



Rijksinstituut voor Volksgezondheid
en Milieu
*Ministerie van Volksgezondheid,
Welzijn en Sport*

Europees onderzoek water en gezondheid

Eerste uitkomsten H2020 projecten:
BlueHealth en Sophie (Seas, Oceans and
Public Health in Europe)
Susanne Wuijts - RIVM

21 juni 2019 Stand van de Waterrecreatie in Nederland



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Inhoud

1. Over het RIVM
2. Waarom deze projecten
3. Opzet en eerste resultaten
4. Vragen, discussie



About RIVM*

- Promotes public health and consumer safety, and helps to protect the quality of the environment.
- Centre for knowledge and expertise
- For governmental authorities, professionals and citizens
- (international) collaboration
- Independent



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*National Institute for Public Health and the Environment



Strategic challenges & Working programme RIVM Environment & Safety

Healthy
urban living



Air pollution
and climate
change



Water quality
and drinking
water



Circular
economy



Natural
Capital



Sustainable and
healthy
agriculture



Working
environment
and health



Safety:
e.g. chemicals,
radiation, biotech



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RIVM | Committed to health and sustainability



Why these projects?

- Focus so far on health risks, much less on health benefits
- Knowledge gap on the understanding of the relation between water and health (BlueHealth)
- Relationship oceans and health in Europe unexplored so far, investment in research agenda and community (Sophie)

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BlueHealth
Linking environment, climate & health



BlueHealth project overview
*Linking environment, climate and health for
health promotion and disease prevention*

BlueHealth is funded by the European Union's Horizon 2020 research
and innovation programme, grant agreement No 666773



Current understanding



Where are the gaps?

www.bluehealth2020.eu | @BlueHealthEU

- *Previous work has shown links between natural environments and positive health and wellbeing outcomes*
- *But has tended to focus on green spaces*
- *Much less is known about the effects of **blue spaces on health***
- *And **urban blue infrastructure** in particular*



Multiple streams of research



Work underway

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- *Reviews & secondary data analyses*
- *Large international survey*
- *In-situ infrastructural interventions*
- *Virtual reality lab-based experiments*
- *Future scenario planning*
- *Translating evidence for policymakers*
- *Engaging with stakeholders across Europe*



Reviewing the evidence



What is known and where are the gaps?

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Comprehensive literature reviews

- *Health impacts blue space:*
 - *Positive association exposure blue environments with benefits on health and wellbeing*
- *Use of “blue” in virtual reality:*
 - *Contact nature (green& blue) beneficial for elderly*
 - *Use of VR in residential settings can overcome barriers for getting outdoors*



BlueHealth Survey



Largest survey of its kind in the world

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- *17,000 people surveyed across 18 countries*
 - *13,000 across Bulgaria, Czech Republic, Estonia, Finland, France, Germany, Greece, Italy, Portugal, Spain, Sweden, The Netherlands, UK*
 - *4,000 in Australia, California, Canada, Hong Kong*
- *The survey will shed light on*
 - *Physical activities near water sources*
 - *Effects on mental health*
 - *Differences between countries*
 - <https://lre203.github.io/> (NL)



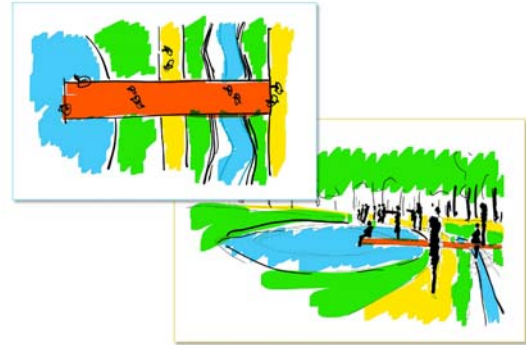
Community interventions



Urban acupuncture across Europe

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- *Projects are taking place across Europe*
- *A series of small-scale interventions*
- *Redesigning urban blue spaces*
- *And assessing impacts on physical and mental health: pre and post evaluations*
- *Interaction with local communities*



Example: Urban Riverside Regeneration, Spain



Health benefits via physical activity (Vert et al.)

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The urban regeneration of this riverside park provides health benefits to the population using the infrastructure, as well as health-related economic benefits

Example: Riverside Accessibility Intervention, Spain



Impact on use, access, physical activity (Vert et al.)

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Nature-based interventions in socio-economically disadvantaged areas can reduce inequalities in access to natural areas and improve the health and well-being of the population

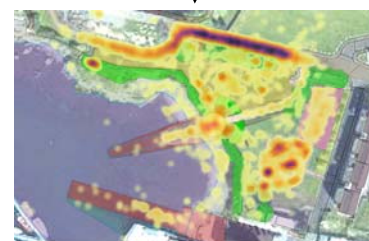
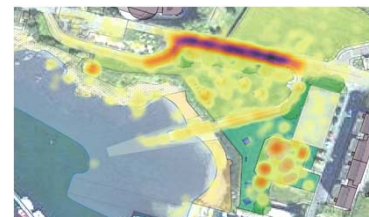


Example urban acupuncture, PLYMOUTH, UK



Impacts on access and use

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Virtual realities

Can blue spaces be brought to people?

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- *Exploring virtual reality blue space*
 - Computer generated landscapes
 - 360° videos
- *For use in health and social care*
 - Elderly
 - Vulnerable
 - Infirm



Trend-analysis and local workshops on trends

Objectives

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- *Identify local normative values on BlueHealth*
- *Ranking of trends on priority and uncertainty from a local perspective*
- *Use city scenarios to assess transferability of case study experiences*

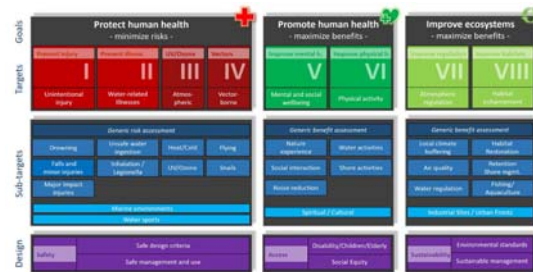


Translating the evidence

Turning research into guidance

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- *Creating a decision support tool*
- *To inform decision-making process by highlighting risks and benefits to*
 - *Health & wellbeing*
 - *Ecosystems*
 - *Climate change mitigation*



Innovation and engagement

Ensuring impact by use of 'innovation slams'

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- *Interact with different stakeholders*
- *Work across sectors to*
 - *Make outputs more practical, raise awareness*
 - *Develop commercial applications*
 - *Put findings into practice*
- *Preliminary findings workshop NL:*
 - *Need for collaboration development blue space*
 - *EU Water framework directive*



Partners BlueHealth

An international multi-partner project



Seas, Oceans & Public Health in Europe

Linking oceans and health research

Sophie - *project overview*

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SOPHIE is funded by the European Union's Horizon 2020 research and innovation programme, grant agreement No 774567.

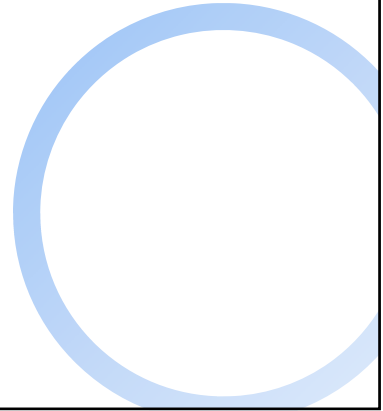


Find out more at
www.sophie2020.eu



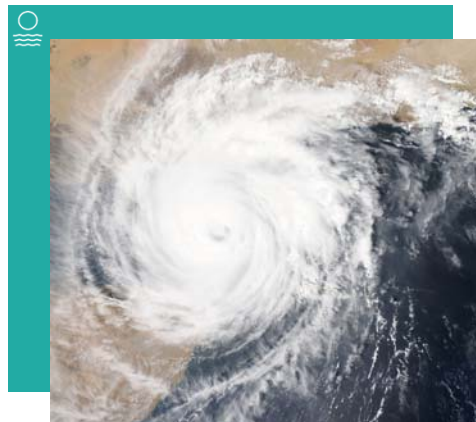
Sophie? Europe has abundant ocean environments

- 7 seas and 2 oceans
- 91,000km of coastline (inc Norway)
- Half of population lives within 50km of the coast
- Ocean economy supports 5.4 million jobs
- Generating a GVA of over €500 billion per year



Yet oceans can present risks to health

- Storms and floods
- Climate change
- Harmful algal blooms and toxins
- Microbial pollution
- Chemicals and plastics

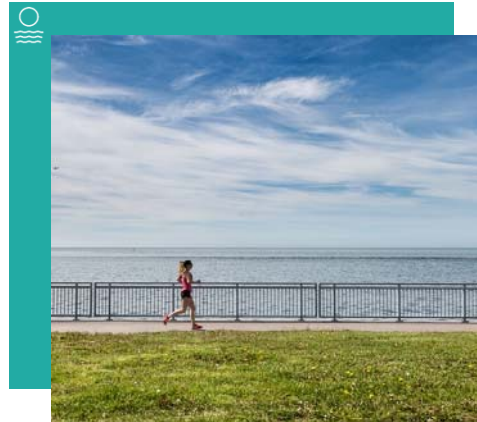




Seas, Oceans & Public
Health in Europe

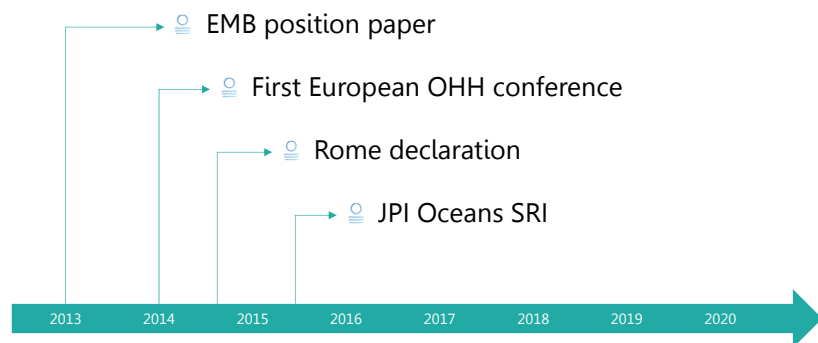
But also benefits & opportunities

- Health & wellbeing
- Seafood & aquaculture
- Renewable energy
- Transport
- Marine biotechnology



Seas, Oceans & Public
Health in Europe

We need a coordinated research approach



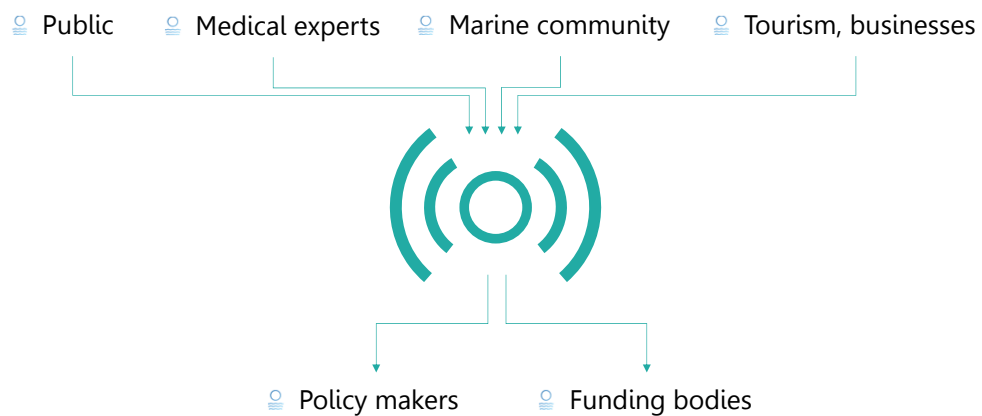


SOPHIE will build this research capacity

- Form a diverse **network of stakeholders** across Europe in Oceans and Human Health
- Set a **Strategic Research Agenda** in Oceans and Human Health for Europe
- Create a **legacy beyond the project** that advances the field across the world



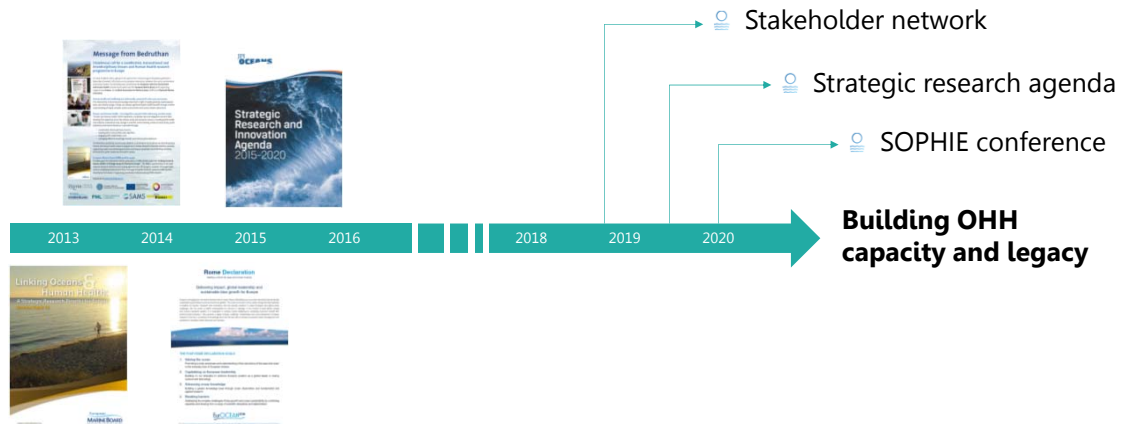
By listening to different voices





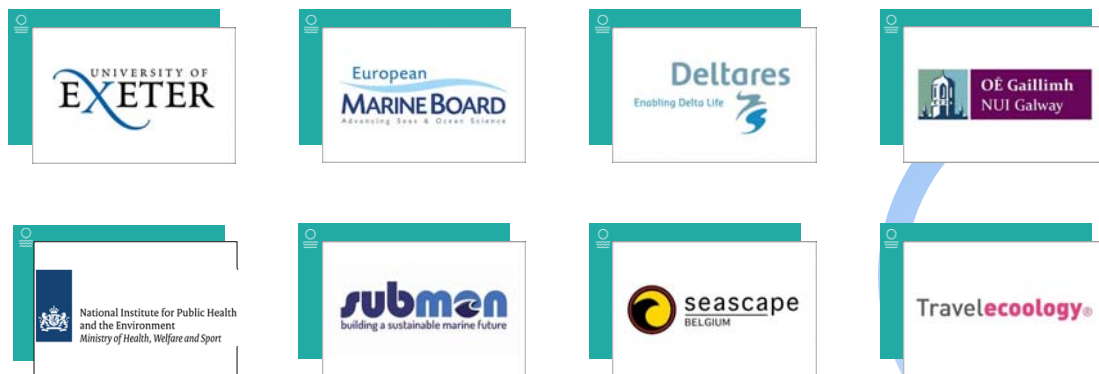
Seas, Oceans & Public
Health in Europe

To deliver a research road map by 2020



Seas, Oceans & Public
Health in Europe

This is a multi-partner initiative





Seas, Oceans & Public
Health in Europe

Film

<https://sophie2020.eu/>



Seas, Oceans & Public
Health in Europe

RSA: different inputs

- Stakeholder workshops (European view)
- Local stakeholder workshops per sea basin, impacts of future trends (e.g. Oosterschelde)
- European survey
- Literature mapping
- Innovative solutions
- Citizen Science



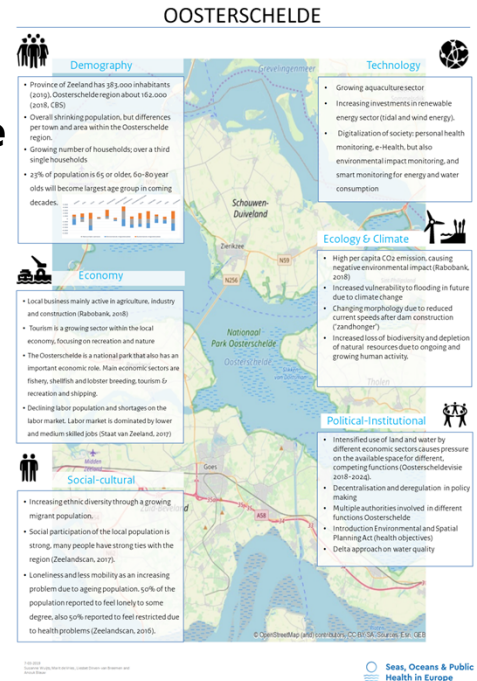


Outcomes workshop Oosterschelde

Relevant trends for oceans an health:

- Climate change
- Aquaculture, protected areas
- Recreation and tourism
- Healthy behaviour

Impacts and research questions related to these trends



Topics for RSA so far

- Food from the ocean
- Coasts and well being (tourism and coastal living)
- Biotechnology and medicine
- Biodiversity, pollution, climate change of relevance in all these topics



**Seas, Oceans & Public
Health in Europe**

Linking oceans and health research

SAVE THE DATE

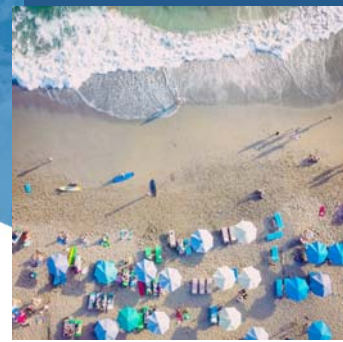
Oceans and Human Health Conference

Launching a Strategic Research Agenda for Europe

- 📅 30th to 31st March 2020
- 📍 Royal Flemish Academy of Belgium for Science and the Arts, Brussels.
- 📄 Register your interest at the Sophie website



SOPHIE is funded by the European Union's Horizon 2020 research and innovation programme, grant agreement No 774567.



Find out more at
www.sophie2020.eu



Vragen, discussie?

- ...