



## BOOK OF ABSTRACTS

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### I. SESSION DESCRIPTION

**ID: T14c**

Barriers and success factors for the application of ecosystem services in decision-making

**Hosts:**

	Title	Name	Organisation	E-mail
<b>Host:</b>		Martina Paulin	National Institute for Public Health and the Environment (RIVM)	<a href="mailto:martina.paulin@rivm.nl">martina.paulin@rivm.nl</a>
<b>Co-host(s):</b>		Niels Schoffelen	National Institute for Public Health and the Environment (RIVM)	<a href="mailto:niels.schoffelen@rivm.nl">niels.schoffelen@rivm.nl</a>
		Clara Veerkamp	Netherlands Environmental Assessment Agency (PBL)	<a href="mailto:clara.veerkamp@pbl.nl">clara.veerkamp@pbl.nl</a>
		Bart de Knegt	Wageningen Environmental Research (WENR)	<a href="mailto:bart.deknegt@wur.nl">bart.deknegt@wur.nl</a>
		Alexandra Marques	Netherlands Environmental Assessment Agency (PBL)	<a href="mailto:alexandra.marques@pbl.nl">alexandra.marques@pbl.nl</a>
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**Abstract:**

Since the publication of the Millennium Ecosystem Assessment (MA, 2005), the ecosystem services framework has been presented as promising to address in a coordinated manner the urgent need to integrate nature's contributions to people into policy and decision-making. This is necessary to prevent the occurrence of tipping points and the deterioration of human quality of life. In the years ensuing the publication of the MA, significant scientific progress has been made in the conceptualization and operationalization of ecosystem services to facilitate their assessment and support the spatio-temporal comparability of assessment results. Despite advances in the scientific realm, mainstreaming the ES framework and integrating it into policy and practice remains a challenge. As a result, ecosystem services and biodiversity are not sufficiently taken into account within policy- and decision-making, which hinders the achievement of EU and internationally agreed



sustainability goals (e.g. Aichi Biodiversity Goals, Water Framework Directive, Habitats Directive, Sustainable Development Goals) and the nature inclusiveness agenda.

The aim of this session is to bring together the experiences of both scientists and policy makers to learn and reflect on how the ecosystem services framework can be successfully integrated into policy and decision-making to address pressing societal challenges (e.g. climate change, pollution, biodiversity loss). To achieve this goal, the session will be divided into two parts. In the first part, participants are encouraged to present case studies assessing ecosystem services to inform/support policies and decisions in various contexts. Presentations/pitches should highlight examples of success stories or failures of scientists and practitioners, aimed at informing policy and decision-making. In the second part of the session, we will discuss and collect factors that make the process a success or a failure from the point of view of both scientists and practitioners.

#### Goals and objectives of the session:

The aim of this session is to bring together the experiences of scientists and practitioners to enhance the successful application of the ecosystem services framework within policy and decision making addressing pressing societal challenges (e.g. climate change, pollution, biodiversity loss).

#### Planned output / Deliverables:

In this session, presentations will be given by hosts and participants. The expected output, which will be obtained during the discussion part of this session, consists of an inventory of the success factors and barriers to the application of ecosystem services to support strategic policy development and decision making. Depending on the quantity and quality of the output, we would like to write a publication that reflects on this output.

#### Session format:

Other (Combined standard session (presentation) and discussion forum)

#### Voluntary contributions accepted:

Yes, I allow any abstract to be submitted to my session for review

#### Related to ESP Working Group/National Network:

[Thematic Working Groups: TWG 14 – Application of ES in Planning & Management](#)



## II. SESSION PROGRAM

**Date of session:** Tuesday September 11, 2022

**Time of session:** 13.30 - 15.30

### Timetable speakers

Time	First name	Surname	Organization	Title of presentation
13.30				Introduction
13.35	Jan	Daněk	Global Change Research Institute of the Czech Academy of Sciences & Charles University	Multistakeholder perspectives on barriers and potential success factors for implementation of the ecosystem services framework in the Czech Republic
13.45	Anabela Salvado	Paula	Centre for Functional Ecology – Science for People and the Planet (CFE), TERRA Associate Laboratory, Department of Life Sciences, University of Coimbra	Co–design solutions for rural areas’ development based on agriculture and forestry Ecosystem Services framework
13.55	Tin–Yu	Lai	Finnish Environment Institute	Co–creating Urban Ecosystem Accounting: a case study of Tampere, Finland
14.05	Maria	Haensel	University of Bayreuth, Bayreuth Center of Ecology and Environmental Research (BayCEER)	Do grassland policies reflect grassland ecosystem services? Tracking 20 years of legal changes for the European Union, Germany, and the State of Bavaria.



Time	First name	Surname	Organization	Title of presentation
14.15	Stefano Davide	Murgese	SEAcop STP	A scientifically-based cultural model of ecosystem services management for the definition of natural risk reduction and climate change adaptation policies.
14.25	Aija	Peršēvica	Association Baltic Coasts	Assessment of ecosystem services in Latvia
14.35	Marcin	Spyra	Opole University of Technology (PL) and Martin- Luther- University (DE)	Governance and planning for reducing ecosystem services trade-offs in peri-urban landscapes
14.45	Phyllis B.	Posy	Posy Global	Achieving Coherence: Advancing ES considerations in understanding long term consequences of Freshwater restoration success
14.55	Martina	Paulin	National Institute for Public Health and the Environment (RIVM) – Netherlands	Social cost-benefit analysis: Application of pressure drainage in the Alblasserwaard-Vijfheerenlanden, the Netherlands
15.05	Alessandra	La Notte	Joint Research Centre of the European Commission	Ecosystem Services based approaches in Natural Capital Accounting – The experience of scaling down complexity without overlooking the key elements
15.15				Discussion



**Date of session:** Tuesday September 11, 2022

**Time of session:** 16.00 – 17.30

	Martina	Paulin	National Institute for Public Health and the Environment (RIVM) – Netherlands	
	Niels	Schoffelen	National Institute for Public Health and the Environment (RIVM) – Netherlands	
16:00	Alessandra	La Notte	Joint Research Centre – European Commission	Workshop
	Alexandra	Marques	Netherlands Environmental Assessment Agency (PBL)	
	Clara	Veerkamp	Netherlands Environmental Assessment Agency (PBL)	
	Bart	De Knegt	Wageningen University & Research (WUR)	

### III. ABSTRACTS

*Abstracts are ordered based on the session program. The first author is the presenting author unless indicated otherwise.*



*1. Type of submission: Abstract*

T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making

Governance and planning for reducing ecosystem services trade-offs in peri-urban landscapes

*Presenting author: Marcin Spyra*

*Other author(s): Nica Claudia Calò, Guillermo Martinez Pastur*

*Affiliation: Opole University of Technology (PL) and Martin-Luther-University (DE),*

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Ecosystem services (ES) trade-offs occur in the situation, where one service increases and fosters the reduction of the other service. ES trade-offs are a significant issue, fostering the sustainability of transitional, peri-urban landscapes (PULs). It is due to dynamic processes of peri-urbanization, which endanger peri-urban natural ecosystems and their services. It is also related to rising demand for ES in PULs.

Policy making, and planning related to ES trade-offs in PULs need to support the balancing of opposing services, thus to foster ES synergies between ES. Nevertheless, ES trade-offs in PULs are not on the top of policy and planning agendas. Knowledge related to policy making and planning for ES trade-offs in PULs remind hidden in country and regional case study specific niches.

Aims of our study is to characterize the ES trade-offs in the case study PULs to detect possible similarity patterns among them. Moreover, the study aims to describe (1) ES trade-offs drivers, (2) obstacles, concerning to how ES trade-offs in PULs are addressed by governance and planning, and (3) improvements to better address peri-urban ES trade-offs in governance and planning.

To facilitate our research, we designed a semi-qualitative survey, which helped us to collect the pool of 24 different case studies, located in various parts of the World. Answers from this survey were binary coded (1=yes, 0=no) and analysed with the help of statistical methods, including Principal Component Analysis approach.

The preliminary results show a variety of different ES trade-offs drivers among which various conflicts emerging in PULs are the most common. The most often identified obstacles and needs for improvements are related to better coordination among different policy and



planning instruments and improving awareness among governance actors about ES trade-offs.

*Keywords:* ES trade-offs, peri-urban landscapes, governance, planning

*2. Type of submission: Abstract*

**T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making**

Multistakeholder perspectives on barriers and potential success factors for implementation of the ecosystem services framework in the Czech Republic

*Presenting author: Jan Daněk*

*Other author(s): Kateřina Mácová, Bronislav Farkač*

*Affiliation:* Global Change Research Institute of the Czech Academy of Sciences & Charles University, Czech Republic

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Implementation of the ecosystem services (ES) framework in decision-making is still considered a major challenge, despite significant advances in the available knowledge, tools and methods. In this contribution, we present perspectives of various national and regional/local stakeholders on barriers and potential success factors for implementation of the ES framework in policy and decision-making in the Czech Republic.

The main goal of our research is to synthesize the results from various projects focused on uncovering: a) perceived barriers for implementation of the ES framework and related research results into Czech decision-making; b) potential success factors which could support implementation of the ES framework in different areas of policy, decision-making or practice. The multi-method research is based on results of several sets of semi-structured interviews and on a series of participatory workshops with a range of national and regional/local stakeholders.

Our results suggest that (a) main barriers on a general level, are insufficient knowledge and capacities, followed by missing methodologies, standardisations or regulatory frameworks for particular uses of ES framework. Also, fear of commodification or potential misuse of ES assessment results was acknowledged. In terms of particular ES research results, the main perceived barrier for implementation identified is the unavailability of good data. The most



important potential success factors (b) include raising awareness for both the public and experts, but also creating methodologies and increasing data availability.

We also discuss particular reflections related to the use of selected existing methodologies which are relevant for ES assessments. We suggest that our results can pave the way for a more efficient process in building the science–policy interface in the area of ES research and its practical use, a process which is already ongoing and is leading to the establishment of the National Platform for Ecosystem Services.

*Keywords:* Ecosystem services framework, science–policy interface, implementation, stakeholder participation

*3. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

Do grassland policies reflect grassland ecosystem services? Tracking 20 years of legal changes for the European Union, Germany, and the State of Bavaria.

*Presenting author: Maria Haensel*

*Other author(s):* Eva Julia Lohse, Thomas Koellner

*Affiliation:* University of Bayreuth, Professorship of Ecological Services, Bayreuth Center of Ecology and Environmental Research (BayCEER), Universitaetsstr. 30, 95447 Bayreuth, Germany,

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From a scientific perspective, permanent grasslands provide multiple ecosystem services. However, those services likely have differing importance to society and might not be equally reflected in grassland related policies. In addition, legal systems have traditionally focused primarily on basic human needs, like food production, and immediate health and safety issues. As European grasslands have been under high conversion pressure over several decades, policies to maintain permanent grasslands were established, especially in the last 20 years. Our goal is to analyze which ecosystem services and to what degree are recognized in those policies and detect trends over time.

To track the changes in policies related to grassland, we screened legal texts and identified all passages containing references to grassland in the federal law of Germany and its largest





State, Bavaria, for the period 2000 to 2020. We also reviewed official justifications for legislative changes as well as court decisions. On the European level, all legal documents of the Common Agricultural Policy were included as well as those, referenced in relevant German acts. We operationalized the recognition of ecosystem services as any reference to a service or function of grassland as well as the mentioned importance of preserving particular grassland sites linked to a certain ecosystem service.

First results show that some grassland ecosystem services like flood control have long been recognized, whereas others, like global climate regulation have only been considered more recently. By including the different levels of policymaking, it is also possible to detect inconsistencies and find out if a certain level is most relevant for stimulating changes, which was in many cases the European Union. Yet, this was also true for a Bavarian referendum, introducing a general grassland conversion ban and prescribing certain grassland management. By comparing legally acknowledged ecosystem services with the scientific knowledge it is possible to identify communication gaps and changing societal relevance.

*4. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

Teaching the ecosystem service concept: experience from academia

*Presenting author: Marcin Spyra*

*Other author(s):* Gloria Rodriguez-Loinaz, Nina Hagemann

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Although ecosystem service (ES) is a well-established concept among the scientific community, it has not reached the mainstream of public awareness because it lacks wide recognition among citizens and educators. Teaching of ES may contribute to the mainstreaming of the ES concept and its framework in society in a critical and meaningful way, toward sustainable development. In fact, the ES concept is a key tool for communicating our social dependence on natural ecosystems, and therefore it has high didactic potential. However, this didactic potential is under-explored, because there is a lack of scholarship related to teaching the ES concept. There is little evidence, for example, on whether scientists who research ES also teach the concept and thus contribute to raising the level of



ES awareness in society, and if so, how such teaching processes could be improved, to broaden the impact to citizen awareness. To close this knowledge gap, we delved deeper into how the ES concept is taught and which teaching strategies are currently being used by ES research academics. We aimed to establish connections between those teaching practices and best educational practices described in educational literature. This analysis will help to provide insights into academics' teaching approaches, as well as how these practices could be improved. A key finding of our research is that teachers with little experience in ES teaching are less likely to use active teaching methods or to evaluate their teaching (both related to best educational practices), whereas lecturers with more years of experience in teaching the ES concept are more in line with best educational practices. Therefore, collaboration and networking among teachers with different levels of experience could help improve the quality of ES concept teaching. We suggest the establishment of a platform to facilitate regular exchange among teachers and educators from different teaching contexts and educational levels. Finally, we propose several future research directions in this emerging research area in order to continue revealing the existing research gap in the teaching of the ES concept.

*Keywords:* active learning; ecosystem services; evaluation; interdisciplinarity; networking; teaching

*5. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

Ecosystem Services based approaches in Natural Capital Accounting. The experience of scaling down complexity without overlooking the key elements

*Presenting author: Alessandra La Notte*

*Affiliation:* Joint Research Centre of the European Commission,

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The System of integrated Environmental and Economic Accounting– Ecosystem Accounts (SEEA EA) has been adopted as standard by the United Nations Statistical Commission in March 2021. SEEA EA provides a general framework to structure accounts without suggesting how to assess ecosystem accounting. The INCA (Integrated system for Natural Capital Accounting) project has completed in its implementation phase the Supply and Use Tables for nine Ecosystem Services. Compliant with the SEEA EA, INCA proposes an



operational procedure to assess ecosystem services in a way that is coherent with the economic accounting mechanism and consistent with the process of ecological modelling. Such an experience brought along (i) the success of results collecting liking when presented as maps, graphs and tables, but also (ii) the difficulties of implementing on regular basis something that is still perceived as highly complex. I am happy to share the lessons learned from the INCA experience on ecosystem services accounting and discuss the way forward to more and do better.

*Keywords:* Natural Capital Accounting, ecological modelling, integrated accounting systems

*6. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

Co-design solutions for rural areas' development based on agriculture and forestry  
Ecosystem Services framework

*Presenting author: Anabela Salvado Paula*

*Other author(s):* Joana Alves, Filipa Marques

*Affiliation:* Centre for Functional Ecology – Science for People and the Planet (CFE), TERRA Associate Laboratory, Department of Life Sciences, University of Coimbra, Portugal.,

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Agriculture and forestry sectors provide a wide range of ecosystem services (ES), with a vital role in rural development. Nevertheless, both sectors presently face multiple challenges (e.g., environmental degradation, overexploitation, climate change, biodiversity loss) that require the co-creation of sustainable solutions that the ES framework could support. However, regardless of its importance, the concept of ES is hardly discussed with local stakeholders and is insufficiently considered in decision-making processes, namely for the development, resilience, and attractiveness of rural areas.

To meet this challenge in the rural east central Beira Interior regions of Portugal, the 'CULTIVAR' and 'MyFORESt' research and innovation projects for the sustainable development of the agri-food and forestry sectors included a participatory approach to address the vision and interests of local stakeholders. It is being implemented in 3 municipalities (representing the 3 main biophysical landscapes), with 49 stakeholders involved.



Following a tiered approach, the initial phase included three participatory workshops (one per municipality) to identify the perceived ES provided by local agricultural and forest ecosystems. All discussed ideas were registered and classified considering the Common International Classification of Ecosystem Services (CICES v5.1). After the discussion, stakeholders selected the most relevant ES provided by these ecosystems. In the next step, local actors shared their insights in an online survey regarding the main Strengths, Opportunities, Weaknesses, and Opportunities (SWOT analysis) linked to both sectors and which valorization strategies they felt necessary to implement.

Based on these inputs, data is being collected for selected key ES, which will be discussed with them in a final workshop. This final dynamic aims to obtain an integrated SWOT analysis and co-design agreed-upon strategies to promote and valorize the key selected agricultural and forestry ES using the Q methodology.

*Keywords:* Ecosystem services; rural development; participatory methodologies; co-creation processes

*7. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

Co-creating Urban Ecosystem Accounting: a case study of Tampere, Finland

*Presenting author: Tin-Yu Lai*

*Other author(s):* Tin-Yu Lai, Pekka Hurskainen

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Urban greenery can provide environmental, social, and economic benefits that play an important role in addressing challenges associated with rapid urbanization and climate change. Yet, these services and benefits are not efficiently mainstreamed into urban planning. Urban ecosystem accounting (EA) is a tool that can be used to integrate the value of ecosystem services provided by urban green spaces into urban planning and decision making in a systematic way to support urban resilience and sustainability. We piloted an ecosystem accounting approach with the municipality of Tampere (Finland) by organizing a series of co-creating workshops. Flooding and thus stormwater management were identified as critical issues for Tampere. Under the EA framework, we compiled the ecosystem extent



account to measure over time changes of different types of urban ecosystems. We assessed the correspondent changes in supply and use of the flood mitigation services. Potential economic damages that were avoided to built infrastructures due to the services were also estimated to value the services. Changes in land-use and land-cover between 2012 and 2018 caused a slight decrease (-0,3%) in runoff retention volume and influenced the runoff volume generated by the same precipitation event. Household was the most benefited economic unit from the flood mitigation services in both physical and monetary terms, compared to industrial and commercial sectors in Tampere. Knowledge, data gaps, resource limitations and methodological approaches were discussed during workshops. Workshops were also designed to provide many opportunities for feedback and overview of the lessons learned during each step of the implementation of the EA. This study contributes to experimental application and development of EA for urban ecosystems by collaborating with a local government to mainstream EA framework and ecosystem service research in urban planning projects.

*Keywords:* Ecosystem Accounting, flood mitigation services, InVEST model, urban green areas, co-creation

*8. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

From nature to plate: linking wild food and eco-tourism within the Ecosystem Services framework

*Presenting author: Anabela Salvado Paula*

*Other author(s): Isabel Passos, Rui Cerveira*

*Affiliation:* CFE – Centre for Functional Ecology – Science for People & the Planet, TERRA Associate Laboratory, Department of Life Sciences, University of Coimbra, Portugal,;

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Wild food is an iconic ecosystem service (ES) that receives little attention due to the perceived low importance or lack of data. However, it has great potential in nature-based tourism destinations since it connects local food to the natural environment and its resources. Additionally, although the Millennium Ecosystem Assessment found a general decline in the consumption and collection of wild edible plants, there is an emerging trend



that involves rediscovering lost traditional knowledge to create new gastronomic tendencies. From 'famine food' to 'delicatessen', there is a search for new stimuli, healthy food and culinary experiences related to wild food that can provide economic and cultural benefits to humans.

We are working with two rural municipalities of the Portuguese Beira Interior (Sabugal and Penamacor) and a local Chef that uses wild food in his 'rural gourmet' restaurant to co-create strategies to value wild edible plants in eco-tourism activities within the ES framework. In the first phase, we carried out a demonstrative and participative workshop (November 2021). It was integrated into a local nature photography event to: 1) promote the sustainable collection of wild edible plants 2) raise local awareness regarding to the importance of preserving traditional knowledge.

The second phase embraces a training programme targeting local accommodation and nature tourism operators. It started in march 2022 and is structured in 4 participative workshops over one year to cover greater species diversity and explore different plant parts (e.g. leaves, flowers, fruit). Each workshop has a theoretical (e.g., species identification tools, nutritional aspects, food safety and sustainability), practical (field trip, culinary aptitude to explore textures and flavours) and participation component. The training aims to encourage these stakeholders to work together and incorporate wild food resources into their touristic activities (e.g. use it in breakfasts or picnic snacks, including foraging in their activities).

*Keywords:* Foraging, local knowledge, wild food resources, participatory workshops

*9. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

Assessment of ecosystem services in Latvia

*Presenting author: Aija Peršēvica*

*Other author(s):* Dr.oec. Elīna Konstantinova,

*Affiliation:* Association Baltic Coasts,

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Although ecosystem service approach is not marked as a mandatory requirement in any of Latvia documentation, for now several significant initiatives that are related to ecosystem assessment and also economic valuation has been implemented.

In the case of Latvia, the ecosystem services approach has been implemented by studying small areas and carrying out a very detailed assessment of these areas, as well as assessments of the ecosystem services has been provided by analyzing specific habitats such as grasslands, forests, wetlands and rivers.

Based on the biophysical assessment of ecosystem services, an economic assessment was carried out and data have been replicated on larger areas, performing an economic valuation of ecosystem services for all Natura 2000 territories in Latvia.

So far, the most effective way of communication with decision makers has been to reflect the monetary values of ecosystem services. This type of approach, on the one hand, provides decision-makers with convenient and easy-to-interpret results of natural values, and on the other hand, allows to initiate a discussion with stakeholders about financial risks or opportunities which will be faced by making one or another decision.

The evaluations of ecosystem services implemented so far in Latvia have provided a general insight about the values of ecosystem services. A number of essential needs have been crystallized in the further implementation of ecosystem service assessment in the decision-making process in Latvia. One of the most important issues of interest to decision makers is to reflect ecosystem services of urban areas in the context of classical economic values, by showing classic economic benefits and contrasting them with the services provided by nature in economic terms.

*Keywords:* Ecosystem economic valuation; decision makers.

*10. Type of submission: Abstract*

[T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making](#)

A scientifically-based cultural model of ecosystem services management for the definition of natural risk reduction and climate change adaptation policies.



*Presenting author: Stefano Davide Murgese*

*Other author(s): Arcostanzo Anna Delfina, Marta Cimini*

*Affiliation: SEACoop STP, Italy*

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Climate change (CC) leads to an increase in frequency and intensity of extreme events which causes a rise in natural hazards level. This situation is critical for rural and mountain areas where natural hazard levels are particularly high (e.g. landslides, floods, forest fires). It is necessary to reduce communities' vulnerability in order to guarantee local development in the years to come and in the new climatic conditions.

Project Cuore Resiliente (PiTer Cuore delle Alpi, Alcotra Programme 2014–2020) focuses on the resilience of communities living in the Western Alps, across Italy and France. WP 3.3 of the project allowed the definition of a cultural model of CC adaptation and natural risk reduction based on the management of ecosystem services (ES). The approach follows the Cultural Diamond model (Griswold, 2005), which enabled the integration of scientific concepts into the local cultural heritage.

The activity was divided into two areas:

- a) sociological study to understand the local population's perception on natural risk and the role of ES for their mitigation and for the adaptation to CC;
- b) modelling of current and future natural risk levels, modelling and valuation of ES for natural risk mitigation and adaptation to CC.

The combination of these activities allowed:

- (1) the definition of a community-based policy for the active management of ES;
- (2) the identification of strategies for payments of ecosystem services (PES) to support land management, to create new jobs opportunities and for the integration of ES valorisation into local development policies.

The final result of the work resulted in the definition of Guidelines for the replication of the experience in other areas of Cuore Resiliente Project.

*Keywords:* ecosystem service, climate change, natural risk, cultural model, local development





*11. Type of submission: Abstract*

T. Thematic Working Group sessions: T14c – Barriers and success factors for the application of ecosystem services in decision-making

Achieving Coherence: Advancing ES considerations in understanding long term consequences of Freshwater restoration success

*Presenting author: Phyllis B. Posy*

*Other author(s): Ildiko Arany;, Zuzana Boukalova*

*Affiliation: Posy Global, Israel*

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Using an ES framework in decision-making helps experts and non-experts alike formulate the key questions, consideration and issues that determine ultimate success of freshwater restoration projects. An ES framework that itemizes both long and short term consequences and values and quantifies them can assist decisionmakers in avoiding funding projects that won't produce the positive results in important social, political, cultural and economic realms.

EcoAdvance, a Coordination and Support Action funded by the European Union's Horizon Europe research and innovation programme under grant agreement No. 101060497, is bringing together experience and expertise to develop tools decisionmakers can use to reduce the risk of funding restoration projects that, perhaps even with initial or on-paper success, ultimately disappoint.

Clearly, any tools must be adapted to be useful in different cultures and countries. While no project funding decision can be made with full knowledge of unintended – but perhaps significant over time – consequences, using an ES approach can provide strong scientific basis and be practical as well.

EcoAdvance, launched in August 2022, will address this by taking an ES approach to sorting, compiling, analyzing, distilling and consolidating the experience of those who “Did It”, showcasing their advice and providing them opportunities help others navigate the challenges they faced. “Showcases” will be collected to raise the visibility of funders, advocates, scientists and journalists in each Member State who contributed to freshwater restoration successes in their country. The team is looking for people with stories to tell regarding freshwater ecosystem restoration projects – including details of both successes



and failures, challenges faced, factors quantified or considered, issues overcome, frustrations addressed. The project packages will include video conversations and scientific research that will help users understand the full ES context so they can adapt the techniques and determine if the success can be duplicated elsewhere.

*Keywords:* Freshwater Restoration, long term consequences, ES tools