

WATER4ALL
PARTNERSHIP

Water4All: Water security for the Planet

NSTC-Horizon Europe Info Day
6 October 2022

Agenda

1. Introduction to Water4All

Prof. Miguel A. Gilarranz , Water4All Vicechair, Spanish State Research Agency (AEI)

2. Cooperation and synergies towards Green Deal

Prof. Maciej Zalewski, Water4All Vicechair, European Regional Centre for Ecohydrology

3. The Joint Transnational Call 2022

Prof. Miguel A. Gilarranz , Water4All Vicechair, Spanish State Research Agency (AEI)

Ms. Maria Bianco, Italian Ministry of Universities and Research (MUR), 2022 Joint Call Secretariat Water4All

4. Q&A

1. Introduction to Water4All Partnership

A co-funded partnership under Horizon Europe

- National/regional research funders and policy makers
- in association with other research and economic actors
- From 2022 to 2029 and beyond
 1. Launch: 1st June 2022
 2. Some activities may last until 2032
- 79 partners
 - 23 EU MS + 8 non-EU countries



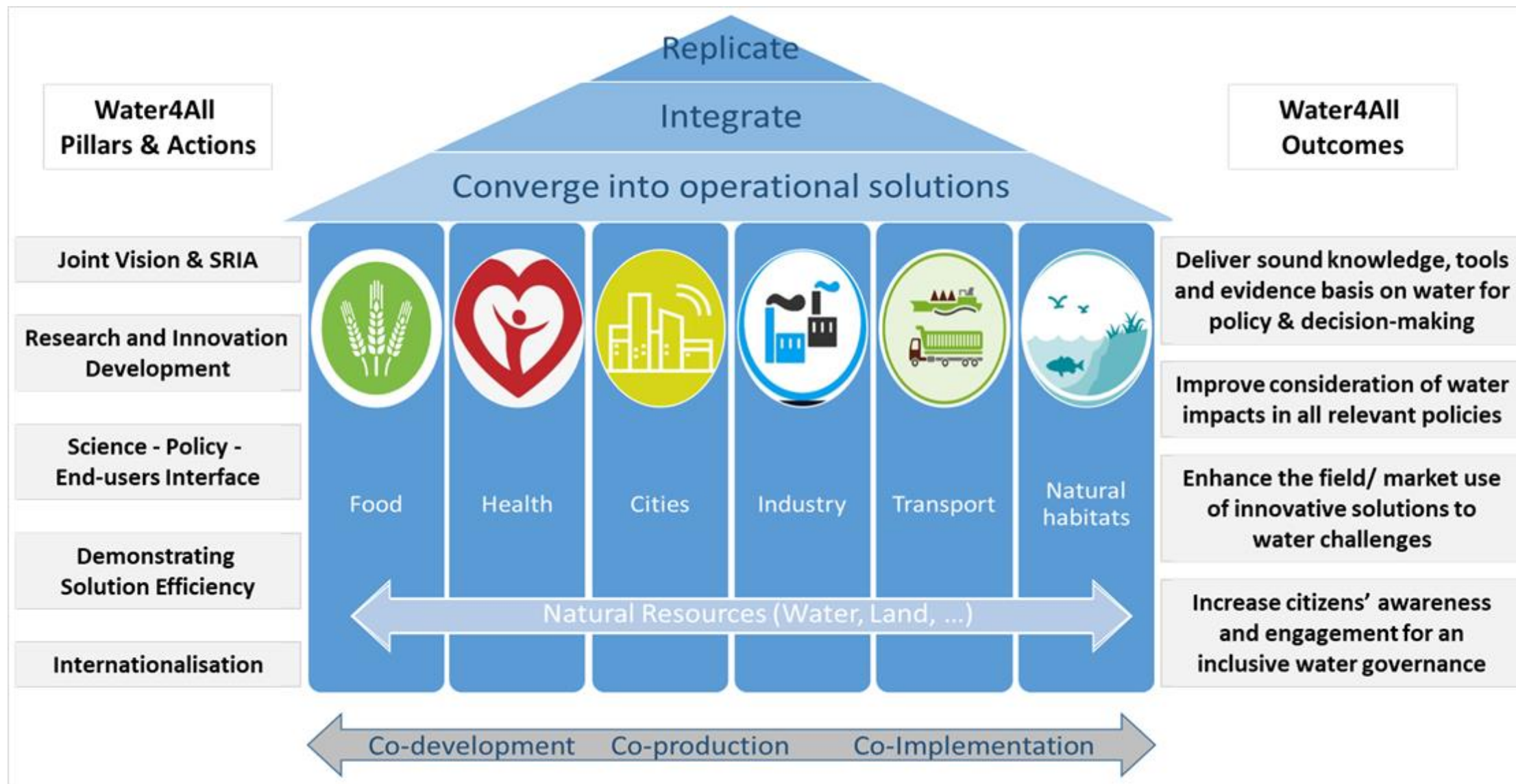
Category	Number of partners
R&I ministries / agencies	34
Sectoral ministries /agencies	13
Local authorities	3
EU networks	3
National/regional networks	8
Research Performing Organisations	18

Aiming at concentrating water R&I actors and its funding in Europe and beyond

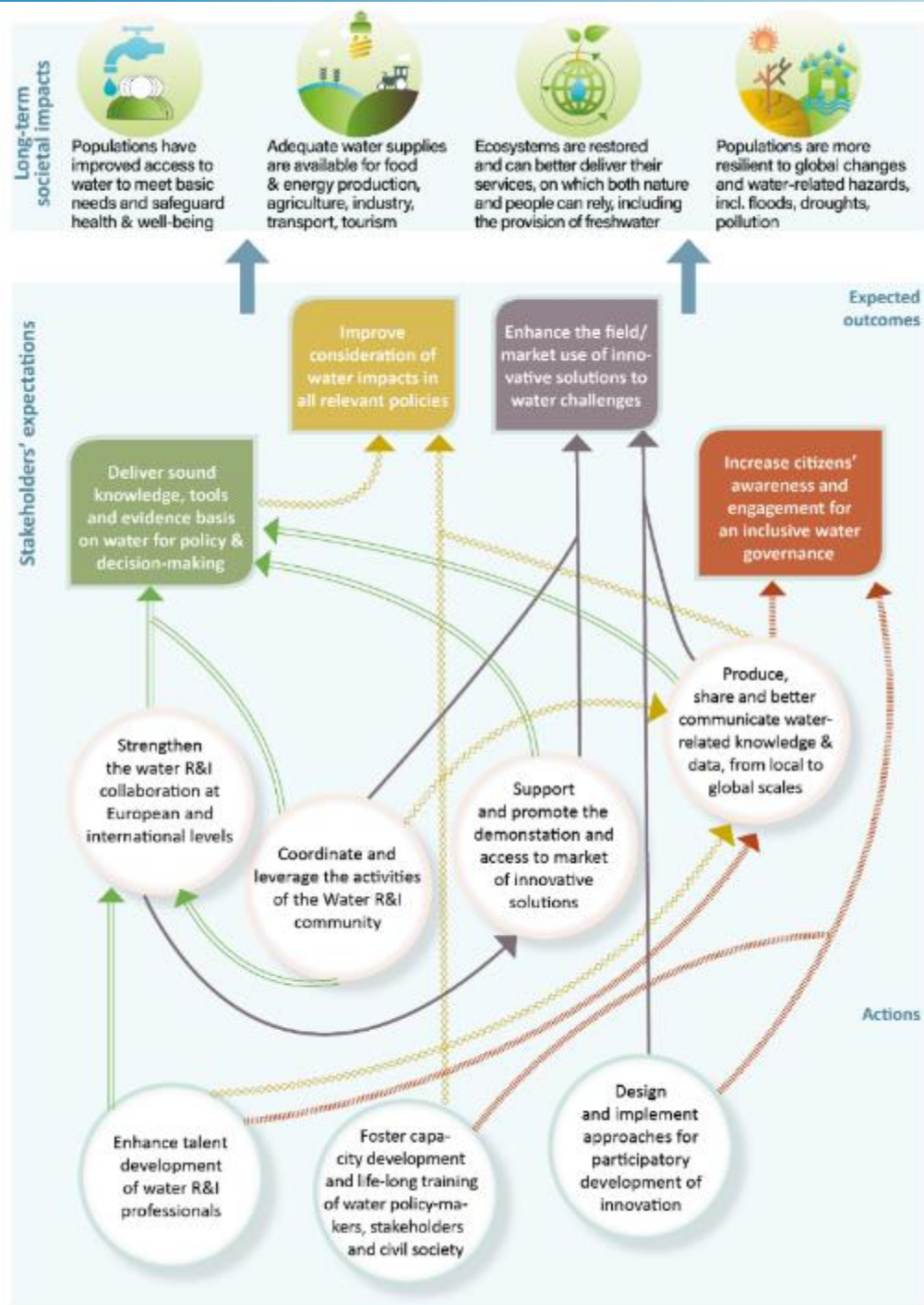
Vision:

- Systemic transformations across the water research and innovation pipeline, fostering the matchmaking between problem owners and solution providers.
- Ensuring water security for all in the long term

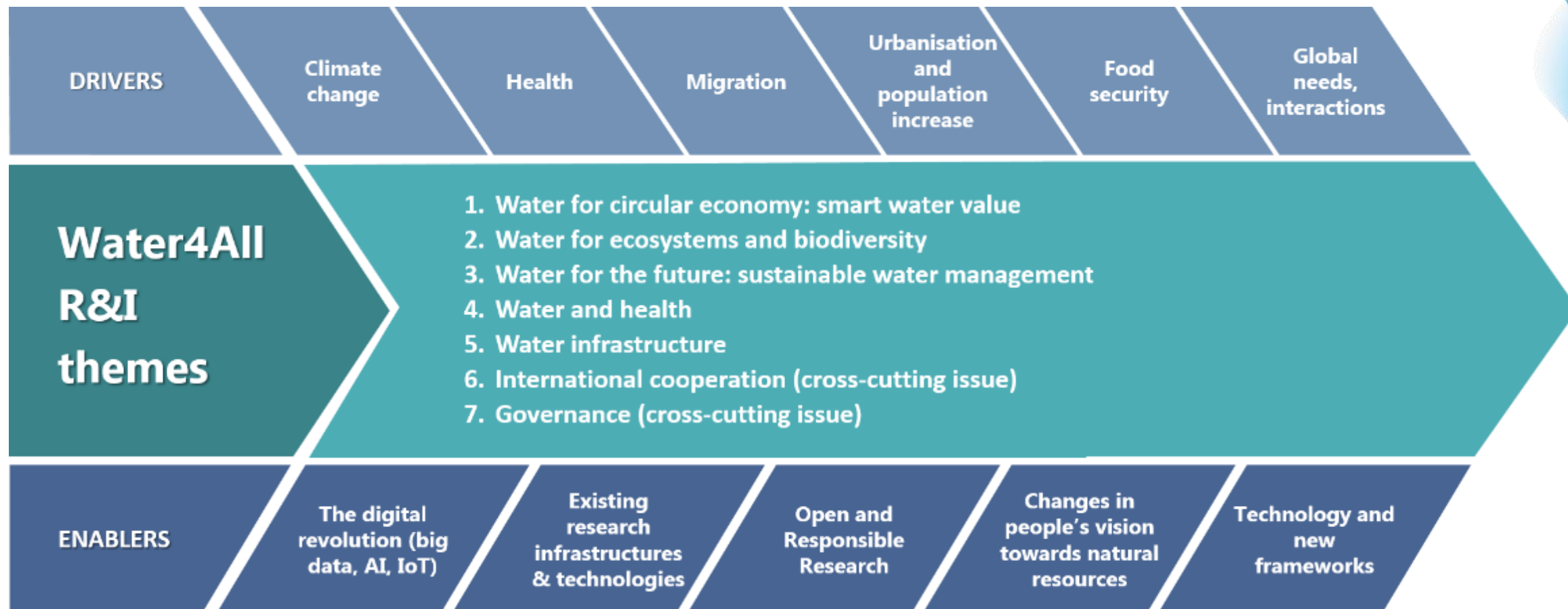
Using a holistic approach



Water4All specific impact pathways



Water4All's RDI themes: SRIA



SRIA Themes addressed through a variety of actions

E. Internationalisation

Developing international cooperation agreements
Engaging with UN Water and other international stakeholders
Developing innovative tools for cooperation

B. Research and innovation Development

Joint transnational calls
Thematic annual programming
Young researchers calls
Demo/transfer calls

A. Joint vision & SRIA

SRIA Development
Mapping of programmes and impacts
Development of synergies
Dissemination

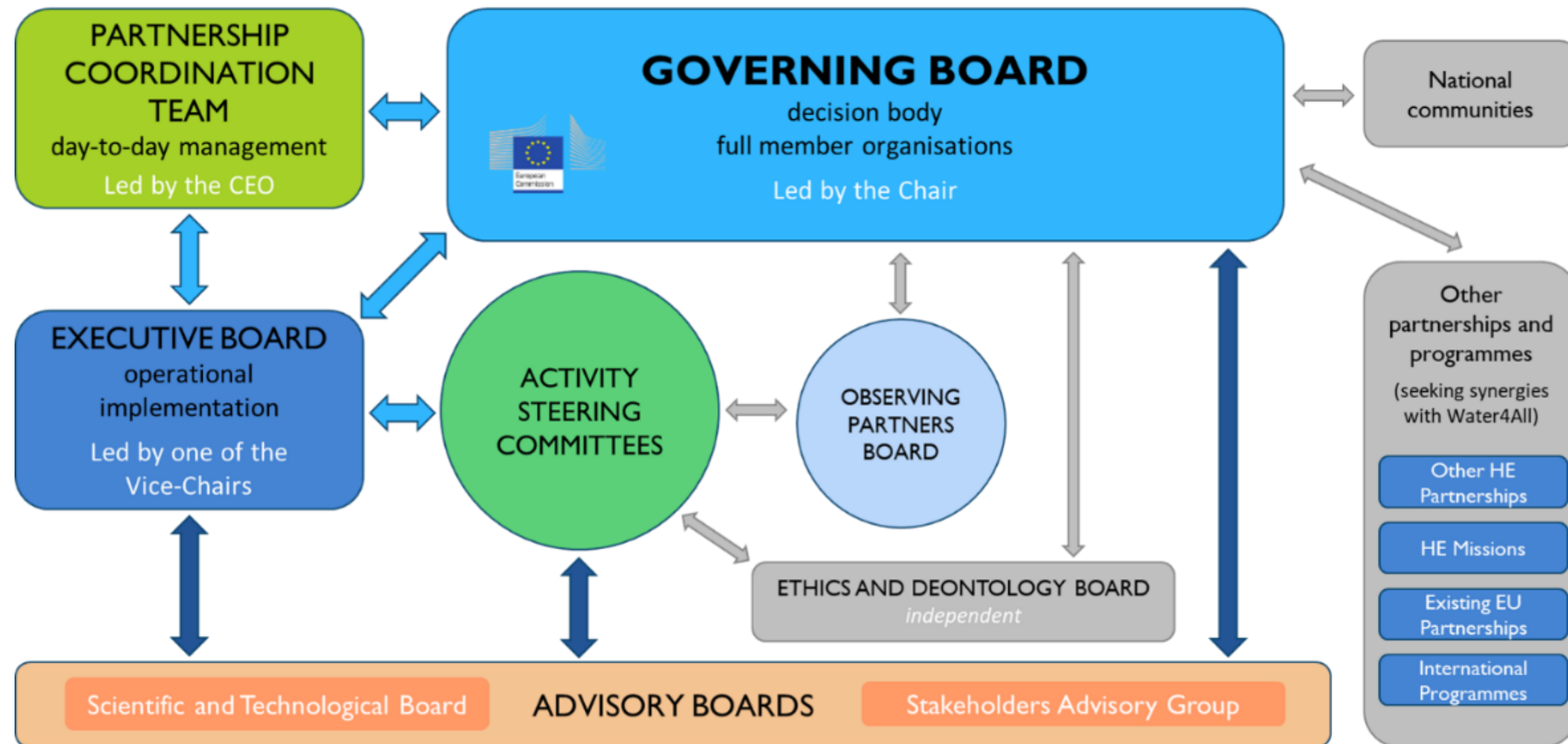
D. Demonstrating Solution efficiency

Water Living Labs (LLs) & demos atlas
Network of LLs/demos and roadmap for demonstration implementation
Support to development of new LLs
Market uptake support
Liaising with investors

C. Science – Policy - End-users interface

Knowledge hubs, policy WGs
Support to start-ups creation
PhD scheme; mobility scheme
Vocational training
Capacity building on systemic thinking
Link to research infrastructures
Toolbox for managing water data

Water4All governance



2. Cooperation and synergies towards Green Deal

Cooperation and synergies promoted by Water4All

- **Alignment of national/regional programmes and actions**
- **Coordination of actions with other partnerships and initiatives**
- **Coordinated use of water related infrastructures and co-development of living labs**
- **Fostering collaboration beyond Europe**
- **Engagement with relevant international organizations**



ERCE

European Regional
Centre for Ecohydrology
Under the auspices
of UNESCO



unesco

Centre
Under the auspices
of UNESCO



Water security for the planet

Water as the Central and Key Factor for achieving SDG and Green Deal



Prepared by prof. Maciej Zalewski,
Vice-Chair





UNESCO IHP Intergovernmental Council , 25 April 2022

We need to re-tool our approaches to water based sciences

RECOMENDATIONS of UNESCO IHP Intergovernmental Council

- Mainstream Governance
- Go Beyond IWRM
- Go Beyond Structures
- **GO FOR NATURE BASED SOLUTIONS**
- **GO DIGITAL**
- Re-inforce system thinking from data capturing to dissemination
- Reduce the Gap between science and policy studies, go transdisciplinary – include social and political science components
- Ultimately SD is based on Culture



From left: **Dr Andras Szollosi-Nagi** (former Director of Division of Water Science UNESCO); **Dr Shamila Nair-Bedouelle** (Assistant Director-General for Natural Sciences of UNESCO); **Dr Abou Amani** (Acting Director of Division of Water Science UNESCO)

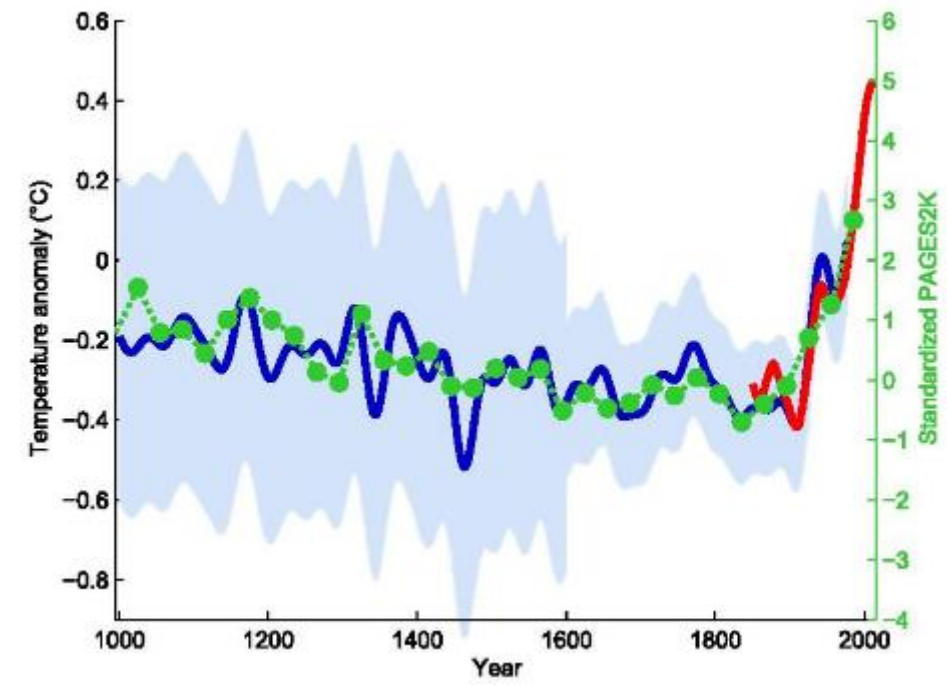
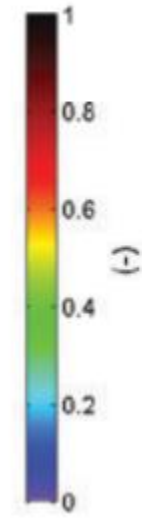
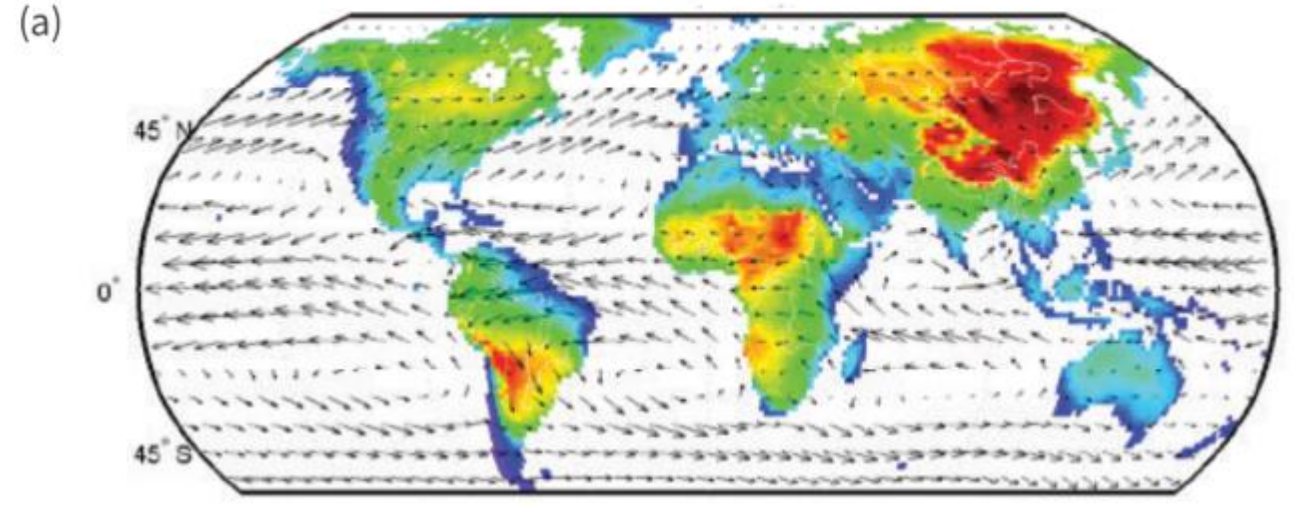


Water4All For Green Deal

Ecosystems – water „recyclers” - Evaporation from the vegetation and soils from terrestrial ecosystems can be a very important source of precipitation for other areas

Role of ecosystems in stabilization of hydrological cycle will be increasing with climate change

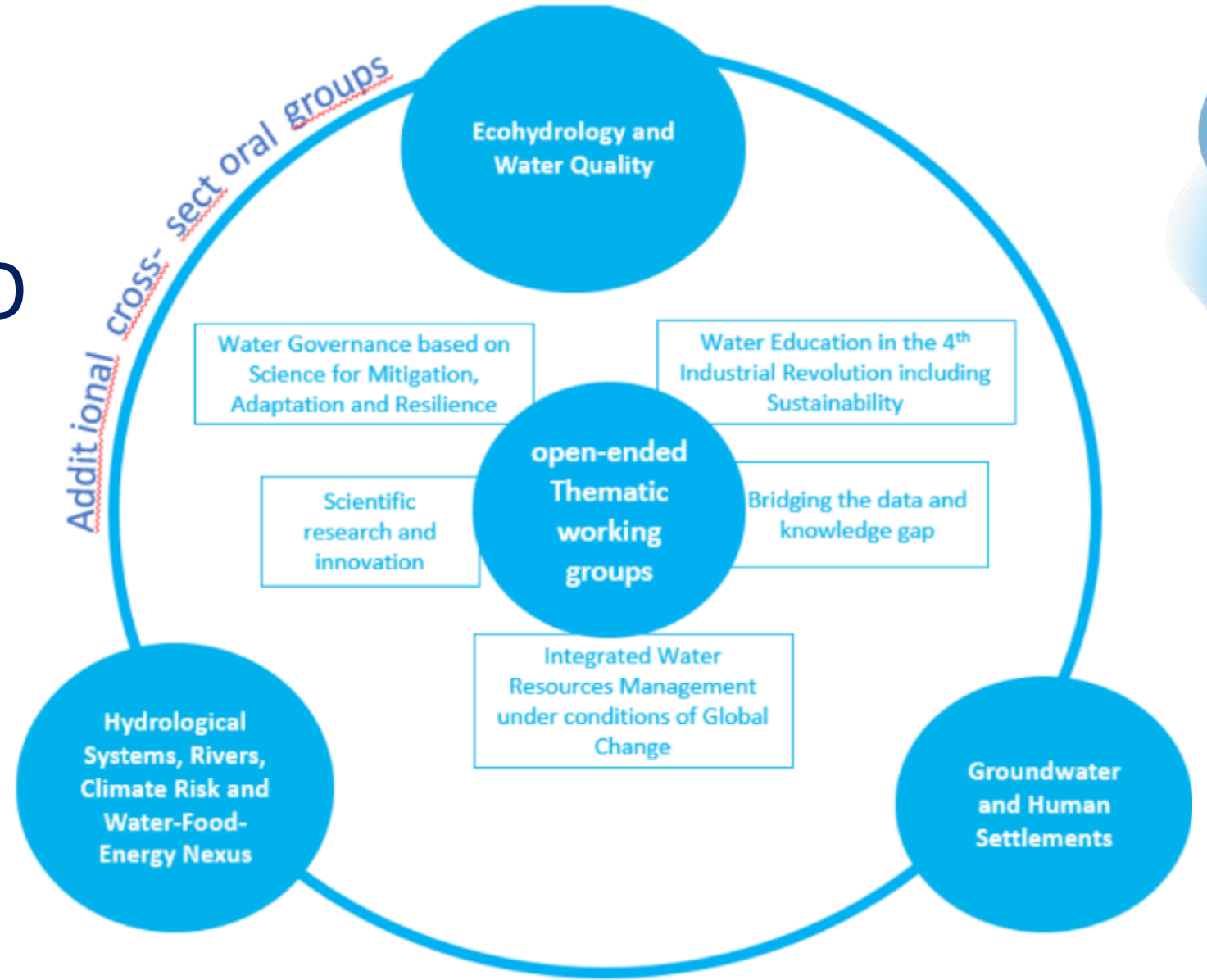
Continental precipitation recycling ratio $\rho_c = \rho_{c,i} + \rho_{c,t}$



Source: Van der Ent et al., 2014



The cooperation for synergy with UNESCO Intergovernmental Hydrological Programme





ECOHYDROLOGY as transdisciplinary science for UN SDG and European Commission „Green Deal” for enhancement of catchment sustainability potential

1. **Ecohydrology** - integration of understanding of hydrological and ecological processes from molecular to catchment scale towards using ecosystem processes as a management tool for enhancement of catchment sustainability potential: WBSR+CE
2. **Sustainability Potential – WBSR+CL** – it is necessary for mitigation of cumulative effect increasing human impact, to set the multidimensional goal of catchment management: improve 5 crucial elements of sustainability – **WATER**, **BIODIVERSITY**, **ECOSYSTEM SERVICES**, **RESILIENCE**, society involvement by **CULTURE** and **EDUCATION** and all of the above translated into **POLICY** and **LAW**.
3. The **enhancement** is possible by integration of hydroengineering methods with Ecohydrological Nature-Based Solutions (EH-NBS) and involvement of society
4. For **harmonization** of enhanced ecosystem potential (WBSRC) with society needs, there is a need to change the paradigm from mechanistic to evolutionary-ecosystemic

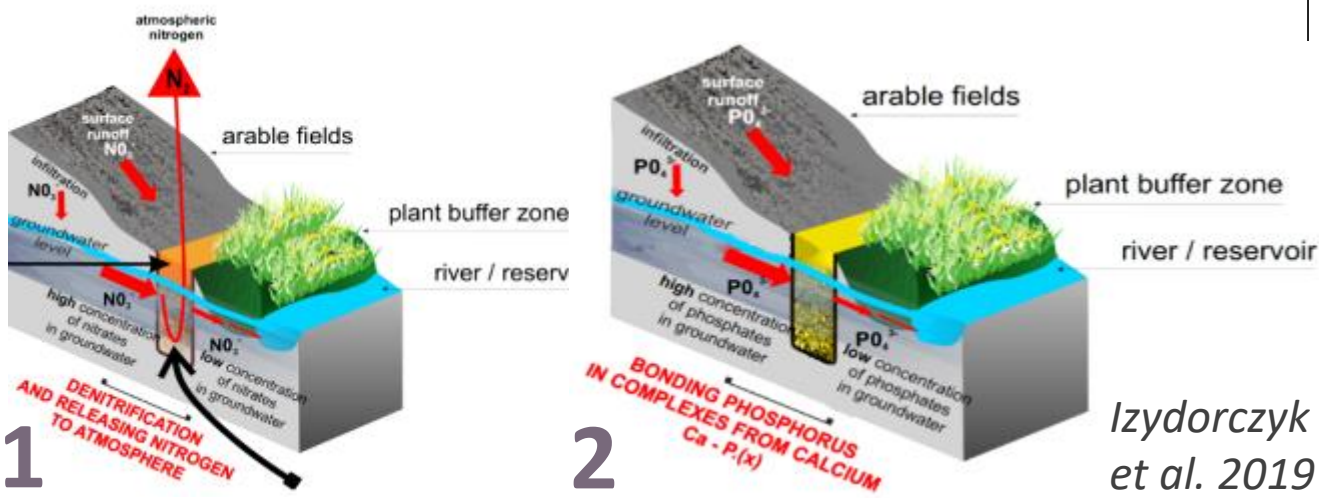
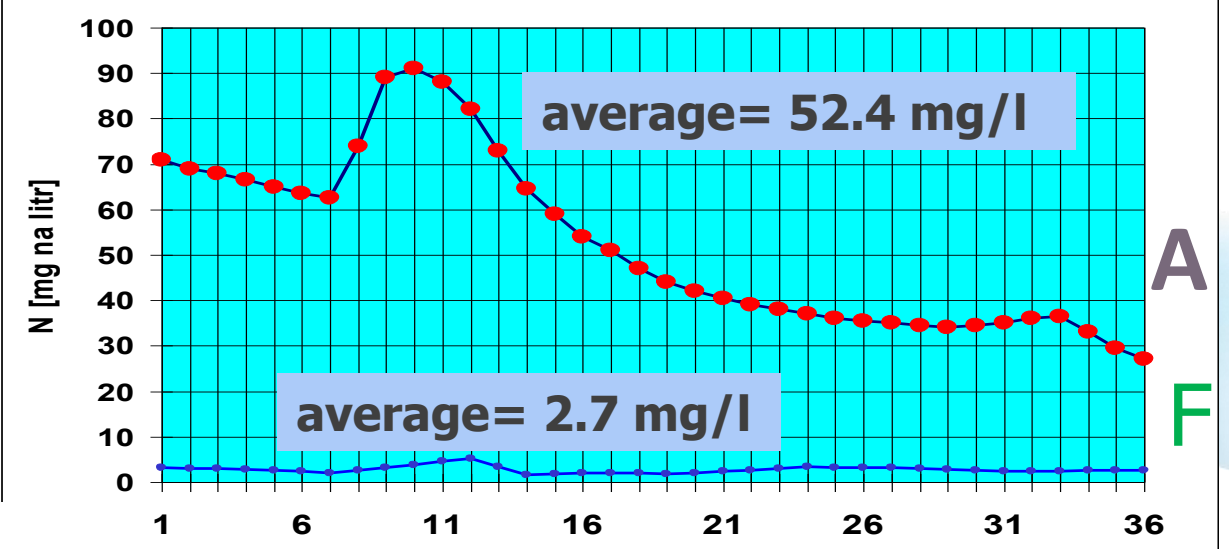


European Regional
Centre for Ecohydrology
Under the auspices
of UNESCO

Water4All For Green Deal



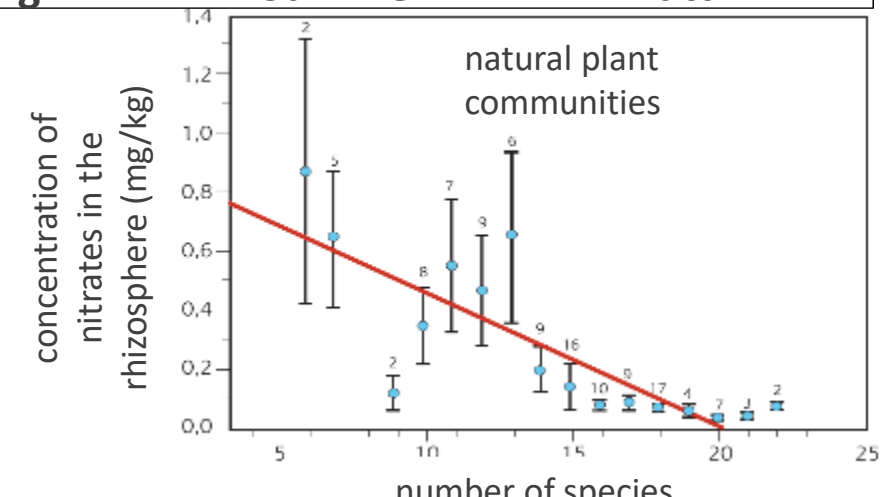
N-NO₃- concentration (N) in groundwater at the intensive agriculture area (A) and at the pine forest (F).



Highly Effective Ecotone buffer zone enhanced by geochemical barrier (2.) or denitrification walls (1.) and phytotechnology

Winter Spring Summer Autumn

(A. Kędziora)





ERCE

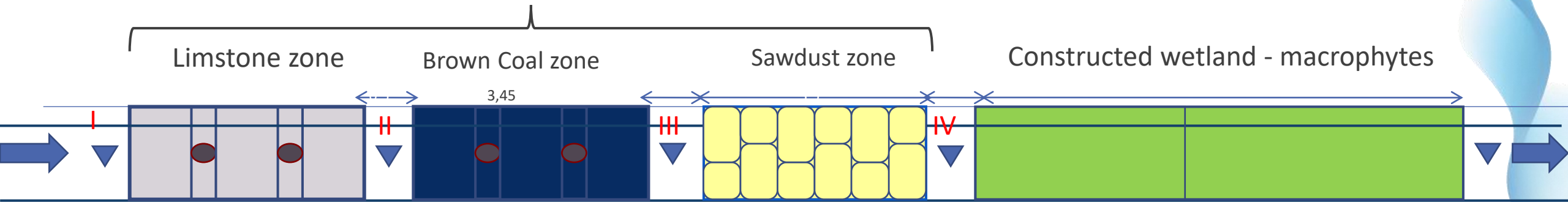
European Regional
Centre for Ecohydrology
Under the auspices
of UNESCO



Enhancement of the effectiveness of swage treatment plants by Sequential Biofiltration System (SBS)

Max. TN reduction 97%
Max. TP reduction 76%

Sequence of biofiltration substrates



Inflow from
Treatment Plant
to the SBS

▼ monitoring stations

Outflow of the purified
WW to the river

Kiedrzyńska et al. 2017





ERCE

European Regional Centre for Ecohydrology Under the auspices of UNESCO



Hybrid solutions integrating hydroengineering and ecohydrological nature-based solutions



Toxic bloom before implementation of EH-NBS

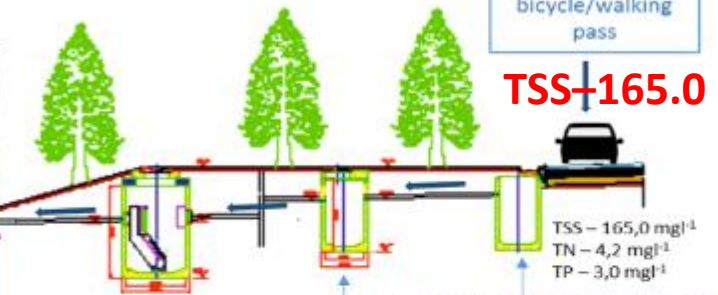
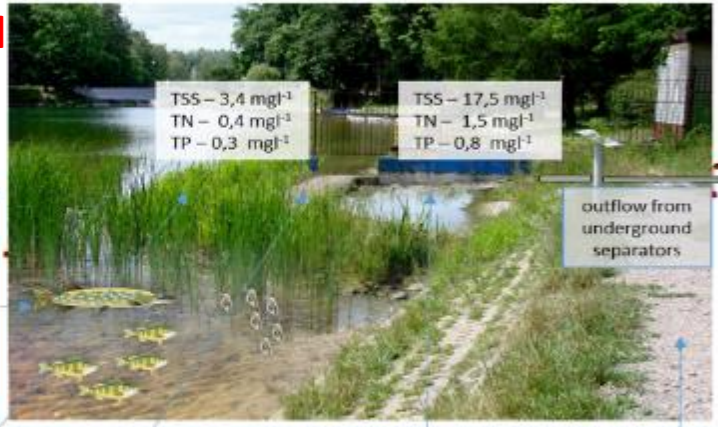


Water quality after implementation of EH NBS

LIFE08 ENV/PL/000517
RESTORATION OF RESERVOIRS IN THE UPPER BZURA CATCHMENT



TSS-3.4 mg/l



TSS-165.0 mg/l

TSS - 165,0 mg/l
TN - 4,2 mg/l
TP - 3,0 mg/l



REGULATION OF BIOLOGICAL PROCESSES
Enhancement of filtering zooplankton by predatory fish stocking

BIOFILTRATION ZONE
Assimilation of nutrients (N, P) into plant biomass

GEOCHEMICAL BARRIER
Reduction of nutrients by dolomite structure

SEDIMENTATION ZONE
Reduction of suspended solids

Interception of surface stormwaters by infiltration through dolomite/gravel bed

UNDERGROUND SYSTEM SEPARATORS
Reduction of oil substances and suspended solids



Best of the Best LIFE + 2018

Jurczak, Zalewski



Ecohydrology as a scientific framework for enhancement of catchment sustainability potential WBSR +CE+PL in Strategic UN and European Commission's Documents

1. Strategic Plan for the 9th Phase of the **Intergovernmental Hydrological Programme (UNESCO IHP-IX 2022-2029)**
 - *the most important challenge for water management is how to increase water resources quantity and quality, and in parallel to increase biodiversity, ecosystem services for society, and resilience to impacts (WBSR). The answer is through a holistic approach which incorporates the innovative nature-based and **ecohydrological solutions methods (NBS)** and catchment scale systemic solutions, based on understanding the water ecosystems interplay, as both recipients and producers of water, as well as promoting society involvement through **culture and education of water and sustainability (CE)**. Culture is deeply embodied in societal behaviour patterns, defining perception and actions, efficiency and effectiveness.*
2. Fitness-Check for the **Water Framework Directive**
 - *Change of Paradigm: „to view biosphere in an evolutionary way (raising people's awareness that the biosphere has always been changing) and in a more ecosystemic manner (including sustainability of catchments and decarbonisation)” (...) „Calls for a new, holistic dimension of the WFD to be developed (...) to enhance catchment sustainability potential (...) – WBSRCE” – **European Commission's Committee of Regions***
3. European Partnership **„Water Security for the Planet „Water4All”**, under Horizon Europe
 - *In support of the European Green Deal and EU water-related policies, the main objective of Water4All is to enable water security for all on the long term, by boosting systemic transformations and changes across the water-research innovation pipeline, fostering the matchmaking between problem owners and solution providers.*



Conclusions

Potential of development of Ecohydrology in Water4ALL as a new dimension of IWRM

In IWRM , the expression „without compromising ecosystems” is not sufficient for acceleration of **SDG and achieve Green Deal**.

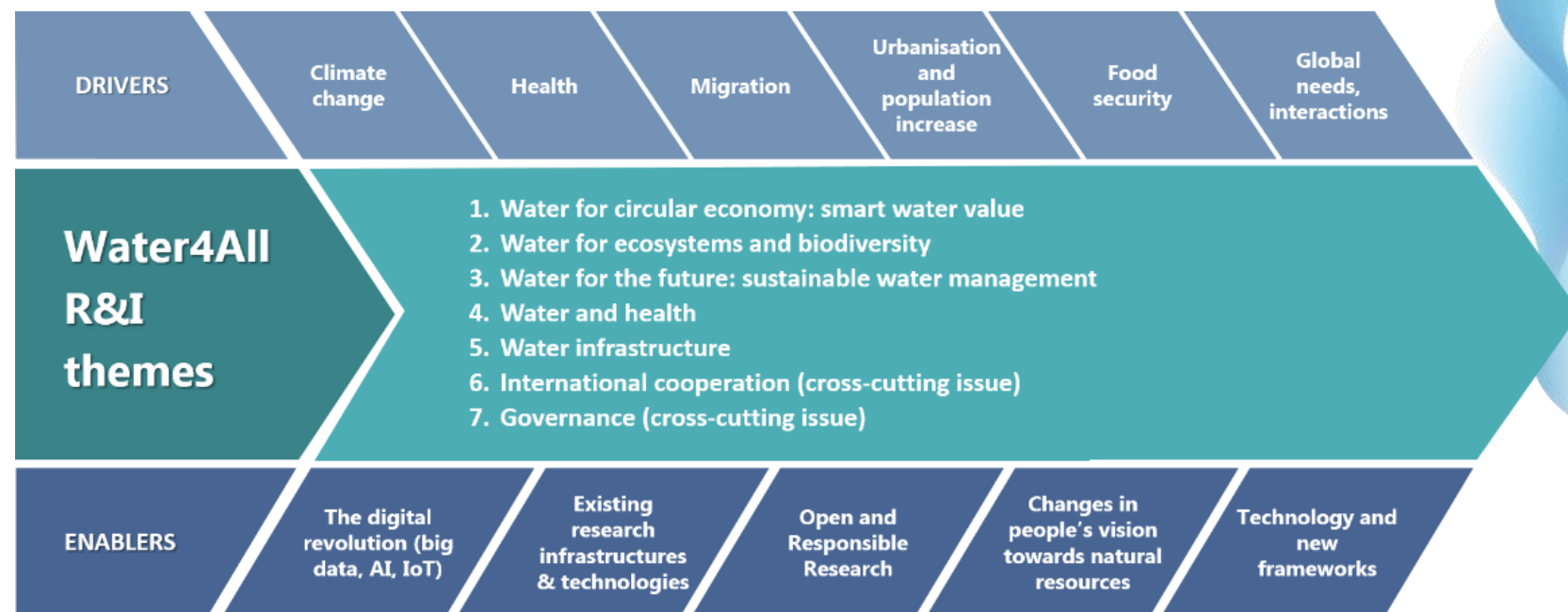
Ecohydrology new dimension of IWRM because:

1. Large number of scientific evidences that the good status of water resources dependant on terrestrial and freshwater ecosystems which are retaining, recycling, purifying and cooling systems at the catchment.
2. Ecohydrology provides scientific framework how to use of ecosystem properties as management tool , to integrate and to harmonize it with hydrotechnical infrastructure for synergy towards:
3. Enhancement of catchment sustainability potential – WBSR+CE+PL

Water4All For Green Deal

■ Securing water is essential for Green Deal policy components:

- Circular economy,
- Zero pollution,
- Biodiversity,
- From Farm to Fork,
- Sustainable agriculture,
- Clean energy,
- Sustainable industry,
- Building and renovating,
- Sustainable mobility,
- Etc.



- **Support to water-related frameworks: EU Green Deal, Water Framework Directive, Drinking Water Directive, SDGs, etc.**

3. The Joint Transnational Call 2022

Topic

Management of water resources: resilience, adaptation and mitigation to hydroclimatic extreme events and management tools

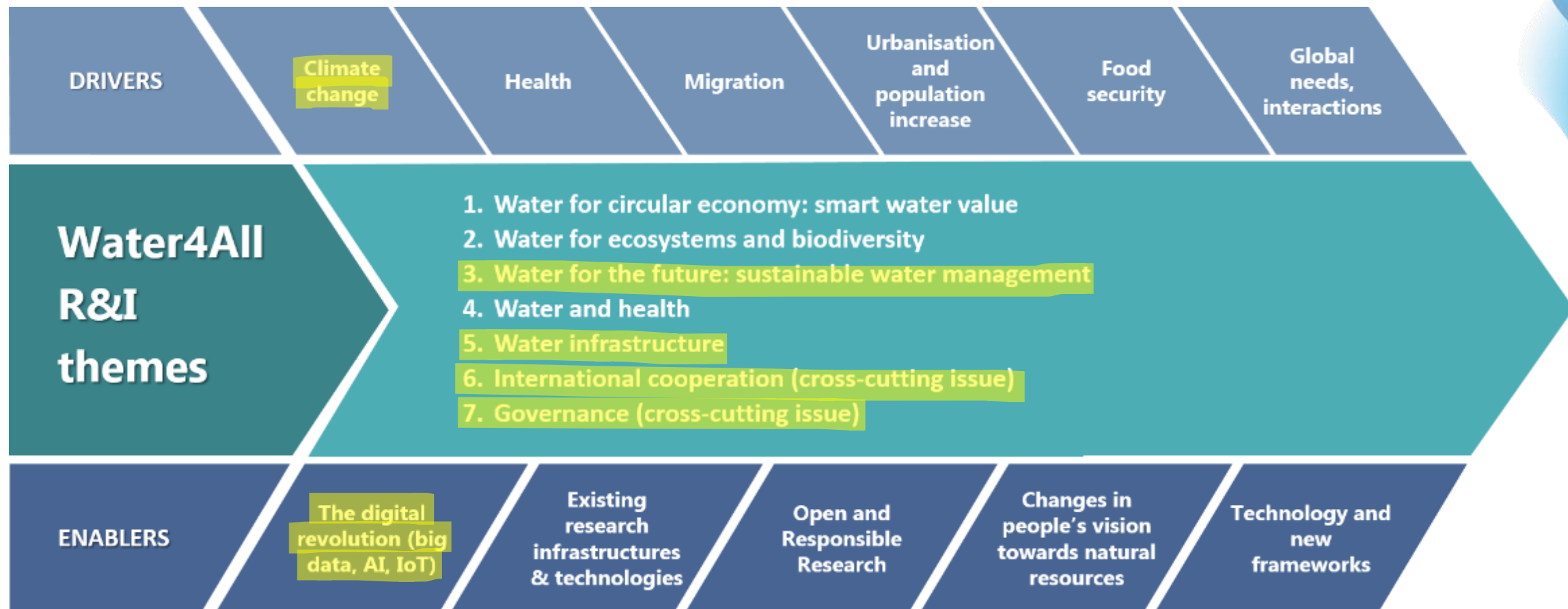
Context

Increase in the number, intensity and duration of hydrological extreme events

Objectives

- Deliver knowledge, models, approaches, tools and methodologies to better understand hydrological processes at different scales and to respond more efficiently to emerging water issues related to extreme events.
- Support the implementation of EU water policies and strategies related to water management and resource efficiency and protection.
- Seek for innovative governance models, and enhanced participation of stakeholders, communities and society at large.

Relation with SRIA



Topic 1: Resilience, adaptation and mitigation to hydroclimatic extreme events

1.1 **Addressing knowledge gaps** in our understanding of the causes of water scarcity, drought events, seasonal variability in climate impacts to develop adaptation and mitigation measures, taking climate change into account.

1.2 Developing and demonstrating innovative (or improved) **societally acceptable adaptation and mitigation strategies** to cope with hydro-climatic extreme events and their increase in length and duration. This includes floods and droughts, although is not limited to them, adopting a regional or a basin scale wide approach.

1.3 **Improving resilience and adaptation capacity of water infrastructure** (e.g., industrial water facilities, urban networks, wastewater treatment facilities, stormwater management systems and rural systems) to hydroclimatic extreme events.

Topic 2 Tools for water management - in the context of hydroclimatic extreme events

2.1 **Developing tools** (e.g., multi-risk approach, decision support tools, monetary/non-monetary costs valuation) **to support the design and implementation of strategies for adaptation and mitigation** to hydroclimatic extreme events, especially floods (including “flash-floods”), heat waves and droughts in a catchment to sea perspective.

2.2 Generating new methodologies, tools and models for water resources assessment/modelling for water bodies in scarcely monitored /data scarce areas. A combination of physical and digital solutions is expected, and opportunities provided by citizen science should be seized.

2.3 **“Smartening the water system”** and use of innovative digitalization, including improved/new sensors, models, communications and computing technologies.

Topic 3 Improved water governance in the context hydroclimatic extreme events and international contexts

3.1 Undertaking an analysis and **developing robust Governance models for the management** of water resources in the context of extreme events, is critical increasing the decision-making capacity of institutions and involvement of citizens. This should include ways of improving coordination between water managers to increase our capacity to reduce vulnerability to extreme events, as well as effectively respond to them.

3.2 Addressing and **encouraging international cooperation** in the field of water, including management of transboundary water resources and contribution to **Water Diplomacy**.

Expectations

- Contribution to the acceleration of the adoption of measures / reduction of vulnerability
- Connect actors
- Knowledge transfer.
- Impact of the deliverables on:
 - Improved water availability and optimisation of water quality and quantity for all uses in Europe, while maintaining ecosystems needs.
 - Improved resilience of European populations to water-related hazards, extreme events and climate change.
 - Supporting the implementation of the UN SDGs and ensuring a Just Transition for all.

4. Call process & Eligibility Rules

Participating countries

Country	Funding Organisation	National budget
Austria	FWF	700.000,00
Belgium	VLAIO	800.000,00
Belgium	FWO	700.000,00
Belgium	F.R.S.-FNRS	300.000,00
Brazil	CONFAP	963.400,00
Brazil	CNPq	100.000,00
Czechia	TA CR	700.000,00
Denmark	IFD	1.000.000,00
Estonia	ETAg	150.000,00
France	ANR	1.700.000,00
Germany	BMBF	1.000.000,00
Hungary	NKFIH	330.000,00
Ireland	EPA	500.000,00
Italy	MUR	2.700.000,00
Italy	MISE	3.000.000,00
Israel	MoE	400.000,00
Latvia	LZP	500.000,00
Lithuania	LMT	150.000,00
Luxembourg	FNR	350.000,00
Malta	MEEE	300.000,00
Moldova	NARD	100.000,00
Netherlands	NWO	1.128.000,00
Norway	RCN	1.000.000,00
Poland	NCBR	1.000.000,00
Portugal	FCT	500.000,00
Romania	UEFISCDI	1.000.000,00
Slovak Republic	SAS	240.000,00
South Africa	WRC and DSI	90.000,00
Spain	AEI	1.500.000,00
Spain	CDTI	1.200.000,00
Sweden	FORMAS	2.000.000,00
Switzerland	SNSF	900.000,00
Turkey	TUBITAK	500.000,00
United Kingdom	EPSRC UKRI	299.546

34 funding organisations from 29 countries

Total funding for the Call:

over 34M€
(+ EU Contribution)

The funding organisation may have defined maximum allowed budget per partner and/or project

➤ **CONSULT THE NATIONAL REGULATION ONLINE:**

http://www.waterjpi.eu/joint-calls/joint-call-2022-water4all/water4all_national_regulation_master_07092022.pdf

➤ **CONSULT THE LIST OF NCP ONLINE:**

http://www.waterjpi.eu/joint-calls/joint-call-2022-water4all/national_contact_points_water4all.pdf

Timeline

**!! Do not wait
until the last
minute to
submit !!**

First Step: Submission of pre-proposals	
30 June 2022	Pre-announcement
1 Sept. 2022	Call Publication 1 st Step opening
31 Oct. 2022	Deadline for submission of the pre-proposals
2 - 30 Nov. 2022	General and National eligibility checks by the CS and FPOs
20 Jan. 2023	Notification to the applicants of the 1st step outcomes
Second Step: Submission of full proposals	
20 Jan. 2023	2nd step opening
20 Mar. 2023	Deadline submission of the full proposals
21 - 27 Mar. 2023	Eligibility check of full proposals by Call Secretariat
31 May - 1 Jun. 2023	Evaluation Panel Meeting – Ranking list
5 Jun. 2023	Meeting CSC for selection of proposals recommended for funding
6 Jun. 2023	Notification to the applicants of the 2nd step outcomes
6 - 20 Jun 2023	Period for appeal
5/6 Jul. 2023	Final approval of the proposals recommended for funding
Last quarter 2023 / 1st quarter 2024	Start of the RD&I projects

Submission procedure

- **STEP 1: Mandatory submission of pre-proposals** through the Online Submission Platform

!! Applicants cannot enter the procedure at a later stage !!

- Eligibility check (Call Secretariat and related Funding Organisations)
- First evaluation by independent evaluation experts according to the following criteria:
 - Excellence*
 - Impact*

Minimum threshold, i.e., 3 out of 5 in each criterion.

- **STEP 2**: Applicants invited to step 2 have to **submit a full proposal via the Online Submission Platform**

- Eligibility check (Call Secretariat)
- Evaluation by external experts and an independent evaluation panel according to the following criteria:
 - Excellence*
 - Quality and efficiency of the implementation*
 - Impact*

Threshold on the final score is 10/15

Consortium Composition

- Each consortium must be composed of at least a minimum of **three eligible partners that request funding from participating Funding Partner Organisations from three different countries.**
 - In addition, part of the eligible Partners, **at least two must be from different EU Member States or Associated Countries (AC)** participating in the call (https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf)
- **The upper limit of eligible project partners per consortium is 7 (including 1 self-funded partner).**
 - No more than one self-funded project partner per consortium is allowed.
 - The applicants have to prove their willingness to self-fund their own activities or the willingness of other partners to fund their activities by sending a letter of intent/commitment together with the **full proposal**.
 - A self-funded partner cannot coordinate a project.
- **The maximum number of partners from the same country within the consortium must comply with national/regional regulations.**

A consortium including organisations from Portugal, Italy and Brazil (Non EU member BUT participating in the Call

Eligible

- ✓ 2 different EU MS and AC (Portugal and Italy) & Partners from 3 different countries (Brazil)

A consortium including organisations from France, Spain and Greece (as self-funded partner)

Not Eligible

- ✓ 2 different EU MS and AC (France and Spain) & Partners from 3 different countries (Greece) whose one not requesting funding
-

Other general eligibility rules

Project duration: 3 years

- The **Consortium Coordinator** must be eligible for funding by a Funding Partner Organisation (FPO) of this call.
- The Principal Investigator acting as **Consortium Coordinator** can only participate in **one** proposal of this call, i.e., he/she cannot participate in any other proposal, neither as a Consortium Coordinator nor as Principal Investigator of a partner. In roles other than that of a Coordinator, the applicants can participate in several proposals, as long as this is in line with their funding organisation's eligibility rules.
- Proposals must be written in **English**.
- The scope or scale of the proposed research should exceed a single country.

Eligibility of international research institutions

- **The Joint Research Centre (JRC)** can participate in a proposal as a self-funded partner.
- **Institutions from countries not participating in the Call** may join consortia only as partners (not as coordinator). Participation will be at the institutions' own expense.
- **International institutions** need to investigate their respective national eligibility guidelines if they are eligible to participate as funded partners and make sure they would be able to fulfil the duties of funded projects (i.e. signature of consortium agreement).

Changes allowed between pre & full proposals

!! The information given in the pre-proposals is binding**!!**

- **No major changes regarding the proposals' content** will be allowed between the pre-proposals and full proposals.
- **A limited number of changes in the consortium composition** maximum 2 changes of Project Partners in proposals with more than 5 partners; maximum 1 change of project partner in proposals with 5 or less partners, provided approval by the concerned Funding Organisations.
- **In terms of procedure:** The eligibility of new research Partners must be confirmed before the full proposal submission deadline. Changes must be asked first to the NCP, who needs to check the eligibility and agree with the change.
 - **Minor change of budget** if allowed by the relevant FPO.
 - **No changes of coordinator** (P.I. Principal Investigator in charge) will be allowed, except in case of force majeure. A request of **change of coordinator must be submitted to the Call Secretariat, at least one week before the deadline for submitting full proposals** and it will be discussed on a case-by-case basis.

Participation of Self-funded partners

Proposal may include in the consortium Partner that cannot be funded by any of the Funding Organizations participating in the call.

➤ **Organizations from countries not listed in the call can join consortia as Self-funded Partner according to the following conditions:**

- They **cannot** assume the role of Consortium Coordinator
- Maximum number of self-funded partner in a proposal is limited to **ONE organization**
- Self-funded partner needs a **Participant Identification Code (PIC)** from the EC to be included in the submission. [The applicants have to check their PIC or ask for the creation of a PIC well in advance of the submission](#)
- Self-funded partner shall participate in the submission procedure by subscribing and filling in information in the **Online Submission Tool**
- In the STEP 2 they need to provide a Commitment/Intent Letter proving their willingness to self-fund their own activities or the availability of other resources to fund their activities.
- Self-funded partner must sign the **Consortium agreement**.
- Self-funded partner is not considered in the minimum requirement of eligible partners and countries and is considered in the maximum number of partners in a project.

Funding organisations' financial rules and eligibility criteria

Each National / regional Funding Organisation funds its own national / regional team

!! Applicants must comply with their funding organisations' eligibility criteria and rules (e.g. eligible budget items)

Applicants are strongly advised to approach their respective Funding organisation Contact Point to make sure they respect all the eligibility criteria and rules **!!**

➤ Consult the Funding Organisations' Contact Points here:

water4all2022_callsecretariat@mur.gov.it

AND National Regulations

http://www.waterjpi.eu/joint-calls/joint-call-2022-water4all/water4all_national_regulation_master_07092022.pdf

Submission Platform and Partner Search Tool

- Use the **Water4All Partner Search Tool**

You simply have to fill in a Partner / Project Search form on the Online Submission Platform (**in English**)

Link: <https://water4all2022-submission.mur.gov.it/Partnering-Offers/>

- ❖ Your form will be visible on the platform and you may be contacted by other applicants

- ❖ Have a look at the forms submitted through a **user-friendly search function**: search for partners or projects to join on the platform according to different criteria: country and keywords

- **Water4All Online Submission Platform**

- ❖ Preproposal Submission Guidelines and Preproposal Template available

Link: <https://water4all2022-submission.mur.gov.it/>

Resources available online



<https://water4all-partnership.eu/>



EUROPEAN PARTNERSHIP WATER4ALL – WATER SECURITY FOR THE PLANET



<https://water4all2022-submission.mur.gov.it/>

Search for Partner / Project

➤ Consult the **CALL DOCUMENT** containing the following information:

- Call Announcement (call text)
- National Regulations
- National Contact Points

➤ Consult the **Online Submission Platform** containing the following information:

- Call Document
- Preproposal Submission Guidelines
- Pre-proposal application form (for information; to be accessed via Online Submission platform)
- Data policy
- **Partner Search Tool**

➤ Coming Soon: Webinar recording, PPT and **FAQ**

Find out more about the call:

<http://www.waterjpi.eu/joint-calls/joint-call-2022-water4all>

Contacts:

Call Secretariat (MUR):

Maria BIANCO and Aldo COVELLO - water4all2022_callsecretariat@mur.gov.it

National/Regional Contact Points:

http://www.waterjpi.eu/joint-calls/joint-call-2022-water4all/national_contact_points_water4all.pdf

Partner Search Tool:

<https://water4all2022-submission.mur.gov.it/Partnering-Offers/>



Thank you for your participation!

Water4All@agencerecherche.fr
www.water4all-partnership.eu



Co-funded by
the European Union

