CfP Section 1 2023
Management of Water

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PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA

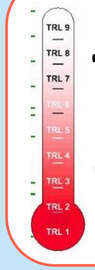
PRIMA is supported under
Horizon 2020, the European Union's
Framework Programme
for Research and Innovation

Water management topic – Section 1

Topic 1.1.1 IA

Topic Water management **S1**

Integrated adaptive wastewater management plans in the Mediterranean region



TRL 6-8

8.2 M€

2

Submission deadline Stage 1: 22/03/2023

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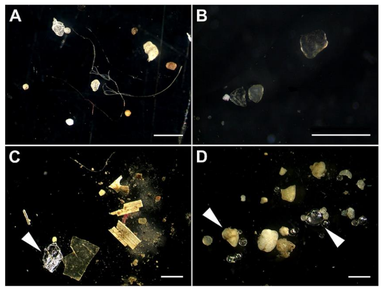
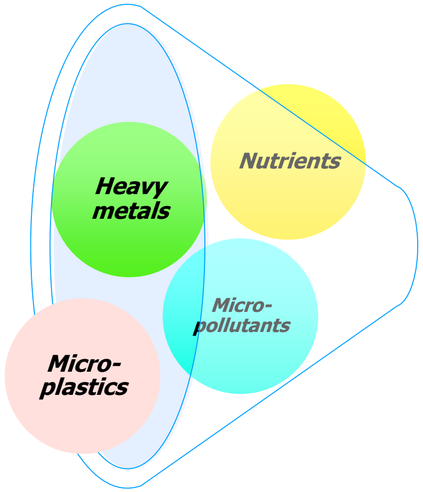
Challenge

Agricultural and industrial sources, urban runoff and improperly treated wastewater discharges are leading to…



By Martin Wagner et al. - Wagner et al.: Microplastics in freshwater ecosystems: what we know and what we need to know. In: Environmental Sciences Europe. 26, 2014, doi:10.1186/s12302-014-0012-7, CC BY 4.0, https://commons.wikimedia.org/w/index.php?curid=39507778

Weerayuth Kanchanacharoen, Tubería de descarga industrial y de fábrica de aguas residuales en el canal y el mar



…**increased pollution** of Med water bodies & related aquatic ecosystems!

Photo: Dr. Jennifer L. Graham | US Geological Survey / eutrophication & hypoxia on Flickr (CC BY-NC-ND)

- eutrophication, destruction of aquatic life, reduction of biodiversity
- impact on ecosystems services, economy (tourism, aquaculture, fisheries) and Med people's livelihoods
- potential threats to human health
- increasing water purification costs for municipal/industrial use

In addition to this, the Med faces issues like **water scarcity and depletion**, the increasing prices of **fertilisers**….

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Scope

Issues mentioned should be addressed holistically through **wastewater management plans** based on new *circular economy business models* and integrating *green (incl. NBS) and grey solutions*

Demonstrating the **recovery & recycling of nutrients** from wastewater/sewage sludge	⇨	*prevent nutrient pollution in aquatic environments and lower need for fossil-based fertilisers*
Upgrading WW treatment plants	⇨	*trap micro-pollutants/micro-plastics, increase water reuse and better sewage sludge management*
Optimising **energy consumption**, encouraging uptake of energy efficient tech	⇨	*energy savings and reduction of GHG emissions*
Strengthening uptake of **digital solutions**	⇨	*tracking of potential pollutants at the inlet and outlet of the WW treatment facilities*
Planning **surveillance systems for COVID-19** in large WW treatment plants	⇨	*source of information on the spread of the virus and other emerging pathogens*
Involve national, regional, local **authorities, industry, farmers and consumers**	⇨	*analyse governance options and costs of improved access to sanitation in Med countries*

Proposals to outline links w/ other projects and the EU Mission "Restore our ocean and waters by 2030" (Water Knowledge System, Implementation Support Platform for Coordination and Monitoring, Med Sea Basin Lighthouse)

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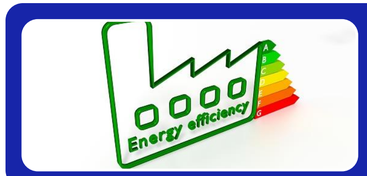
Expected Impacts

Market opportunities for recovered or recycled nutrients



Improve energy efficiency of wastewater treatment, towards carbon and energy neutrality

Reduction of the eutrophication in water bodies; protection and restoration of affected ecosystems

Changes in practices (society, agriculture, industry) towards more sustainable ones to prevent and reduce nutrient pollution

A farmer applies fertilizer on his rice field. IRRI Photo (Isagani Serrano)
Part of the image collection of the International Rice Research Institute (IRRI).

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Key Performance Indicators

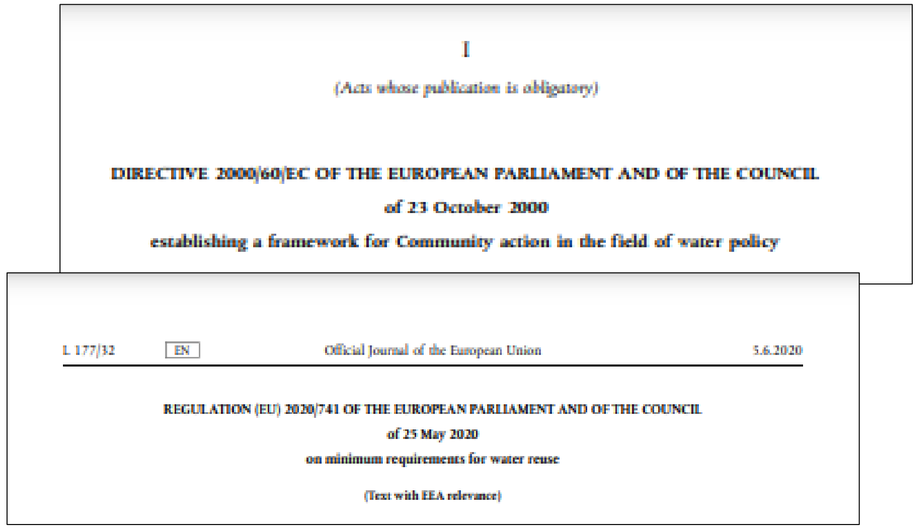
- Contribution of recycled nutrients to the overall nutrients used for agricultural production (%)
- Decrease in inputs of nutrients into soils and aquatic environments (%)

- SDG #6 Indicator 6.3.2 "Proportion of bodies of water with good ambient water quality"

Water management topic – Section 1

Links with national, EU/int'l policies, strategies

- Sustainable Development Agenda 2030
- EU Green Deal
- Zero pollution Action Plan
- Water Framework Directive
- Biodiversity Strategy
- Etc.



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(Acts whose publication is obligatory)

DIRECTIVE 2000/60/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 23 October 2000
establishing a framework for Community action in the field of water policy

L 177/32 EN Official Journal of the European Union 5.6.2020

REGULATION (EU) 2020/741 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 25 May 2020
on minimum requirements for water reuse

(Text with EEA relevance)

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Thank you

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