



INTPA-NEAR Environment & Climate Week

27-31 March 2023
Brussels, Belgium





31 March 2023, Brussels, Belgium



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

Session Block on “Water & Oceans”

“Water and Environment Support in the ENI Southern Neighbourhood: an example of the *Source to Sea* approach”.

Presented by: Professor Michael Scoullas, WES Team Leader

WES Identity

Facts & Figures	
Partner Countries:	Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia
Project value:	9 508 054 Euros
Duration:	May 2019 – November 2024 (66 months)
Project team:	Team Leader: Professor Michael Scoullos, scoullos@wes-med.eu Water Expert: Ms Suzan Taha, taha@wes-med.eu Environment Expert: Mr. Anis Ismail, a.ismail@wes-med.eu Communication & Networking Expert: Ms Lisa Papadogeorgaki, lpa@ldk.gr Stakeholder Engagement Expert: Dr. Emad Adly, wes.gc@raednetwork.org

WES objectives

- WES aims at protecting the environment and improving the management of scarce water resources in the Mediterranean.
- It strives to address the country needs for creating the enabling environment and enhancing the capacities of stakeholders in the Partner Countries (PCs) **to tackle problems related to pollution prevention and water use efficiency.**
- WES capitalises on previous successful EU funded regional projects (Horizon 2020 CB/MEP; SWIM SM; SWIM-Horizon 2020 SM).

WES Activities' Overview



Water and Environment Support
in the ENI Southern Neighbourhood region

Technical Assistance, Capacity Building, Enhancement of Enabling conditions, at:


Regional level:

- Around **20 Regional Activities** on major water and environment issues such as **Trainings/Workshops, Study Visits** to European and Southern Mediterranean countries, **Webinars** and coached **Peer-to-Peer exchanges**.
- **+3 Regional Activities on plastic pollution** (environment)

National Level:

- Around **4 National Activities** (2 on water and 2 on environment) **per Partner Country**
- **+ Activities on plastic pollution** (environment)
- **National WES Meetings:** collaboration platforms to assess progress, plan next steps, enhance synergies with other programs/ projects, etc.

Also a component on supporting a set of **Demonstration Projects on Water**

Role of WES:  to monitor and disseminate innovative approaches and successful practices in the field of efficient use of water.



How the Source to Sea Approach and activities/operations are developed:

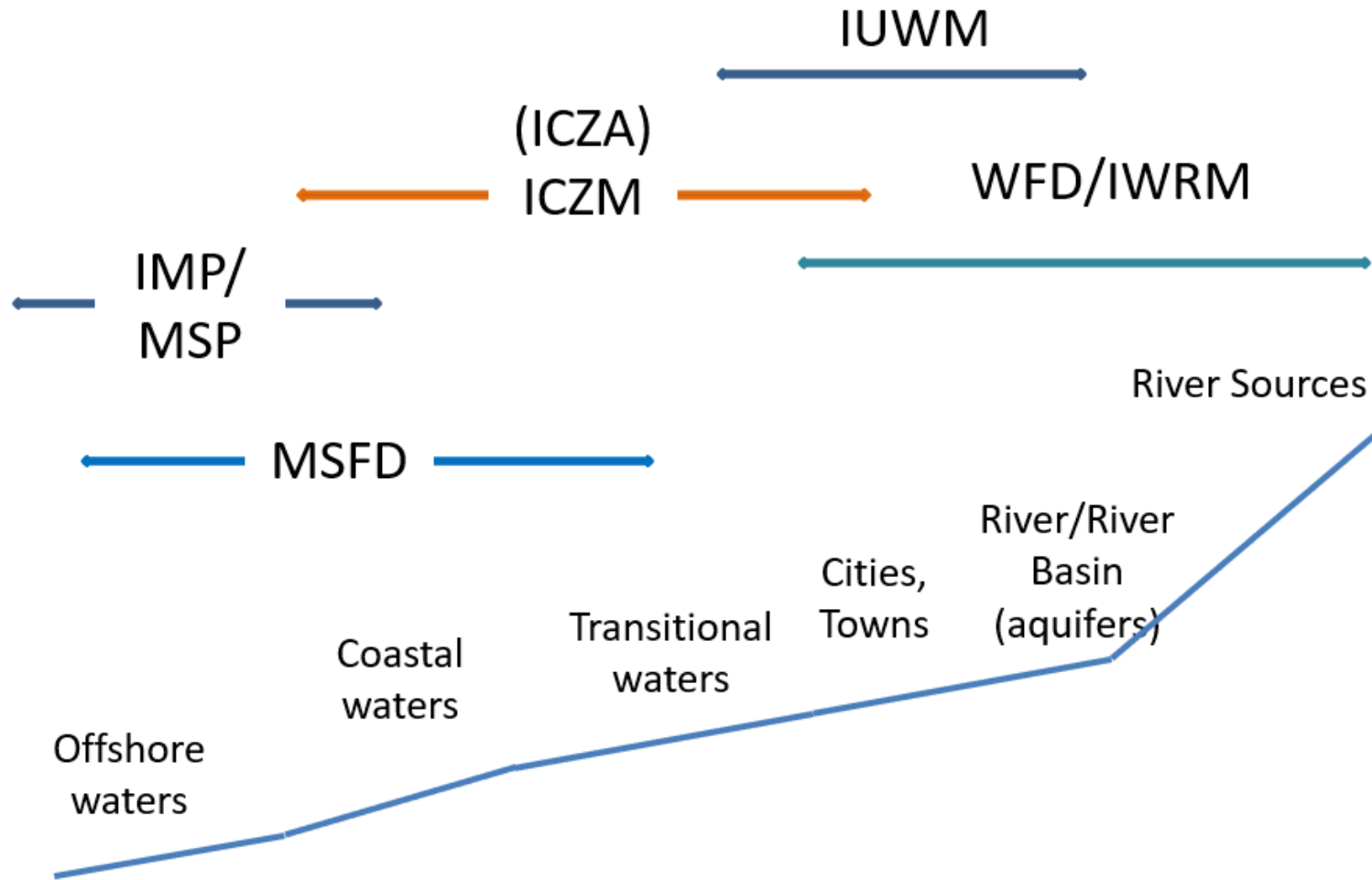
- (a) by better **understanding** and clarifying with all stakeholders the relevant “concepts”;
- (b) by taking into account the related **EU policies, priorities and guidelines**;
- (c) by **responding to the requests of the Partner Countries and the priorities of the regional institutional partners** (UfM and UNEP/MAP-MCSD), addressing them not as isolated issues, but as components of the Source to Sea Approach and the overall process towards achieving the SDGs and Sustainable Development, in general.

The Source to Sea (S2S) Approach

The concept of the Source to Sea approach is the epitome of integration of:

- ❑ Integrated Water Resources Management (IWRM)
- ❑ Integrated Coastal Zone Management (ICZM)
- ❑ the Ecosystem Approach (ECAP)
- ❑ other already integrated approaches therefore becoming an “Integration of Integrated Approaches”.

A variety of “Integrated Management Tools”



An Integrative Methodological Framework (IMF)

for coastal, river basin and aquifer management
Towards converging management approaches
for Mediterranean coastal zones



- ICZM, IWRM, ECAP are components of the Source to Sea/S2S approach.
- WES is capitalizing on the Integrative Methodological Framework (IMF) produced by PAP/RAC of UNEP/MAP, UNESCO IHP and GWP-Med (principal author, the WES TL), which allows for the individual components to be applied and operate in synergy.



- **Regional & Horizontal related Activities of WES**
- **Support to water DEMO projects**

Regional & Horizontal activities

C2: Water



Activity	Training/ Capacity Building	Study tour	P2P	Status in 2023
RW-1-REG: Training on the practical application of the water-energy-food-ecosystems nexus	x			Planned for 2023
RW-2-REG: Training on water accounting	x			Completed successfully
RW-3-REG / RW-3-P2P : Capacity building on Water demand management (WDM)	x		x	Completed successfully
RW-4-REG / RW-4-P2P : CB on NCWR focusing on water harvesting	x		x	Completed successfully
RW-5-REG/ RW-5-ST: CB on WWT for reuse	x	(x)	x	Completed successfully
RW-6-REG / RW-6-ST/RW6-P2P: Training on Non-Revenue Water in addition to a study tour	x	x	x	on-going
RW-7-REG / RW-7-ST: Study tour and training(s) of WUAs on optimal irrigation management and practices for improved irrigation efficiency and soil fertility	x	x		Planned for 2023
HW-1- REG/ HW-1-P2P: Capacity building on PPP, green/blue economy entrepreneurship and banking for the water/wastewater sector	x		x	Planned for 2024
Sub-total	8	3	4	
Total	16 out of which 8 are completed			

National activities

Progress to date

C2: Water



Activity title / Status	ToRs not started yet	ToRs under development	ToRs Approved	Status 2023
N-W-DZ-1: Diagnosis for the performance of NRW in a pilot utility and develop a plan for improvements			✓	Ongoing
N-W-DZ-2: Potential of Water use efficiency & water saving in domestic water			✓	Ongoing
N-W-EG-1: Strengthen the water utilities capacities to manage/reduce NRW			✓	Ongoing
N-W-EG-2: PPP for the banking system to improve irrigation network management and efficiency			✓	Ongoing
N-W-IL-1: Evaluation of new methods to reduce the cross subsidies in the agricultural water tariff in Israel			✓	Ongoing
N-W-IL-2: Storm water management and Natural Water Retention Measures (NWRM)			✓	Ongoing
N-W-JO-1: Elaboration of non-revenue water policy for Jordan			✓	Ongoing
N-W-JO-2: Explore the potential of NWRM at the catchment scale			✓	Ongoing
N-W-LB-1: Explore the potential of Natural Water Retention Measures	One New activity – eventually cancelled			
N-W-LB-2: CB on WWTPs / Replaced with National plan for sludge management and treatment				
N-W-MO-1: Support WDM in relation to water scarcity			✓	Ongoing
N-W-MO-2: Elaboration of strategies for cost recovery, and development of tools for the evaluations of costs			✓	Completed
N-W-PS-1: Design actions for improved water billing & fees collection			✓	Ongoing
N-W-PS-2: CB of pilot farmers' associations and communities on optimal irrigation management			✓	Ongoing
N-W-TN-1: Improving the efficiency of water use in agriculture			✓	Ongoing
N-W-TN-2: Reservoir Sedimentation Hazard and Mitigation Measures towards Sustainability in Tunisia			✓	Ongoing
Total	0	0	14	1 completed 13 ongoing

Regional & Horizontal activities

Overview and status

C1: Environment



Activity	Training/ Technical Assistance	Study tour	P2P	Status in 2023
RE-1-REG / RE-1-P2P: Phasing-out single-use plastics in the Mediterranean	x		x	Completed successfully
RE-2-REG: Understanding better microplastics and identifying how to address the issue	x			Completed successfully
RE-3-REG /RE-3-P2P: Innovative Circular Economy Business Models in the Mediterranean region	x		x	Launched in January 2023
RE-4-REG / RE-4- ST/ RE-4-P2P: Management of Construction & Demolition Waste (C&DW)	x	x	x	ST completed successfully P2P on-going
RE-5-REG: Supporting countries to implement NAPs (2016-2025)	x			Planned for 2023-2024
RE-6-REG/ RE-6-ST / RE-6-P2P: Decentralized management of organic waste	x	x	x	Planned for 2023
RE-7-REG: Best practices in achieving waste reduction in the Mediterranean	x			Completed successfully
HRE-1-REG: On-line UfM Stakeholder Consultation on post-2020 Environment and Climate Action priorities in view of the 2nd UfM Ministerial Conference	x			Completed successfully
HRE-2-REG: Awareness raising and Education for Sustainable Development: Training of Trainers on campaigns for sustainable consumption	x			Completed successfully
HRE-3-REG: Educating for Sustainable Development: focus on WWT for reuse and NCWRs	x			Completed successfully
HRE-4-REG / HRE-4-P2P: Overall environmental governance - promotion of the Aarhus Convention in the whole of the Mediterranean	x		x	On-going
Sub-total	11	2	5	
Total	18 out of which 9 are completed			

'New' Regional & Horizontal activities

Overview and status

C1: Environment



Activity / Status	ToRs not started yet	ToRs under development	ToRs approved
RE-8-REG: Mediterranean "Champions" of plastic pollution prevention		✓	
RE-9-REG: SUPs-free coastal and Marine Protected Areas		✓	
RE-10-REG: Enhancing the number of responsible Tourism and Recreation related businesses in coastal areas		✓	
Going deeper into:			
HRE-2-REG: Awareness raising and Education for Sustainable Development: Training of Trainers on campaigns for sustainable consumption	✓		
HRE-3-REG: Educating for Sustainable Development: focus on WWT for reuse and NCWRs	✓		
Resources available for:			
HRE-5-REG: Knowledge Management; Science/Policy interface; citizen science	✓		
<i>i.e. 6 more activities for 2023-2024</i>	3	3	

National activities

C1: Environment



Activity title / Status	ToRs not started yet	ToRs under development	ToRs Approved	Activity launched or ongoing
N-E-DZ-1: Consolidation activities for the ongoing marine litter monitoring activities in Algeria			✓	Ongoing
N-E-DZ-2: Support for university training on green entrepreneurship and circular economy in Algeria			✓	Completed
N-E-EG-1: Support on the sustainable management of Construction and Demolition waste	Combined with RE-4-REG on CDW and cancelled			
N-E-EG-2: Support for the implementation of Extended Producer Responsibility (EPR) schemes		✓		
N-E-JO-1: Joint public-private roadmap to transition to reduce the use of Single-Use Plastics			✓	Ongoing
N-E-JO-2: Consolidation activities on green banking and support to green investment opportunities			✓	Ongoing
N-E-LB-1: Revision of sectoral guidelines and ELVs for industrial activities in Lebanon			✓	Completed
N-E-LB-2a: Support to Marine Litter Monitoring		✓		
N-E-LB-2b: Policy support to address Single Use Plastics			✓	Ongoing
N-E-MO-1: Joint initiative for the management of the PET packaging waste within the framework of EPR			✓	Completed
N-E-MO-2: Consolidation actions for the ongoing marine litter monitoring activities in Morocco			✓	Ongoing
N-E-PS-1: Technical assistance on sustainable Medical Waste Management			✓	Ongoing
N-E-PS-2: New activity Development of an action plan for the plastic waste management and to transition away from the use of single-use plastics (SUP) in Palestine		✓		
N-E-TN-1: Support for the implementation of Sustainable Public Procurement operation in construction sector			✓	Completed
N-E-TN-2: Industrial pollution prevention and abatement of tomatoes processing industry in a coastal area			✓	Completed
	0	3	11	5 completed 6 ongoing

New National and Sub-regional activities on plastics

C1: Environment



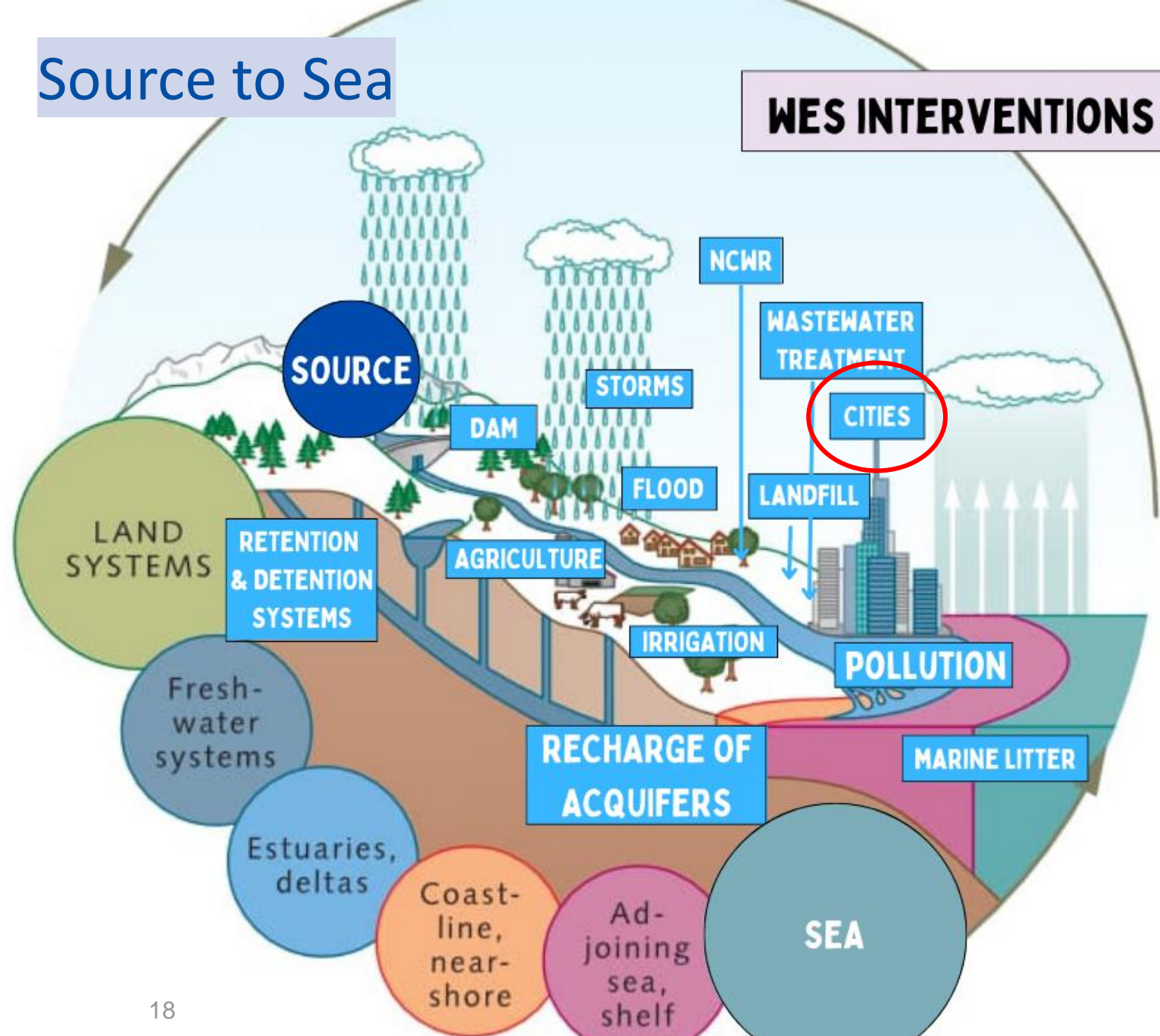
Activity title / Status	ToRs not started yet	ToRs under development	ToRs Approved	Activity launched or ongoing
N-E-IL-P1: Contribution to the development of a joint public-private road map to effectively recycle plastic polymers in Israel			✓	Ongoing
N-E-LB-PL-P2: Investigating and developing a compendium with successful approaches of an Extended Producer Responsibility (EPR) system for plastics in Lebanon and Palestine			✓	Ongoing
N-E-LB-PS-P3: Identify small scale “model” approaches of separate collection and recycling for further replication, Lebanon and Palestine			✓	Ongoing
N-E-TN-P4: Enforcement of political and legal measures undertaken by Tunisia for the reduction and prohibition of certain types of single-use plastic packaging			✓	Ongoing
N-E-DZ-P5: Solving the separate collection problems in Algeria and compiling an Action Plan		✓		
N-E-P6 (optional/potential additional activity on national level to be designed)	✓			
N-E-P7: Material for public awareness campaigns to be used by all PCs pioneered by Jordan and Morocco	✓			
<i>i.e. 4 out of 7 new activities are underway</i>	2	1	4	4

Project name	Lead applicant	Aim	Country	Duration months	Budget EUR
Gaza H2.0: Innovation and water efficiency.	We World – GVC Onlus	Reduce water losses in the supply system of Khan Younis Municipalities in the Gaza Strip. → Increase the availability of water through the application of sensor- and analytic-based approaches and improve the water resources management through Smart Water Networks pilots	Palestine (Gaza Strip)	09/2023	1.25M
Enhance the resilience of vulnerable communities through efficient water solutions and addressing climate change in the Eastern area of Khan Younis in the Gaza Strip	Stichting Oxfam Novib	Strengthen water resource management through an innovative water management model for agriculture in the Gaza Strip. → implement a new Treated Wastewater Re-use (TWWR) system linked to recovery wells around the TWWR infiltration basin. Disseminate smart agriculture best practices adapted to the Climate Change	Palestine (Gaza Strip)	07/2023	1.25M
WISPER – Efficient Innovative Solutions Portfolio for Enhancing Resilience	ICU (Istituto per la Cooperazione Universitaria)	Identify, test and showcase a portfolio of innovative technical and institutional solutions , at different maturity stages, related to the efficient use of water	Jordan Tunisia	10/2023	1.25M
ValEUr Gabes: Valorisation of urban water through innovative actions and instruments	Area Metropolitana de Barcelona (AMB)	Develop the capacity of Tunisian cities to cope with the impacts of climate change by using rainwater in urban areas . Demo activities will be carried out at the level of the city of Gabes and broadcasted in Tunisia and in other similar contexts in the region.	Tunisia (city of Gabes)	07/2023	0.79M
Promotion of integrated water resource management in an oasis environment: Oasis of Ferkla and Aguinane	Association des Enseignants des Sciences de la Vie et de la Terre au Maroc (AESVT)	Promote innovative approach to the efficient and sustainable management of water resources in an environment of climate change through the deployment of two pilot cases of integration of the principles of Integrated Water Resources Management in territorial strategic planning for the oasis of Ferkla and Aguinane	Morocco	10/2023	0.82M
Saving Water, Growing Cops: Remote-controlled irrigation systems to address water scarcity and promote preservation of available freshwater resources	OIKOS	The project aims at promoting the transfer and adoption of the precision irrigation solution on water-use efficiency linked to sustainable irrigation and crop production in the Shouf Biosphere Reserve.	Lebanon	08/2023	1.23M

Source to Sea

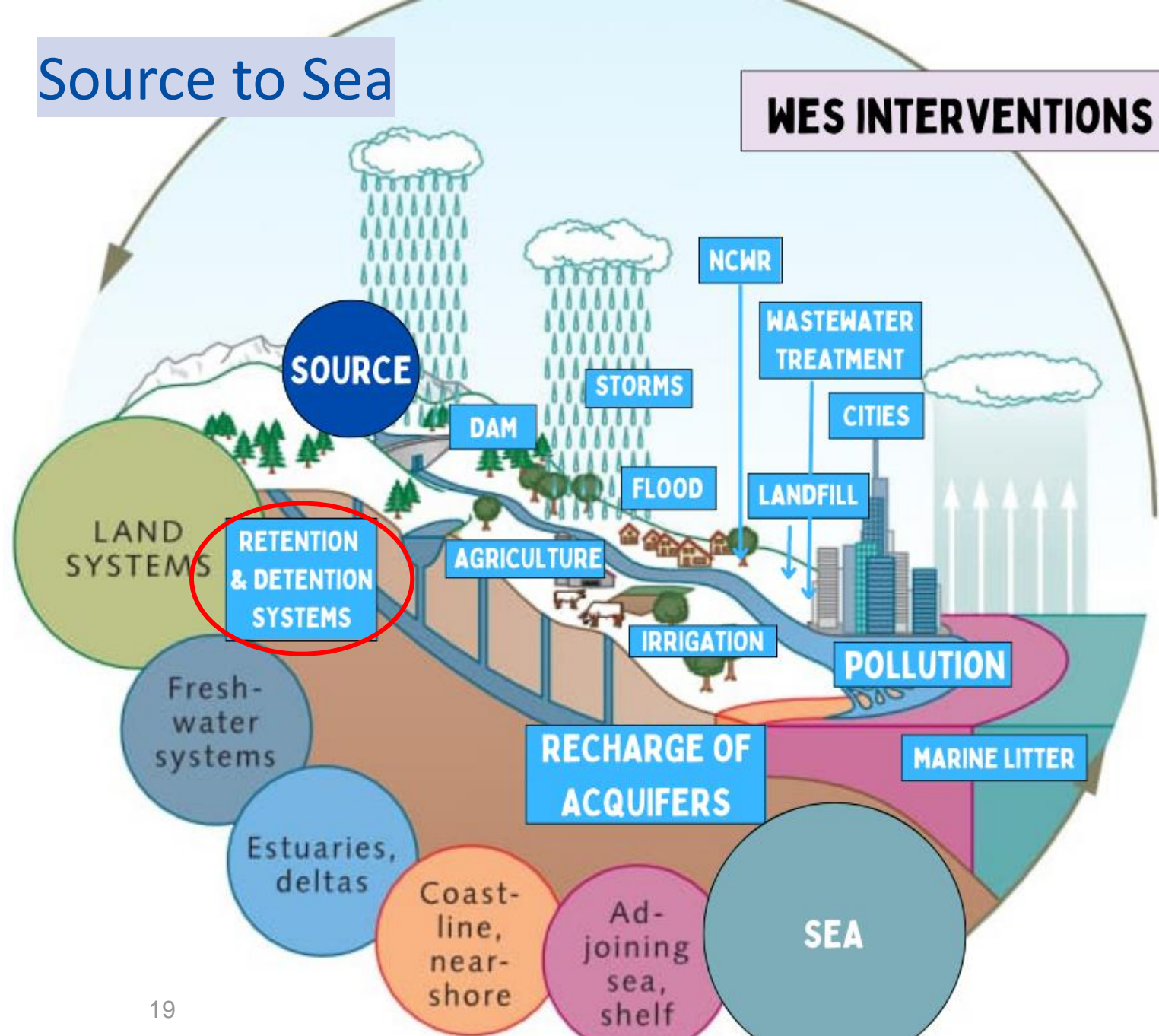
WES INTERVENTIONS

Cities



- **RW-2-REG: Training on water accounting**
- **RW-3-REG / RW-3-P2P** : Capacity building on Water demand management (WDM)
- **RW-6-REG / RW-6-ST/RW6-P2P**: Training on Non-Revenue Water in addition to a study tour
- **HW-1- REG/HW-1-P2P**: Capacity building on PPP, green/blue economy entrepreneurship and banking for the water/wastewater sector
- **N-W-DZ-1**: Diagnosis for the performance of NRW in a pilot utility and develop a plan for improvements
- **N-W-DZ-2**: Potential of Water use efficiency & water saving in domestic water
- **N-W-EG-1**: Strengthen the water utilities capacities to manage/reduce NRW
- **N-W-JO-1**: Elaboration of non-revenue water policy for Jordan
- **N-W-MO-2**: Elaboration of strategies for cost recovery, and development of tools for the evaluations of costs
- **N-W-PS-1**: Design actions for improved water billing & fees collection
- **Demo on Gaza Strip**

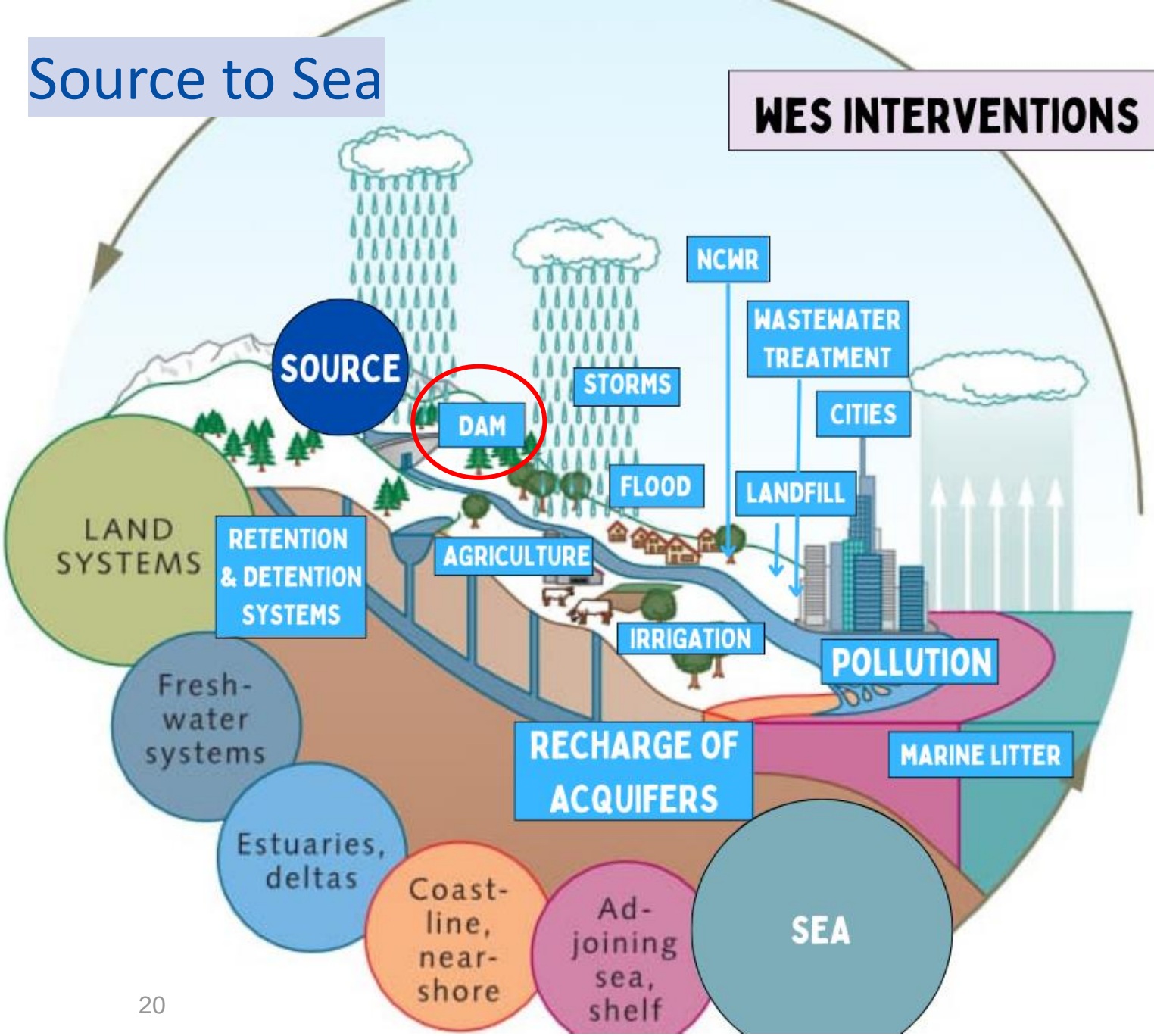
WES INTERVENTIONS



Retention and Detention Systems

- **N-W-DZ-1:** Diagnosis for the performance of NRW in a pilot utility and develop a plan for improvements
- **N-W-LB-1:** Explore the potential of Natural Water Retention Measures
- **N-W-JO-2:** Explore the potential of NWRM at the catchment scale
- **N-W-IL-2:** Storm water management and Natural Water Retention Measures (NWRM)

WES INTERVENTIONS

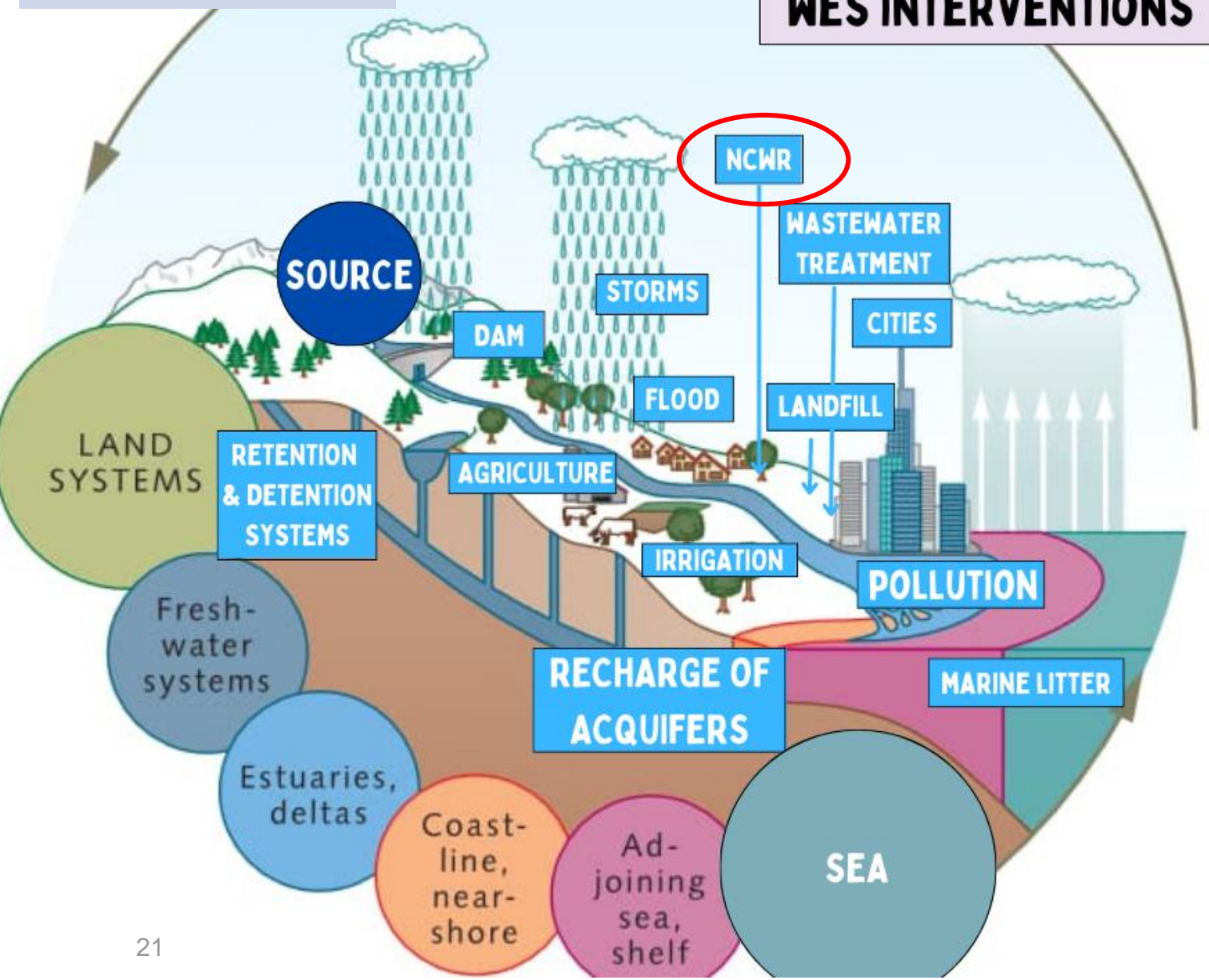


Dams

- **N-W-TN-2:** Reservoir Sedimentation Hazard and Mitigation Measures towards Sustainability in Tunisia

Source to Sea

WES INTERVENTIONS

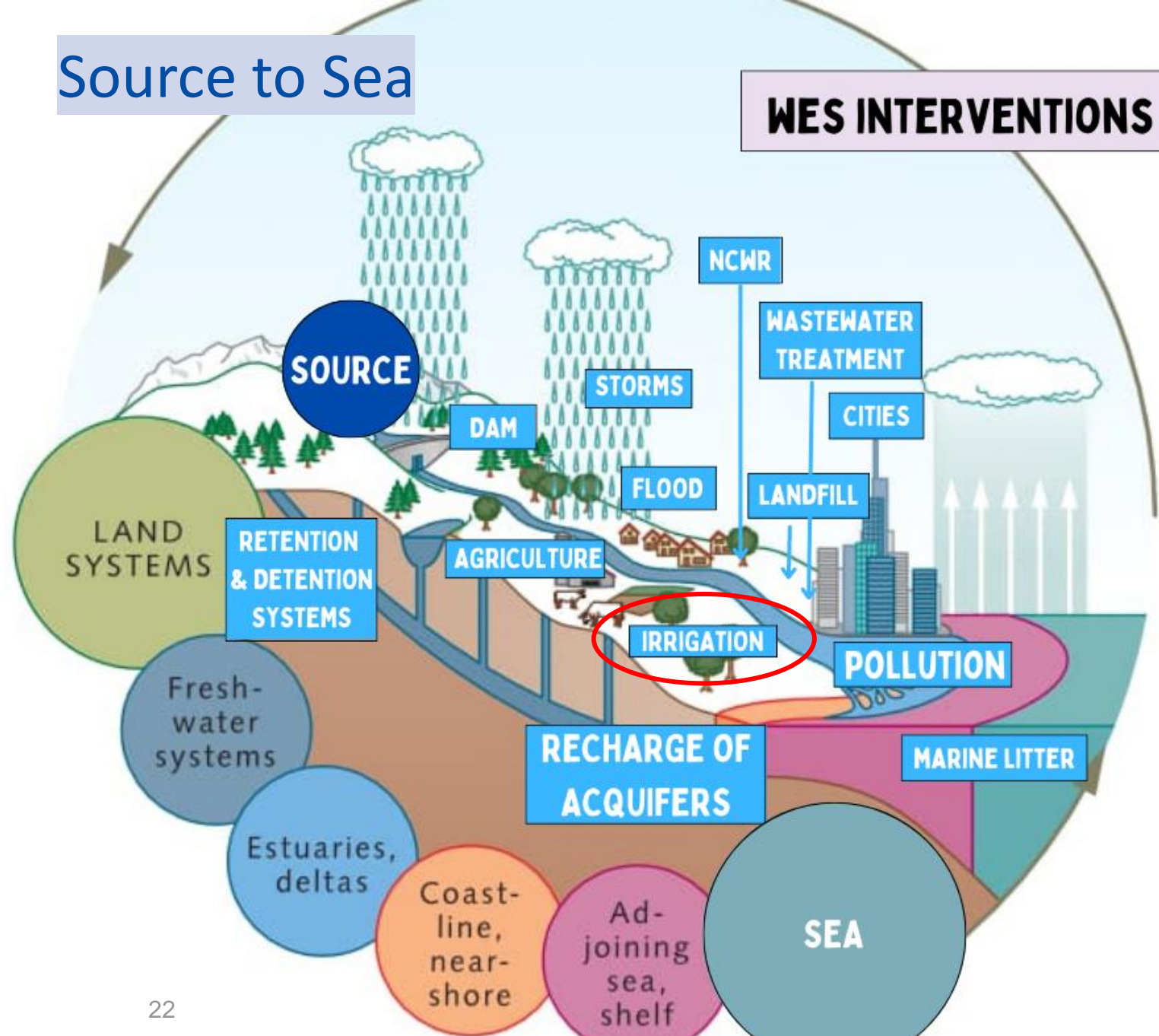


NCWR

- RW-4-REG / RW-4-P2P : CB on NCWR focusing on water harvesting
- N-W-JO-2: Explore the potential of NWRM at the catchment scale
- Demo in Tunisia on using rainwater in urban areas

Source to Sea

WES INTERVENTIONS

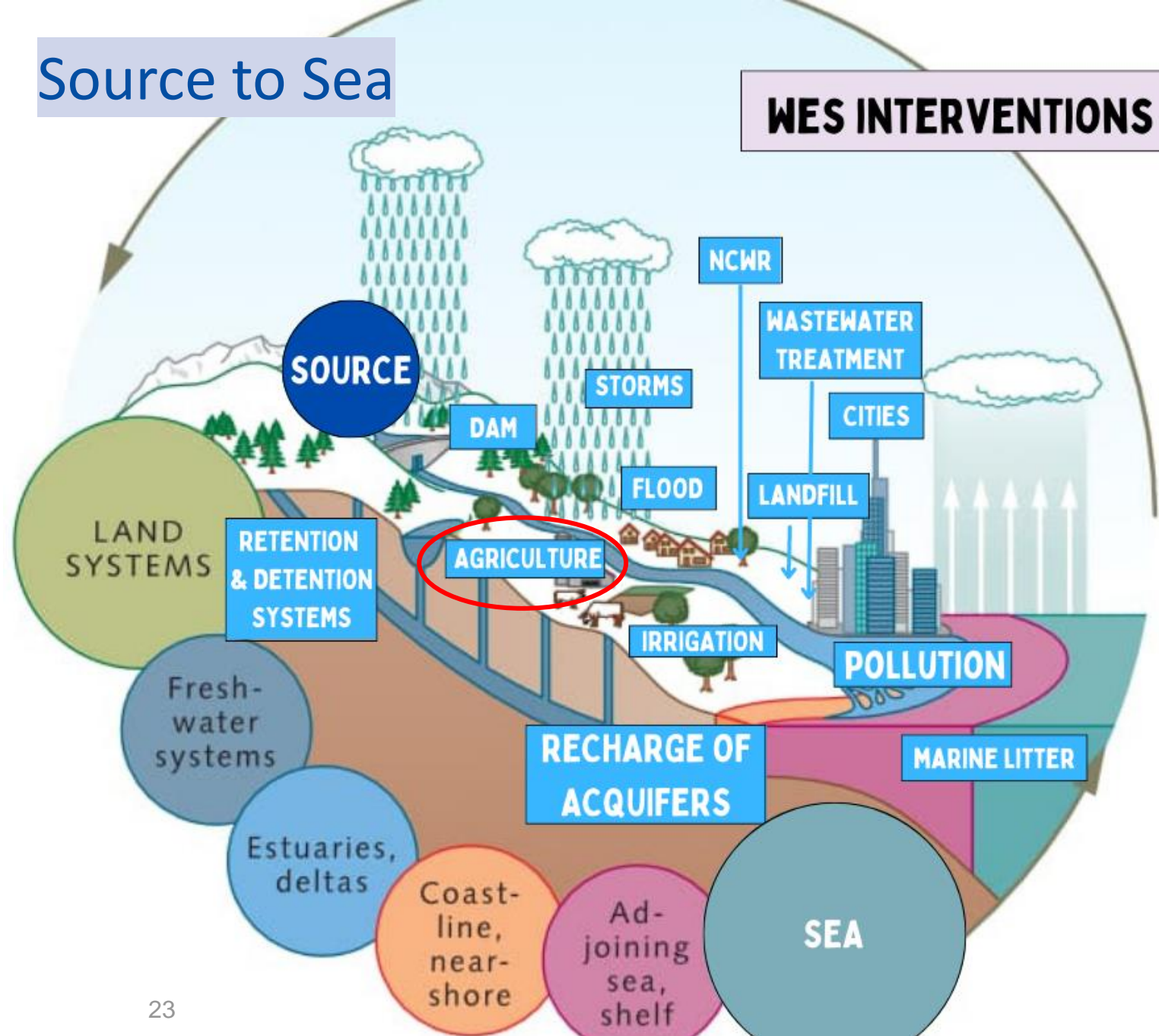


Irrigation

- **RW-7-REG / RW-7-ST:** Study tour and training(s) of WUAs on optimal irrigation management and practices for improved irrigation efficiency and soil fertility
- **N-W-PS-2:** CB of pilot farmers' associations and communities on optimal irrigation management
- **N-W-EG-2:** PPP for the banking system to improve irrigation network management and efficiency
- **Demo in Lebanon on irrigation solution on water-use efficiency**

Source to Sea

WES INTERVENTIONS



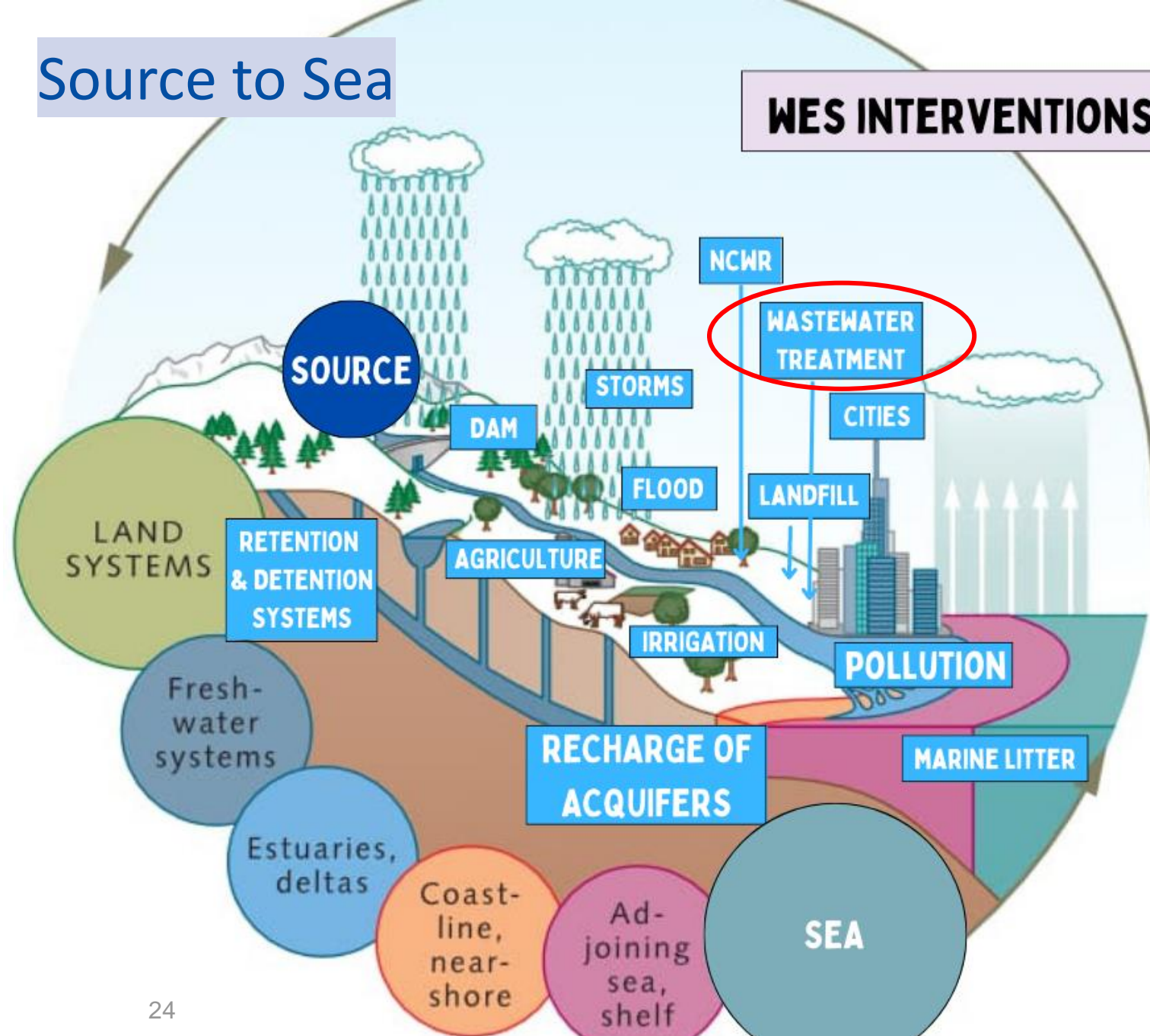
Agriculture

- **N-W-IL-1:** Evaluation of new methods to reduce the cross subsidies in the agricultural water tariff in Israel
- **N-W-TN-1:** Improving the efficiency of water use in agriculture
- **N-E-TN-2:** Industrial pollution prevention and abatement of tomatoes processing industry in a coastal area
- **Demo in Jordan and Tunisia for innovative technical and institutional solutions**

Source to Sea

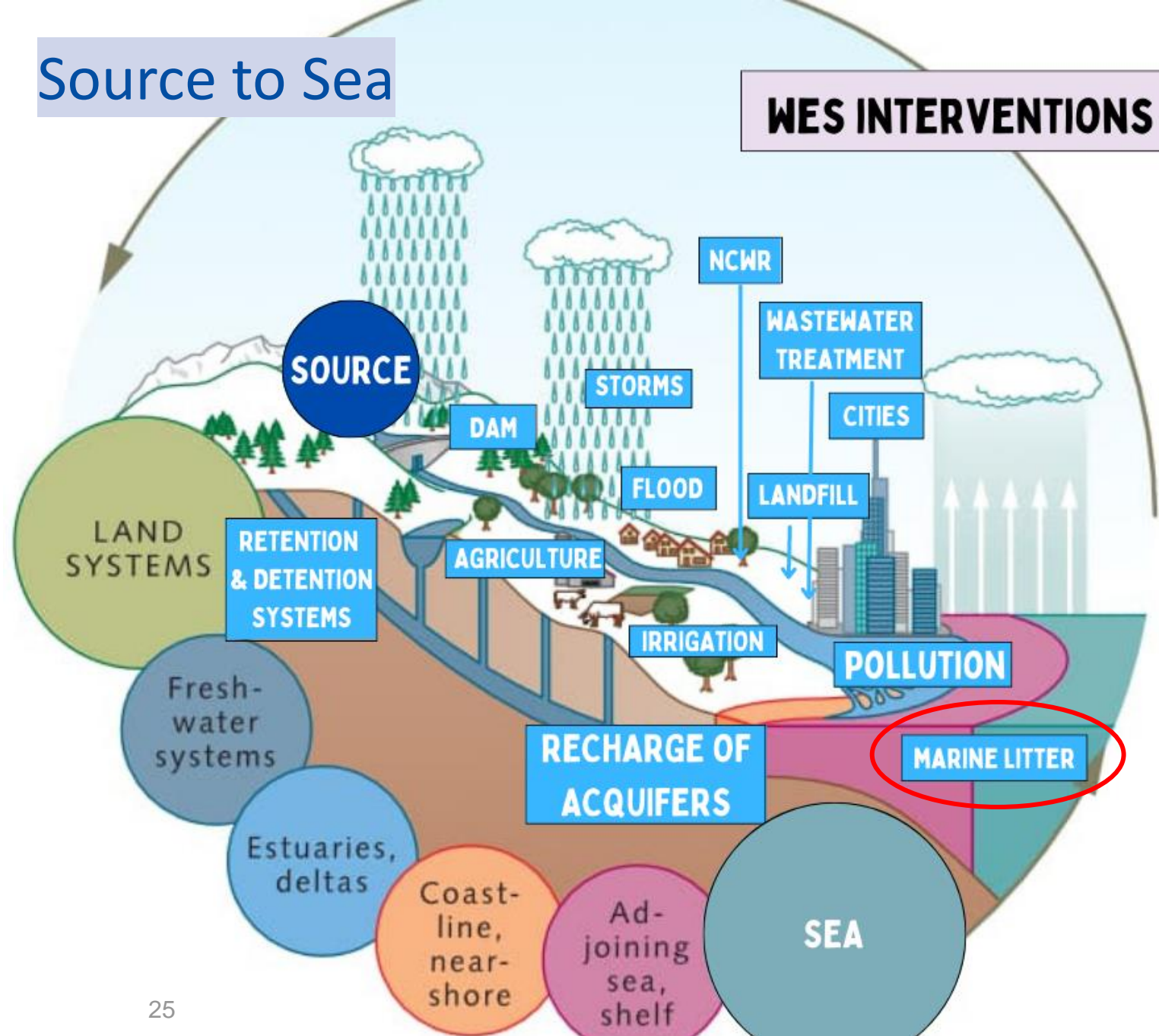
WES INTERVENTIONS

Wastewater treatment & reuse



- **HW-1-REG/HW-1-P2P:** Capacity building on PPP, green/blue economy entrepreneurship and banking for the water/wastewater sector
- **RW-5-REG/ RW-5-ST:** CB on WWT for reuse
- **N-W-LB-2:** CB on WWTPs / Replaced with National plan for sludge management and treatment
- **Demo in Palestine on a new Treated Wastewater Re-use (TWWR)**

WES INTERVENTIONS

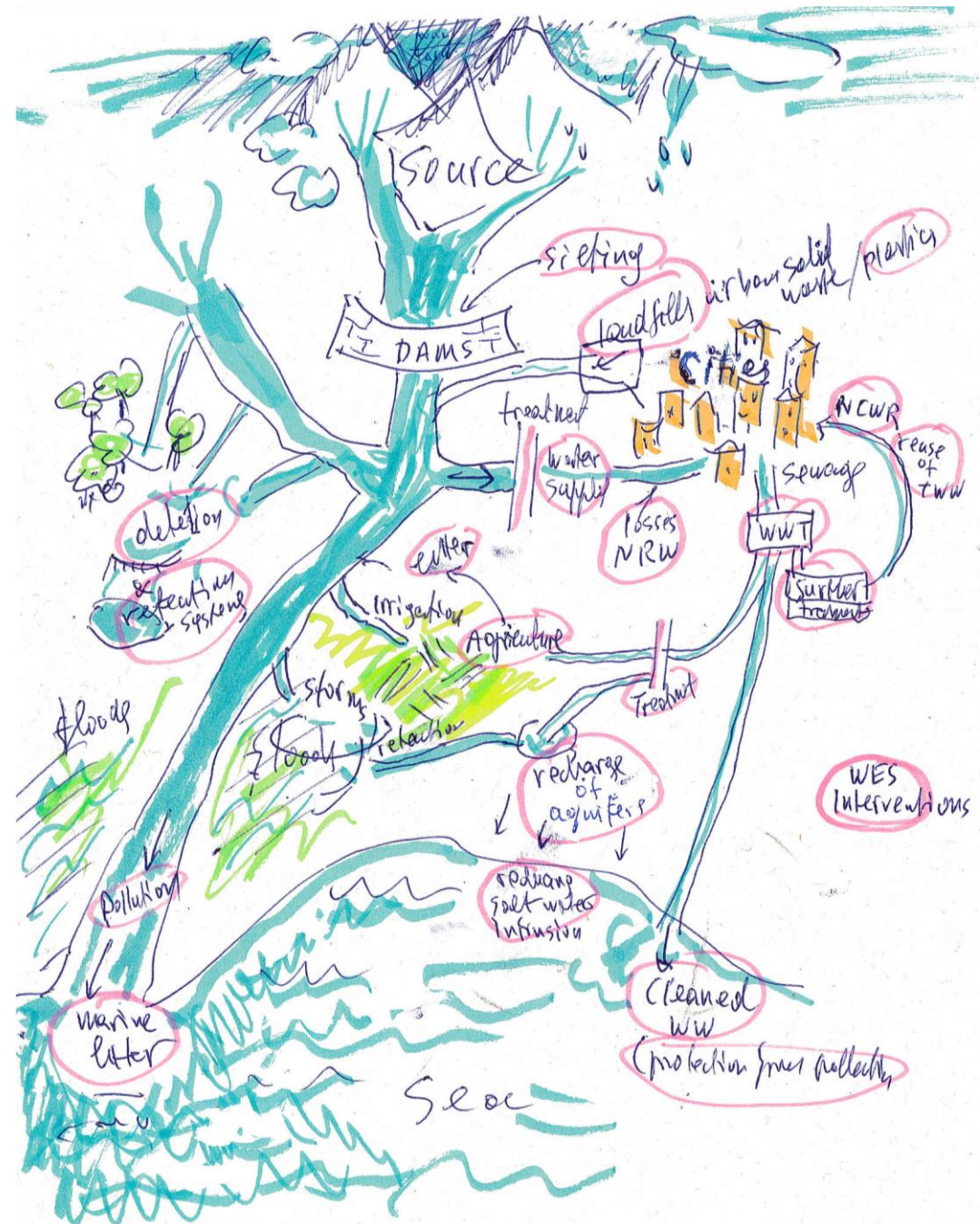


Marine Litter and Plastics

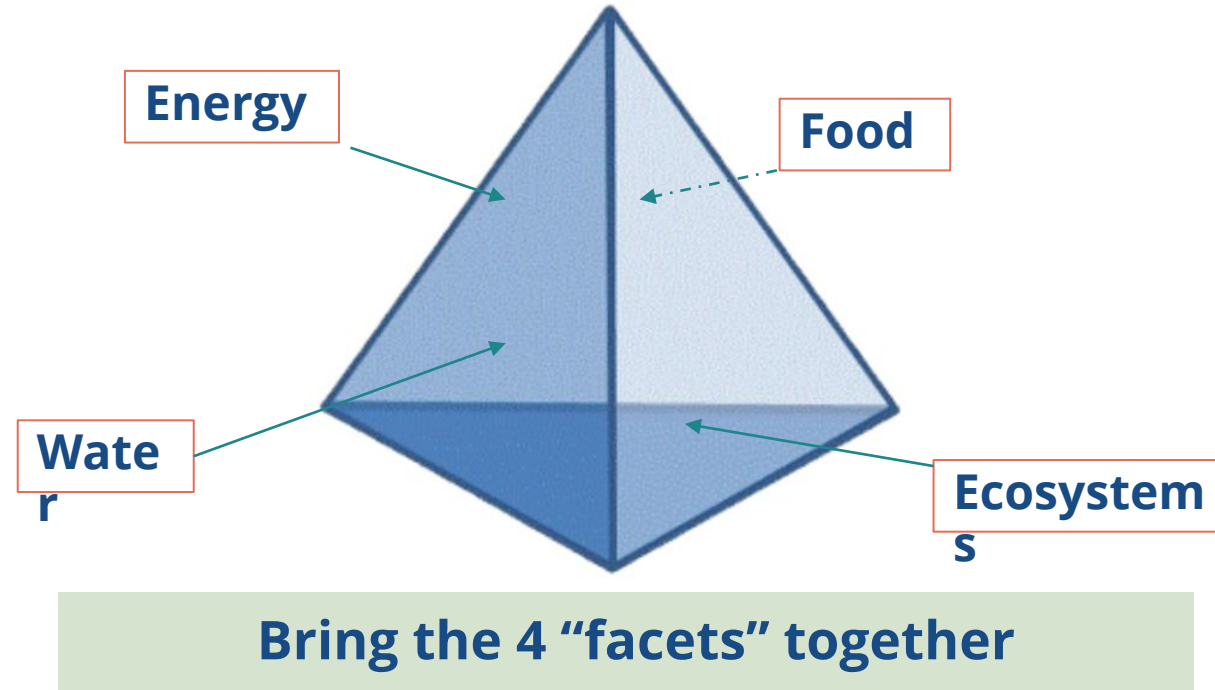
- **RE-1-REG / RE-1-P2P:** Phasing-out single-use plastics in the Mediterranean
- **RE-2-REG:** Understanding better microplastics and identifying how to address the issue
- **RE-3-REG /RE-3-P2P:** Innovative Circular Economy Business Models in the Mediterranean region
- **RE-7-REG:** Best practices in achieving waste reduction in the Mediterranean
- **HRE-2-REG:** Awareness raising and Education for Sustainable Development: Training of Trainers on campaigns for sustainable consumption
- **HRE-3-REG:** Educating for Sustainable Development: focus on WWT for reuse and NCWRs
- **RE-8-REG:** Mediterranean “Champions” of plastic pollution prevention
- **RE-9-REG:** SUPs-free coastal and Marine Protected Areas
- **National activities in Algeria, Israel, Jordan, Lebanon, Morocco, Palestine, Tunisia**

Source to Sea

Apart from “spatial” connections S2S addresses also aspects beyond water



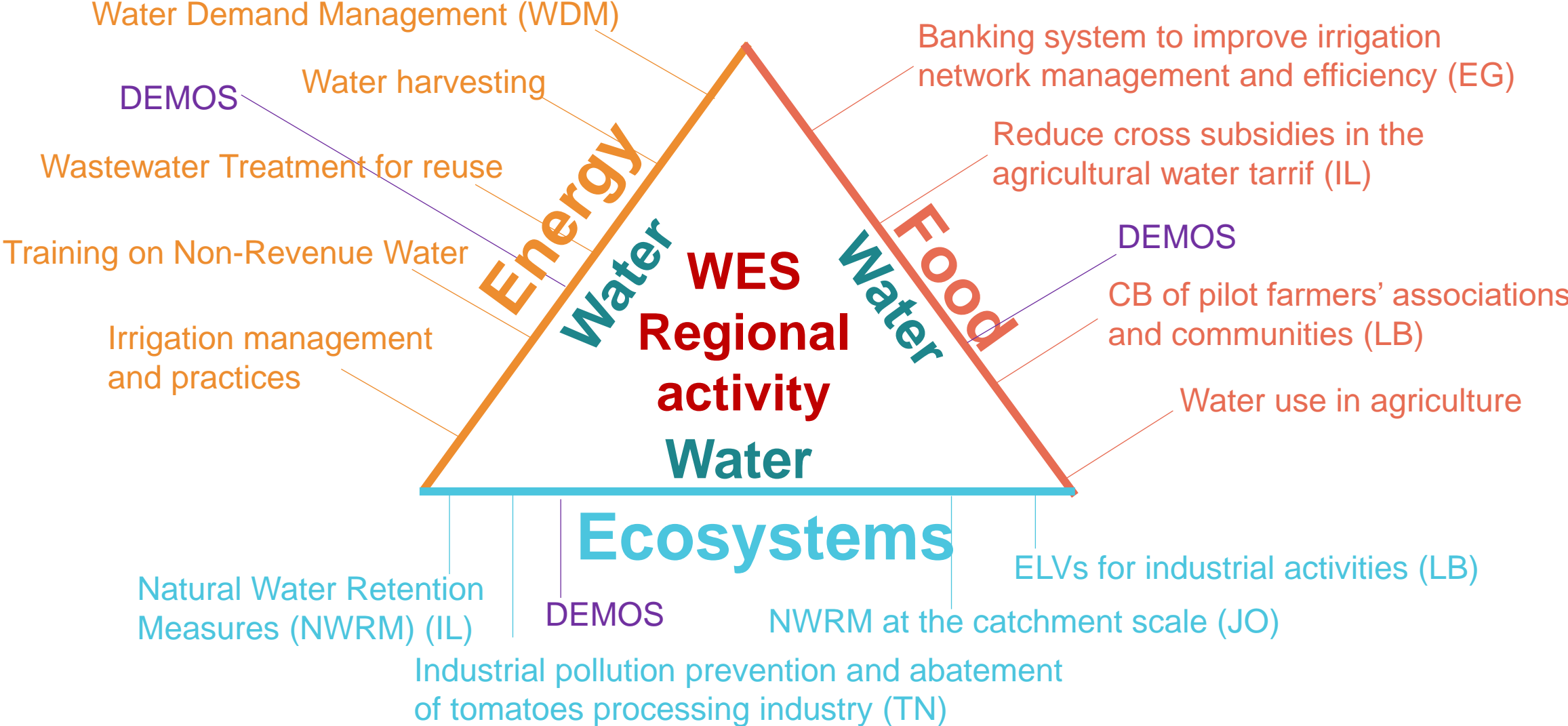
S2S is also closely related to WEFEE on which WES has a major regional activity



WES Regional activity (RW-1-REG, Regional Training on WEFEE) which is at the heart of the objectives of WES and the EU, but also of the UfM, UNEP/MAP and MCSD, and GWP-Med.

Approaching integration working on water “interfaces” with energy, food and ecosystems:

WES Regional and National activities related to WEF E and S2S



Thank you

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