



PHUSICOS

According to nature

Deliverable D8.2

The Dissemination and Communication Plan

Work Package 8 – Dissemination and communication

Deliverable Work Package Leader:
NGI

Revision: 0 – Final
Dissemination level: Public

June, 2018



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 776681.

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Project information

Project period: 1 May 2018 – 30 April 2022
Grant Agreement number: 776681
Web-site: www.phusicos.eu
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Summary

The overall ambition of this Dissemination and Communication Plan is to support the design and implementation of strategic communication in order to demonstrate how PHUSICOS can provide adequate proof-of-concept for the ability of NBSs to address hydrometeorological events in sensitive rural and mountainous regions. Thus this plan outlines PHUSICOS's dissemination and communication principles, key target groups and specific activities and communication channels to ensure significant project impact. The Dissemination and Communication Plan aims at maximizing the use of project deliverables, ensuring that key target groups receive the full, lasting benefits of the project results. This includes producing excellent interdisciplinary science which is theoretically informed and policy relevant as well as building new networks through clustering activities and connecting people and disciplines. This is the first version of the Dissemination and Communication Plan, which will be further developed in Month 18 (D8.4) and Month 36 (D8.5).

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1 Introduction and Project Overview

PHUSICOS, meaning 'According to nature' in Greek (φυσικός), is a four-year Innovation Action project that started in May 2018 and is funded by the European Union's Horizon 2020 research and innovation programme (Grant agreement No 776681). PHUSICOS aims to demonstrate how nature-inspired solutions reduce the risk of extreme weather events in rural mountain landscapes. The project consortium comprises 15 organisations from 7 countries, including end-user partners from local and regional administrative units in Norway, Italy, France, Spain and Andorra.

The main objective of PHUSICOS is to demonstrate that nature-based/nature-inspired solutions for reducing the risk of extreme weather events in particularly vulnerable areas such as rural mountain landscapes, are technically viable, cost-effective and implementable at regional scale. Furthermore, they increase the ecological, social and economic resilience of local communities. PHUSICOS's underlying premise is that nature itself is a source of ideas and solutions for mitigating the risk caused by changing climate. As nature's designs are often elegant, effective and frugal, implementing nature-based solutions (NBS), including hybrid green/blue/grey infrastructure, can provide ecological, social and economic resilience for society.

Communication and dissemination is an important component of PHUSICOS to support the development and verification of NBSs in rural mountainous areas, and to provide a basis for further exploitation of the developed technologies in the market. Specifically, Work Package 8 of the project (Dissemination and communication) is designed to ensure broad and effective dissemination of the PHUSICOS findings and results, including the outcomes of the demonstrator and concept cases.

This report outlines the PHUSICOS strategy for broad and effective communication and dissemination, which would ensure that the project results reach a wide audience and thus maximise the project impact.

2 Dissemination and Communication Principles

2.1 Disseminating versus Communicating

The EC has recently published guidance on the use of social media in H2020 projects to increase the impact of project communication (EC, 2018). This guidance document also provides useful information on how to distinguish between disseminating and communicating. This information is replicated in Table 1.

Table 1: Differences between communication and dissemination (based on EC, 2018).

Communication	Dissemination
Covers the whole project (including results) and therefore begins at the start of the project.	Covers project results only and therefore begins after results are produced from the project.
Multiple audiences that include target groups beyond the project's own community. This includes the media and general public.	Specialist audiences refers to target groups that may use the results. PHUSICOS has identified six target audiences (Table 2).
Informing and engaging with society, to show how it can benefit from research. The PHUSICOS Living Labs approach at the different case study sites provide an important communication channel for the project.	Enabling the take-up and use of results which will be further developed in the PHUSICOS Exploitation Plan (D8.6) and the Plan for mainstreaming NBSs in Europe (D8.7).
Legal reference Grant Agreement Article 38.1. The beneficiaries are obligated to promote the action and its results.	Legal reference Grant Agreement Article 29, also specifies that each beneficiary must ensure open access to all peer-reviewed scientific publications relating to its results as well as open access to research data.

2.2 Open Knowledge Plan

All peer-reviewed publications generated in PHUSICOS will be provided in Open Access (OA) following the 'Guidelines on Open Access to scientific publications and research data in Horizon 2020', either in green or, in some cases, gold OA as well as other methods acceptable to the EC which potentially become available during the project period.

To support open knowledge, the PHUSICOS website (www.phusicos.eu) will contribute to the communication and dissemination of PHUSICOS and will be maintained for at least 10 years after project completion. PHUSICOS newsletters, policy briefs, videos, guides and reports will be made available on the PHUSICOS website. Scientific output (data and knowledge) will be centralised in the Open Access Infrastructure for Research in Europe (OpenAIRE), which will also serve as an entry point for linking publications to the underlying research data.

The web-based tool developed within PHUSICOS will be continuously supplied with new knowledge and information and used by the stakeholders, even after PHUSICOS will have been completed. The web-based PHUSICOS tool will be developed according to the technical design for assuring the necessary compatibility with existing platforms. The long-term support of this service will be addressed through the establishment of agreements with organisation(s) with the assignment to deliver information and services to the end-users.

2.3 Graphic Design Identity

In the interest of promoting a unified image of the project, a PHUSICOS design identity has been developed for all dissemination and communication activities throughout the project period:

- The logo is compact and geometrically formed with triangles to represent mountains relative to the earth (Figure 1). The blue and green colouring reflects blue-green infrastructure inherent in NBSs.
- A document template is created for report deliverables.
- All dissemination materials and activities will clearly state information on EU funding:
 - Display the EU emblem
 - Include the following text: “This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 776681.”
- All partner logos are to be used in dissemination materials. The logos are available in the reporting template, a standard acknowledgement slide for presentations (Appendix A) and in a standard poster presentation (Appendix B).



Figure 1: PHUSICOS logo in horizontal format including the project name (left) and the logo graphic without the project name when rectangular formats are more appropriate (right).

3 Target groups

Dissemination and communication activities will target specific groups including local stakeholders (e.g. local industry, authorities), regional authorities as well as public funding sources. PHUSICOS has specifically identified six key target groups (TGs). In addition to these specific target groups, PHUSICOS will target audiences beyond the project's own community to include the scientific community beyond the PHUSICOS consortium, the media and the general public. An overview of the different TGs is provided in Table 2 including links to the relevant work packages, which again reflect the PHUSICOS innovation actions. The different TGs will also be important for the PHUSICOS exploitation activities to be further developed in the Exploitation Plan (D8.6) and the Plan for mainstreaming NBSs in Europe (D8.7).

Table 2: Target groups for the PHUSICOS dissemination and communication activities and their respective links to the relevant innovation work packages (WPs).

TG	Short description	Relevant innovation WP
TG1	National, European and International administrators and policy-makers working with DRR, climate adaptation and water management	WP5: Governance innovation (particularly the through the Policy Business Forum)
TG2	Local, Regional & National practitioners and contractors responsible for implementing and managing potential NBSs	WP2: Case study sites WP6: Learning arena innovation
TG3	Private sector to include insurance, green banks and other businesses	WP5: Governance innovation
TG4	Environmental groups and other NGOs	WP3: Service innovation (particularly through participation in the Living Labs)
TG5	Academic networks working with NBS, DRR, CCA and water management to include other relevant H2020 NBS-related projects.	WP8: Dissemination and communication
TG6	Stakeholders participating in the Living Labs approach at the case study sites	WP3: Service innovation and the integration of the Living Labs in all innovation action WPs (WP4, WP5, WP6, WP7)
Media	Print media (newspapers), digital media (internet and television) and broadcast media (radio)	Cross-cutting over all WPs
Public	General public including inhabitants of the demonstrator and concept sites	WP2: Case study sites WP3: Living Labs

From each target audience, PHUSICOS will establish: (i) what needs to be done with dissemination/publicity to maximize impact, (ii) when is the most opportune timing to disseminate, and (iii) which medium or means is the most effective. A more detailed description of each target group is provided in the following chapters.

3.1 Administrators and policy-makers

PHUSICOS will benefit from inputs provided by administrators and policy-makers at the Global, European, and National levels. The Policy Business Forum (PBF) provides an important platform for interacting with this target group. The PBF will provide expertise on NBS funding and support to the demonstration and concept cases, and for proposing innovative ways to exploit opportunities and overcome barriers for implementing NBSs. Organisations that have responded positively to collaborating with PHUSICOS are listed in Table 3.

The PBS is to be established by Month 14 (M14) and activities include interviews, workshops, and e-consultations. The workshops are planned for M20, M30 and M40.

Table 3: List of organisations interested in collaborating with PHUSICOS partners in the research activities of the Policy Business Forum.

Organisation name	Short description	Level
European Commission Disaster Risk Management Knowledge Centre	European initiative on disaster risk reduction knowledge and competence management, Belgium	European
Food and Agriculture Organisation of the United Nations – Mountain partnership	United Nations partnership and international voluntary alliance protecting mountain environments, Switzerland	Global
International Centre for Integrated Mountain Development	Regional intergovernmental learning and knowledge sharing centre, Nepal	Global
Italian Department of Civil Protection	National disaster risk and emergency management agency, Italy	National
Legambiente	Nature conservation and use of natural resources NGO, Italy	Global
Munich Re	Reinsurance company, Germany	Global
Munich Climate Insurance Initiative	Innovation laboratory on climate change and insurance, Germany	Global
Norwegian Environmental Authority	National environmental agency, Norway	National
Partnership for Environment and Disaster Risk Reduction	Global alliance of UN agencies, NGOs and specialist institutes working on ecosystems for adaptation and disaster risk reduction, Switzerland	Global
Po River Basin Authority	River Basin Authority, Italy	Regional
Province of Bolzano/Bozen- Civil Protection of the Autonomous	Provincial Civil Protection Agency, Italy	Provincial /Regional
Regional Environment Agency	Coastal ecosystem and water cycle sector-Region Liguria, Italy	Regional
Swiss National Platform for Natural Hazards	Swiss extra-parliamentary commission for risk management, Switzerland	Nation
The Environment Bank	Bank supporting environmentally sustainable developments and nature based solutions, United Kingdom	Global
United Nations Office for Disaster Risk Reduction	Focal point in the United Nations system for the coordination of disaster reduction, Switzerland	Global
UNEP Inquiry into the Design of a Sustainable Financial System	Expert group on financial market policy and green financial system, Switzerland	Global
Lipu-Lega Italiana Protezione Uccelli	NGO and the Italian partner of BirdLife International	National/ Global
Partnership for Environment and Disaster Risk Reduction	Global alliance of UN agencies, NGOs and specialist institutes working on ecosystems for adaptation and disaster risk reduction, Switzerland	Global

3.2 Practitioners and contractors

The practitioners and end-user communities are central to the PHUSICOS project and provide important local knowledge and information regarding the unique challenges at each of the case study sites. Three end-user partners (local and regional authorities), representing the three demonstrator sites, are active partners in the PHUSICOS project:

- Oppland County Authority, Norway
- Serchio River Basin Authority, Italy
- The Consorcio de la Comunidad de Trabajo de los Pirineos (CTP, meaning 'Working Community of the Pyrenees'), Spain/France/Andorra

As partners in the project, they have the resources to fully participate and are active throughout the entire project. The PHUSICOS end-users as partners also initiate engagement with local, regional and perhaps national contractors for implementing and managing the NBSs. Furthermore, the end-user partners have access to a wider target audience to address the transferability of the project, relevant for other end-users at the local, national and European level. An overview of specific contractors is forthcoming during the development of PHUSICOS training programmes (project products) which will begin in Month 18.

3.3 Private sector

The innovation framework developed through PHUSICOS will enable the efficient development, technical verification and dissemination of new NBSs. As such, the framework is particularly relevant for local business and the private sector with the interest or need to develop Green Infrastructure. These new opportunities can be related to the construction and maintenance of NBSs (Eklipse, 2017) as well as to territorial growth in rural mountain areas. Job creation as a NBS co-benefit is included as one of the factors in the protocol for evaluation of the proposed NBSs to be implemented at the demonstrator and concept case sites. New job opportunities are present both in the planning, design and verification of the NBS and in the actual construction activities.

Engagement of the private sector is also relevant for governance and includes insurance, green banks and policy-related businesses. Some private sector representatives are already indicated (Table 3) and will participate in the activities of the Policy Business Forum. An overview of additional strategic contacts in the private sector is forthcoming during the capacity building activities and exploitation of key results which will begin in Month 13.

3.4 Environmental groups and other NGOs

Environmental groups and NGOs will be invited to participate in the Living Labs to be initiated at the demonstrator sites and concept cases (see Ch. 3.6). Organisations that have been indicated in preliminary project activities include:

- Environmentalist Associations (for example WWF, LiPU)
- Nature conservation NGOS
- Park and recreation Association
- Canoe Association
- Alpine Hiking Association

This list will become more complete as the Living Labs are established. Furthermore, some NGO representatives are already indicated (Table 3) and will participate in the activities of the Policy Business Forum which will begin in Month 12.

3.5 Scientific community, academic networks and clustering

PHUSICOS places strong emphasis on integrated transdisciplinary research that creates a bridge between several academic disciplines such as Disaster Risk Reduction (DRR), Climate Change and Adaptation (CCA), water management as well as NBS. The partners in PHUSICOS will continuously collaborate to create synergies with academic networks working in these disciplines, as well as other projects and initiatives of interest that might provide significant leveraging potential to PHUSICOS. Examples include:

- Oppla (<http://www.oppla.eu>) is a new knowledge marketplace with a focus on ecosystem services, natural capital and nature-based solutions. Its purpose is to share, obtain and create knowledge to better manage the environment. Oppla is an open platform for practitioners, policy makers and scientists.
- The European Climate Adaptation Platform (Climate-ADAPT, <http://climate-adapt.eea.europa.eu>) is a partnership between the European Commission (DG CLIMA, DG Joint Research Centre and other DGs) and the European Environment Agency. Climate-ADAPT is an initiative to help users access and share data and information on several aspects of climate change and adaptation strategies. The platform includes tools that support adaptation planning, case study search tool and an interactive map.
- JRC's Disaster Risk Management Knowledge Centre (<https://drmkc.jrc.ec.europa.eu/>) provides a networked approach to the science-policy interface in DRM, across the Commission, EU Member States and the DRM community within and beyond the EU. This Commission initiative builds on three main pillars of knowledge, partnership and innovation.
- PreventionWeb (<http://www.preventionweb.net>) is the leading portal for disaster reduction knowledge management and is curated by UNISDR. PreventionWeb serves the information needs of the disaster risk reduction community, including the development of information exchange tools to facilitate collaboration.
- Euromontana (<https://www.euromontana.org/en/>) is the European Association of Mountain Areas. Euromontana is the European multisectoral association for co-operation and development of mountain territories. It embraces regional and national mountain organisations throughout greater Europe, including regional development agencies, local authorities, agriculture organisations, environmental agencies, forestry organisations and research institutes. This network has a convention every two years.

- Society for Ecological Restoration (<https://www.ser.org/>) is a global community of restoration professionals that includes researchers, practitioners, decision-makers, and community leaders. SER members are actively engaged in the ecologically sensitive repair and recovery of degraded ecosystems.
- The Partnership for Environment and Disaster Risk Reduction (PEDRR, <http://pedrr.org/>) is a global alliance of UN agencies, NGOs and specialist institutes.
- NEMOR Network: Network for European Mountain Research: <http://nemor.creaf.cat/> The OPCC-CTP is member of this network and we sometimes organize events in this framework. The Network for European Mountain Research (NEMOR) is a network of institutions -public or private-undertaking research in mountain areas, who want to promote research in, and for the sustainable development of, these areas.
- UNFCCC (<https://unfccc.int/>): The United Nations Framework Convention on Climate Change (UNFCCC) and its annual Conferences of the Parties (COPs), which constitute the main decision-making body of the Convention, are the most important instrument of international cooperation in the field of tackling the impacts of climate change. During the COPs, high-levels events and side events are held.

Furthermore, continuous collaboration will be established with those projects funded under the NBS-related topics SCC-02-2016/2017, SCC-03-2016, SC5-08-2017, SC5-09-2016, and SC5-10-2016. PHUSICOS will also have regular communication with the other two projects funded under SC5-08-2017 to continuously support the operationalization of synergies. Relevant H2020 NBS-related projects include:

- CONNECTING Nature (<https://connectingnature.eu/>): Focuses on implementation of nature-based projects in urban settings. The impact of these initiatives will be measured to assess climate change adaptation, health and well-being, social cohesion and sustainable economic development in 11 European cities.
- GROWGREEN (<http://growgreenproject.eu/>): A partnership for greener cities to increase liveability, sustainability and business opportunities. GrowGreen aims to create climate and water resilient, healthy and livable cities by investing in nature-based solutions (NBS).
- UNALAB (<https://www.unalab.eu/>): UNaLab aims to develop smarter, more inclusive, more resilient and increasingly sustainable societies through innovative nature-based solutions. The UNaLab project sets out to provide a framework for future upscaling of nature-based solutions in the 7 European cities and 3 non-European cities.
- URBAN GreenUp (<http://www.urbangreenup.eu/>): aims at developing, applying and validating a methodology for Renaturing Urban Plans to mitigate the effects of climate change, improve air quality and water management and increase the sustainability of our cities through innovative nature-based solutions.
 - The Project coordinator of URBAN GreenUp is a member of the PHUSICOS External Reference Committee.

- NATURVATION (<https://naturvation.eu/>): Will develop what nature-based solutions can achieve in cities, examine how innovation can be fostered in this domain, and contribute to realising the potential of nature-based solutions for responding to urban sustainability challenges by working with communities and stakeholders.
 - Stephan Pauleit (TUM) is a member of the project Task Force consisting of Associate Partners with extensive European and international experience of developing and implementing nature-based solutions.
- Nature4cities (<https://www.nature4cities.eu/>): A comprehensive reference platform for NBSs, offering technical solutions, methods and tools to empower urban planning decision making. The platform will help addressing the contemporary environmental, social and economic challenges that face European Cities.
- NAIAD (<http://www.naiad2020.eu/>): Focuses on operationalisation of the insurance value of ecosystems for water related risk mitigation, by developing and testing concepts, tools and applications on 9 demo sites across Europe, under the common concept of Nature Based Solutions (NBS).
- ThinkNature (<https://www.think-nature.eu>) A multi-stakeholder communication platform supporting the understanding and promotion of Nature based Solutions.
- Eklipse (<http://www.eklipse-mechanism.eu/>): A knowledge and learning mechanism on biodiversity and ecosystem services. A large part of the EKLIPSE budget is made available to the wider community through open calls. EKLIPSE also conducts capacity building events.
- RECONNECT: Recently funded under SC5-08-2018.
- OPERANDUM: Recently funded under SC5-08-2018. Open air laboratories for nature based solutions to manage environmental risks.

In addition, relevant H2020 funded projects with a focus on DRR and CCA can also be a source of information and inspiration as well as a channel for broader dissemination of PHUSICOS via H2020 project events include:

- PLACARD (www.placard-network.eu/): PLACARD's (PLAtform for Climate Adaptation and Risk reDuction) mission is to be the recognised platform for dialogue, knowledge exchange, and collaboration between the Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) communities. In the large and complex landscape of stakeholder networks, research, policy initiatives, and information sources, the PLACARD interchange will enhance the coherence of and give direction to CCA and DRR research, policy and practices, strengthening cooperation and countering fragmentation between the domains.
- RESCCUE (<http://www.resccue.eu/>): (RESilience to cope with Climate Change in Urban arEas) is Europe's first large-scale innovation and resilience project to improve urban resilience: the capability of cities to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage.

- ESPRESSO (<http://www.espressoproject.eu/>): (Enhancing Synergies for disaster PREvention in the EurOpean Union) aims to contribute to a new approach to natural risk reduction and climate change adaptation.
- CLIMATEUROPE (<https://www.climateurope.eu/>): H2020 project related to climate observations, earth-system modelling and climate service activities.
- ECOPOTENTIAL (<http://www.ecopotential-project.eu/>): H2020 project for improving future ecosystem benefits through earth observations.

3.6 Stakeholders – Living Labs

Dissemination and communication activities are closely linked to PHUSICOS stakeholder engagement activities at the demonstrator and concept case study sites, which are promoted by the application of the Living Labs approach (WP3) with interfacing stakeholder participation in WP4, WP5, WP6 and WP7. The Living Labs methodology is a central feature of PHUSICOS in order to ensure a user-contribution innovation methodology. The aim is "to involve a range of committed stakeholders in real-life 'laboratory' settings to test and develop alternative solutions for complex challenges, such as climate adaptation or risk and uncertainty assessments."

Preparation of the Living Labs includes the identification of relevant stakeholders by means of a stakeholder analysis. A stakeholder is defined as any person who has a 'stake' or interest in a policy question. This is a very broad category and includes both persons involved in making a decision and those affected by it. Each of the case study sites has indicated key stakeholders and a more detailed list is forthcoming during the establishment and implementation of the Living Labs by Month 9.

3.7 Media

Project partners, especially WP leaders and case study site partners, will establish contact with journalists for local and regional news coverage in newspapers, radio and television. For example, Oppland County Authority invited a journalist to join the PHUSICOS partners during the excursion to the demonstrator site at Gudbrandsdalen in May 2018. An article was published in the local newspaper (Appendix C).

The Project Coordinator will write a press release for significant project developments and outcomes that will be available to all partners for translation to the local language. This can include PHUSICOS's participation in global clustering events as well as announcing the release of project products during the last two years of the project.

3.8 General public

Communication is also essential to inform non-specialists. PHUSICOS will therefore also direct its communication activities towards the general public, including inhabitants and young students living near the demonstration and concept sites. Specifically, the local community will be invited to join six site visits at each of the five case study sites.

The site visits will showcase the NBSs and provide an informal platform for sharing knowledge and memory as well as societal awareness of building with nature. PHUSICOS also aims to involve citizens in the Living Labs at each of the case study sites (Ch 3.6).

4 Activities and communication channels

PHUSICOS has identified multiple communication channels to promote project activities and disseminate project results. These includes the project website, social networks, production of dissemination products, as well as the planning and execution of outreach events. Furthermore, participation at conferences and clustering activities and publishing scientific results will also be prioritised. An overview of these communication channels and dissemination activities is provided in Table 4, with additional details included in the subsequent chapters.

Table 4: Summary of communication channels and dissemination activities for target groups (TG) and expected impact.

Activity	Description	TG	Expected impact
Website	External dissemination of the project structure, news and key research findings for engagement of the wider public in the form of downloadable newsletter, brochures, posters and publicly available research reports.	TG1- TG6	PHUSICOS project legacy (the website will be maintained for 10 years) and ensuring project outcomes are widely available.
Multi-lingual brochures and posters	Well designed, high quality and multilingual story of the PHUSICOS project, its goals and what is to be accomplished to showcase nature-inspired solutions. Target for local users.	TG2, TG4, TG6	Inspire broad stakeholder participation and interest in NBSs.
Newsletters	Biannual newsletters (in English) to highlight innovation actions (WPs) and the case study sites.	TG2, TG5	Communicate ideas for broader publication in ECs research magazines.
Policy briefs	Minimum of 2 policy briefs related to Governance innovation (WP5) to summarise the best available evidence of NBS, potential barriers to implementing these solutions and strategies for addressing these barriers.	TG1, TG3	Influencing attitudes of policy-makers and insurance agencies for the implementation of NBSs
Social media presence (Twitter, Facebook, LinkedIn)	A PHUSICOS account is established on Twitter with the aim of each partner submitting one 'tweet' a month to generate activity. PHUSICOS will also be exploited via each partner's established Facebook and LinkedIn profiles.	TG1- TG6	Ensure broad dissemination of PHUSICOS, especially with individuals not previously identified within the TGs.

Blogging	Expert partners are registered to contribute articles to the JRC Disaster Risk Management Knowledge Centre and UNISDR's PreventionWeb	TG1, TG5	Knowledge exchange between science and policy to improve confidence in and use of NBSs.
Stakeholder integration workshops	Three stakeholder integration workshops are planned, one at each of the three demonstrator case study sites and in conjunction with consortium meetings.	TG2, TG3, TG4, TG6	Increase knowledge of NBSs and support multi-stakeholder dialogue to solidify long-term stakeholder relationships.
European multiplier seminars	Two European multiplier seminars convening representatives from relevant policy networks to be organised in months 24 and 36, to introduce the outputs of the project and encourage the implementation of NBS in Europe.	TG1	Influencing attitudes of policy-makers for the implementation of NBSs.
Policy Business Forum workshops	The PBF members will be involved in interviews, e-consultations, and three workshops.	TG1, TG3, TG4	Strengthen the science-policy-business nexus.
Final international conference	Public Conference at the end of the project (M46) to disseminate the PHUSICOS findings.	TG1-TG6	Ensure broad dissemination of PHUSICOS and increase confidence for NBS proof-of-concept.
Site visits to demonstrator sites and concept cases	End-user partners and primary case study site partners will take the lead to invite interested parties (local, regional, national and European) to visit their site, showcasing locally implemented NBSs.	TG1-TG6	Increase knowledge of and generate enthusiasm for NBSs and their upscaling throughout Europe.
Participation conferences, workshops and events	Presentations and posters to promote the results of PHUSICOS at European and International conferences as well as events requested by the Commission.	TG1, TG5	Contribute to scientific excellence.
Scientific papers	Minimum submission of 2 open access peer reviewed papers per WP (12). Special attention will be paid to collaborative papers to high impact internationally peer-reviewed journals.	TG5	Contribute to scientific excellence and ensure PHUSICOS legacy.

4.1 PHUSICOS website

The PHUSICOS website (www.phusicos.eu) will contribute to the communication and dissemination of PHUSICOS and will be maintained for at least 10 years after project completion. From the PHUSICOS homepage (Figure 2) it is possible to navigate to additional pages for more detailed information about the project with some pages including several content blocks:

- About
- Case studies
- Publications/Results
- News

The website will be actively updated throughout the duration of the project, particularly through the 'News' content page, which will be used to announce events and activities that take place. Furthermore, all publicly available materials will be available on this website and will be downloadable, including deliverables, reports, and newsletters.

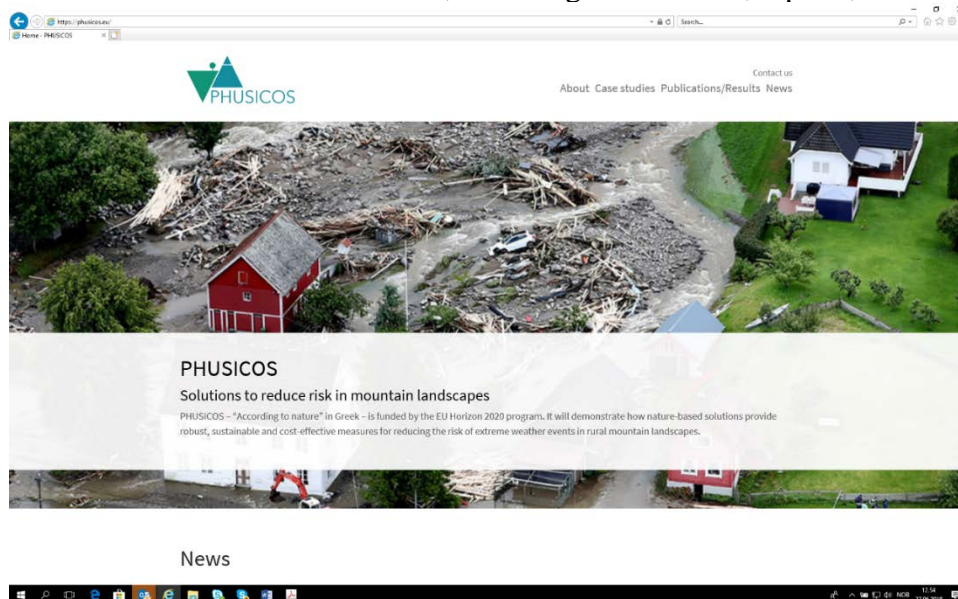


Figure 2: Screen shot of the PHUSICOS website (www.phusicos.eu).

4.2 Multi-lingual brochures and posters

Further to communication channels, PHUSICOS will produce relevant dissemination products with brochures and posters providing a presentation of the project in each partner's native language.

4.3 Newsletters

An electronic newsletter will be produced every 6 months (in English), containing information on project activities and other relevant news. The newsletters will be available on the website and will also be distributed to those who have indicated an

interest in the project. The first newsletter will give the introduction on the project. Subsequent newsletters will highlight innovation actions (WPs) and the case study sites.

4.4 Policy briefs

The development of policy briefs by the PHUSICOS partners will disseminate the project outcomes and results to policy makers to transform results into policy priorities of the political agenda in relation to the implementation of nature based solutions. A minimum of 2 policy briefs will be produced to highlight the outcomes of Governance innovation (WP5). The publications will be short, concise, and will present the PHUSICOS relevant findings in an engaging and convincing manner.

4.5 Social media presence

Social media will be used for announcing news, key findings, events and project outcomes. A PHUSICOS account (@phusicos) will be established on Twitter. The goal is to have each partner write one 'tweet' each month to generate activity. The 'tweet' should be tagged with the #PHUSICOS for easy identification and subsequent retweet by the PHUSICOS handle. Project announcements will also be made available for communication via each partner's established Facebook, LinkedIn and Instagram profiles. Table 5 provides an overview over the PHUSICOS partner Twitter handles that will be used to communicate about the project. Social media channels that are most actively used by each partner are also indicated.

Table 5: PHUSICOS partners and their Twitter handle and their social media channels that are actively used indicated with an X.

Partner	Twitter handle*	LinkedIn	Facebook	Instagram
NGI	@InfoNGI	X	X	
UNINA	@Phusicos_U	X	X	
TUM	@tu_muenchen @Landschaft.plus		X	X
BRGM	@BRGM_fr	X		
UNISI-CGT	@CGTH2020		X	X
RD	@risquesetdev	X	X	X
IIASA	@IIASAVienna	X	X	
ETHZ	@AnnaScolobig	X	X	
UNIVIE	@KrauchaarSabine		X	
Oppland	@Opplandfylke		X	
CTP/OPCC	@opcc_ctp	X	X	
ADBS	@ndelseppia		X	
CREAF	@CREAF_ecologia		X	X
PLUS	@rr_junker		X	
Agence Ter	@AgenceTerTeam		X	

* For some partners, an individual will be responsible for providing PHUSICOS 'tweets' rather than from the official partner Twitter account.

4.6 Blogging

Expert partners are registered to contribute articles to the JRC Disaster Risk Management Knowledge Centre and UNISDR's PreventionWeb.

Other proper fora for blogging will be identified as the project proceeds.

4.7 Outreach events

Internal project workshops and seminars include:

- Stakeholder integration workshops: Three stakeholder integration workshops are planned, one at each of the three demonstrator case study sites and in conjunction with consortium meetings and invitation of the PHUSICOS External Reference Committee (PERC). Dynamic workshops methods will be utilised to engage participants (e.g. invited speakers for storytelling, photo posters to ignite dialogue, group excursion with local guide).
- European multiplier seminars: Two European multiplier seminars convening representatives from relevant policy networks to be organised in Month 24 and Month 36, to introduce the outputs of the project and encourage the implementation of NBS across Europe. The seminars will be organised in collaboration with established platforms (e.g. European Climate Change Adaptation Conference (ECCA), Partnership for Environment and Disaster Risk Reduction (PEDRR)).
- Policy Business Forum workshops: The PBF members will be involved in interviews, e-consultations, and three workshops. Themes of the PBF workshops include: i) Why do we need NBS?, ii) How do we implement NBS?, and iii) How can we improve legislation, policy and implementation of nature based solutions?
- Final international conference: Public Conference at the end of the project (M46) to disseminate the PHUSICOS findings. Open event and all stakeholders who have contributed to the project will be personally invited to attend. This event will be run in conjunction with UNISDR and collaboration with additional projects funded under the call will be explored.
- Site visits to demonstrator sites and concept cases.

4.8 External conferences and events

The project partners have conducted an event mapping exercise to identify participation at important conferences, workshops and events. An ongoing list is provided below emphasizing International and European conferences. Although not specified here, it is anticipated that partners will also participate in relevant national conferences and local events. Partners that attend and present at conferences will report on their experiences by providing content to the PHUSICOS web-page as a news event that will also be available for further communication via social media.

PHUSICOS will also expose its results on the broad international platforms Future Earth (<http://futureearth.org/>) and the non-profit TED (<https://www.ted.com>). Future Earth will help accelerate the result of PHUSICOS demonstrations becoming international (e.g. within the United Nations' Sustainable Development Goals and climate and biodiversity agreements (United Nations Framework Convention on Climate Change and the Convention on Biological Diversity). TED will spread PHUSICOS' successes with NBSs to a worldwide audience.

Ongoing list of potential International and European conferences and events:

- Biennial Adaptation Futures conference of the Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA). The last conference was held in Cape Town, South Africa and PHUSICOS was invited to give a pitch at the EU stand (<https://adaptationfutures2018.capetown/>).
- International Union for Conservation of Nature (IUCN) World Conservation Congress is held once every four years and the IUCN (<https://www.iucn.org/about/world-conservation-congress>) and brings together several thousand leaders and decision-makers from government, civil society, indigenous peoples, business, and academia, with the goal of conserving the environment and harnessing the solutions nature offers to global challenges. IUCN has led the way with nature-based solutions and NBS events are expected to take place at the next Congress (next IUCN World Conservation Congress June 11-19, 2020 in Marseille, France).
- International Association for Landscape Ecology (IALE) holds a world congress every four years and the IALE (<https://www.landscape-ecology.org/home.html>) aims to develop landscape ecology as the scientific basis for the analysis, planning and management of the landscapes of the world. The next World Congress is July 1-5, 2019 in Milan, Italy. The theme is "Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology." European and national IALE chapters also hold conferences: IALE Europe, IALE Germany (annual conferences next edition September 5-7, 2018 Hannover), IALE UK (annual conferences, not determined yet).
- The International Mountain Conference (IMC) is held every four years and focuses on evaluating the responses of mountains to climate change, and their resilience as social-ecological systems. The IMC 2019 (<https://www.uibk.ac.at/congress/imc2019/index.html.en>) aims to encourage in-depth cross-disciplinary discussions towards a new understanding of mountain systems, their responses and resiliencies (next edition September 8-12, 2019 in Innsbruck, Austria).
- International Congress on Environmental Geotechnics is held every four years (<http://www.iceg2018.com/>) (next edition on October 28th- November 1st, 2018, Hangzhou, China).
- International Conference on Natural Hazards and Infrastructure, was first held in 2016 and will be held for the second time in 2019 to further the concept of Infrastructure Resilience and challenge the currently well understood that

- protection against extreme events is not served by the “stronger is better” (<https://iconhic.com/2019/>) (next edition on June 23-2, in Chania, Greece).
- Biennial European Climate Change Adaptation (ECCA) conference is convened by EU-funded projects on behalf of the European Commission (next edition on May 28–31, 2019, Lisbon, Portugal, <https://www.ecca2019.eu/>).
 - Biennial European Ecosystem Services Partnership (ESP) Regional Conference. ESP is a worldwide network to enhance the science, policy and practice of ecosystem services for conservation and sustainable development (next edition on October 15th-19th, 2018, San Sebastian, Spain).
 - Biennial International Association for Hydro-Environment Engineering and Research (IAHR) World Congress (next edition on September 1st-6th, 2019, Panama City, Panama)
 - Biennial International Association for Hydro-Environment Engineering and Research (IAHR) Europe Congress (next edition on June 30th - July 2nd, 2020, Warsaw, Poland)
 - Biennial Permanent Conferences on Rural Spaces in Europe (PECSRL, <http://www.pecsrl.org/>), (next edition September 3-7, 2018, Clermond-Ferrand, France).
 - Biennial River Flow International Conference (next edition on September 5th - 8th, 2018, Lyon-Villeurbanne, France)
 - Biennial Understanding Risk (UR) Forum (<https://understandrisk.org/>): The UR community convenes for five-day events that highlight best practices, facilitate non-traditional partnerships and showcase the latest technical know-how in disaster risk identification A collaborative global community for disaster risk identification initiated by GFDRR.
 - Annual European Council of Landscape Architect Schools (ECLAS) conferences (<http://eclas.org/index.php/activities>).
 - Annual European Geosciences Union (EGU) General Assembly (next edition on April 7th-12th, 2019, Vienna, Austria)
 - Annual ICSSPN 2019: 21st International Conference on Soil Science and Plant Nutrition (ICSSPN) (<https://waset.org/conference/2019/01/paris/ICSSPN>) (next edition January 24-25, 2019 in Paris, France.
 - Annual International Association for Critical Realism (IACR) Conference (<http://criticalrealismblog.blogspot.com/>) (next edition to focus on Sustainability, Interdisciplinarity and Transformative Change, 29-31 august, 2018, Lillehammer, Norway).
 - Annual International Conference on Building Resilience (next edition on November 14-16, 2018, Lisbon, Portugal)
 - Annual International Conference on Natural Hazards and Risk Reduction (ICNHRR) (<https://waset.org/conference/2019/05/rome/ICNHRR>) (next edition May 2-3, 2019, Rome, Italy)
 - Annual International Disaster and Risk Conference (IDRC) (next edition on August 26th- 30th, 2018, Davos, Switzerland)
 - Annual International Federation of Landscape Architects (IFLA, <http://iflaonline.org/>) World Congress (next edition to be held July 18-22 in

Singapore with the World Congress in 2019 to be held September 18-20 in Oslo, Norway). European IFLA also holds events in Europe.

- Annual Meeting of the European Environment Information and Observation Network (EIONET, <https://www.eionet.europa.eu/>). The OPCC-CTP participates every year in June, in Copenhagen, Denmark.
- Annual Open Living Lab Days of the European Network of Living Labs (ENoLL) (next edition on 22nd-24th August, 2018, Geneva, Switzerland)
- Annual World Congress on Climate Change and Global Warming (next edition on August 6th-7th, 2018, Osaka, Japan)
- Annual World Congress on Environment Management (next edition on July 6th-7th, 2018, New Delhi, India)
- Assembly of European Regions (<https://aer.eu/>) holds events multiples times throughout the year. The AER aims to promoting regional interests in Europe and beyond as well as foster interregional cooperation to promote the exchange of experience and the development of regional policy. As such, AER is an important innovation network for PHUSICOS (next edition on 25-27 September 2018, Vojvodina, Serbia).
- SER Europe Conference 2018. Restoration in the Era of Climate Change. 9 – 13 September 2018 in Reykjavik, Iceland (<https://sere2018.org/>)
- SER Australasia Conference 2018. Striving for restoration excellence. 25-28 September 2018 in Brisbane (<https://www.sera2018.org/>)
- International Conference on "Natural Hazards and Risks in a Changing World", University of Potsdam from 4-5 October 2018 (<https://www.uni-potsdam.de/en/natriskchange/activities/internationalnatriskchangeconference2018.html>)
- IAEG Congress - Engineering Geology for a Sustainable World (<http://iaeg.info/events/congresses/xiii-iaeg-congress-engineering-geology-for-a-sustainable-world/>) (next edition on September 17th - 21st, San Francisco, California).

4.9 Scientific papers

Papers in scientific journals are important tools for knowledge sharing. To reach a wider audience, we aim to submit papers in scientific, sector/trade, national and in-house publications. To meet the EU H2020 requirements for open knowledge, all peer-reviewed publications generated in PHUSICOS will be provided in Open Access (OA). PHUSICOS aims for a minimum submission of 2 open access, peer-reviewed papers per technical work package (total of 12 papers).

Potential International journals for future publications include:

- Applied Sciences (Open Access; MDPI; ISSN 2076-3417; CODEN: ASPCC7)
- Canadian Geotechnical Journal (ISSN: 0008-3674, E-ISSN: 1208-6010)
- Catena (Open Access; MDPI; ISSN: 0341-8162)

- Catena, An Interdisciplinary Journal of Soil Science - Hydrology - Geomorphology focusing on Geoecology and Landscape Evolution (supports Open Access, ISSN: 0341-8162): <https://www.journals.elsevier.com/catena>.
- Clean Technologies (Open Access; MDPI; ISSN 2571-8797)
- Climate (Open Access; MDPI; ISSN 2225-1154; CODEN: CLIMC9)
- Conservation Biology (Wiley; Open Access Option; Online ISSN:1523-1739): <https://onlinelibrary.wiley.com/journal/15231739>
- Eco.Mont. – Journal on Protected Mountain Areas Research and Management ISSN 2073-106X print version, ISSN 2073-1558 online version (open access)
- Ecological Applications (Wiley; Open Access Option; Online ISSN: 1939-5582): <https://esajournals.onlinelibrary.wiley.com/journal/19395582>.
- Ecology & Society (Open Access for all content): <https://www.ecologyandsociety.org/>.
- Engineering Geology (Open access; MDPI; ISSN: 0013-7952)
- Environmental Science & Technology (Open Access Option; ACS publications, Web Edition ISSN: 1520-5851): <https://pubs.acs.org/journal/esthag>.
- Environmental Science and Policy (Open Access Option; Elsevier; ISSN: 1462-9011): <https://www.journals.elsevier.com/environmental-science-and-policy/>.
- Environmental Systems Research (Springer Nature; Open Access, ISSN: 2193-2697):<https://www.springer.com/environment/monitoring+-+environmental+analysis/journal/40068>
- Environments (Open Access; MDPI; ISSN 2076-3298)
- European Planning Studies (Open Access Option): <https://www.tandfonline.com/toc/ceps20/current>.
- Forest Ecology and management (Gold Open Access Option; ISSN: 0378-1127): <https://www.journals.elsevier.com/forest-ecology-and-management>.
- Geofluids (Open Access, Hindawi, ISSN: 1468-8123 E-ISSN: 1468-8115)
- GeoHazards (Open Access; MDPI; ISSN 2624-795X)
- Géotechnique (Open Access Option, ICE Virtual Library, ISSN: 0016-8505, E-ISSN 1751-7656)
- Hydrogeology Journal (Open Access Option, Springer; ISSN: 1435-0157 - electronic version)
- Hydrology (Open Access; MDPI; ISSN 2306-5338)
- Integrated Environmental Assessment and Management (Open Access Option; Wiley; Online ISSN:1551-3793): <https://setac.onlinelibrary.wiley.com/journal/15513793>.
- International Journal of Coal Science and Technology (Open Access; Springer; ISSN 2095-8293)
- International Journal of Disaster Risk Reduction (Open access, Elsevier, ISSN: 2212-4209)
- International Journal of Energy and Environmental Engineering (Open Access; Springer; ISSN 2251-6832)
- International Journal of Engineering Science (Open Access Option; Elsevier; ISSN: 0020-7225): <https://www.journals.elsevier.com/international-journal-of-engineering-science>.

- Journal of Applied Ecology (Open Access Option; Wiley; Online ISSN: 1365-2664): <https://besjournals.onlinelibrary.wiley.com/journal/13652664>.
- Journal of Ecology (Open Access Option; Wiley; Online ISSN: 1365-2745): <https://besjournals.onlinelibrary.wiley.com/journal/13652745>.
- Journal of Environmental Management (Gold Open Access Option; Elsevier; ISSN 0301-4797)
- Journal of Environmental Planning & Management (Open Access Option): <https://www.tandfonline.com/toc/cjep20/current#>.
- Journal of Flood Risk Management (Open Access Option; Wiley Online Library; Online ISSN: 1753-318X)
- Journal of Geochemical Exploration (Open Access Option, Elsevier, ISSN: 0375-6742)
- Journal of Hydro-Environment Research (Gold Open Access Option; Elsevier; ISSN 1570-6443)
- Journal of Water and Land Development (Open Access; Polish Academy of Sciences; ISSN 2083-4535)
- Land Use Policy (Open Access Option; Elsevier; ISSN: 0264-8377): <https://www.journals.elsevier.com/land-use-policy/>.
- Landscape and Urban Planning (Open Access Option; Elsevier; ISSN: 0169-2046): <https://www.journals.elsevier.com/landscape-and-urban-planning/>.
- Landslides (Open Access Option; Springer; ISSN 1612-5118)
- Natural Hazards (Open Access Option; Springer; ISSN: 1573-0840)
- Natural hazards (Open access, Springer, ISSN: 0921-030X (Print) 1573-0840 (Online))
- Nature Sustainability (Open access, Nature, ISSN:2398-9629)
- Resources (Open Access; MDPI; ISSN 2079-9276)
- Restoration Ecology (Open Access Option; Wiley; Online ISSN:1526-100X): <https://onlinelibrary.wiley.com/journal/1526100x>.
- Science of the Total Environment (Open Access Option, Elsevier, ISSN: 0048-9697E-ISSN: 1879-1026)
- Soil Biology & Biochemistry (supports Open Access; ISSN: 0038-0717): <https://www.journals.elsevier.com/soil-biology-and-biochemistry>.
- Sustainability (Open Access; MDPI; ISSN 2071-1050; CODEN: SUSTDE)
- TOPOS Magazine (International review of landscape architecture and urban design): <https://www.toposmagazine.com/>.
- Water (Open Access; MDPI; ISSN 2073-4441; CODEN: WATEGH)
- Water Resources Management (Open Access Option; Springer; ISSN (electronic version): 1573-1650)

5 References

EC (2018): H2020 Guidance — Social media guide for EU funded R&I projects. v1.0 dated 06.04.2018.

EKLIPSE (2017): An Impact Evaluation Framework to Support Planning and Evaluation of Nature-based Solutions Projects. Report prepared by the EKLIPSE Expert Working Group on Nature-based Solutions to Promote Climate Resilience in Urban Areas Centre for Ecology & Hydrology, Wallingford, United Kingdom.

Appendix A

Standard acknowledgement slide for presentations

Contents

A1 Presentation slide of partners and EU H2020 funding information Error! Bookmark not defined.

A1 Presentation slide of partners and EU H2020 funding information



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 776681



Figure 1: PHUSICOS acknowledgement figure to be included as last slide in Powerpoint presentations.

Appendix B

Poster presentation template

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B1 PHUSICOS poster template




PHUSICOS – Nature based solutions to reduce risk in mountain landscapes

Wei Liu (IIASA, Austria; liuw@iiasa.ac.at), Joanne Bayer (IIASA, Austria; bayer@iiasa.ac.at)
Amy Oen (NGI, Norway; amy.oen@ngi.no), Bjørn Kalsnes (NGI, Norway; bjorn.kalsnes@ngi.no)

Project aim

The main objective is to demonstrate that nature-based/nature-inspired solutions for reducing the risk of extreme weather events in particularly vulnerable areas such as rural mountain landscapes, are technically viable, cost-effective and implementable at regional scale. Furthermore, they increase the ecological, social and economic resilience of local communities.

Toolbox of NBS measures

The methodology for implementing PHUSICOS' multiple layers of innovation is illustrated below.

- Engage a diverse range of stakeholders through a Living Labs approach
- Design a comprehensive framework for comparative analysis to evaluate the performance of NBSs
- Explore ways to enhance the effectiveness of NBSs using planning and policy mechanisms for sustainable management of land, water, and natural resources
- Create a knowledge co-generation platform using learning arena innovation
- Establish a comprehensive state-of-the-art evidence-base and data platform

Service Innovation: multi-stakeholder participation	Living Labs: stakeholders' engagement plan, workshops, forums
Technical Innovation: comprehensive framework	Governance Innovation: planning and policy
NBS performance assessment, monitoring, applicability evaluation	Policy and regulatory opportunities and barriers
Learning arena Innovation: knowledge exchange and training	Market deployment, serious game simulations and courses
Product innovation: evidence base and data platform	Market deployment, web-based tool, best practices and upscaling potential

Conceptual model with multiple levels of innovation: green process-related activities and grey marketable products.




The Valley of Gudbrandsdalen, Norwegian demonstrator site. Flooding of agricultural land (left) and mass gravity flows (right) due to extreme weather events.

Valley of Gudbrandsdalen, Norway
Flooding, landslides and debris flows

Isar River Basin, Germany
Flooding and erosion

Kaunertal Valley, Austria
Landslides, rockfall and debris flows

Serchio River Basin, Italy
Extreme drought and flooding

The Pyrenees, Spain-Franco-Andorra
Landslides, rock falls and flash floods



Hazard potential

Kaunertal Valley, Austrian concept case. View of the Gepatschferner glacier and partly vegetated lateral moraines on both valley sides with linear erosion features (Sabine Kraushaar 2012).

Location of the three large-scale demonstrator sites (stars) and concept sites (circles) in Europe, hazard potential indicated from low (green) to high (red).




Isar River Restoration, German concept case (Aude Zingraff-Hamed, May 2015).

The Pyrenees demonstrator site. Photos from Bareges after the flood in June 2013.

Challenges

Extreme weather events in mountain areas trigger flooding and landslides and often affect entire river basins and pose a risk to local communities, infrastructure and ecosystems. However, rural mountainous regions do not receive same attention as urban areas and coastal regions.

Contact information

More information about the PHUSICOS project can be found at our website: www.phusicos.eu

Visit us on Twitter: @PHUSICOS

If you have any questions or comments, please contact NGI, the PHUSICOS project coordinator.

Partners:



























This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 776681.



Figure 1: PHUSICOS poster template that can be tailored for content and conference.

Appendix C

Local newspaper article on Gudbrandsdalen

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C1 Example of PHUSICOS in the local newspaper

4 TORS DAG 21. JUNI 2018 DØLEN

● Har fått millionar til å studere naturbasert flaumforbygging

Skal prøvast ut i dalen

Forskarar frå heile Europa kom førre torsdag til synfaring i Kvam, for å sjå løysingane for flaumsikring i Veikleåa.

Synfaringa er ein del av eit EU-finansiert forskings- og innovasjonsprosjekt, Phusicos, med kostnadsramme på omlag 100 millionar kroner. Prosjektet skal jobbe med meir naturbaserte løysingar, for å redusere til dømes flaumskader og andre skader av ekstremvær.

Kva er naturbaserte løysingar?
Grønn-blå løysingar, naturbaserte løysingar, naturlege tiltak. Desse omgrepa svirva i lufta under befaringa, men kva betyr det konkret?
Amy Oen frå Norges geotekniske institutt er prosjektleiar, og freistar å forklare kva ein meiner.

Til dømes kan ein seie at steinsettinga nedover i elva her, der ein dempar energien på vatnet, er ei naturbasert løysing. Ein kunne gjort det ennå betre, ved å ta omsyn til det opphavlege elveleiet, slik at det er naturen som set premissa, i utgangspunktet. Og så legg også forvaltning inne i naturbaserte løysingar, seier Oen.

Utvald område
Gudbrandsdalen er ein såkalla demonstrasjons-site i prosjektet, saman med elvar i både i Italia og Pyreneene. Desse tre, saman to mindre omfattande demonstrasjonsstader, kjem inn under det same prosjektet. Kvar i Gudbrandsdalen ein landar eit konkret prosjekt er ikkje bestemt, men det er sett til den nyleg vedtekte Regional plan for Gudbrandsdalslågen og sidevassdrag.

Veikleåen
Tanken er at nye innovative måter å avgrense skadeflaumfanget ved flaum og ras kan koma til nytte andre stader, dersom ein lykkast med eit prosjekt med utgangspunkt i Gudbrandsdalslågen, seier Oen.

NVE, som står bak botnløstsperrane i Kvam, presenterte eit eksempel på ei såkalla grå løysing, eller tradisjonell ingeniørløysing, men nokre av deltakarane tykte den var relativt lite ingripande i naturen, samlikna med løysningar som har vore brukte andre stader.

– Målsettinga med prosjektet er å jobbe på naturlege premisar, og finne løysingar som er effektive og gir inn i landskapet på ein naturleg måte, med

an ein tek vare på det biologiske mangefaldet, heiter det hjå Oppland fylkeskommune, om Phusicos.

Området er på 7x8 meter inne på eksisterande gravplass, på eit felt som ikkje tidlegare er målt opp til graver. I minnelunden skal det berre vere moglege å sette ned urner, ikkje kister. Til saman vil det bli plass til 180 urner. Nord-Fron kommune skal, som helsefagleg myndigheit, uttale seg i saka. Leiar i soknerådet i Skåbu, Uln Bøyum Kluge, skriv til kommunen at det ennå er liten interesse for kremasjon i Skåbu, men at den er aukande, og vil vere det i mange år framover.

TOMÉ SIDSEL SANDEN
tone@dolen.no

KVAM: Løysingane i Veikleåen i Kvam er meir tradisjonelle ingeniørløysingar enn det Phusicos-prosjektet skal undersøkje mogleghetene for, i nedslagsfeltet til Gudbrandsdalslågen. EU har låyd 100 millionar kroner, til tre store og to mindre stader, der Laugen er ein av stadene. Turid Wulff Knutsen frå Oppland fylkeskommune og prosjektleiar Amy Oen ved nedre botnløstsperra i Kvam. FOTO: GURD VOLLEN

BEFARING: Forskarar frå Europa i Kvam for å sjå arbeidet NVE har gjort for å sikre bygda mot nye skadeflaumar. Her forklarar NVEs Grete Aaletad konstruksjonen for prosjektleiar Amy Oen. FOTO: GURD VOLLEN

NYTT: Ein EU-rapport fins, om bruk av naturbaserte løysingar. Den viser ca. 150 eksempel, der berre eitt var frå fjellområde. Det gjer at Gudbrandsdalen er nytt terreng for ei slik tinsærming. FOTO: GURD VOLLEN

GURD VOLLEN
gurd@dolen.no

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Vil ha minnelund på Skåbu kyrkjegard
Skåbu sokneråd har bedt Hamar Bispedømme om å få etablere ein namna minnelund.

Figure 1: PHUSICOS article published June 21, 2018 in Dølen, the local newspaper for the municipality of Nord-Fron in Oppland, Norway.