

LOS_DAMA!

Public synthesis report

Green Infrastructure for better living

European Regional Development Fund





INTRODUCTION	p.4
LOS_DAMA! KNOWLEDGE PARTNERS	p.7
Technical University Munich (TUM)	p.8
University Grenoble Alpes (UGA)	p.10
Eberhard Karls University Tübingen (EKUT)	p.12
Urban Planning Institute of the Republic of Slovenia (UIRS)	p.14
LOS_DAMA! EDUCATION	p.17
TUM workshop regional management Munich South West	p.18
TUM workshop Trento	p.20
UGA workshop	p.22
Thesis and individual projects	p.24
LOS_DAMA! FROM RESEARCH TO RECOMMENDATIONS	p.31
Autumn School “Enhance the ordinary”	p.32
World Cafe Grenoble	p.40
LOS_DAMA! ACADEMIC CONTRIBUTIONS	p.43
Individual contributions from TUM, UGA, EKUT and UIRS	p.44
Congress on the Geography of Europe (EUGEO)	p.52
International Association of Landscape Ecology (IALE)	p.54
List of academic and other scientific contributions	p.56
LOS_DAMA! PROJECT PARTNERS	p.61
LOS_DAMA! Project partners – contacts	p.62
PHOTO CREDITS AND IMPRINT	p.63

INTRODUCTION

Peri-urban landscapes play an essential role as everyday human habitats. However, in the urban areas of the Alpine region, they are exposed to a growing pressure of land use: a wide range of social demands, such as local recreation, nature conservation, agriculture, settlement development and the expansion of infrastructure, come face-to-face here. The EU-Interreg project LOS_DAMA!, started in 2016, investigates approaches to better protecting, enhancing and developing green and open spaces and thus improving the quality of life in peri-urban landscapes. This goal is to be achieved by developing a networked and multifunctional peri-urban green infrastructure as well as by networking actors over the entire Alpine region. The practice-oriented LOS_DAMA! project focuses on seven pilot projects in the urban regions of Grenoble, Ljubljana, Munich, Piedmont, Salzburg, Trento and Vienna. In the pilot projects, green infrastructure will be further developed or improved with innovative planning approaches involving local and regional actors, e.g. inter-municipal associations. New multifunctional and participatory approaches are applied. Likewise, more emphasis will be placed on cooperation at the various planning levels.

The pilot projects will be supported by an extended network of universities, scientific institutions and interested actors. It is intended that, the Technical University of Munich (TUM), the University Grenoble Alpes (UGA), Eberhard



Assessment framework for analysing LOS_DAMA!.

Karls University Tübingen (EKUT) and the Urban Institute of the Republic of Slovenia (UIRS), as LOS_DAMA! knowledge partners (KPs) will build a bridge between theory and practice, both at transnational and local levels. They support the project partners (City of Munich – MUC - as lead partner, Grenoble Alpes Métropole - GAM, City of Trento – TRENT, Region Piedmont - PIEM, City of Vienna – VIE, Salzburg Institute for Planning and Housing– SIR, and UIRS as both knowledge and project partner) with up-to-date expertise on green infrastructure, participatory and collaborative planning approaches and the implementation of European planning documents. To this end, various seminars were held during the project meetings, including in cooperation with the project partners of work packages T1, T2 and

T3. Within WP T1 TUM analysed the pilot action plans and the pilot projects together with VIE and other partners. This means that conclusions can be drawn which can be transferred to development processes for green infrastructure in urban landscapes elsewhere, thanks especially to the co-design of a toolbox. Within WP T2, EKUT and SIR looked at the topic of landscape approaches, in particular the assessment of job shadowing reports and the respective opinions of project partners when abroad. As for WP T3, UGA supported TREN with the analysis of stakeholders' constellation and the assessment of pilot projects regarding their governance principles and finally set up policy recommendations at local and regional levels. At the local level, KPs supported the implementation of pilot activities (from design to implementation) by providing content elements from the latest research on GI and also consulted PPs on projects, highlighting weak points within the pilot projects. In this way, local know-how is promoted in order to advance the development of innovative approaches for the development of green infrastructure in the pilot projects. The aim is to close the gap between academic knowledge and the local action of politics and administration. This requires a willingness on all sides to listen and learn.

Teaching also plays an important role within the LOS_DAMA! project since most of the KPs are also involved in lecturing at various levels,

from bachelor's degree to PhD. Thus, TUM and UGA conducted workshops with their students who were asked to reflect on the neighbouring territories of Munich and Grenoble, which are the core areas of LOS_DAMA!. In both cases, students were also able to gain feedback from local practitioners and decision-makers, following a presentation of their results on site. Many theses were also drafted by students on topics and areas related to LOS_DAMA!. As LOS_DAMA! is a research to practice project, KPs had the opportunity to produce recommendations for decision-makers. To this end, the International Autumn School "Enhance the Ordinary" was held in Weihenstephan in September 2018. 24 young people at the beginning of their professional careers in planning and science, together with local experts, developed concepts for strengthening peri-urban landscapes in Munich and Salzburg. Another format chosen by UGA and GAM was to set up a World Café bringing together researchers and practitioners, both LOS_DAMA! members and local representatives.

Finally, the project inspired academic contributions; KPs partners published in English and their own national language at international and national conferences and in various journals. They were particularly active at the EUGEO and IALE conferences. Within LOS_DAMA! They produced an Interim Report in July 2018 which was a first assessment of the pilot activities, as well as a Synthesis Report, to be published soon.



LOS_DAMA! KNOWLEDGE PARTNERS

European Regional Development Fund





Technical University of Munich (TUM)

School of Life Sciences Weihenstephan

Chair for Strategic Landscape Planning and Management

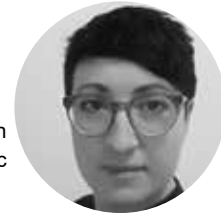
The Technical University of Munich (TUM) is a leading German university with over 40,000 students, awarded University of Excellence by the German government. A member of the EuroTech Universities Alliance, it has representation in Asia, Africa and Latin America. The Chair for Strategic Landscape Planning and Management at the School of Life Sciences is one of the leaders in its field, with an excellent track record of national and international research. Research concentrates on developing knowledge, tools and innovative strategies for the sustainable development of rural/urban landscapes facing major challenges of socio-demographic, environmental, technological and climate change, with expertise in transdisciplinary research and knowledge transfer to practice. Urban ecology, urban green infrastructure planning and strategies for urban adaptation to climate change via NBS are particular focus areas, using, inter alia, extensive modelling and experimental field work.

Prof. Dr. Stephan Pauleit

Stephan Pauleit is a professor in strategic landscape planning and management. His expertise is in urban ecology and green infrastructure planning, ranging from studies of the cooling capacity of urban trees and other types of urban green to advancing concepts of green infrastructure as a planning approach. He has published 91 peer-reviewed papers and supervised 32 PhD students, as well as a large



Dr. Stephan Pauleit



Ing. Martina van
Lierop MSc

number of graduate and post-graduate students. He has contributed as a work package leader to several EU funded projects as well as national projects funded by German, UK, Danish and Bavarian organisations. He has been appointed member of the advisory board for other research projects and research organisations.

ing. Martina van Lierop MSc

Martina van Lierop is a research and teaching associate with a master's degree in Landscape Architecture and Planning from Wageningen University in the Netherlands. Her research focuses on the interaction between research, design and practice, and on the design of planning processes and research methodology. Her expertise is in green infrastructure planning and its local implementation in collaborative and participatory processes, while in her research she focuses on the supporting approaches, strategies and methods.

Other staff:

- Dr. Rieke Hansen
- Nuria Roig BSc
- Clara Siebel BSc
- Francesca Simonetto
- Claire Mignard BSc
- Luis Habersetzer BSc
- Regina Speth BSc

Scope of TUM within LOS_DAMA!

TUM led work package T4, which is concerned with the link between research and practice. Alongside that, TUM supported the project partners in work package T1 with the development and assessment of the pilot action plans and the toolbox. Through seminars, workshops and student work, TUM contributed to providing the project partners with an overview of state-of-the-art research on e.g. green infrastructure, ecosystem services as a planning tool, and landscape approaches. Further, TUM assessed the projects and their progress on peri-urban spatial issues, the potentials of and barriers to green infrastructure implementation, design of planning processes, methods and tools for planning processes, and landscape approach principles. Through the assessment, TUM was able to support the project partners with local project implementation as well as cooperate with fellow research partners and observers for a common transnational perspective.

Former/upcoming experience with projects related to landscape/GI/peri-urban

- PHUSICOS 'According to nature' solutions to reduce risk in mountain landscapes. European Union, Horizon 2020 Programme (2018-2022).
- Future Green Cities: Climate resilient neighbourhoods in a growing city. German Federal Ministry of Education and Research (2017-2021).
- Climate Experience Würzburg. Bavarian Ministry of the Environment and Consumer Protection (2017-2020).
- Climate Mitigation and Green Infrastructure. Bavarian Ministry of the Environment and Consumer Protection (2013-2017).
- GREEN SURGE. EU FP7 (2014-2017).
- GreenInfra. Awarded by the German Nature Conservation Agency (2016)
- Urban Forest 2050. Bavarian Ministry of Food, Agriculture and Forestry (2013-2017).
- URBES: Urban Biodiversity and Ecosystem Services. Era-net Biodiversa project (2012-2014).
- PLUREL on tools and methods for planning and management of sustainable land use systems in peri-urban landscapes. EU FP6 (2007-2011).



University Grenoble Alpes (UGA)

PACTE CNRS Research Centre (“Public policies, Political Action, Territories”)

The University Grenoble Alpes is a major university in France with 48 000 students (5th largest nationally) and more than 3000 staff. The PACTE Research Centre is one of the leading units in the field of social sciences, especially in territorial and transition studies, with an excellent track record in research at European and national levels. Research concentrates on developing knowledge of society transformations through their political, territorial, sociological and ecological dimensions. The University is a recognised stakeholder for research to practice approaches in cooperation with public authorities (such as Grenoble Metropolitan Authority -GAM- and the Urban Planning Agency), associations and with neighboring territories. UGA researchers are also members of Laboratory of Excellency (Labex) on Innovation & Territories of Mountain Areas.

Ass-Prof. Dr. Emmanuel Roux

Emmanuel Roux is a senior lecturer at the Urban Planning and Alpine Geography Institute and researcher at the PACTE CNRS Research Centre, within the research team “Cities and Territories”, at the University Grenoble Alpes. He has been head of the Alpine Geography Institute and an expert in planning design for national and regional authorities. His research interests are focused on rural, peri-urban and metropolitan dynamics. He has contributed to national prospective or strategic planning projects (former



Dr. Aurore Meyfroidt



Ass-Prof. Dr.
Emmanuel Roux

DIACT, now CGET, French State Agency for Territorial Justice) at national, regional and metropolitan levels. Within his research and teaching activities, he is eager to foster inclusive and research to practice approaches through workshops with practitioners and decision-makers. He recently dedicated part of his research on developing observatories and innovative knowledge devices to the subject of territorial action.

Dr. Aurore Meyfroidt

Aurore Meyfroidt is a post-doctoral researcher at the PACTE CNRS Research Centre, within the research team “Cities and Territories”, at the University Grenoble Alpes. Her research interests are metropolitan and peri-urban dynamics, nature in the city, stakeholder constellations and governance. Alongside teaching geography and urban planning at UGA, she has been guest lecturing at Charles

University in Prague, the “Ecole Normale Supérieure” in Lyon and Sciences Po Rennes. She gained experience in research to practice projects as the Collaborative Research Chair “Living together in the City of Tomorrow” (Labex IMU, University of Lyon) as well as in the assessment of centres of rural excellence (former DIACT, now CGET, French State Agency for Territorial Justice).

Other staff:

- Ismaël Bah MSc
- Inès Hubert MSc
- Estelle Kauth BSc

Scope of the partners within LOS_DAMA!

UGA will contribute to the state of the art of projects' topics and to the assessment of pilot actions, and will cooperate with the partners for a common transnational perspective. As well as this, UGA supported the City of Trento in drafting policy recommendations at local and regional levels (WP T3.2.).

- Peri-urban drivers
- Multi-scale governance
- Planning systems
- Methods and tools for stakeholder involvement

Former/upcoming experience with projects related to landscape/GI/peri-urban

- FRUGAL. Urban Forms and Food Governance. PSDR (2017-2019)
- POPSU II. Platform of Observation of Urban Projects and Strategies. PUCA, Ministry of Ecology, Sustainable Development and Energy ; Ministry of Housing, Territorial Justice and Rural Areas (2013-2015)
- RURBANCE. Rural Urban Governance. Alpine Space Programme (2007-2013)
- PERI-URBAN PROSPECTIVE. Interministerial Agency, Ministry of Ecology, Energy, Sustainable Development, Planning (2007-2009)
- NATURAL METROPOLIS. INTERREG IIIb-MEDOC (2002-2004)

Eberhard Karls University Tübingen (EKUT)

Urban and Regional Development

Cities, regions and urban regions have been and continue to be subject to many processes of change. After industrialization and post-industrialization, complex city-country hybrids developed from a fairly clear separation of city and country. One focus of the working group SRE - Urban and Regional Development - lies in the research area Geography at the Eberhard Karls University Tübingen in the illumination of corresponding complex changes, especially with a theoretical as well as a practical orientation. With a social constructivist approach, which emphasizes the changeability of social reality/realities, the research shines a light on settlement development processes in southern California and the southern states of the USA – keyword ‘city-land hybrids – and on the upheavals in the course of deindustrialisation (keyword ‘old industry’) and energy transition processes in Central and Eastern Europe, as well as ‘landscape changes’ caused by the extraction of raw minerals. A starting point or ‘roof’ for these considerations is social constructivist landscape research as well as an adaptation of poststructuralist discourse theory for the analysis of current social change processes.

Prof. Dr. Dr. Olaf Kühne

Olaf Kühne studied geography, modern history, economics and geology at the University of the Saarland and took his doctorate in geography and sociology there and at the Distance Learning University of Hagen. After working in various

Prof. Dr. Olaf Kühne



Dr. Corinna Jenal



Dr. Karsten Berr



official capacities for the Federal State of the Saarland, he was from 2013–2016 Professor of Rural Development and Regional Management at Weihenstephan-Triesdorf University of Applied Sciences, and Extraordinary Professor of Geography at the University of the Saarland in Saarbrücken. Since October 2016 he has been Research Professor of Geography at the University of Tübingen’s Chair of Urban and Regional Development. His research focuses on landscape and discourse theory, social acceptance of landscape change, sustained development, transformation processes in Eastern Central and Eastern Europe, regional development, and urban and landscape ecology.

Dr. Corinna Jenal

Corinna Jenal studied German, politics and philosophy at the University of Trier and completed a certificate in sustainability at the University of the Saarland's Chair of Sustainable Development. She subsequently worked on a number of research projects at the University of the Saarland and Weißenstephan-Triesdorf University of Applied Sciences, including on demographic change in Saarland industry, on public discourse on the health implications of HT power lines, and on the social acceptance of mineral extraction. Since fall 2016 she has lectured and researched in geography at the University of Tübingen's Chair of Urban and Regional Development. Her research interests focus on landscape, renewable energies, cross-border cooperation, and social constructs and processes of negotiation around nature and woodland.

Dr. Karsten Berr

Karsten Berr studied landscape conservation at the University of Osnabrück, and philosophy and sociology at the Distance Learning University of Hagen, where he gained his doctorate with a thesis on philosophy in 2008. After appointments in Oldenburg, Hagen and Vechta, he headed a German Research Foundation project from 2012–2017 on the theory of landscape and landscape architecture at the Technical University of Dresden, Brandenburg University

of Technology (Cottbus), and the University of Vechta. In May 2018 he took up an appointment at the University of Tübingen's School of Geo-Sciences. His research focuses on the inter- and transdisciplinary theory, practice and ethics of landscape and architecture, landscape conflicts, the philosophy and aesthetics of art, nature and landscape, cultural theory, and anthropology.

Scope of the partners within LOS_DAMA!

EKUT provides a link into a vast network of research institutions and will support the project in close cooperation with stakeholders and all research partners.

Former/upcoming experience with projects related to landscape/GI/peri-urban

The key persons working for LOS_DAMA! are experienced in sustainable urban development with a background in various projects such as:

- Evaluation of the Rural Development Plan for Saarland (EAFRD)
- Regional planning for transnational territorial cooperation (INTERREG administration 2006-09)
- MORO national model projects in spatial planning (2003-06: transnational / 2017-18: regional landscapes).

The UIRS is the main national research centre in the field of spatial planning. It pays attention to sustainable development at all levels, conducting research in the areas of spatial planning and design, environmental protection, cultural heritage preservation, housing, transport and spatial informatics. It is involved in projects, which enable the implementation of research results in practice, including provision of knowledge for legislation.

Dr. Barbara Goličnik Marušić

Barbara Goličnik Marušić is Head of Research at the UIRS. She holds a PhD in landscape architecture. She is involved in multidisciplinary projects concerned with sustainable development, quality of living and environment-behaviour issues. She has been examining contemporary paradigms such as ecosystem approach, nature based solutions and co-creation and evaluating their actual implementation into spatial planning; including method of behavioural mapping as analytical and evaluation approach in place management/design. She is a member of various networks and editorial boards.

Dr. Barbara Goličnik
Marušić



Dr. Damjana Gantar

Mag. Ina Šuklje
Erjavec



Dr. Damjana Gantar

Damjana Gantar is a researcher at the UIRS, and the editor-in-chief of *Urbani izziv*, international scientific journal published by UIRS. She holds a PhD in landscape architecture. Her main research interests are landscape changes and scenarios, and the preservation of quality and cultural heritage in the countryside in correlation to various drivers, e.g. policies or demographic changes. She complements these topics with aspects of energy efficiency within spatial planning and renovation of cultural heritage buildings.

Mag. Ina Šuklje Erjavec

Ina Šuklje Erjavec holds a Master of Science in Landscape architecture. She is a researcher and an authorised landscape architect and licensed spatial planner. She has research experience in theoretical and empirical studies on urban landscape planning/design, in developing urban planning/design guidance and methodology, and in practical urban landscape design and implementation. Currently she works on relation of green space, health and well-being, addresses vertical green issues in cities, and examines potentials of ICT for co-creation of inclusive public places.

Other staff:

- Andrej Gulič MSc
- Sergeja Praper Gulič
- Nina Goršič
- Živa Ravnikar

Scope of the partners within LOS_DAMA!

UIRS tested and developed two methodological approaches (WP T1). 1) Behaviour mapping - an analytical tool for revealing relationships between spatial characteristics of place and dynamic patterns of its use. The approach was used to set up and test the concept of place capacity for occupancy. 2) The thematic green infrastructure concept - a planning

tool to be used in situations with large green areas, where it is not easy to determine the individual elements of green infrastructure, due to the general presence of large green/open spaces, and diverse nature protection regimes. It is an expertise-based approach for green infrastructure provision for specific development issues which are dependent on specific landscape characteristics and settings. UIRS also contributed to, and with, papers and presentations (WP T4).

Former/upcoming experience with projects related to landscape/GI/peri-urban

- CONNECTING NATURE: Bringing cities to life, bringing life into cities, Horizon 2020 (2017-2022)
- Vertical Green 2.0, JPI Urban Europe (2018-2021)
- GREENKEYS: Urban Green as a Key for Sustainable Cities; INTERREG IIIB CADSES (2005-2008)
- Expertise and guidelines for spatial planning of green areas to promote physical activity of the population, Ministry of Health (2016-2019)
- Definitions for types of green areas and the urban green system with planning guidelines and graphical symbols, Ministry of the Environment and Spatial Planning (2016-2017)



LOS_DAMA! EDUCATION

European Regional Development Fund



TUM WORKSHOP REGIONAL MANAGEMENT MUNICH SOUTH WEST

Munich South West: integrative and sustainable approaches to landscape planning

The peri-urban region southwest of Munich is strongly influenced by urban developments with increasing traffic problems, loss of identity, and fragmentation and degradation of open spaces. To deal with these issues and provide guidelines for future sustainable regional development, the communities concerned along the river Würm jointly commissioned a Development Strategy for the Spatial Structure of Munich South West.

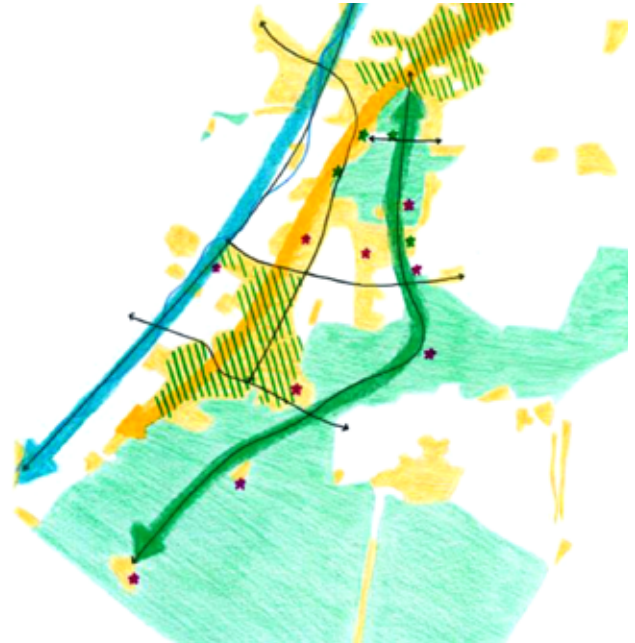
One principle question is how this broad strategy can be implemented by taking into account the specific landscape character at the local level. Two teams of second year students of the Bachelor's programme in Landscape Architecture and Landscape Planning developed integrative planning solutions and corresponding development strategies for sub-areas of the southwest of Munich. To address the particular potentials and challenges of the sub-areas, an extensive landscape analysis was conducted.

One team showed through historical analysis how urban development primarily led to a decline of open agricultural areas, while the amount of forest barely changed. In addition, they made an extensive analysis of the slow mobility network - of the existing pathways and their quality. They proposed three major corridors interlaced with a bicycle network connecting Munich in the north with the towns and recreational areas in the south: a blue corridor with room for the river Würm; a green forest corridor; and a yellow corridor to connect the remaining open spaces,



such as arable lands, meadows and gravel pits. Gravel mining is strategically used to create habitats for rare pioneer species in this corridor.

The second team focused on the southern landscape with the river Würm, a moorland area, forests and agricultural lands around small villages as well as many cultural relics from different eras. Their concept aims to highlight these cultural and natural assets, while reducing recreational pressure on vulnerable areas. An old railway station is transformed into a visitor



Presentation of student workshop results for local stakeholder of the Munich region.

centre, which provides room for activities such as seminars and local farmers markets. It is also the starting point for many routes within the upgraded and extended recreational network. Specific areas are designated for mountain bikers, while vulnerable areas become less accessible. Moorland areas are managed more naturally, while in some forests grazing is reintroduced as a management practice.

The final outcomes were presented at the landscape treasure map workshop of the

LOS_DAMA! pilot project with the Regional Management Munich South West. This helped to get a constructive discussion going among the participating stakeholders. Due to the in-depth landscape analysis, the students were well prepared to participate in discussions regarding the regional landscape qualities and support the workshop. Participants were glad to see a younger generation concerned with landscape issues. In turn, the workshop was an invaluable opportunity for the students to experience public participation.

Masterplan & implementation strategies for green infrastructure in peri-urban Trento North

Over the past decades, unregulated development in Trento North has led to an increase in inferior peri-urban settlement and industrial areas. Today, the area is characterised by scattered areas of intensive agriculture and a lack of high quality, coherent open spaces. The project area includes former industrial compounds, commercial buildings, and residential units intertwined with important transport infrastructure, such as the Brenner motorway and railway. Fragmented open spaces lie in between and consist of privately owned vineyards and orchards as well as abandoned plots and public parks. Five teams, consisting of second year students of the Bachelor's programme in Landscape Architecture and Landscape Planning and first year students of the Master's programme in Nature Conservation and Landscape Planning, developed strategies for an evidence-based transformation and implementation of the Trento North area. The teams each dealt with a particular challenge of open space development: the healthy city, the climate-adapted city, the ecological city and the productive city.

From the 28th of October until the 1st of November, the students and supervisors visited Trento to conduct field studies and meet local actors. We ended up arriving during the worst storm of 2018. Luckily, the teams were able to visit the project area between the showers and during the worst hours of the storm, we would meet municipal officials and lecturers of the



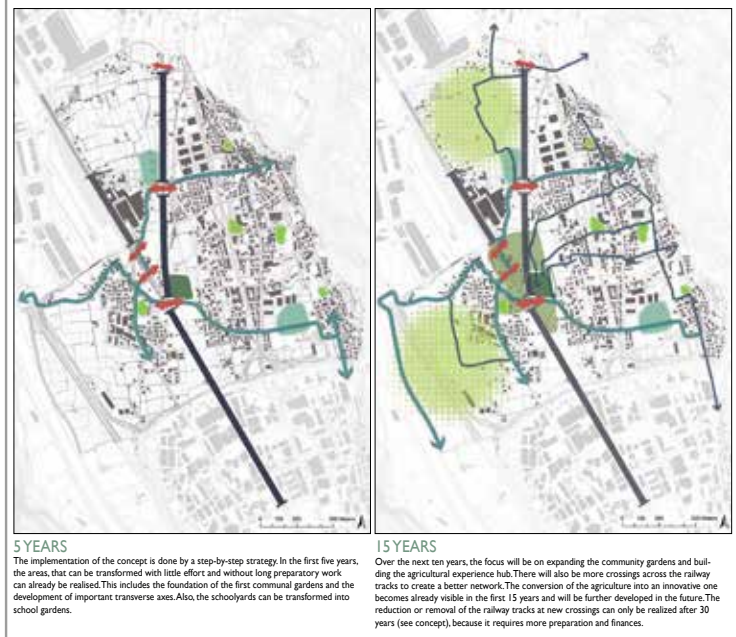
University of Trento. They gave us inspiration for our project on the historical development of the city, its climate, social issues and future regional and green infrastructure plans.

In December 2018 and February 2019, the students presented their intermediate and final project results to guest critics from the City of Trento and the University of Trento. The guest critics were impressed by the level of work, and invited us to present the results of the project to representatives of the local neighbourhood

FROM BARRIER TO DEVELOPMENT AXIS



STRATEGY



Presentation of student workshop results for local stakeholder of the City of Trento.

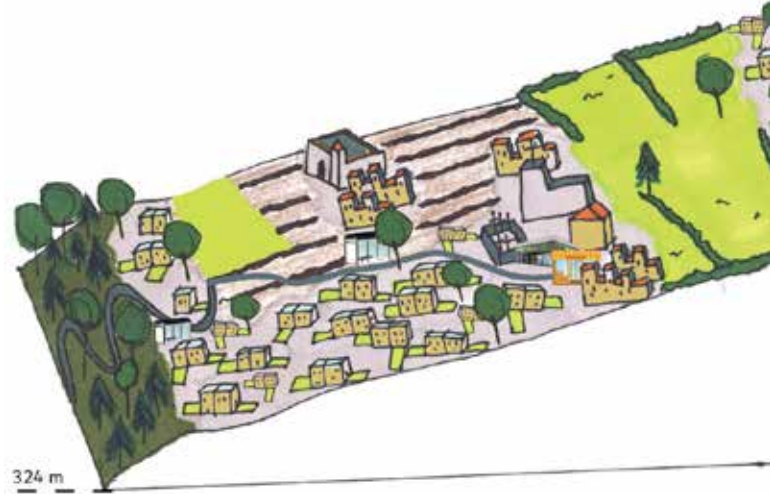
councils, officials of the City of Trento and researchers and students of the University of Trento. In March 2019, we were received at the community centre of Gardolo in the north of Trento. The council members praised the combination of functionality and vision. As one council member said, "Such ideas make people, especially politicians and local authorities, think about the challenges and opportunities of these areas, even if they are courageous solutions, such as the creation of a 200 m wide

fresh air corridor in a built-up area." The idea of transforming an industrial area into a green business park sparked a small discussion on future development beyond Trento North. In particular, the proposals to turn roads into green corridors to connect new recreational areas on currently fallow land, as well as the conversion of brownfield sites along the railway tracks into a corridor for urban agriculture were well received by the councillors. We left Trento with great satisfaction and no posters. We left them behind to be exhibited in the City of Trento.

Towards a revalorization of peri-urban landscapes within the Grenoble Metropolitan Area

Background: within the context of the elaboration of the new intermunicipal planning document, the GAM places new emphasis on landscapes through a specific planning guideline dedicated to landscape and biodiversity. However, the metropolitan authority felt the need to better document these spaces which has faced strong dynamics over the past 30 years. The focus was then put on the identification of landscape units. A group of 13 students in the first and second years of the Master's programme in Engineering of Territorial Development and Transition was then asked to draft a landscape diagnosis on specific areas within peri-urban landscapes, to implement a methodological device to enable the involvement of various stakeholders and finally to propose recommendations.

Organisation/methods: the group of 13 students (with different skills regarding field research, mapping, statistical analysis, creative format and layout) worked over one semester on the project and stayed in contact with their academic supervisors (Emmanuel Roux and Aurore Meyfroidt) and GAM (Guillaume Tournaire, LOS_DAMA! officer and Sophie Galland, landscape architect within the planning department). Further to an analysis of planning documents (Regional Scheme for Ecological Coherence and Local Planning document mainly), the group chose a research question related to the perception and appropriation of these peri-urban landscapes by inhabitants.



Research fields: after an in situ exploration of peri-urban areas, backed up by a territory diagnosis (based on content analysis of planning documents), three peri-urban municipalities were chosen to reflect on their landscapes and set up focus groups with inhabitants.

- Venon: a municipality located on the “balcony” of the Belledonne and Chartreuse mountain ranges, with a rural character but well connected to the metropolitan core



Results of a collaboration with high-school-student

- Jarrie: located on the southern plateau of Grenoble's urban area. The municipality is characterised by its industrial landscape (huge chemistry conglomerate) and forest landscapes
- Varcès: chosen as the typical representation of peri-urban landscape with urban sprawl (suburban residential area) and as a gateway to the core metropolitan area for daily commuters

Outcomes: based on the results of the focus groups with inhabitants, the group drafted theoretical maps with paths through different landscape units for each municipality, as well as a fictitious discourse from the viewpoint of an inhabitant, to highlight the potentialities of these ordinary peri-urban landscapes. The group also proposed a prospective scenario towards 2040 with planning recommendations related to built up densification and the promotion of slow transport modes.

Student	Julia Zobel
Year	2019
Title	The “Leitbild” map as a medium for visual communication in informal spatial planning - exemplified by the “Landschaftlichen Leitbild” Munich North. (Die Leitbildkarte als visuelles Kommunikationsmittel in der informellen Landschaftsplanung - am Beispiel des Landschaftlichen Leitbilds München Norden)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Landscape Planning, Ecology and Nature Conservation
Type	Thesis
Summary	The aim of the thesis was to explore perceptions of the representations of informal spatial plans to improve the visual communication of plans between planners and the public. Despite the promotion of more awareness for the communicative value of spatial plans, few empirical studies have been conducted. Julia Zobel initiated the study with a literature review on visual representations of spatial plans. Based on the available literature, she constructed an analytical framework with which different representations of informal spatial plans were analysed. The analysis outcomes formed the basis for a survey in which three representations of the Landscape Concept Munich North of the Heathland Association were questioned. In total 203 persons participated in the survey. The survey outcomes seem to suggest that spatial plan representations with a higher level of abstraction, reduced complexity and retaining typical associations (e.g. colour associations: blue is water, dark green is forest) are more aesthetically pleasing and are better at conveying the intended information despite the lower level of information content.



Master thesis cover.

1

Student	Lea Rosenberger
Year	2019
Title	Networking through compensation in Salzburg?! A critical examination of the Eco-Vision and the GIS analysis for the Salzburg Eco-Pool on the basis of a qualitative action plan. (Vernetzung durch Kompensation in Salzburg?! Eine kritische Betrachtung der Ökovision und der GIS-Analyse für den Salzburger Ökopool anhand eines qualitativen Maßnahmenkonzeptes)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Engineering
Type	Individual project (10 credits)



Master thesis cover.

2

Student	Maike A. Nilges
Year	2019
Title	Evaluation of the implementation of the “Landscape Concept Munich North” with regard to the aims of public relations and environmental education. (Evaluierung der Umsetzung des “Landschaftskonzeptes Münchner Norden” in Bezug auf die Ziele zur Öffentlichkeitsarbeit und Umweltbildung)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Planning and Ecological Engineering
Type	Thesis

3

4

Student	Marco Adriano Frank
Year	2019
Title	Analysis of open space planning in the north of Munich and evaluation of future scenarios by visitors in the context of a survey. (Analyse der Freiflächenplanungen im Münchner Norden und Bewerten von Zukunftsszenarien durch die Besucher im Rahmen einer Befragung)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Bachelor Forestry and Resource Management
Type	Thesis

5

Student	Katrin Babel
Year	2018
Title	Evaluation of the landscape concept in the north of Munich. Review of the formulated objectives in the areas of land use and nature conservation. (Evaluierung des Landschaftskonzeptes Münchner Norden. Überprüfung der formulierten Ziele der Bereiche Landnutzung und Naturschutz)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Planning and Ecological Engineering
Type	Individual project (10 credits)

6

Student	Kathrin Möhrle and Leo Manke
Year	2018
Title	Perception and use of open spaces in the north of Munich (Wahrnehmung und Nutzung der Freiflächen im Münchner Norden)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Planning and Ecological Engineering
Type	Individual project (10 credits)

7

Student	Johanna Löffelhardt
Year	2018
Title	Visitor management in the Fröttmaninger Heide. Suggestions for improvements based on a case study analysis (Besucherlenkung in der Fröttmaninger Heide. Verbesserungsvorschläge anhand einer Fallstudienanalyse)
Supervisor	Martina van Lierop and Wolfgang Zehlius-Eckert
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Planning and Ecological Engineering
Type	Thesis

Student	Ismaël Bah
Year	2018
Title	Peri-urban landscapes in Alpine metropolises, towards a better living environment
Supervisor	Emmanuel Roux
Institution	UGA Institute of Urban Planning and Alpine Geography
Degree	Master Engineering of Territorial Development and Transition
Type	Thesis



Master thesis cover.

8

Student	Sarah Wolter
Year	2018
Title	The inclusion of the informal planning instrument “Landscape Concept Munich North” in formal planning instruments (Die Einbeziehung des informellen Planungsinstrumentes „Landschaftskonzept Münchner Norden“ in die formellen Planungsinstrumente)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Planning and Ecological Engineering
Type	Individual project (10 credits)

9

10

Student	Laura Brenner
Year	expected 2019
Title	Tools for the implementation of green infrastructure in local planning processes.
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Life Science Economics and Policy
Type	Individual project (10 credits)

11

Student	Beatrice Behrend and Daniel Hildebrandt
Year	expected 2019
Title	Tools and landscape approaches from European projects for the implementation of green infrastructure (Tools und Landschaftsansätze von europäischen Projekten zur Implementierung grüner Infrastruktur)
Supervisor	Martina van Lierop
Institution	TUM School of Life Sciences Weihenstephan
Degree	Master Environmental Planning and Ecological Engineering
Type	Individual project (10 credits)

LOS_DAMA! FROM RESEARCH TO RECOMMENDATIONS

European Regional Development Fund



AUTUMN SCHOOL “ENHANCE THE ORDINARY”

The autumn school entitled “Enhance the ‘Ordinary’ – How to strengthen everyday landscapes in Alpine city regions” focused on peri-urban Alpine landscapes, using the Salzburg and Munich regions as examples. Consequently, this international and interdisciplinary event took place in Salzburg, Munich and their surroundings. LOS_DAMA! knowledge partners the Technical University of Munich, the University of Tübingen and the University Grenoble Alpes facilitated the workshop in close cooperation with the City of Munich, the City of Salzburg and SIR. Between the 22nd and 29th of September 2018, graduate students, young researchers and other young professionals were invited to generate ideas for the enhancement of “everyday landscapes” at the doorsteps of our Alpine metropolitan regions and work in a studio setting at the Technical University of Munich’s School of Life Sciences Weihenstephan in Freising.

Kicking off with a warm welcome in Salzburg, 24 participants from the Alpine region and beyond got together for the LOS_DAMA! International Autumn School. Getting familiar with issues of green space development in peri-urban Alpine regions was the focus of the first two days. In Salzburg, local experts explained green space development projects and the accompanying processes. In Munich, the participants visited the Dachauer Moos, where local experts explained its historical development, the pressures on



this landscape, and the successes and failures of safeguarding the area. After a workshop on communicative planning with examples from the City of Munich, the participants split into three groups to work over the following three days on a specific assignment.

In Salzburg, the task was to support the Salzburg Institute for Regional Planning and Housing (SIR) in developing an approach for the “Ökopool”, an ecological land banking scheme. The “Ökopool” is intended to facilitate regional



Participants and impression of the LOS_DAMA! Autumn School.

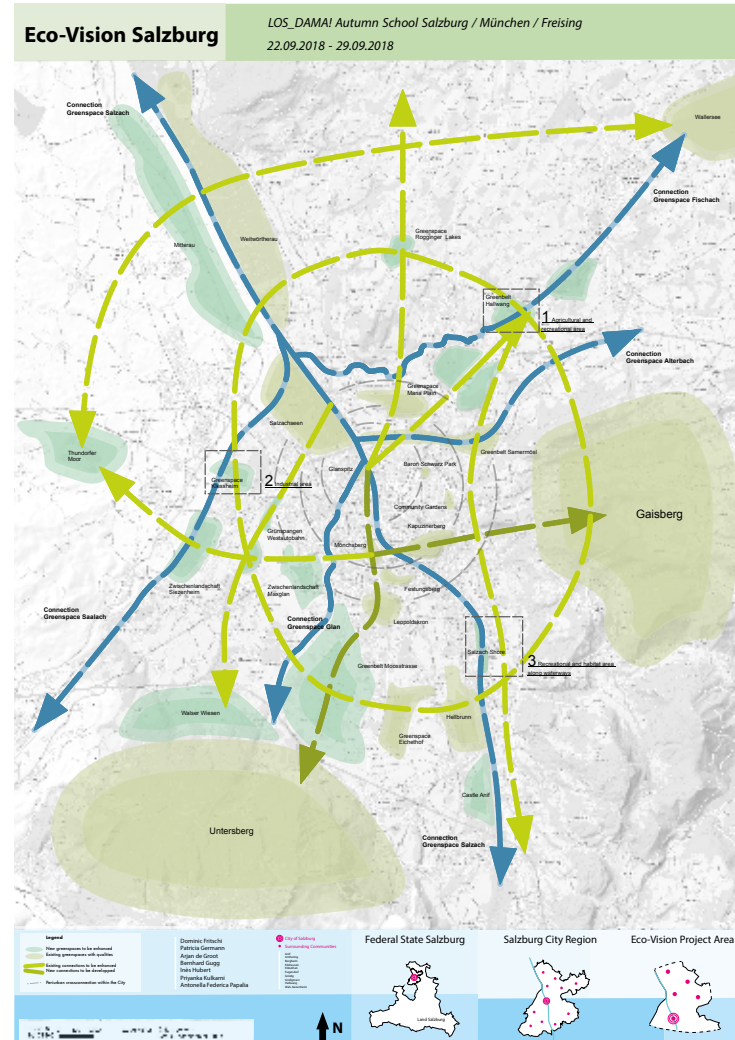
compensation measures in the greenbelt and other areas surrounding the City of Salzburg. In the Munich region, landscape governance through intermunicipal associations is taken into account to further promote the region of the Dachauer Moos. The participants drew up, built and tested tools for the planning and governance of these landscapes – together with local stakeholders. Alongside delivering specific place-based ideas for the pilot areas in Salzburg and Munich, one team discussed the transferability


of these suggestions to other areas in the Alpine region and beyond.

On Friday the 28th of September, after six days of an intensive programme, the final results were well received in a cheerful atmosphere by a broad audience of project partners, local experts and academics. The results were published online on the LOS-DAMA! social media channels and a video compilation of the event is available at <https://www.youtube.com/watch?v=G1gWGDB19rw>

ECO-VISION SALZBURG

Group A worked on an eco-vision for the Salzburg region to guide the development of the “Ökopool”. To gain a broad understanding of the region, the region was analysed from three perspectives: matterscape, the physical landscape; mindscape, the emotional landscape; and powerscape, the political landscape. After the analysis, a brainstorming session was held about what constitutes an eco-vision. Different aspects were evoked, from the actual content to the dissemination and promotion of the vision. These steps help to set the structure for the eco-vision. For the whole Salzburg region, the participants defined existing good quality green areas and corridors, areas with potential for green space development and potential corridors to connect these areas. The vision’s aim is to support ecological connectivity, but also to improve liveability. Fictional characters were used to explain the personal benefits by each gained from the eco-vision using examples for the development of different green spaces. For instance, the ‘Ökopool’ might be used to upgrade spaces close to residential areas, which can be used by inhabitants for recreation while at the same time providing room for nature. In this way, the participants want to show the importance of communicating the added value of the ‘Ökopool’ to a wider public, and develop further strategies for awareness raising.





"I feel trapped between all the buildings in this neighbourhood. I hardly dared to take my pushchair outside since the route to the nearest park is ugly and dangerous."

NORA NÖRGLI

- Mother of four children
- Wants her children to play around in nature while she relaxes in the sun
- Wants to live in the countryside

Results of group A.



SUPERVISOR

Martina van Lierop
Philipp Vesely

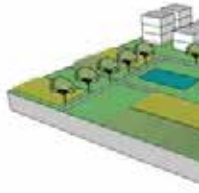
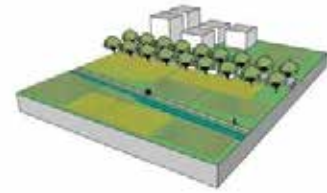
PARTICIPANTS

Dominic Fritschi
Patricia Germann
Arjan de Groot
Bernhard Gugg
Inès Hubwert
Priyanka Kulkarni
Antonella Federica Papalia

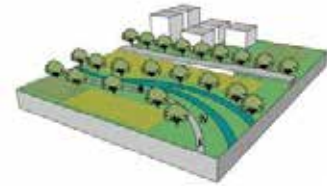
LIVING LAB MUNICH

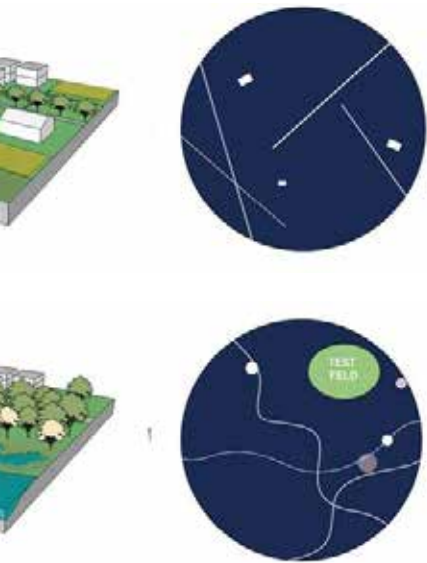
Despite its many historical layers, the area of Dachauer Moos, north of Munich, is for many people a blank spot on the map, pressured by urban expansion. The aim was to improve the identity of the Dachauer Moos for different target groups. The participants defined the area as a living lab for testing prototype landscape perception solutions and developing several solutions for harmoniously improving leisure and building biodiversity on the identified ecosystem benefits of the Dachauer Moos.

TODAY



FUTURE





Results of group B.

**SUPERVISOR**

Emmanuel Roux
Aurore Meyfroidt

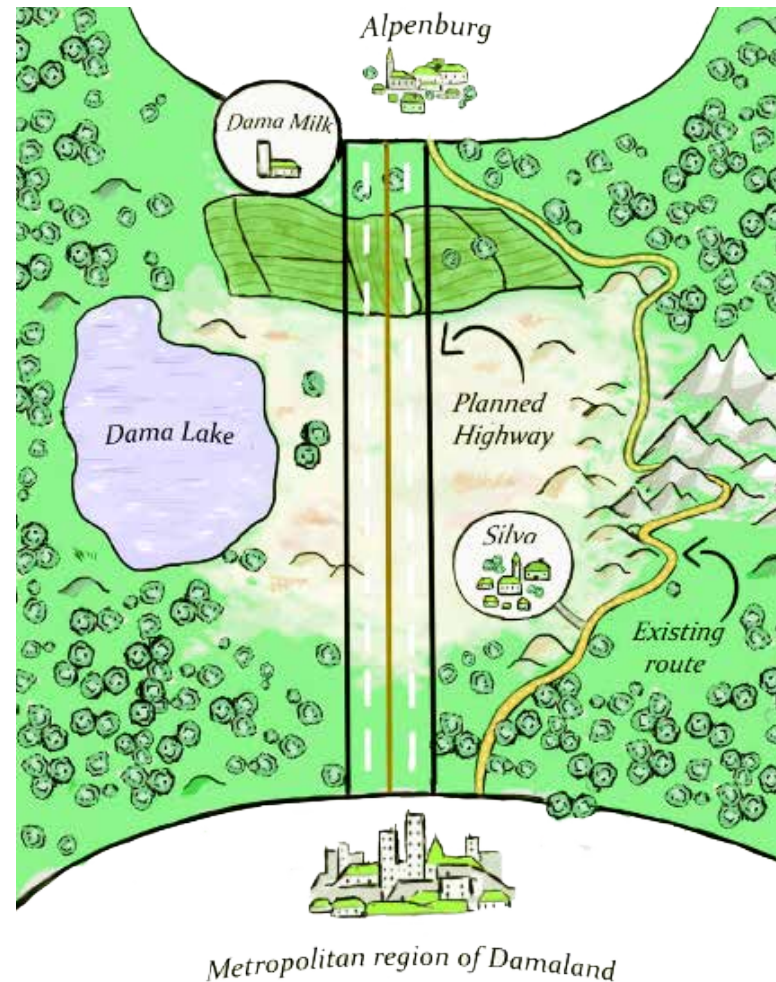
PARTICIPANTS

Anna Borisova
Klemen Beličič
Noémie Benezeth
Maria Stella Stange del Carpio
Theresa Luber
Istvan Goman
Angela Taufer
Wenxuan Zhang



ALPINE LANDSCAPE GOVERNANCE GAME

Group C developed a simulation game to gain insight into stakeholder conflicts in peri-urban alpine regions. The participants came up with a fictitious though typical conflict situation. Based on this situation they determined stakeholders' profiles, motivations and arguments, which were played out through role-playing, and ultimately presented in a video. By reflecting on the whole simulation process, the participants provided recommendations for planning practitioners on how to deal with such stakeholder conflicts and how such simulation games can support landscape governance.





Results of group C.



SUPERVISOR

Karsten Berr

PARTICIPANTS

Manca Dremel

Rashad Gasimov

Yongyu He

Agboeze Anthony Ikechukwu

Anna Maria Jasieńska

Alenka Kstelic

Maike Nilges

Margherita Valcanover

Further to the LOS_DAMA! steering meeting in Grenoble, UGA and GAM organised, with the kind support of the Urban Planning Agency of the Grenoble region, an event to bring together LOS DAMA! partners (researchers and practitioners) and local experts from Grenoble (from Grenoble-Alpes-Metropole, the Regional Nature Parks of Vercors and Chartreuse...). After three introductory keynote speeches from Martina van Lierop (TUM), Alessandro Betta (City of Trento) and Sergeja Praper (UIRS), LOS_DAMA! partners (both knowledge and project partners) and local practitioners from Grenoble participated in a World Café around three main topics and three roundtables.

1. Landscape and GI to rethink regional and urban planning
2. Living peri-urban landscapes: towards better living in metropolitan Alpine regions
3. Landscape and public policies from local to global

Regarding the methodology, to facilitate exchanges between participants we organized a first round where participants were asked to draw up the main interests related to each topic. Then after changing tables, the participants proposed three recommendations based on the identified interests. For the organisation of this event, we are grateful to the City of Grenoble and the “Biennale of Cities in Transition” who helped us to disseminate information about the event.

Impressions of the World Cafe.







LOS_DAMA! ACADEMIC CONTRIBUTIONS

European Regional Development Fund



THE POTENTIALS AND BARRIERS OF GREEN INFRASTRUCTURE IMPLEMENTATION IN LOCAL PLANNING PROCESSES: EXAMPLES OF PERI-URBAN ALPINE METROPOLITAN AREAS.

Peri-urban areas are subject to strong pressures from urban development. This often leads to fragmented landscapes characterised by urban sprawl with low ecological, recreational and social quality. At the same time, the important role of ordinary peri-urban landscapes as the everyday living spaces of people and as an ecological resource is often overlooked in planning. The green infrastructure concept has been identified as a promising strategy for the development of a multifunctional green network to meet a range of policy objectives such as social cohesion and biodiversity. Within the EU Interreg-project LOS_DAMA!, local and regional actors closely cooperate to develop and enhance peri-urban green infrastructure within seven pilot projects in the Alpine Space region. However, the implementation of GI in local planning practice seems often hampered by dealing with the complexity of its processes.




We aimed to identify the potentials and barriers practitioners experience when implementing GI in local planning processes. The study is based on semi-structured interviews with practitioners and an analysis of pilot action plans that have been developed by practitioners of the LOS_DAMA! pilot projects. As the focus was on GI implementation, we used the underlying principles of GI, as defined in the GREEN SURGE and GreenInfra projects (e.g. multifunctionality, integration of green and grey, connectivity, social inclusion, and quality

improvement) as a framework for analysis. Yet these principles can be interpreted as only indirectly related to planning processes. Therefore, for each of the GI principles we identified essential planning process principles (see table xx). For example, to achieve multifunctionality in a landscape, inter-sectorial or interdisciplinary cooperation is needed.

The outcomes showed that project partners often have their specific barriers and potentials. In Trento, inter-sectorial cooperation still needs to mature, while in comparison with the other partners public participation has been well developed. In the Piedmont region, only first steps in public participation have been taken, while regional coordination is well established. Insufficient regional coordination is, in turn, for the pilot area of Munich a well-known barrier. Some principles were mentioned less by the practitioners in the pilot areas. For instance, “cooperation between opposing parties” has not been frequently mentioned. Perhaps as the related GI principle of the “integration of green and grey” also gained less attention in the LOS_DAMA! project as a previous analysis of the pilot projects showed. The principles related to “management for quality” also received less attention. “Long-term planning”, however, seems to be well established in most of the study areas. The topic of “Management and maintenance” has been touched upon, yet more in relation to social inclusion by raising the awareness of

different stakeholders for the values of peri-urban landscapes and so indirectly improve landscape management. Alongside principles related to GI and planning processes, we also identified barriers and potentials related to the GI concept itself. The lack of knowledge and awareness of GI were in some cases identified as a barrier, while others considered the GI concept as a potential to highlight and raise awareness for the value of green open spaces.

The study helped in gaining a better understanding of the potentials of and barriers to GI implementation in local planning processes. In a next step, we aim to compare the outcomes with relevant literature, and develop a typology of these potentials and barriers. This typology might help to better identify in a follow-up study, which tools can be used to unlock the potentials and lift the barriers.

PRINCIPLES OF GI PLANNING		
	Multifunctional	Intersectorial/ Interdisciplinary cooperation
	Integration of green & grey	Cooperation of opposing parties
	Connectivity	Intermunicipal collaboration Regional coordination
	Social inclusion	Governance Participation
	Quality improvement	Management and maintenance Long-term planning

Scheme of GI planning principles.

van Lierop, M. and Pauleit, S., (2019). The potentials and barriers of green infrastructure implementation in local planning processes: examples of peri-urban Alpine metropolitan areas. In: EUGEO, 7th EUGEO Congress with the 51st Conference of Irish Geographers "Re-Imagining Europe's Future Society and Landscapes". Galway, 15-18 May 2019.

PERI-URBAN LANDSCAPE AS A TOOL FOR COLLABORATION. EXAMPLE OF ALPINE METROPOLISES

Beyond a sectoral vision related to the preservation of biodiversity and ecosystems, landscape appears as a driving force behind territorial projects and questions public action on several levels. It enables action within the territory but above all it brings stakeholders together. Thus, landscape is both the object and matrix of public action on territories but its operational nature in planning and its holistic character are still being debated. The multiple stakeholders and multi-level nature of governance in metropolitan regions questions the modalities of public action on and through landscape. Assuming that the European Union conveys a specific vision of landscape through the European Landscape Convention and the GI strategy for the EU, enabling the circulation of good practices, then transnational programmes such as LOS_DAMA! appear as an interesting stakeholder network to focus on.

This contribution questions the role of landscape in planning policies in rethinking the articulation between different decision-making scales, and is part of the renewal in research both on landscape and open spaces, and on the future of peri-urban spaces. The aim here is to complete a set of works that have been carried out concentrating on types of spaces with landscape challenges such as urban fringes, the interfaces between built and undeveloped spaces, support for new practices for households in the peri-urban areas of metropolitan areas. Based on an

analysis of the Pilot Action Plans, the research question of this paper addresses to what extent the network configuration of LOS_DAMA! at the transnational level can be combined with the design of locally embedded landscape policies (embedded within a territorial and a legal context).

The seven metropolitan regions represented within LOS_DAMA! reflect a variety of peri-urban patterns and landscape units. They differ also in terms of landscape governance with a predominance of regional and local scales, through sectoral policies or project-related policies. In spite of the role of the EU in harmonising policies, there are varying levels of maturity of landscape policies between the areas. Missions assigned to landscape are also very different as shown by this figure, and reveal two main groups of partners along two axes. A first group, composed of Salzburg and Vienna strongly link landscape to nature conservation policies, while Piedmont, Trento and Grenoble rather embed landscape policies within territorial development goals. Finally, Munich insists on strategic goals while Ljubljana refers to regulation.

Three visions were conveyed by this first analysis of the pilot action plans and show convergences between partners. Firstly, the role of peri-urban landscapes and peri-urban agriculture in fostering links between urban and rural/mountain areas can be noted.

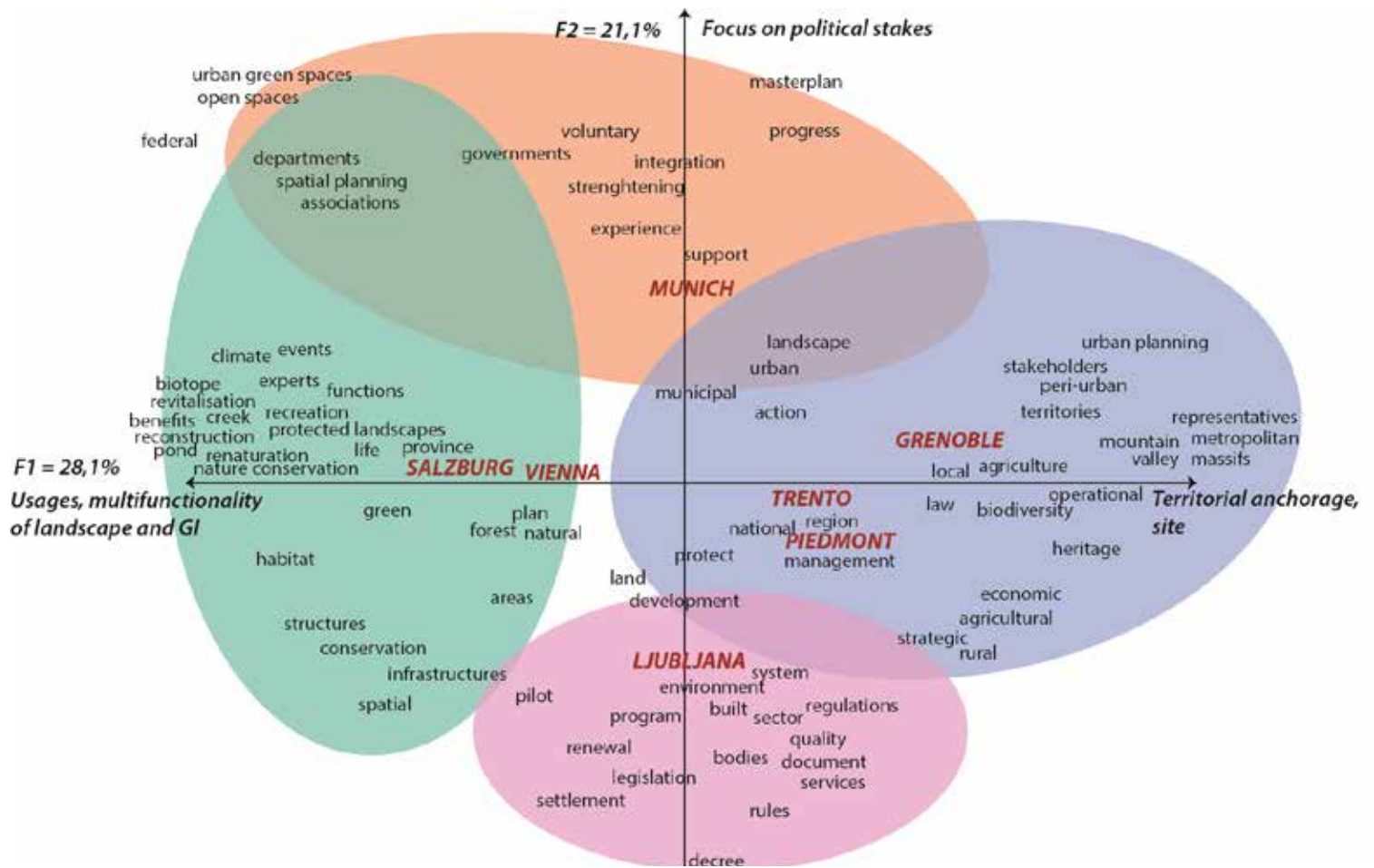


Diagram of a lexicometric analysis.

Then, LOS_DAMA! helps to mobilize stakeholders and to put landscape on the agenda of local policies. Finally the programme contributes to rethinking collaborative governance by fostering cross-sectoral cooperation.

Meyfroidt, A., 2018. Le paysage périurbain, outil de coopération entre métropoles européennes. Le cas du projet INTERREG Europe alpine LOS DAMA! Projets de paysage, 19.

CROSS-BORDER COOPERATION AT INTERREG PROJECT LEVEL: NEGOTIATION PROCESSES AND CONFLICTS OVER PERI-URBAN LANDSCAPES

With population growth, usage pressure, land competition, settlement expansion and urban sprawl, increasingly diverse and complex challenges for the development of 'postmodern landscapes' are arising, including specifically in the context of the so-called 'Alpine Space'.

With reference to Alpine Space as the EU backdrop for cross-border cooperation in the Interreg project LOS_DAMA!, the article takes a closer look at how participating landscape planners from different EU countries assess the need for action in favour of 'peri-urban landscapes'.

From a social constructivist research perspective, it can be seen on the one hand that landscapes that have been identified as such are inadequately planned and constructed in a controlled manner.

On the other hand, certain conflicting assessments of a cognitive and aesthetic nature become visible at the same time, which bear witness to ambiguities in postmodernism. With recourse to Chantal Mouffe, Ralf Dahrendorf, and Olaf Kühne, these conflicts can be productively formulated by classifying urban hybrid conflicts as social normality.

Jenal, C. & Weber, F, 2019. Grenzüberschreitende Zusammenarbeit auf Interreg-Projektebene: Aushandlungsprozesse und Konflikte um, periurbane Landschaften' (Cross-border cooperation at Interreg project level: negotiation processes and conflicts over peri-urban landscapes). In. Berr, K. & Jenal, C. (Hrsg.), Landschaftskonflikte (S. 665-685). Wiesbaden: Springer VS (<https://www.springer.com/de/book/9783658223243>)



Cover of the publication.

PLANNING FOR ENHANCED QUALITY OF LIFE AND SUSTAINABLE ACCESSIBILITY OF PERI-URBAN AREAS: APPLICATION OF THEMATIC GREEN INFRASTRUCTURE CONCEPT AND BEHAVIOURAL MAPPING IN THE LJUBLJANA MARSH AREA

Peri-urban areas surrounding Alpine metropolitan cities tend to be exposed to heavy pressures and a variety of demands. The Ljubljana marsh area can be seen as representative of such areas; it forms a green wedge for Ljubljana and it is a valuable nature protection area (Natura 2000, Nature Park). Its landscape is an attractive setting for recreational and leisure activities for urban dwellers from Ljubljana and several towns in the area including municipal centres which share the Ljubljana Marsh area. The landscape is maintained by agriculture, which can conflict with nature protection and other land uses, thus a transparent coordination of different interests is required. For this reason, we examined the possibilities and usefulness of Thematic Green Infrastructure as a planning and management framework to ensure quality of life by providing the spatial conditions for recreation and tourism. The process was supported by the use of behavioural mapping of the two most visited destinations in the Ljubljana Marsh area. The results were discussed at two stakeholder workshops regarding the applicability of Inter-municipal Thematic Green Infrastructure for connecting and coordinating spatial development between the municipalities involved and between several governance levels.

The Thematic Green Infrastructure concept is a planning tool relevant for large green areas, where individual elements of GI are difficult to determine due to the general presence of large green spaces and diverse protection regimes.

It is an example of an expertise-based approach for comprehensive GI provision for a specific purpose which depends on certain landscape characteristics and settings. It was tested in the context of outdoor recreational and leisure activities in the Ljubljana Marsh wider area and resulted in the Recreational Green Infrastructure Plan. This concept is an innovation developed and tested in accordance with the purpose of the LOS_DAMA! project – to enhance the potential of peri-urban green infrastructure for sustainable development by improving the governance and planning of landscapes and open spaces. The concept emphasizes the elements of GI which support the selected functions on the sub-regional scale with respect to sustainable development and nature protection. The concept is based on relevant content from municipal spatial plans and spatial analysis of distinctive features in the area supporting or opposing the development of leisure activities, e.g. flood areas, protection regimes, accessibility. The concept was initially developed for three groups of users (inhabitants, hikers and tourists) with specific demands and preferred destinations within the area. Finally, the elements supporting the leisure activities for these three groups were united in a single concept named Recreational Green Infrastructure Plan. The concept goes beyond land use categories by emphasising the multifunctionality of areas and paths that are



Recreational Green Infrastructure Plan for Ljubljana Marsh area.

co-developed, co-used and co-managed. The concept operates cross-scale. It is developed for the intermunicipal, sub-regional level and can be incorporated into municipal spatial plans and strategies as well as regional plans to improve the overall function of the area. The GI plan was discussed with stakeholders regarding the structure, the possibilities and drawbacks for implementation.

At a very micro scale the concept addresses place capacity issues. In this context it implements observation and behaviour mapping to address the question as to how much nature can take and reflects on place carrying capacity for occupancy emphasising actual dimensions, frequency and intensity of use as valuable inputs for the sustainable management and governance of GI.

This type of approach may provide the basic characteristics of spatial uses in the observed place, commenting on the distribution of the activities across the area by means of predefined parameters, such as density of use, manner of filling up the area, activity type and intensity, presence by age group. The assessment of the area's carrying capacity is based on a generalized size of the area used per person. The more similar observations and analyses following the proposed protocol are performed in the future, the more likely improved measures for determining the rate of an area's carrying capacity for use will be obtained. It will be necessary to study the relationship between an area's use, its physical form, and ecosystem features in as multi-layered a manner as possible.

PERI-URBAN LANDSCAPES, CHALLENGES FOR BETTER LIVING IN ALPINE METROPOLITAN AREAS

LOS_DAMA knowledge partners proposed a Special Session within the 7th EUGEO Congress on the Geography of Europe - Re-Imagining Europe's Future Society and Landscapes, in Galway, Ireland, from 15-18 May 2019. Ass-Prof. Emmanuel Roux, Prof. Dr. Stephan Pauleit, Ing. Martina van Lierop and Dr. Aurore Meyfroidt were co-convenors of the session "Peri-urban landscapes: challenges for better living in [Alpine] metropolitan areas". This special session brought together 4 papers, including one from outside of the Alpine region.

Alessandro Betta (City of Trento) focussed on agricultural hybrid fringes as potential "peacekeeping" tools between different land uses. His main purpose was to present how peri-urban agriculture is integrated into GI planning and how agriculture can shape GI within peri-urban spaces.

Martina van Lierop and **Stephan Pauleit** (TUM) explored the potentials of and barriers to GI implementation that practitioners experience, with a focus on practitioners involved within LOS_DAMA!. Based on semi-structured interviews and an analysis of the Pilot Action Plans, they provided a typology of levers and barriers, which will further be developed in relation with a toolbox.



Aurore Meyfroidt (UGA) and **Martina van Lierop** (TUM) analysed the concept of GI and how it is translated at local level and appropriated by practitioners. The aim of the paper was to analyse to what extent GI can be considered as an operational concept whilst still being adaptive enough to enable efficient place-based planning thanks to a content analysis of the Pilot Action Plans and interviews conducted with practitioners.



Group of researchers representing LOS_DAMA! at EUGEO.

Claire Fonticelli (Ecole Nationale Supérieure du Paysage Versailles-Marseille) presented a paper on the Paris suburban region, reflecting on the impact of residential densification on the peri-urban landscape. She analysed the architecture, the social transformation of neighborhoods and the governance associated with this new way to build, often leading to poor urban quality.

INTERNATIONAL ASSOCIATION OF LANDSCAPE ECOLOGY WORLD CONGRESS (IALE)

NATURE AND SOCIETY FACING THE ANTHROPOCENE

LOS_DAMA! has been well (re-)presented at the 10th World Congress of the International Association of Landscape Ecology (IALE) - Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology, held in Milan, Italy, from 1-5 July 2019. This theme of the IALE congress fitted well within the scope of LOS_DAMA! with its interdisciplinary approach combining ecological, environmental and societal issues in a landscape largely influenced by people. In total 5 contributions, in 5 different sessions, introduced topics and results related to the LOS_DAMA! project.

Alessandro Betta (City of Trento), **Martina van Lierop** (TUM) and **Aurore Meyfroidt** (University Grenoble-Alpes) explored the peri-urban landscapes of the LOS_DAMA! pilot projects and posed the question, of whether and how peri-urban agriculture could support green infrastructures in these landscapes, investigating in particular the instrument of the “Biodistretto” (bio-district) as a way to involve agricultural stakeholders

Collaborative governance within the peri-urban landscapes of the LOS_DAMA! pilot projects has been further studied by **Aurore Meyfroidt** (University Grenoble-Alpes), **Martina van Lierop** and **Alessandro Betta**. They presented the various stakeholder constellations, their inclusion in governance processes and the tools tested in the pilot projects for the enhancement of collaboration and participation.



Maria Quarta, Sarah Braccio and Francesca La Greca (Region Piedmont) contributed to a paper presented by one of their collaborators **Maddalena Gioia Gibelli** (Studio Gioia Gibelli) on the multi-scale method, which has been applied to the local pilot project of Region Piedmont. This method combines a landscape vulnerability evaluation, a socio-economic analysis based on ecosystem services, and an economic evaluation to better support planning policies.



Impressions of the IALE World Congress.

Stephan Pauleit (TUM), **Martina van Lierop** and **Sergeja Praper** (UIRS) explored the similarities and differences between the European Landscape Convention and the Green Infrastructure strategy. The Ljubljana pilot project was taken to showcase how these similarities and differences play out in practice and how these two policies could strengthen each other.

As part of the theoretical framework of the LOS_DAMA! project, **Martina van Lierop** and **Stephan Pauleit** presented a comparison between landscape approaches and the green infrastructure approach. A discussion followed on whether landscape approaches would be able to support the implementation of green infrastructure in local planning processes.

LIST OF ACADEMIC AND OTHER SCIENTIFIC CONTRIBUTIONS

1. Betta, A., van Lierop, M. and Meyfroidt, A., (2019). Potentials and issues in involving peri-urban agricultural stakeholders to enhance landscape multifunctionality. A selection of cases from “Los_Dama!”. In: IALE, 10th IALE World Congress “Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology”. Milan, 1-5 July 2019.
2. Betta, A. (2019). Hybrid fringes. Agricultural strategies for GI enhancement in peri-urban areas. In: EUGEO, 7th EUGEO Congress with the 51st Conference of Irish Geographers “Re-Imagining Europe’s Future Society and Landscapes”. Galway, 15-18 May 2019.
3. Berr, K., Jenal, C., Kühne, O. & Weber, F. (2019). Praxis Landschaftsgovernance. Ein Überblick (Landscape governance practice. An overview) (Essentials). Wiesbaden, in Vorbereitung: Springer VS.
4. Faiss, J. (2019). Eine Insel für jeden. Konfliktmanagement in Zürichs Erholungslandschaft (An island for everybody. Conflict management in the recreational landscape of Zurich). In K. Berr & C. Jenal (Hrsg.), Landschaftskonflikte (Landscape conflicts) (in press.). Wiesbaden: Springer VS.
5. Goličnik Marušič, B., Mihevc, N., and Dremel, M. (in print). Patterns of using places for recreation and relaxation in peri-urban areas: The case of Lake Podpeč, Slovenia. *Urbani izziv* (in print).
6. Goličnik Marušič, B and Praper Gulič, S. (2018) Development of a user-centered module: A contribution to flood-sustainable spatial planning. *Urbani izziv*, 29(2), pp. 111-125. <http://www.urbani-izziv.si/Portals/urbaniizziv/Clanki/2018/urbani-izziv-en-2018-29-02-04.pdf>
7. Gretter, A., Rizzi, C., Favargiotti, S., Betta, A. and Ulrici, G. (2018). Trento Social Commons. Community Engagement as Tools for New Physical and Cultural Relationships Between Rural and Peripheral Spaces, in: *Journal of Alpine Research | Revue de géographie alpine*, 106:2.
8. Hansen, R., van Lierop, M., Šuklje Erjavec, I., Rall, E., Rolf, W. and Pauleit, S., (in press). Fuzzy concept or robust, elastic approach? Framing urban green infrastructure for practice. [work in progress, title and sequence of names subject to change].
9. Jauschneg, M., Stockinger, C. Alte Idee, neu gedacht: Grünraumspanne Bisamberg – Gerasdorf – Norbert-Scheed-Wald (reviewed paper), in: REAL CORP 2018 Proceedings 4-6 April 2018, Vienna

10. Jenal, C. & Weber, F. (2019). Grenzüberschreitende Zusammenarbeit auf Interreg-Projektebene: Aushandlungsprozesse und Konflikte um periurbane Landschaften (Cross-border cooperation at Interreg project level: Negotiation processes and conflicts over peri-urban landscapes). In: K. Berr & C. Jenal (Hrsg.), *Landschaftskonflikte (Landscape conflicts)* (in press.). Wiesbaden: Springer VS.
11. Meyfroidt, A., van Lierop, M. and Betta, A., (2019). Beyond boundaries, collaborative governance in peri-urban landscapes. Evidence from Alpine metropolitan areas. In: IALE, 10th IALE World Congress "Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology". Milan, 1-5 July 2019.
12. Meyfroidt A., van Lierop M. (2019). How to translate green infrastructures for place-based planning? The example of Alpine peri-urban landscapes. In: EUGEO, 7th EUGEO Congress with the 51st Conference of Irish Geographers "Re-Imagining Europe's Future Society and Landscapes". Galway, 15-18 May 2019.
13. Meyfroidt, A., (2018). Le paysage périurbain, outil de coopération entre métropoles européennes. Le cas du projet INTERREG Europe alpine LOS DAMA! *Projets de paysage*, 19.
14. Meyfroidt, A., van Lierop, M., Jenal, C., (2018). Le paysage périurbain, outil de coopération entre métropoles européennes. Le cas du projet INTERREG Europe alpine LOS DAMA!. Journées doctorales du Paysage 2018. Versailles, 03-04 April 2018.
15. Meyfroidt, A., Roux E., (2017). Repenser les périphéries par le paysage. Le cas de la métropole grenobloise. IADT, Colloque Métropoles, villes intermédiaires, et espaces ruraux. Quelles interactions au service du développement territorial? Clermont-Ferrand, 23-24 November 2017.
16. Pauleit, S., van Lierop, M. and Praper, S., (2019). From the European Landscape Convention to green infrastructure: making progress or stepping backwards? In: IALE, 10th IALE World Congress "Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology". Milan, 1-5 July 2019.
17. Rebernik, N., Goličnik Marušić, B., Bahillo, A., and Osaba, E. (2019) A 4-dimensional model and combined methodological approach to inclusive urban planning and design for all. *Sustainable cities and society*, 44, pp. 195-214, doi: 10.1016/j.scs.2018.10.001.

18. Roux, E. (2018). Devices for Understanding Territory to Rethink Relations Between City and Highland in Alpine Metropolitan Areas, in: *Journal of Alpine Research | Revue de géographie alpine* 106-2 | 2018 LINK:
19. Šuklje Erjavec, I. (2017) Challenges of co-creation of public spaces. V: *Resurces*. Lisbon: Cyberparks.. http://cyberparks-project.eu/sites/default/files/resources/inaserjavec_challenges_for_co-creation_14.0217.pdf. [COBISS.SI-ID 2829507]
20. van Lierop, M. and Pauleit, S., (2019). Landscape approaches for implementing green infrastructure in local planning practice: A review. In: IALE, 10th IALE World Congress "Nature and society facing the Anthropocene: challenges and perspectives for landscape ecology". Milan, 1-5 July 2019.
21. van Lierop, M. and Pauleit, S., (2019). The potentials and barriers of green infrastructure implementation in local planning processes: examples of peri-urban Alpine metropolitan areas. In: EUGEO, 7th EUGEO Congress with the 51st Conference of Irish Geographers "Re-Imagining Europe's Future Society and Landscapes". Galway, 15-18 May 2019.
22. van Lierop, M. and Pauleit, S. (2019). Grüne Infrastruktur – von der Theorie zur Praxis in alpinen Stadtlandschaften (Green infrastructure – from theory to practice in Alpine urban regions). In: *Landschaftsarchitektur in Südtirol*, Kammer der Architekten, Associazione italiana di Architettura del Paesaggio, City of Meran, Paesaggissimo 2019 Landschaftsentwicklung = Luxus der Zukunft?. Meran, 15 February 2019
23. van Lierop, M., Meyfroidt, A. and Pauleit, S., (2018). Governing the trade-offs of peri-urban ecosystem services in the Alpine region. In: *Ecosystem Services Partnership, ESP Europe 2018 regional conference "Ecosystem services in a changing world: moving from theory to practice"*. San Sebastian, 18 September 2019.
24. van Lierop, M., Meyfroidt A., Jenal, C., (2018). Interim report WPT4 [Project document], 27 p. https://www.alpine-space.eu/projects/los_dama-/results/t4/20190520_Id_interimreport_final.pdf
25. van Lierop, M., Jenal, C. and Pauleit, S., (2017). LOS_DAMA! Developing pilot action plans for practice and research [Poster presentation]. In: *GREEN SURGE, International Conference "Urban green Infrastructure – Connecting People and Nature for Sustainable Cities"*. Malmö, 20-21 September 2017.

26. Žlender, V. and Goličnik Marušić, B (2019). Integration of perception and usage of peri-urban open spaces in planning documents: how can the appropriate format of information help?. In: Governance of natural heritage in peri-urban open spaces. Bern: Universität Bern. <https://www.conftool.com/osm2019/index.php?page=browseSessions&search=vita> <https://www.youtube.com/watch?v=a2dEfk8ook0&feature=youtu.be>

The experiences the LOS_DAMA! partners gained in the pilot activities, networks and collaborations as well as the Autumn School contributed to this and to additional, linked publications:

- The LOS_DAMA! Landscapes on the urban fringe highlights the added value of our activities for the general public
- The LOS_DAMA! compendium gives a detailed insight into our challenges we faced and our local pilot activities
- The LOS_DAMA! Toolbox is a ready to apply publication that carved out transferable tools for practitioners
- The LOS_DAMA! synthesis report offers technical insights for highly skilled practitioners and researchers



Cover of LOS_DAMA! publications.

www.alpine-space.eu/projects/los_dama
los_dama@muenchen.de



LOS_DAMA! PROJECT PARTNERS

European Regional Development Fund



PROJECT PARTNERS-CONTACTS**Landeshauptstadt München (Lead Partner)**

Franziska Drasdo +49 89 233 24508
los_dama@muenchen.de
www.muenchen.de/los_dama

Comune di Trento

Giovanna Ulrici +39 0461 884524
giovanna_ulrici@comune.trento.it
www.comune.trento.it/Aree-tematiche/
Ambiente-e-territorio/Parchi-e-giardini/Iniziative/
LOS_DAMA

Grenoble-Alpes Métropole

Guillaume Tournaire +33 4765 95706
guillaume.tournaire@lametro.fr
www.lametro.fr/482-programmes-
europeens.htm

Regione Piemonte

Maria Quarta +39 011 4324518
maria.quarta@regione.piemonte.it
www.regione.piemonte.it/ambiente/los_dama/

Universität Tübingen

Corinna Jenal +49 7071 2977535
corinna.jenal@uni-tuebingen.de

UIRS Ljubljana

Sergeja Praper Gulič +386 1420 1318
sergeja.praper@uirsi.si
www.uirsi.si/projekt?id=323

Stadt Wien

Christina Stockinger +43 1 4000 88886
christina.stockinger@wien.gv.at
www.wien.gv.at/stadtentwicklung/projekte/
landschaft-freiraum/landschaft/gruenraum/los-
dama.html

SIR Salzburg

Manuela Brückler +43 662 62345524
manuela.brueckler@salzburg.gv.at
www.salzburg.gv.at/bauenwohnen_/Seiten/los-
dama.aspx

TUM Technische Universität München

Martina van Lierop +49 8161 714777
martina.van-lierop@tum.de
https://www.landschaftsentwicklung.wzw.tum.
de/startseite/

Université Grenoble Alpes

Aurore Meyfroidt +33 476822038
aurore.meyfroidt@umrpacte.fr

Unless stated otherwise, LOS_DAMA! project partners hold copyrights for the images.

Alberto Campi

p. 10 Top left

Candice Magnard

p.14 Botton left

p.20 Top right

Bérenger Gallay

p.14 Top right

Blaž Zupančič

p.14 Bottom right, middle

Žiga Koritnik

p.14 Top right

PUBLISHER

City of Munich - Department of Urban Planning
Blumenstrasse 28a - 80331 Munich
TUM Technical University Munich
Arcisstraße 21 - 80333 München
www.muenchen.de/plan
los_dama@muenchen.de

Piedmont Region
Division of Strategic Planning and Green
Economy
corso Bolzano, 44 - 10121 Torino
los_dama@regione.piemonte.it

In collaboration with
Division of External Relations and
Communication

EDITORIAL OFFICE

Under the guidance of Aurore Meyfroidt (UGA) and Martina van Lierop (TUM), this publication was created in cooperation with all the LOS_DAMA! partners.

EDITORIAL COMMITTEE

The following representatives of the LOS_DAMA! project partners were members of the editorial committee: Franziska Drasdo (MUC), Karsten Berr (EKUT), Sergeja Praper (UIRS) and Alessandro Betta (TRENT).

PROOFREADING

Kern AG
<https://www.e-kern.com/de/>

DESIGN AND LAYOUT

ERICA s.a.s. - Pinerolo [TO]
www.studioerica.it
TUM Technische Universität München
Martina van Lierop, Nuria Roig.

PRINTING

Printed on 100% recycled paper
October 2019
The EU-project LOS_DAMA! (November 2016 - December 2019) was co-financed by the European Regional Development Fund (ERDF) within the Interreg Alpine Space Programme of the European Union.



European Regional Development Fund

