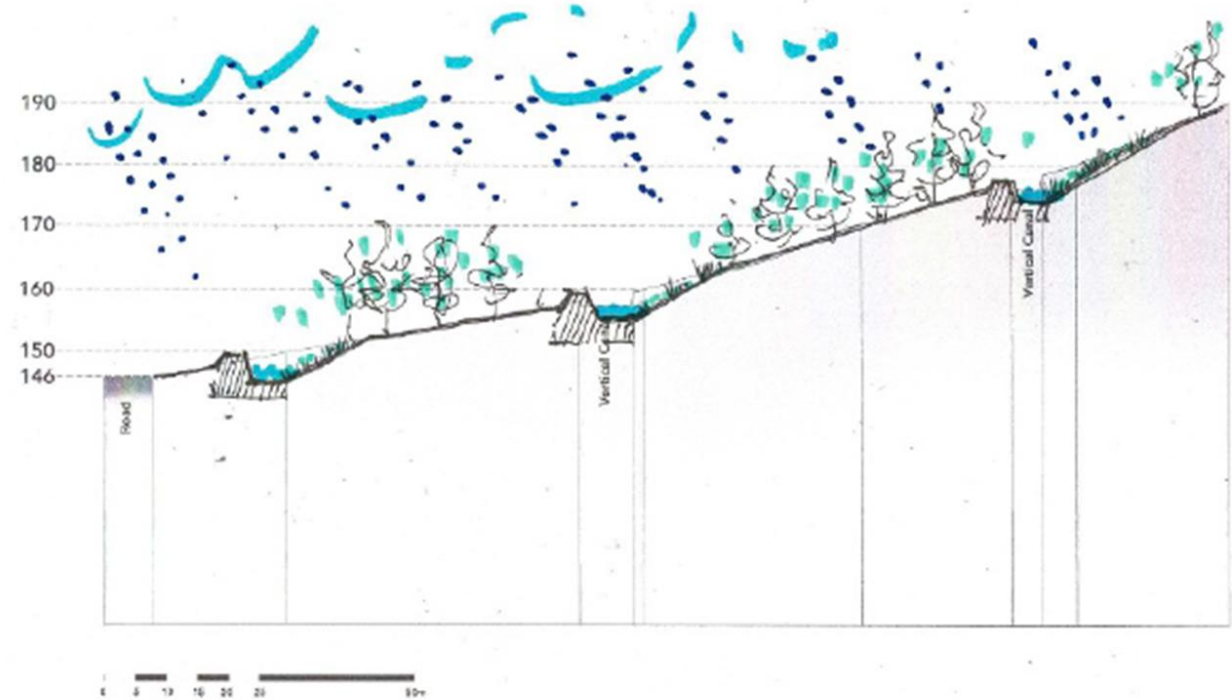
Area Characteristics:

- Storm runoff potential
- Land availability
- Groundwater aquifers for recharge
- Water scarcity

Design Rationale and Measures



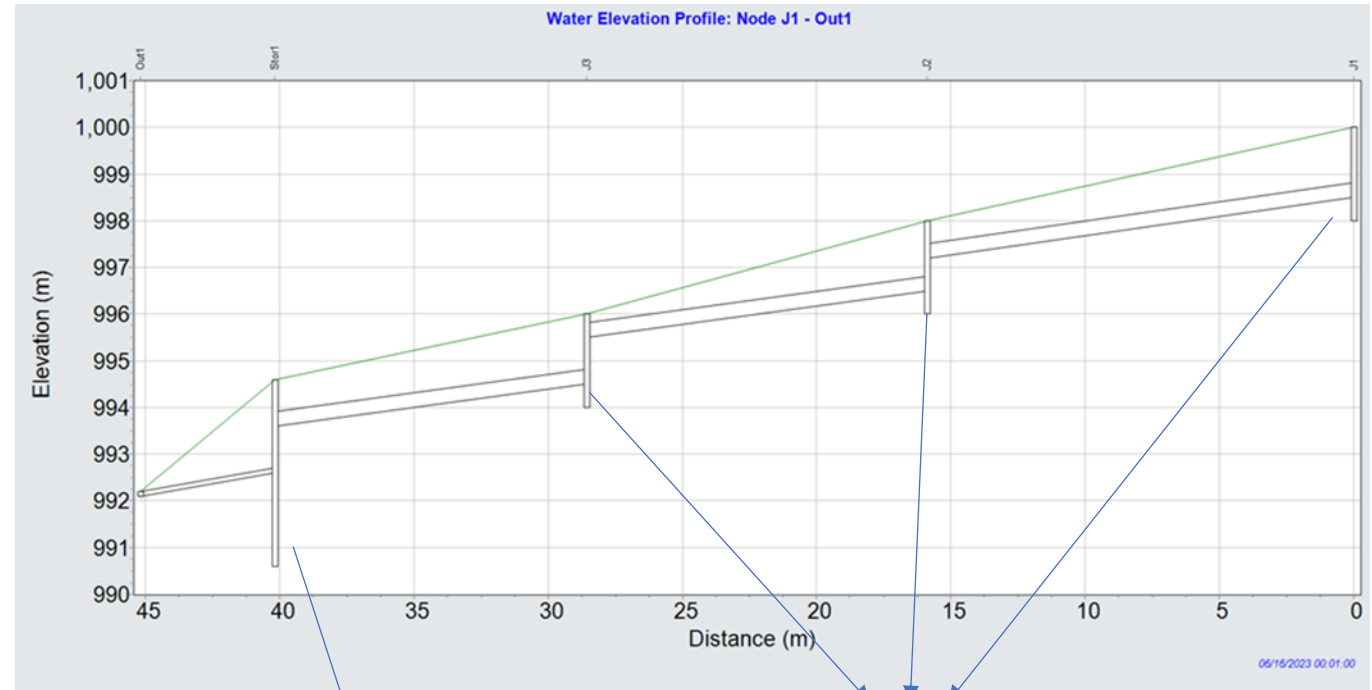
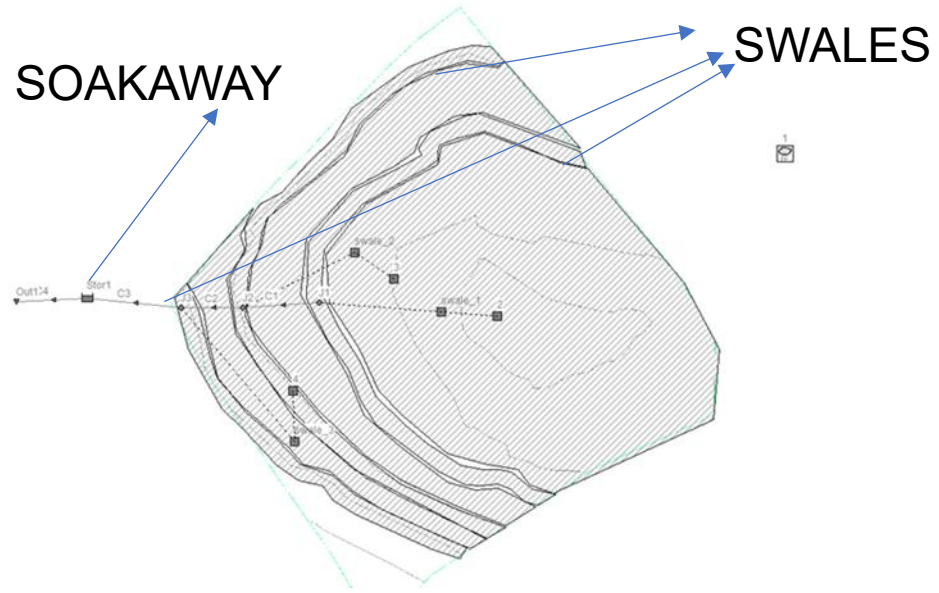
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Design Configuration and Modelling



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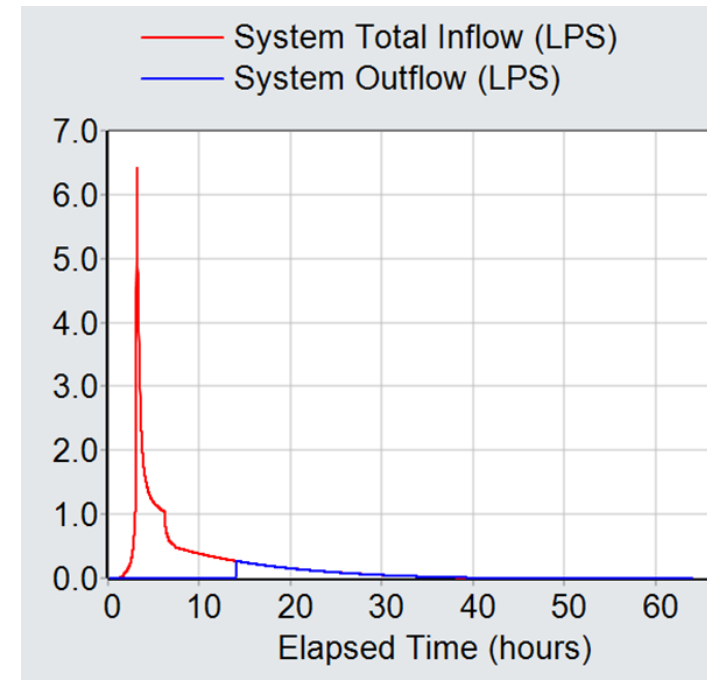
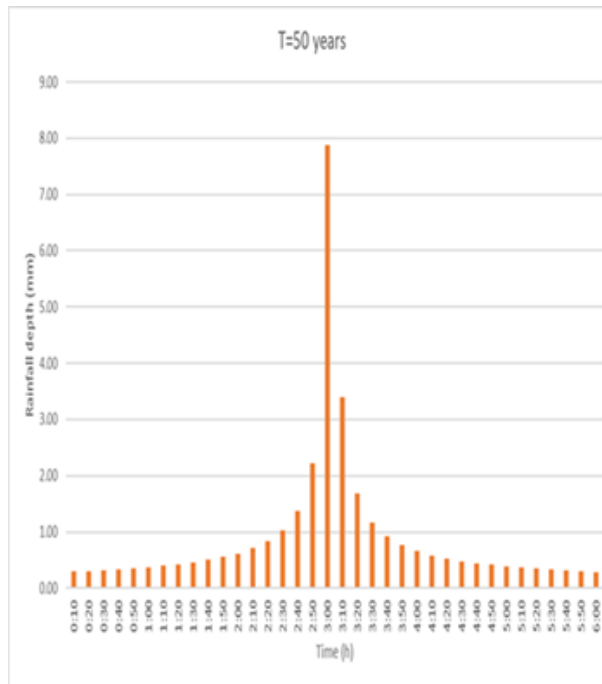


Results

For 6-hour events the swales had the following results:

1. T=5: inflow 86.28 mm; infiltration 54.31 mm (~63%); outflow 30.82 mm (~36%).
2. T=10: inflow 100.81 mm; infiltration 61.83 mm (~61%); outflow 37.84 mm (~38%).
3. T=50: inflow 134.65 mm; infiltration 77.88 mm (~58%); outflow 55.62 mm (~41%).

The swales-soakaway combination contributes to total flood elimination for T=5 and T=10 years. In the case of T=50 years the peak flow is 0.2 L/s whereas the system inflow is over 6 L/s. The swales manage to capture the majority of runoff and assist in the infiltration. The soakaway, modeled as a tank, also contributes to infiltration and aquifer recharge. In case the water need to be retrieved, a tank could replace the soakaway.





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Component I, Communication Plan

5 August 2025

online

Presented by:

Ms Lisa PAPADOGEORGAKI, Communication Expert WES-BCA

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- Disseminate information and knowledge on all WES-BCA activities;
- Increase awareness on the protection of the environment, the restoration of biodiversity, the management of scarce water resources and the effects of climate change in the Mediterranean region;
- Increase the commitment of decision-makers and key stakeholders at national and local level;
- Mobilise the civil society, especially young people and women;
- Ensure the visibility of WES-BCA and the EU support for WES-BCA and other projects/initiatives related to environmental issues in the Southern Neighbourhood countries.

Communication plan for this activity

- ❑ All related information and results (presentations, deliverables etc.) will be disseminated to **promote successful practices on Nature-Based Solutions (NBS)**, how stormwater/rainwater can be managed as a resource through site-specific design and feasibility analysis of NBS.
- ❑ Emphasis will be placed on **how NBS aligns with national strategies** such as the National Water Sector Strategy (2024–2035) and the National biodiversity objectives.
- ❑ News items, especially prepared for this activity, would enhance knowledge exchange and learning among a wider public.



Target Groups

- Local Water Establishments;
- Ministry of Energy and Water (MoEW);
- Ministry of Environment (MoE);
- Ministry of Agriculture;
- Ministry of Public Works and Transport;
- Ministry of Interior and Municipalities;
- Local Authorities;
- Parliament's Environment and Public Works Committee;
- Regional Partners and International Organizations;
- NGOs and CSOs, including women's and youth organisations;
- Academia;
- Media.

Communication Tools



- ☐ Press Releases/Announcements
- ☐ Social media posts;
- ☐ Best practices messages;
- ☐ Deliverables published via the website;
- ☐ Photos;
- ☐ Video.

All news items will be published in English, French and Arabic.

WES-BCA PRESS RELEASE

The WES-BCA project's work plan of 27 Activities and Outreach campaigns towards Climate Action and Environmental Protection was endorsed during the 1st Steering Committee Meeting

Athens, 27 May 2025

The "Water and Environment Support-Biodiversity and Climate Action (WES-BCA) in the Neighbourhood South region" project presented the 27 national and regional activities, trainings, study tours, workshops, consultations, as well as the large scale outreach campaigns to be delivered in the Mediterranean East and South, many of which related to Plastic Pollution, Water-Energy-Food-Ecosystems (WEFE) Nexus, Biodiversity and Water Scarcity.

The WES-BCA work plan was discussed among the WES-BCA experts, the 16 Focal Points of the related Environment and Water Ministries of the 8 Partner Countries (PCs) (including Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia), European Delegations, the institutional partners (Union for the Mediterranean and the Barcelona Convention), and various other stakeholders. It was endorsed during the project's first Steering Committee Meeting (SCM) on the 26th of May 2025, in Brussels, Belgium.

Based on the valuable feedback of the SCM's participants on the issues to be tackled over the next 2,5 years, the plan of action is to be implemented through two complementary Components:

Under Component I, the issues covered focus on 5 topics: Prevention & Reduction of Pollution; Curbing Plastic Pollution & Marine Litter; Promoting the Water-Energy-Food-Ecosystems (WEFE) Nexus approach; Promotion of water efficiency at all steps and levels of water management and use; Climate Change mitigation and adaptation actions, including Water Scarcity and Biodiversity protection.

Under Component II, the project aims to raise awareness and improve understanding by the general public (and specific segments of the population), including youth and women, stimulating adoption of appropriate behaviours and attitudes towards improved Climate Action and effective Environmental Protection.

During their opening remarks, Mr Patrick Wegerdt, Directorate-General for Environment (DG-ENV), reaffirmed the European Union's commitment to support the Southern Neighbourhood countries through the WES-BCA project activities, that follow the principles of the European Green Deal (EU policy initiatives) on the path to low-carbon, resource-efficient economies, with the ultimate goal of reaching climate neutrality by 2050.

Ms Olfat Hamdan, Programme Management Officer, UNEP/MAP- MedPol, confirmed the importance attached to the WES-BCA project and its contribution towards a healthy, clean, sustainable and climate resilient Mediterranean Sea and Coast with productive and biologically diverse ecosystems, a vision also reflected in the 2030 Agenda for sustainable development.

As for Ms Cristina Cardenete, Environment Expert, Water, Environment, & Blue Economy Division, Union for the Mediterranean (UfM), expressed the commitment of the Union for the Mediterranean in promoting and pushing forward a close collaboration with WES-BCA, along the lines of the previous years, in support of the UfM GreenerMed Agenda, Sustainable Blue Economy Roadmap and a renewed Water Ministerial Declaration, currently in the making.

Mr Stavros Damianidis, General Manager of LDK Consultants and WES-BCA Project Director, made clear that the WES-BCA team will deliver activities based on their valuable expertise gained during the previous WES project and in close cooperation with the WES-BCA Focal Points from the Water and Environment ministries of PCs and the EU Delegations in the PCs.

Professor Michael Scoullas, WES-BCA Team Leader, who has led also the predecessor phases, reminded old and new partners on the vision, principles, priorities and overall approaches and related strategy of the project/program and gave emphasis to the activities related to the pioneer Water-Energy-Food-Ecosystems (WEFE) Nexus approach. New policies and best practices to follow, advanced techniques to adopt and apply, along with initiatives and synergies to be promoted, will certainly promote development efforts of the PCs, while protecting the environment and supporting the sustainable development in the region.

Mr Frédéric Fournet, Programme Manager, WES-BCA, European Commission-DG MENA, added: "Thanks to the productive collaboration among the SCM's participants, the endorsed workplan and the 27 WES-BCA activities and outreach campaigns would prove to be beneficial to the PCs and pave the way to a greener and more sustainable



TERMS OF REFERENCE

Design of NBS in a Pilot Area in Lebanon

Activity Code: C1_N-LB-2

June 2025

COMPONENT I (Water, Biodiversity and Environment)	
SCOPE OF ACTIVITY	National (Lebanon)
WES-BCA TOPIC:	Topic 5: Climate Change mitigation and adaptation actions, including Water Scarcity and Biodiversity protection as priorities
WES-BCA SUBTOPIC	Sub-Topic 5.1: Promoting the use of NCWR (in combination with renewable energies)

Version	Document Title	Author	Review and Clearance
v.1	Design of NBS in a Pilot area in Lebanon	Suzan TAHA Stelios VAVOULOIANNIS	Prof. Michael SCOULLAS

Press Clippings



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منوعات

مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي ينطلق رسمياً!

٢٠ ديسمبر 2024

مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي ينطلق رسمياً!

عقد "مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي" في منطقة الجوار الجنوبي، الممول من الاتحاد الأوروبي، اجتماعه الافتتاحي، اجتماعه الافتتاحي، يوم الثلاثاء 17 كانون الأول/ديسمبر 2024، في بروكسل، بلجيكا. وأدأ السيد ستافروس داميتيديس، مدير مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي في ملاحظاته الافتتاحية "بما أنّ مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي (2024-2027) هو في الواقع استمرار لمشروع دعم المياه والبيئة (2019-2024)، ويستفيد من الخبرة الطويلة الأمد للمشاريع الإقليمية الناجحة السابقة الممولة من الاتحاد الأوروبي (مشروع دعم المياه والبيئة – آلية الدعم Horizon 2020، آلية دعم برنامج الإدارة المستدامة والمكاملة للمياه، وبناء القدرات/ برنامج البيئة المتوسطي Horizon 2020)، فإني على ثقة بنجاح تنفيذ أهداف مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي والتلتج المتوخاة".

كما أنّ البروفيسور مايكل سكولوس، قائد فريق مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي، في تلخيصه للمناقشات، على الكيفية التي سيعمل بها مشروع دعم المياه والبيئة على الارتقاء بإنجازات المشروع، والسعي إلى تعميق فهم البلدان وتعزيز المهارات في النهج المتكاملة، مثل الرابط بين المياه والطاقة والغذاء والنظم الإيكولوجية (WEFE) في سلسلة البحر الأبيض المتوسط من المصدر إلى البحر، على النحو الذي يروج له بشكل مشترك الاتحاد الأوروبي والاتحاد من أجل المتوسط والتفقيه برتلونه على المستوى الإقليمي. وسيظل الحد من التلوث البلاستيكي والقمامة البحرية، من المصادر النهرية أيضاً، هدفاً ذا أولوية. وسيدعم عنصر إضافي للتوعية والتواصل، يتوجّه إلى القطاعات الرئيسية والجمهور الأوسع، مع التركيز على النساء



The latest news and information on the European Union's (EU) cooperation with its Southern partners.

EU NEIGHBOURS south

WES-BCA first online Kick-off Meeting of the environment activity in Lebanon

July 28, 2025

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The WES-BCA project has organised its first online kick-off meeting of the environment activity in Lebanon, on July 24, 2025. WES-BCA is to support the initial implementation of an Extended Producer Responsibility (EPR) scheme for selected single-use plastics (SUP) in Lebanon, with a focus on packaging plastic waste. The WES-BCA team of experts will provide technical and legal guidance for the development of a national EPR legal framework and assist in preparing relevant policy recommendations and related legal documents. It will also enhance national capacities and stakeholder engagement through targeted capacity-building workshops and consultations, promoting source separation, recycling technologies, and alignment with ongoing programs supporting EPR implementation for selected SUP. The activity is prepared with the collaboration of the Ministry of Environment of Lebanon. During the meeting, the team of WES-BCA experts presented the activity's action plan and discussed the issues raised with key stakeholders.



الدورة الاقتصادية مجلة اقتصادية عربية

الرئيسية مصارف مؤتمرات مقالات استثمار طاقة تكنولوجيا مجتمع نقل بلا قيود تحميل

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مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي ينطلق رسمياً!

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وسشارك في رئاسة الاجتماع السيد فريدريك فورتز، مدير برنامج البيئة في المديرية العامة لتسياسات الجوار ومعاونات النوع والبيئة - فرع المياه والنوع البيولوجي، في المفضلة الأوروبية. وهو أيضاً مدير كل من مشروعي WES و WES-BCA "أ" على نفس من أن التعاون المتبادل السابق مع فريق مشروع دعم المياه والبيئة سوف يسهم في مشروع دعم المياه والبيئة – فرع التنوع البيولوجي والعمل المناخي. من خلال عنصرين متميزين، نكثي ضمانات، بتقنيات على المستويين الإقليمي والوطني. سوف يساهم في الحد من التلوث والتفقيه به في منطقة البحر الأبيض المتوسط، وحماية التنوع البيولوجي والسمات، ما يجعل البلدان الشريكة أكثر قدرة على التكيف مع تضر المناخ، مع تضر كفاءة استغلال المياه".

البيان: استطلاع ارتفاع بنجاح 96% في إيرادات "الرجعي" سنة 2024
«البيان: تراجع تراجع اليوم الثالث على التوالي سائراً بهبوط التدفقات الخارجية لمصادر الاستثمار المندولة القوية في الولايات المتحدة إلى مستوى قياسي»



LDK CONSULTANTS S.A.

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الاجتماع التمهيدي الأول لمشروع WES-BCA عبر الإنترنت حول النشاط البيئي في لبنان (24/07/2025)

لقد نظم مشروع WES-BCA اجتماعه التمهيدي الأول عبر الإنترنت حول النشاط البيئي في لبنان، في 24 تموز/يوليو 2025.

من المقرر أن يدعم مشروع WES-BCA التنفيذ الأولي لمخطط مسؤولية المنتجين الموسعة لمجموعة مختارة من المواد البلاستيكية الأحادية الاستخدام في لبنان، مع التركيز على نفايات التغليف البلاستيكي.

[...]



[اقرأ المزيد <](#)

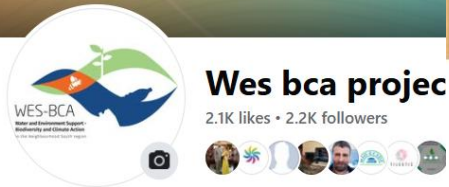
اجتماع WES-BCA التمهيدي الأول للنشاط البيئي في تونس عبر الإنترنت (03/07/2025)

نظم مشروع WES-BCA اجتماعه التمهيدي للنشاط البيئي في تونس عبر الإنترنت، في 3 تموز/يوليو 2025. وتكمن أهداف النشاط في:

تعظيم الإطار التنظيمي الذي يحكم حظر الأكياس البلاستيكية الأحادية الاستخدام، وآليات التنفيذ من خلال اقتراح تعديلات قانونية لتوضيح تدابير الحظر وتعزيزها؛ دعم انتقال القطاع الصناعي إلى البدائل المستدامة من خلال تحديد واقتراح آليات اقتصادية لدعم التحول إلى الحلول البيئية وتشجيع



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WES-BCA project

@WesMed19

The EU funded WES-BCA project aims to improve the protection of the environment, the restoration of biodiversity and the management of scarce water resources.

 Athens, Greece  wes-med.eu  Joined September 2019

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WES-BCA a Partner of EU EyesOnLife Contest



The #EyesOnLife contest is now open!

WES-BCA project is proudly supporting the #EyesOnLife contest!

The #EyesOnLife contest is now open!

Launched by the European Union in partnership with EU Neighbours South, MedWaves – the UNEP/MAP Regional Activity Centre for SCP, the European Training Foundation (ETF), SPARK, WES-BCA, Interreg NEXT MED, and Expertise France, this regional initiative highlights and supports outstanding eco-innovations and civil society initiatives advancing the circular economy in the Southern Mediterranean. [...]



WES Video to be used for WES-BCA comms



“Natural Water Retention Measures (NWRM) in urban environments”

In this video some NWRMs are presented with a focus in urban areas adapted to the local context, in order to inform the viewers on the range of options available under NWRM, the impacts, advantages and benefits of such measures in the context of water scarcity and climate change, as well as to support the uptake of such NWRM.



All versions of the video with subtitles in English, French and Arabic are accessible via the WES-BCA YouTube page and Website.



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Water and Environment Support -
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in the Neighbourhood South region

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WES-BCA Kick-off Meeting

C_1-N-LB-2: Design of NBS in a Pilot area in Lebanon

Stakeholders Engagement and Evaluation of Impact

5 August 2025

online

Presented by:

Dr. Emad ADLY, Stakeholders Engagement Expert and Impact Evaluation, WES-BCA

WES-BCA Impact assessment methodology (C1)



- **Interlinked aspects:**

- ☐ Stakeholder engagement (involving the right people from the relevant institutions)

- ☐ Defining, monitoring and assessing expected impacts throughout the process on both personal and institutional levels

WES-BCA Impact assessment methodology (C1)



- Approval of Activities' ToRs (Relevant Stakeholders, Impacts and Indicators)
- Mobilizing candidates based on certain criteria to make sure the project serves the right target groups.
- Dynamic participatory activities involving quizzes, exercises etc.
- Evaluation immediately after the intervention.
- Follow-up and getting feedback (e-survey, interviews, capitalization questionnaires completed by FPs).

Engaging the right stakeholders is key! (C1)

- ❑ Trainees from the government / ministries that can contribute to the decision-making process and in designing policies. From other stakeholder groups as well.
- ❑ WES-BCA to identify and invite relevant Mediterranean CSOs and NGOs from regional and national networks.
- ❑ Gender and Youth aspects are well integrated from the ToR development phase.

Engaging the right stakeholders is key! (C2)

Under **Civil Society Mobilization** actions:

NGO/CSO Engagement



- Number of members in the *WES-BCA Communities for Climate Action* in each PC;
- Number of outreach activities implemented by participating CSOs/ NGOs;

Synergies



- Amplification of impact via joint/coordinated efforts (regional, national, local);

Community Actions Taken



- Cases showcasing real-world, on-the-ground impact of the WES-BCA CII outreach actions.



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Thank you for your attention!



WES-BCA Kick-off Meeting

Design of NBS in a Pilot Area in
Lebanon (C1_N-LB-2)

5 August 2025

On-line video-conference

Discussion and Q&A



WES-BCA Kick-off Meeting

C_1-N-LB-2: Design of NBS in a Pilot area in Lebanon

Discussion and Q&A

5 August 2025

online

Key Requirements for Successful Implementation



- Providing relevant data and information in a timely manner
- Formulation of the expert group to review the results of the evaluation
- Providing the necessary assistance to the experts in order to identify the relevant stakeholders and invite them
- Facilitation of the work of experts and meetings as needed
- Facilitation of the expert's contact with the local representatives of the pilot areas
- Support the project in the organization of the workshops (invitations, video projector, screen, flipchart; where applicable and if available)
- During the final workshop, agree on a set of concrete follow-up actions, such as:
 - Pilot implementation of the designed NBS
 - Use of the guidelines at municipal or national level
 - Steps toward replication and integration into policy frameworks .
- Facilitate the implementation of the communication plan proposed by the key communications expert from WES-BCA.

Potential Challenges

- Incomplete or outdated hydrological, land use, and drainage data may hinder site analysis and design accuracy.
- Overlapping mandates and limited cross-ministerial collaboration could delay decisions or follow-up actions.
- Low capacity or limited availability of municipal staff and stakeholders may affect the quality of consultation and validation.
- Lack of familiarity with NBS and its benefits among local actors may lead to limited interest.
- Security challenges could affect stakeholder participation, field visits, or workshop scheduling.

Comments and questions





WES-BCA Kick-off Meeting

C_1-N-LB-2: Design of NBS in a Pilot area in Lebanon

Next Steps and Closing Remarks

5 August 2025

online



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