



UNESCO-IHP “Urban W-ECOMED” Initiative

Urban Water - Eco-security Coastal Observatories for Mediterranean Environmentally-livable Development - «Urban W-ECOMED»

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Following MENA Hydro-Diplomacy Symposium 12/08/2016
UNESCO-IHP Advisory Council
March 8th, 2017

City of **Gaza**



A Historic Moment in New York
June 9, 1999,
Polytechnic University
With UNDP/UNEP Support 2006 - 2010

City of **Ashkelon**



Eco-Peace Mayors' Civil Society initiative through Education, Capacity Building & Integration of Aquifer Protection and Agricultural Water Reuse

<http://www.un.org/press/en/2010/pal2135.doc.htm>

References:

- Barcelona Convention
- UfM Strategy
- European Union Water Directive
- COP 21 & 22

Declaration of Beirut

Collaboration of MENA States
for shared Eco-Risk
management and preservation
of the Med coastal ecosystem

**Education &
Capacity Building**
*Public Awareness &
Professional Education*

Hydro-Diplomacy

*To Inspire a Culture
of Eco-sustainable
Regional Development
(F. Comair, 2008)*

**Art &
Science**
*Human Capital
for Innovation*

**Governance
& Finance**
*Global Challenges
& Local Action*

**To Ensure Sustainable Access to Water, Sanitation, and Protection of
the Ecosystem of the Coastal Mediterranean Region.**



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Context – COP 21 & Declaration of Beirut

After COP 21: Adaptation Policy –Mediterranean Region - March 13th, 2016

Adopted at COP 22, Marrakesh, November 2016

- **Climate Change is accelerating** the societal instability, ecological risks and water stress in the context of massive migration, lack of sanitation infrastructure and conflicts between nations
- **The dialogue on the adaptation strategies of the COP 21 'Declaration of Paris'** for the southeast Mediterranean is indispensable in order to:
- **Put in place a monitoring system to survey** the deployment of eco-protection measures and their impacts on the growing pollution effects
- **Promote integrated transboundary management** of regional water resources with renewable resources (desalination, agricultural reuse, etc.)
- **Engage adaptation measures, professional training and information sharing** in order to promote shared eco-risk assessment, raise public awareness & reduce climate change effects





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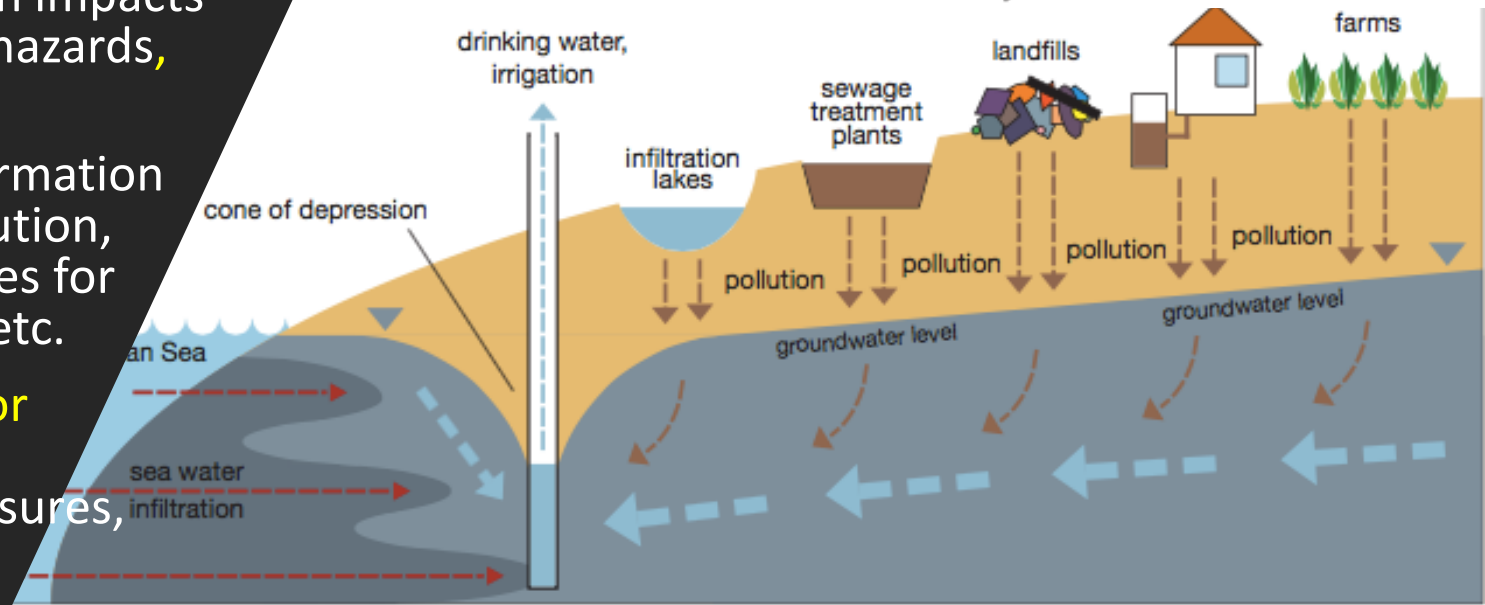
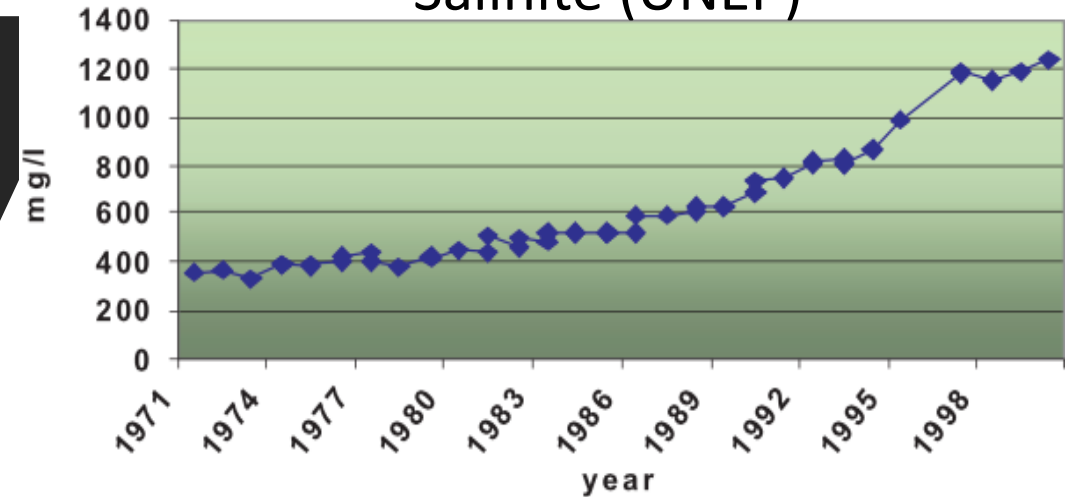
Eco-Observatory – Local Partners' Network

Eco-Risks Assessment & Management Platform

Local Governance Capacity Building for

- ✓ Undertaking integration of renewable resources and monitoring preemptive measures for the preservation of the coastal ecosystem
- ✓ Setting up a Regional Network of Eco-security Coastal Observatories (ECOs) for monitoring marine disposal of wastewater treatment and quality control, ecosystem preservation measures, pollution impacts assessment on public health risks and eco-hazards, with collaboration of the states concerned
- ✓ Establishing knowledge/data bases for information sharing on: the state of the ecosystem pollution, lack of sanitation impacts, regional initiatives for integration of renewable water resources, etc.
- ✓ Evaluating feasibility of project financing for coastal depollution projects, wastewater treatment infrastructure & protective measures, promoting partnerships for their financing.

Salinité (UNEP)





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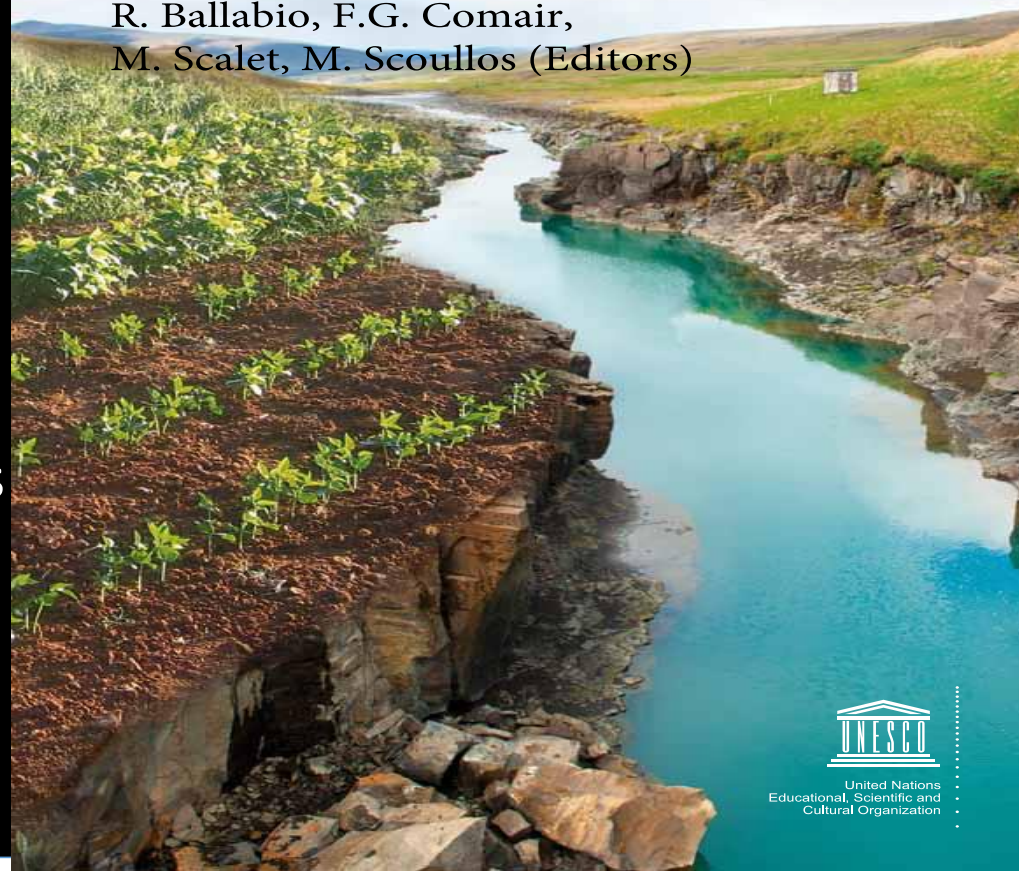
Eco-Risks Assessment & Management Platform

Local Governance Capacity Building programs for:

- Ensuring sustainable urban water supply in water stress vulnerable regions,
- Implementing safer marine pre-disposal wastewater treatment and quality control,
- Initiating water reclaiming management strategies for agricultural applications and promoting food security,
- Undertaking coastal ecosystems preservation measures and monitoring their efficiency and impacts
- Alleviating the growing public health risks, preemptively reducing severe environmental hazards and ensuring sustainable water supply
- Professional education of local water industry experts

Science diplomacy
and transboundary water
management **The Orontes River case**

R. Ballabio, F.G. Comair,
M. Scalet, M. Scoullous (Editors)



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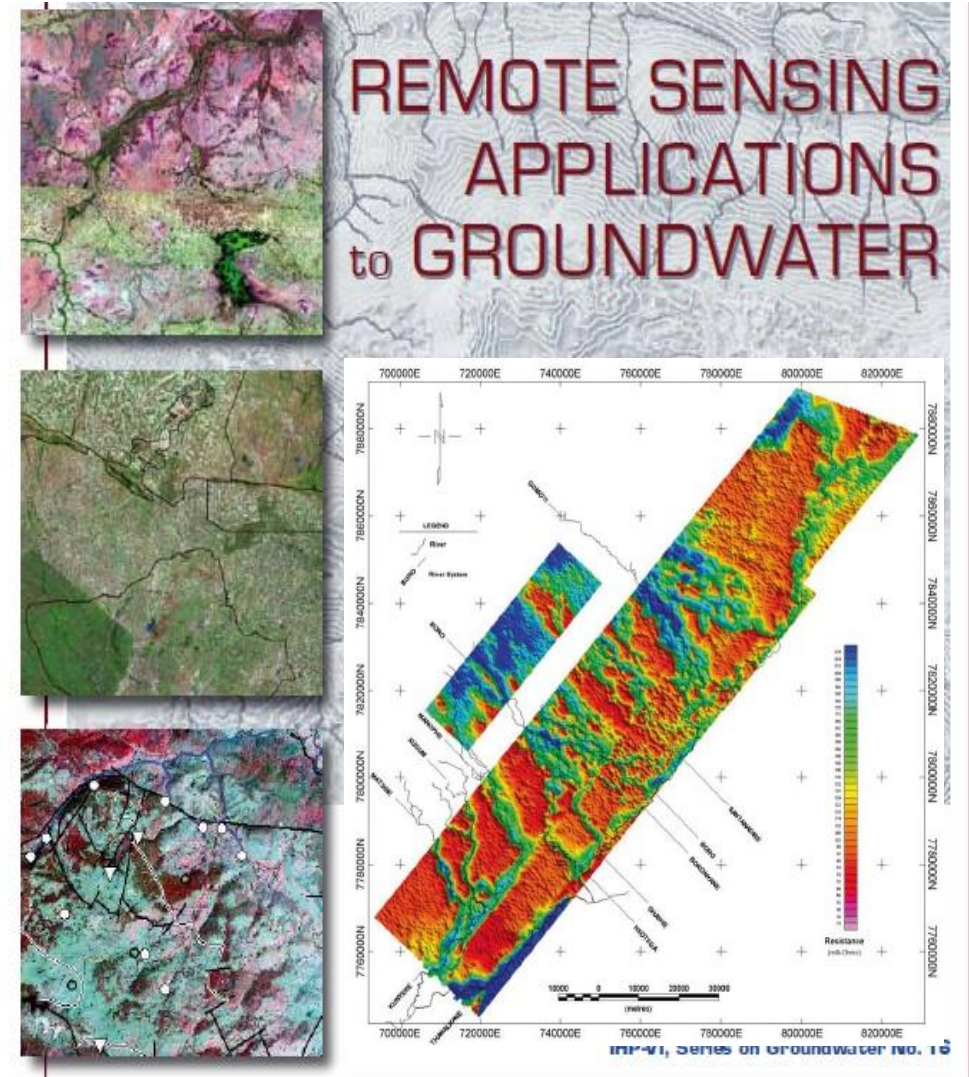
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Eco-Observatory – Local Partners' Network

Eco-Risks Assessment & Management Platform

Mission – Create a shared regional platform for eco-risks assessment and preemptive management facing local challenges – with the support of UNESCO-IHP the objectives of the Eco-Observatories, to be constituted as a network of local and/or global stakeholders' partnerships, are to provide:

- A network of information, data sharing and monitoring systems for stakeholders, financial sector, universities, others to assess:
 - ✓ State of the ecosystem pollution, its impacts, QC Measures
 - ✓ Integration of renewable resources and agriculture reuse
 - ✓ Eco-risks, protective measures and their expected impacts
 - ✓ New technology solutions for managing growing demand
 - ✓ Project info/data for planning, financing & management
- A Center of Education, Professional Training and Innovation for:
 - ✓ Promoting corporate and public awareness towards a regional culture of shared eco-sustainable development
 - ✓ Capacity building of local water service industry
 - ✓ Supporting education and R&D with universities & industry





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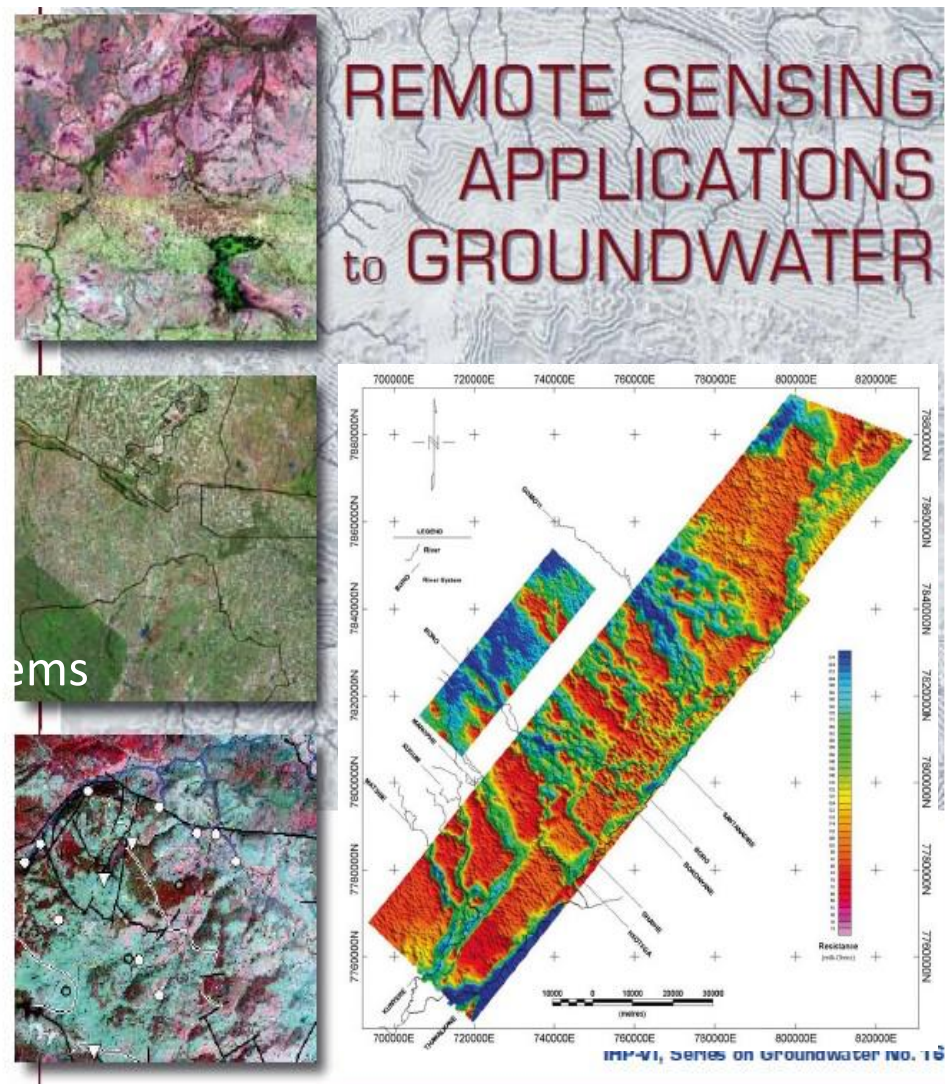
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Eco-Risks Assessment & Management Platform

“W-ECOMED” Terms of Reference (ToR) - for UNESCO IHP **Network of ‘W-ECOMED’ Partnerships for Eco-Observatoires** **partners’ commitment to:**

- Adhere and adopt UN Societal Values, Principles and Goals (SDGs) & Int. Conventions (Barcelona, COP 21, COP 22), UfM Strategy, etc.
- Embrace and support regional UNESCO-IHP Initiatives to undertake pollution prevention measures & pre-disposal effluent QC
- Promote the principles of hydro-diplomacy for eco-sustainable regional IWRM strategy, coastal pollution control and food security
- Collaborate in creating regional knowledge bases & monitoring systems for risk assessment & prevention measures impact evaluation
- Adopt UNESCO-IHP ToR for the network governance, observatory’s program development, operation monitoring, data sharing, annual outcome review and reporting under the overall UNESCO oversight
- Other TOR to be jointly established by UNESCO, WHO, the partners and other stakeholders as appropriate





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Eco-Risks Assessment & Management Platform

Eco-Observatory Stakeholders' Partnership for

Local Governments – Capacity Building support for:

- Condition assessment of the coastal ecosystem & water stress effects
- Professional training for pollution prevention measures and QC
- Integrated wastewater management for agricultural reuse
- Technology solutions deployment monitoring for water security
- Infrastructure planning, financing & management

International Orgs & Financial Sector – Accountable Monitoring

- Feasibility assessment of Infrastructure financing – data bases
- Project monitoring & performance assessment v-a-v int. conventions
- Environmental, societal and economic impacts assessment

Universities, Educational & Research Institutes – Regional Data Bases

- Data sharing for R&D, innovation & solution impact monitoring
- Professional development of local water industry

Community Information Access for Public Awareness

- Corporate and public education for shared eco-security culture



«W-ECOMED» - Education, Science,
Professional Development & Public
Awareness for Promoting
Sustainable Water & Food Security

Eco-Observatory – Local Partners’ Network

Eco-Risks Assessment & Management Platform

Next Step - Nov 2017 – “Urban W-ECOMED” Colloquium at UNESCO on

Theme: Regional Trans-Boundary Challenges of Sustainable Coastal Ecosystem Preservation and Growing Water Stress in the S-East MED

Purpose: Constitution of the UNESCO-IHP Network of Eco-Observatories and Implementation of their 1st year Work plans

Agenda:

- Create a stakeholders’ dialogue on regional SDGs, feasibility of ecosystem preservation measures, their monitoring and impacts
- Promote the principles of hydro-diplomacy for responding to the regional challenges of transboundary water resources management
- Establish the terms of reference for the Eco-Observatories and undertake the creation of monitoring systems & knowledge bases
- Engage local & global partnerships for financing their initial programs

Potential Partners:

SIAAP, AFD, Peres Foundation, UN Org., World Bank, GEF, WHO, RIOB, REMOB, OIEAU, CIFME, Local Governments, UfM, strategic partners

M-States: East Mediterranean Region States, France, Morocco, Spain





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Project Governance

UNESCO IHP Network of Local Stakeholders’ Partnerships:

- “Urban W-ECOMED” Project Steering Committee (PSC) - Delegates of member states, Local Governments, Civil Society leaders, Technical Experts, Academia, Financial Sector, UN Org., other Stakeholders
- Executive Board of Directors (ExBoD) – ECOs Directors, Delegates of member-states, UNESCO- IHP, WHO, other Stakeholders - sponsors.
- ECOs local Management (ECOM) supported by UNESCO IHP Project Implementation Units (PMU)

5 Year Budget (not including local support)

- 0.25M €/year - ExBoD Coordination and Support services
- 0.75M €/year - ECOs program development (locally leveraged)
- 0.1M €/year – ISC Annual Review & Prog Oversight

1st Phase 2017: ECOs Corporate Work plans in 4 EM States

Thanks for your support and thought provoking discussion



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«W-ECOMED» 1st Phase - Time line

Tasks	Deliverables	Date
Task 1 – Concept Paper: UNESCO-IHP “Urban W-ECOMED” Initiative Project Plan - Executive Summary & Guidelines	Presentation to UNESCO-IHP Advisory Board of Experts Letters of support from the Med member states concerned	March 8th 2017 Apr-17
Task 2 – “Urban W-ECOMED” Colloquium Planning with the identified stakeholders, member states representatives, local governments, financial sector, academia, and others	Colloquium Steering Committee Meeting to discuss the program and establish a pre-Colloquium Publication of the Current State of Eco-Security Challenges with input from the communities concerned and member states	Jul-17
Task 3 – Stakeholders’ discussions with potential partners - exploring regional SDGs and feasibility assessment of ecosystem preservation measures, QC, regional IWRM & impact monitoring	Terms of Reference for UNESCO-IHP network of local stakeholders’ partnerships for the constitution and government of the Eco-Observatories	Jul-17
Task 4 – Preparation of 1st year work-plan for Eco-Observatories in 4 members states with local stakeholders and global partners including exploration of economic model and financial support	1st Year Work Plan with potential project financing intents for constitution, governance and operation of 4 Eco-Observatories in the member states concerned	Sep-17
Task 5 – “Urban W-ECOMED” colloquium at UNESCO	Official Constitution of the Eco-Observatories and implementation of their first year work plan	Nov-17
Task 6 – Post Workshop Publication providing analysis of the coastal ecosystem and water eco-security challenges, with guiding principles for preservation measures, QC, regional IWRM & impact monitoring	Workshop recommendations for a work-plan with financing strategies for the identified local governance capacity building Terms of Reference and guiding principles for establishing a UNESCO-IHP Network of W-ECOMED Observatories	Dec-17



«W-ECOMED» - 1st Phase Work Plan 2017

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Tasks	Deliverables	Date/Budget
Task 1 - Concept Paper: UNESCO-IHP Urban W-ECOMED Initiative Project Planning, Objectives & Scope	i Presentation to UNESCO-IHP Advisory Board of Experts ii Letters of Support from the Member States concerned	March 8th 2017 Apr-17
Task 2 - Feasibility Assessment, ToR, Interactive Planning, Project Financing & Monitoring Strategies for the Constitution of the Observatories and Strategic Development of their work-plans with local partners in Jordan, Israel and Palestine 2A Initial Feasibility Assessment with Local Partnerships and Stakeholders 2B Feasibility Assessment & Planning Mission at EMC Region: Jordan, Israel, Palestine 2C Initial work plans with objectives, scope and financing models by local partners to PSC 2D PSC meeting at UNESCO Paris for review of pilot plans of observatories & Conf. Planning 2E 1st W-ECOMED pre-conference publication 2F Knowledge based development on UNESCO-IHP database for Pollution Monitoring & Risk Assess 2G Information to National Delegations, UN Agencies, Regional Offices, IHP offices, M-States 2H Integration in UNESCO-IHP Annual program	i Initial Feasibility Assessment with local partners - priority needs, scope, strategic objectives, 1st Year Work plan, management and financial models - Executive Summary discussions with UNESCO-IHP experts & local stakeholders i Feasibility Assessment & Planning Mission at EMC Region: Jordan, Israel, Palestine - National & local partnerships, Feasibility Assessment, Work Planning of Pilot Observatories i Identifying public and private project financing sources and stakeholders on local, regional and global levels ii Timeline for creating the Observatories, preparing their work-plans and identifying project financing sources iii Initial work plans with priority needs, objectives, scope and financing models submitted by local partners to PSC review i 1st W-ECOMED pre-conference publication & Agenda ii PSC meeting at UNESCO Paris for review of pilot plans of observatories and W-ECOMED Conference Planning iii Information to National Delegations, UN Agencies, Regional Offices, IHP offices, M-States iv Integration of W-ECOMED Initiative in UNESCO-IHP program	May-17 Jun-Aug 2017 Budget Missions Tasks 2A-2E Mission to EMC: 2 Pax x 250€/d Travel - 1500€ Total: 8500€ PSC meeting at UNESCO Paris: 2 Pax x 250€/d Travel - 6 Pax x 750€ Total: 9000€ G-TOTAL: 17500€

«W-ECOMED» 1st Phase – Work Plan

Tasks	Deliverables	Date/Budget
Task 3 – Stakeholders' discussions with potential partners & funding sources exploring feasibility of project financing, ecosystem QC, regional IWRM & impact monitoring	<ul style="list-style-type: none"> i Mission WB-GEF & IANA exploring project financing for the Observatories pilot plans ii Financial Commitments – local and global stakeholders iii “W-ECOMED” Conference program agenda & delegates list 	Jul-Sep-17 Mission to WB & IANA: 2P x 24 d x 250€/d Travel – 7777 2000€ Total: 77777 4000€
Task 4 – Preparation of 1st year work-plan for Eco-Observatories in 4 members states with local stakeholders and global partners including exploration of economic model and financial support	<ul style="list-style-type: none"> i Observatories' work-plans & Stakeholders' commitments ii TOR for the UNESCO IHP Network of W-ECOMED Observatories iii Conference Logistics, invited participants, detailed program, pre-conference publication, information, other issues 	Sep-Dec 17 Colloquium Budget Nov 2017 12P x 3 d x 250€/d Travel – 9000€ Total: 777 18000€ Consultants 77777 Jun-Dec 2017 1P x 20% x 4m 1P x 25% x 6m Total: 77777 18,000€ G-TOTAL: 777 40,000€ ? ?
Task 5 – “Urban W-ECOMED” Colloquium at UNESCO to assess Observatories work plans and financing	<ul style="list-style-type: none"> i Official Constitution of the Eco-Observatories and implementation of their first year work plan ii Pilot Monitoring Systems deployment and impact assessment iii ECO-partnerships' presentations and strategic plans assessment 	
Task 6 – Post Workshop Publication providing analysis of the coastal ecosystem and water eco-security challenges, with guiding principles for preservation measures, QC, regional IWRM & impact monitoring	<ul style="list-style-type: none"> i Workshop recommendations for work-plan with financial strategies for the identified local governance capacity building ii Terms of Reference and guiding principles for establishing a UNESCO-IHP Network of W-ECOMED Observatories 	
Program 2018 Task 7 – UNESCO-IHP Experts Program Monitoring & Performance Assessment Task 8 – “Urban W-ECOMED” Colloquium at UNESCO	<ul style="list-style-type: none"> i Pilot Program Report by Local Observatory Partnerships ii UNESCO Experts Oversight & Technical Support iii “Urban W-ECOMED” Annual Review Colloquium Proceedings 	Jan-Jun 2018 Travel 77777 25,000€ 777P x 1 Month – 25,000€ 777TOTAL – 77777 50,000€