
LOS_DAMA! Compendium

Green infrastructure for better living

European Regional Development Fund





LANDSCAPE AND OPEN SPACE DEVELOPMENT IN ALPINE METROPOLITAN AREAS

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LOS_DAMA! PROJECT AND PARTNERSHIP

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LOS_DAMA!

PROJECT AND PARTNERSHIP

LOS_DAMA! means Landscape and Open Space Development in Alpine Metropolitan Areas. This EU-Interreg V B project from November 2016 to December 2019 focused on Alpine metropolitan areas. They are surrounded by mountains, by areas of high natural value like heath- and marshlands, by agricultural land and forests. The sometimes rather unspectacular landscapes of the peri-urban transition zones surrounding cities are important for connecting people with green spaces. Despite their importance, policy makers at all levels and citizens often overlook and undervalue these areas.

The metropolitan areas in and around the core Alpine region face common challenges related to increasing pressure on peri-urban land. Located at the fringes of urban cores these areas are complex and land use is fragmented, yet their potential for a more sustainable and resilient development is high. Despite the importance of such areas for a more balanced development, planners struggle to offer effective solutions for their social and ecological enhancement. Conflicts between different users are becoming more frequent. Fragmented ownership patterns and lack of landscape stewardship are pressing issues. What is needed is political commitment, increased cooperation within administrative departments and with stakeholders in order to make these areas more livable and more sustainable.

PARTNERS AND OBSERVERS

The ten LOS_DAMA! partners from Austria, France, Germany, Italy and Slovenia teamed up to deal with similar and more specific peri-urban green infrastructure issues. Our partnership comprised three cities, one metropolitan and one regional authority in order to increase impact and test the propositions in different contexts: Munich (as lead partner), Trento and Vienna, Grenoble-Alps Metropolis and Piedmont Region. Two planning institutes worked in close contact with their home cities and surrounding municipalities: the Salzburg Institute for Regional Planning and Housing (SIR) and the Urban Planning Institute of the Republic of Slovenia (UIRS). Three universities supported our project and the local pilot activities: the University of Grenoble-Alps, the Technical University of Munich and the Eberhard Karls University Tübingen.

22 Project Observers took part in our exchange and ensured our wider cooperation. 8 of the observers are cities and metropolitan authorities that are part of our city network and valuable partners in exchanges on how to enhance GI in city regions. 6 associations and local partners supported the implementation of our activities on the local level. 8 transnational, regional and knowledge institutions contributed to enhancing multilevel governance. You can find a list of our observers on page 60-61.



LOS_DAMA! partners and observers in Munich 2017.

PILOT ACTIVITIES

With LOS_DAMA! we set up pilot activities in seven areas to test multi-functional and cross-sectoral solutions and tools to enhance inter-municipal cooperation. The project setting provided the opportunity for experiments in innovative governance and planning to enhance negotiation, mediation, and action among stakeholders. In 2013, the European Commission published its Green Infrastructure strategy. LOS_DAMA! bridges the gap between EU-level and local policies and between strategic framework and implementation. Cities and municipalities are essential to establishing and enhancing green infrastructure. To strengthen the impact of activities and help overcome existing barriers, both between departments and between public authorities and other stakeholders, co-creation and informal approaches are required.

The LOS_DAMA! pilots cover a wide range of topics, scales, tools, and scopes. They vary from cooperation between municipalities to developing plans and packages of measures to enhance multi-functionality of the landscape. For example, the City of Vienna and the neighbouring municipality of Gerasdorf cooperated closely to develop a regional park and the Urban Planning Institute of Slovenia (UIRS) supported the municipalities within the Ljubljana Marsh natural area in joint development. The City of Munich set up three different pilot activities with inter-municipal associations for the development of landscapes around the city. Other pilots successfully tested governance and innovative management tools to better develop peri-urban green infrastructure. The Salzburg Institute for Regional Planning and Housing developed an “Ecopool” to foster more effective compensation

measures based on the quality of green areas. Grenoble-Alps Metropolis tested innovative management measures in the Vouillants park and aimed to raise awareness concerning peri-urban green areas at the political and technical level. Raising awareness and changing the common perception of peri-urban open spaces is also a key objective for the City of Trento, which has been testing participatory methods for acquiring knowledge and promoting landscape plans. The Piedmont Region is working on a wider territorial scale to implement their green infrastructure concept into regional planning and translate it into specific measures.

Our experiences fed into the LOS_DAMA! toolbox in which transferable tools and methods are described. As the LOS_DAMA! Toolbox is closely linked to this publication you can find a reference to the tools applied after each pilot activity.

NETWORKS AND COLLABORATION

This variety of scales and levels helped LOS_DAMA! to build a comprehensive set of recommendations and tools to enhance peri-urban green infrastructure. Now, they are ready to be applied for cities and regions facing similar issues. A network of experts from the partnership and other interested colleagues will continue to promote insights and results. In applying and continuing our work, we will further raise awareness and develop and enhance knowledge and implementation. To offer access for all interested parties we have set up groups on landscape and open space development in city regions on different social media platforms, which are open to new members.



Officers from the City of Trento visiting the City of Munich

With LOS_DAMA! we founded a core partnership of major Alpine cities, to ensure that cooperation between peers and the enhancement of green infrastructure for better living will continue after the project end in 2019. A Memorandum of Understanding is the founding document of the LOS_DAMA! Network of Cities and Metropolitan Authorities for green infrastructure. It is open to further cities and metropolitan authorities throughout the Alpine region and it will continue in close cooperation with EUSALP. You can read more about the city network on page 56.

LOS_DAMA! established a strong link to the European Strategy for the Alpine Region (EUSALP). The macroregional strategy EUSALP is based on an initiative of Alpine states and regions and sets the framework for joint cooperation with the help of nine thematic Action Groups. From the very beginning in 2016, we



LOS_DAMA! project partners located in the Alpine Space.

closely cooperated with EUSALP Action Group 7, which aims at developing ecological connectivity across the whole EUSALP territory.

AUTUMN SCHOOL AND OTHER OUTPUTS

LOS_DAMA! knowledge partners, universities and institutes offered their capacities to bridge the gap between theory and practice. In 2018, the LOS_DAMA! Autumn School for young professionals was organised where 23 (future) practitioners from all over the world came together in Salzburg, Munich and Freising (Bavaria) to enhance the ordinary. We jointly explored green infrastructure benefits and develop tools, masterplans and a governance role play. Pilot partners and local/regional stakeholders provided insight into “real world” issues, challenges and problems on the spot. 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! 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

www.alpine-space.eu/projects/los_dama



LOS_DAMA! CITIES AND METROPOLITAN REGIONS

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LANDSCAPES OF LOS_DAMA! CITIES AND METROPOLITAN REGIONS

LOS_DAMA! project partners have been implementing green infrastructure pilots in seven peri-urban areas of cities and metropolitan regions in the Alpine Space. The pilot projects are situated across the Alps. High mountains surround the valleys of Trento and Grenoble. Salzburg and Ljubljana are part of river valleys amongst alpine foothills, while the regions of Munich, Vienna and Turin lie at a distance from the Alps on plains created by glaciers and rivers. The metropolitan regions of Munich, Vienna and Turin are each home to over 1.5 million inhabitants. In comparison, the metropolitan regions of Grenoble and Ljubljana are smaller with approximately 500,000 inhabitants each. The metropolitan regions of Salzburg and Trento are home to between 110,000 and 120.000 inhabitants each.

While the landscapes, populations and planning systems differ in each of the metropolitan regions, they face common challenges regarding peri-urban landscapes: high land-use pressure and multiple, often conflicting uses of landscapes on the urban fringe. Enhancing peri-urban landscapes despite those challenges is the common aim of LOS_DAMA!. These ordinary landscapes provide a large variety of functions such as water retention, food supply and biodiversity and contribute to the improvement of human well-being in metropolitan regions. We have been learning from each other how to enhance peri-urban landscapes and we can offer experiences to many other cities and metropolitan areas of the Alpine region.



Aerial view of Munich 1:500,000

MUNICH

With a total size of 310 km² and a population of about 1.5 million, Munich is the third largest city in Germany. Nearly three million inhabitants live in the metropolitan area and the population is still growing. Munich is situated 80 km north of the Alps on a wide gravel plain, formed by post-glacial meltwaters. Besides the Isar river that shapes the cityscape, there are two smaller watercourses in the east and the west: the Würm and the Hachinger Bach. The landscape south of Munich is characterised by forests, such as the Perlacher Forst. North of the city, depending on the groundwater level, dry heath lands, such as the Fröttmaninger Heide, and wetlands, such as the Dachauer Moos and the Erdinger Moos, can be found. Munich's pilot projects enhance these landscapes.



Aerial view of Grenoble 1:500,000

GRENOBLE

Grenoble-Alpes Métropole (GAM) brings together 49 municipalities with around 450,000 inhabitants, stretching over 543 km². The surrounding areas of the urban agglomeration are home to around 100,000 inhabitants and are directly connected to the urban core as well as to the surrounding natural amenities: the mountain ranges of Vercors, Chartreuse and Belledonne and the two rivers Drac and Isère.

The landscapes within these areas are rather “ordinary”, mainly composed of agricultural lands in the valleys and forests and meadows in the foothills. Despite recent efforts to control growth, the peri-urban landscapes remain under strong pressure of urban expansion. The GAM pilot finds new ways to better respect the peri-urban landscape in order to preserve and extract value from it.

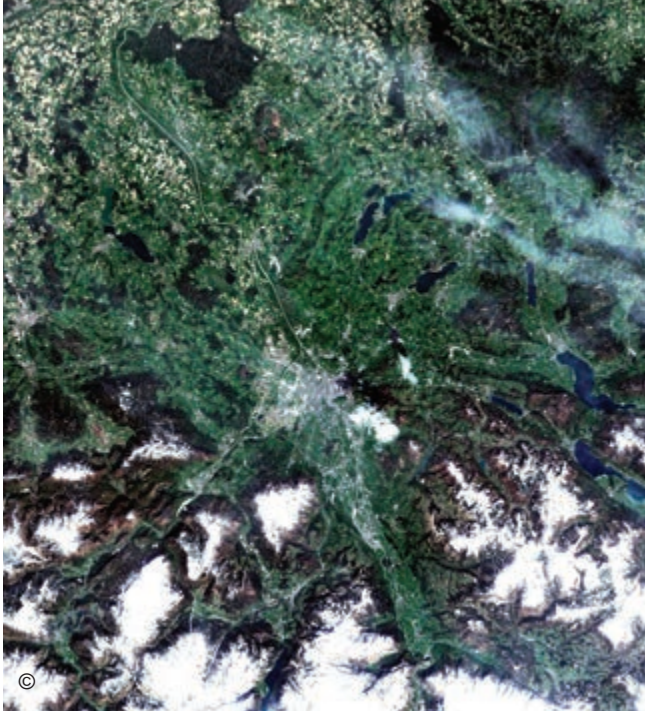


Aerial view of Vienna 1:500,000

VIENNA

The City of Vienna is the national capital of Austria and one of Austria’s federal states (Bundesland). With a total size of 415 km² and a population of about 1.9 million, it is by far the largest municipality in the country. Despite administrative border, there are very strong economic and physical ties between the two federal states of Vienna and Lower Austria. Living and working, the populations’ leisure activities and shopping stretch over the entire region. Land use pressure is high due to strong growth within the metropolitan agglomeration.

The pilot area is part of the border area of Vienna and the municipality of Gerasdorf in Lower Austria. It is characterised by agriculture and a variety of ownership patterns; its uses include ballast pits.



Aerial view of Salzburg 1:500,000

SALZBURG

The city region of Salzburg is located in the northern part of the Austrian federal state of Salzburg and to a minor extent in the southwestern part of Upper Austria, at the border to Bavaria, Germany. It consists of a core zone (11 municipalities) and an outer zone (35 municipalities) where 110.731 inhabitants live. At the transition of the northern Alpine foothills and the western part of the northern „Limestone Alps“ it lies in the “Salzburg Basin” and partly in the Salzach valley. The capital city of Salzburg is situated by the river Salzach and its 156.100 citizens live on an area of 65.7 km². However, the population of the city area is increasing, especially in peri-urban areas, which leads e.g. to urban sprawl, increase of traffic, housing shortage, a lack of building land and last but not least environmental issues.



Aerial view of Trento 1:500,000

TRENTO

The city of Trento forms the centre of the region and is home to about 118,000 inhabitants over 158 km². It lies in the Adige valley and the topography influences urban development: most housing and other functions lie at the valley bottom. Infrastructural and ecological corridors stretch from North to South. Most of the suburbs are located in the east while the west hosts hamlets and Natura 2000 sites.

As the city grows, planning policies seek to limit further soil consumption, which depletes agricultural land. Trento's pilot activities aim at enhancing biodiversity and sustainable agriculture on public and private plots as well as tackling accessibility of peri-urban open spaces, enhancing slow-mobility and improving participative design.



Aerial view of Piedmont 1:500,000

PIEDMONT

The centre of the Piedmont Region is the city of Turin with about 890,000 inhabitants. The metropolitan area is home to over 1.8 million people in about 90 municipalities. Turin is situated 20 km east of the Alps. The river Po crosses the city and is supplied by smaller rivers like Dora Riparia and Stura di Lanzo that cross the city region. As the metropolitan area is growing, the Piedmont Region has developed the strategic project Corona Verde, aimed at green infrastructure (GI): a system of open spaces is to be implemented to improve biodiversity and other ecological, economic, social and cultural functions. Corona Verde builds relationships within the city and between the city and the surrounding area. It serves as testbed for a new management system for Green Infrastructure.



Aerial view of Ljubljana 1:500,000

LJUBLJANA

The Ljubljana Urban Region (LUR) covers an area of 2,555 km² and has around 540,000 inhabitants. LUR is the most prosperous and densely populated region in Slovenia and home to more than 25% of Slovene population. Concentration of employment and educational institutions in Ljubljana is resulting in intense commuting. Being the Slovene capital, Ljubljana provides high quality of living due to its manageable size, its metropolitan functions and the accessibility of green areas and surrounding landscapes. An important peri-urban area is the Ljubljana Marsh Nature Park, which stretches to the south-west of the city. The area is part of seven municipalities with separate governance and spatial planning sovereignty. The pilot activities aim to enhance cooperation in this area.



LOS_DAMA! PILOT ACTIVITIES

European Regional Development Fund



PILOT ACTIVITIES

MUNICH

With our local pilot activities in Munich, we enhanced cooperation and dialogue within the city-region. We involved three intercommunal associations in the set-up and implementation, each caring for different landscapes.

BE MY TREASURE – EXPLORE NATURE WITH REGIONAL MANAGEMENT MUNICH SOUTH WEST

The area southwest of Munich is characterised by a chain of settlements along the Würm river, large forest areas, open grasslands, and agricultural areas. Our intention was to initiate a stronger relationship, to raise people's awareness and to discuss different uses for the landscape. The informal kick-off was a joint walk along the Würm with NGOs addressing recreation or nature conservation. In cooperation with these key stakeholders and external experts, we developed a public landscape treasure hunt. The survey was online for two months asking citizens to mark their favorite places. To support participation we promoted the survey with stands at three local markets. Around 250 people shared their treasures. With the initial stakeholder group, we discussed and filtered the results, selecting ten places along the Würm river for publication. All but one are easily accessible by public transport, bike or on foot. The final map became a popular post-card sized folded booklet, which is available online and in local public facilities.

LET'S DO MOOR - LANDSCAPE CONFERENCE WITH THE DACHAUER MOOS ASSOCIATION

The landscape of the Dachauer Moos is a former wetland with remaining patches of moorland. It is very biodiverse with rare plants and animals, even if it is fragmented by residential and industrial areas, infrastructure and intensive agri- and horticulture. As the Dachauer Moos extends across nine municipalities, landscape development requires intermunicipal cooperation. With the Dachauer Moos Association, we jointly organised a landscape conference at Dachau palace bringing together decision makers. It fostered cross-sectorial exchange among local stakeholders, political representatives, and researchers. Perspectives from citizens, political statements, scientific lectures, and an expo of experiences with practitioners created a lively exchange. The conference led to commitment from all participants across all levels and disciplines. It created new ideas for the Dachauer Moos, started a lasting exchange and a growing network.

LANDSCAPE ON THE RADAR - VISUALISATION OF LANDSCAPE WITH THE HEATHLAND ASSOCIATION

In the north of Munich, next to a former marshland, a natural heathland landscape occurs due to the limestone debris from the last glacial period.



Local mayor and project partners visiting the north of Munich.

Different land uses such as gravel mining, military use, and sheep pasturing have led to wide heathland areas, little forest patches and lakes that provide a unique landscape next to the big city. In 2007, the Heathland Association released a non-binding intercommunal masterplan - the "Landscape Strategy Munich North". It aims at balancing landscape preservation, nature conservation, cultural heritage and recreation. Our pilot activity seeks to "activate" the propositions of this plan through better readability. Digital media and innovative forms of visualisation will support decision makers and inform citizens. Additionally, the Heathland Association has relaunched its website and we helped the municipalities to emphasise landscape more strongly on their website. The association will build on the renewed awareness and the improved "vision" of the plan to enhance intermunicipal green infrastructure.

TOOLS

- PRESS /MEDIA WORK
- IMPROVEMENT AND COORDINATION OF INTERNET PRESENCE
- INVOLVEMENT OF HIGH LEVEL ACTORS (E.G. POLITICIANS)
- PRESENCE AT PUBLIC EVENTS (E.G. MARKETS)
- BRANDING OF LANDSCAPE TREASURES
- PUBLIC PARTICIPATORY GIS
- COOPERATION WITH SCHOOLS AND UNIVERSITIES
- NUDGING THE NEIGHBOURS
- JOINT FIELD TRIPS
- PRESENTATION OF STAKEHOLDERS' PERSPECTIVES
- WORKSHOPS WITH DIFFERENT STAKEHOLDERS
- LOCAL HIGH LEVEL POLITICAL CONFERENCE ON PERI-URBAN GREEN INFRASTRUCTURE DEVELOPMENT
- EXPO OF EXPERIENCES
- DECLARATION OF COMMITMENT
- NETWORKING BEYOND PROJECT BOUNDARIES
- INTER-MUNICIPAL ASSOCIATIONS

CHALLENGES

- CHALLENGE 4
- CHALLENGE 5

PILOT ACTIVITIES

GRENOBLE

In Grenoble-Alps Metropole we implemented LOS_DAMA! in three settings:

LES VOUILLANTS TREASURE HUNT

“Les Vouillants” is a 475 ha recreational park located in the foothills of Vercors. Its diverse landscapes of forests, agricultural lands, open fields and rock cliffs are strong natural assets with rich biodiversity. It is the area for hiking, cycling, climbing and a place for families to enjoy the natural environment. We created an awareness-raising event, inviting people to discover our peri-urban landscapes. The event highlighted in an interactive way how different uses can coexist and how we should respect nature. To do it in a fun way, we decided to create a treasure hunt event. A gaming company created the hunt of the “7 Snakes of La Tour Sans-Venin”. Organised stakeholders such as sports associations, nature NGOs and farmers' federations participated in the design. The joint collaboration led to a high level of commitment from the stakeholders. Actors portraying characters in seven locations spoke about fauna, flora, history, agriculture, etc. In October 2018, more than 1,500 people, mainly families from the metropolitan region, had fun with clues and riddles. Using playful means was a successful way to attract people's interest and better deliver our messages for multifunctional use. GAM is now working to create a second event, focused on biodiversity, in another recreational park.

LOS_DAMA! MASTERCLASSES

The impact of decisions on landscape and biodiversity is not the main concern of most public decision-makers, real estate developers, investors, or businesses. Even if they are aware of environmental issues, they often lack the methods and tools for effectively balancing development. To improve their commitment to landscape and biodiversity, we organised four masterclasses. In half-day sessions, practitioners and decisions-makers learned about new concepts and solutions.

The first masterclass focused on a new settlement with landscape as the central element of design. The second one introduced a new concept of organising streets. It uses the “frontage” method developed by N. Soulier considering the “public” space in a larger way, from one front to the other without consideration for property. Integrating nature within this space allows a better involvement of inhabitants and users within the design process. The third masterclass asked how agriculture could be more sustainable when we better include agricultural land within the surrounding inhabited areas, paths and human activities. The last one on road infrastructures focused on how to integrate wildlife in the design or renovation of roads. Aisles or median zones could be strong vectors of biodiversity if correctly designed and maintained.

The masterclasses taught us how important exchange between stakeholders is and that the involvement of recognised experts has high added-value. Even if there is a strong interest for our topics, there is still a lack of knowledge among practitioners and decision-makers. Now, the challenge is to convince the participants to become ambassadors for stronger inclusion of environmental and landscape issues into spatial planning and management policies.

PERI-URBAN LANDSCAPES TRANSFORMATIONS EXHIBITION

Finally, we are designing a LOS_DAMA! exhibition to show the dynamics of territorial transition within the peri-urban areas of the Metropole over the last fifty years. It will raise public awareness, showing how landscapes are the products of socio-economic change but also of political decisions. With a focus on natural assets, we will show how we could improve our territories for a more sustainable landscape.

Even if some of these landscapes still seem rural in nature, they are part of the metropolitan area and their inhabitants live an urban way of life. The exhibition will show how these areas evolved and will show a vision of the future in 20-30 years' time. The exhibition, planned for November 2019, will illustrate this with six different use cases.



Climber with Grenoble in the background.

TOOLS

- METRORANDO HIKING TRAILS VALORISATION POLICY
- OAP – GUIDELINES FOR PLANNING AND DEVELOPMENT
- MASTERCLASSES
- TREASURE HUNT

CHALLENGES

- CHALLENGE 1
- CHALLENGE 4

PILOT ACTIVITIES

VIENNA

‘DREIANGER’ REGIONAL PARK

In our local pilot activity, we have been developing a cross-municipal regional park in the northern city region of Vienna. Agriculture, gravel pits, a variety of ownership patterns, and high land use pressure characterise the area. Long-term maintenance of the park is part of the project.

Together with various stakeholders and citizens, we, the City of Vienna, the neighbouring municipality of Gerasdorf and the province of Lower Austria have developed ideas to strengthen the multiple functions of the cultural landscape. The focus on upgrading the landscape for people seeking recreation takes into account agricultural activities.

We provided different formats such as a Green Space Conference, a Workshop of Ideas and discussions with stakeholders on-site to involve the various stakeholders and citizens. This close contact with different stakeholders in order to achieve a common vision of green spaces was a novel way of cooperating for the cross-regional border area. It included finding efficient ways of implementing green planning.

In a first step, a landscape plan defined locatable targets for land and recreational use in the northern city region. They combined expert views from landscape planning, nature conservation, agriculture and forestry, water management and more with ideas from stakeholders and

citizens. A local action plan, delivered together with stakeholders, sets out how and with what kind of steps and measures the objectives of the landscape plan can be achieved.

As one specification of the landscape plan, the local action plan supports the gradual realisation of the “DreiAnger” regional park. It includes measures for governance, marketing, public relations and awareness raising, land management and spatial planning as well as recreational infrastructure development. The local action plan is a guideline for implementation for participating bodies. In addition, with the local action plan we intend to inspire and encourage as many other people, groups and organisations as possible. We hope that they will become active participants and help to reach our goals.

We made the project visible on the ground with rapid kick-starting actions that mesh with the activities of the participating organisations, such as a new cycle path or renovated footpaths. One of the difficulties recognised by both citizens and experts was the lack of a name for the project area. So one of our first actions was to organise a name search. In a widely publicised information event all interested parties had the opportunity to discuss questions and concerns for the area with the project manager, politicians and experts. Face-to-face interviews with those involved in the project and an exhibition showing the landscape plan set the frame for this event. In addition, everyone was able to participate in the vote on



View of the city of Vienna from DreiAnger regional park

various name proposals both online and via voting card. This is how the “DreiAnger Regional Park” got its name. It refers to the traditional shape of municipalities in the area – the green hearts – the Anger – of Stammersdorf, Gerasdorf and Süßenbrunn.

A steering group accompanied the entire local pilot process. This group brought together politicians, members of the administration and other key stakeholders from the region. They worked on the content and functioned as a decision-making body. As such, they were the heart of planning and implementation. Two attractive publications show the first steps and the whole process and can be found online.



www.regionalpark.wien.at

TOOLS

- NAME SEARCHING
- DIALOGUE WITH LANDOWNERS
- JOINT FIELD TRIPS
- IDEAS WORKSHOP
- DIALOGUE WITH STAKEHOLDER GROUPS
- GREEN SPACE CONFERENCE
- LANDSCAPE PLAN
- LOCAL ACTION PLAN
- STEERING GROUP

CHALLENGES

- CHALLENGE 2

PILOT ACTIVITIES

SALZBURG

The aim of the pilot project is to strengthen green infrastructure in the Salzburg region, to improve inter-municipal and cross-sectorial cooperation on a city-regional level as well as to build up a network and promote a cooperative mindset.

The Salzburg region faces high land use pressure and low density urban sprawl. Therefore, the City of Salzburg and its surrounding communities have been developing a concept for a regional green belt in the peri-urban zone that serves as green infrastructure (GI) for recreation and nature conservation.

The local pilot activity contributes to the further development of the green belt plan.

The SIR pilot creates the basis for further developing the green belt by using compulsory compensation measures. The Eco-pool could be established as a regionally coordinated intermunicipal platform which manages a “pool” of potential compensation areas as well as financing possibilities.

Green spaces can be enhanced either as compensation after the planning and designation of building areas or in advance, to be payed off at a later stage.

At first, we set up a steering group that consists of the Regional Association of Salzburg City and its surrounding communities, the City of Salzburg, the Federal State of Salzburg and the District Authority of Salzburg. The role of the

steering group was to influence the direction of the project via stakeholders. In addition, the Landschaftspflegeverband Berchtesgaden Land supported the project with its practical experience in dealing with certain areas and finding appropriate measures.

We then assigned the external expert “Revital” for the technical conception, planning and execution of the Eco-pool. To identify possible compensation areas an extensive GIS-analysis was carried out. The zone analysed comprises areas of the City of Salzburg and the surrounding communities Anif, Anthering, Bergheim, Elixhausen, Elsbethen, Eugendorf, Grödig, Großgmain, Hallwang and Wals-Siezenheim.

Based on the GIS-analysis SIR and “Revital” jointly facilitated workshops with stakeholders (e.g. property owners, politicians) and forum events for a wider professional public. We involved various stakeholders such as farmers and local decision-makers to further develop the GIS-analysis. It proved to be useful for both sides to exchange with (private) property owners of potential compensation areas as well as farmers who might manage compensation areas in the future. Taking part in the Eco-pool offered them an incentive to take up land that is not otherwise viable.

A catalogue of measures to be coordinated with all stakeholders is currently being developed, which should provide a basis for negotiations



Salzachsee close to Salzburg.

in the future. In the long term we will develop a strategic landscape plan that steers green infrastructure and prevents ad-hoc compensation measures. Local action plans will support implementation of the first compensation measures.

www.oekopool-sbg.at

TOOLS

- GIS ANALYSIS
- WORKSHOPS WITH DIFFERENT STAKEHOLDERS
- STEERING GROUP

CHALLENGES

- CHALLENGE 3
- CHALLENGE 5

PILOT ACTIVITIES

TRENTO

As the City of Trento team we have chosen to dedicate the pilot activities to the exploration and enhancement of the ecological and social connectivity of peri-urban open spaces. By this we mean to create a network of continuous open spaces for flora, fauna and humans. We focused our pilot actions on three settings addressed through 'exploration', 'cultivation', and 'dissemination' activities in order to acquire knowledge, improve perception and spread the results:

Exploration: Enhancing the asset of vegetable gardens

The aim is to promote vegetable gardens and to enhance their social and ecological potential as stepping stones for the green network, the recovery of abandoned lands and the growth of biodiversity. First, the municipality collected comprehensive georeferenced data of both unmanaged agricultural fields and all types of orchards and vegetable gardens: public, private, scholastic and social. We gathered additional data through site visits, meetings and interviews with managers and users focused on agricultural practices, spatial and social structure.

A handbook on better cultivation methods and gardening information and contacts has been agreed and shared. Alongside the handbook we created a map that provides data and input for the upcoming strategic plan on open spaces. Both are used by various stakeholders and a local project on circular economy.

Cultivation: Co-designing paths and itineraries on peri-urban areas

The second focus lies on the need for pedestrian routes to connect the city centre with its peri-urban landscapes and invite citizens and visitors on discovery tours. Again, we started with an extensive GIS platform hosting data and information on the pathway network and its condition as well as previous feasibility studies and different points of interest.

We used the collected data to plan maintenance interventions and public works, to re-design and promote existing paths and to provide input for the upcoming landscape plan.

When collecting the data, we involved citizens and local NGOs in looking together at the potentials of these pathways. Using these data, professionals selected some existing pathways to publish on online platforms, websites and in booklets. High school students and the Environment Commission of the City Council tested a new app for participatory mapping.

Dissemination: Innovating and sharing knowledge

One of our main goals is to improve knowledge and promote the approach of directly managed green areas. All activities aimed to promote public municipal green spaces.



Bike trip by the LOS_DAMA! group in Trento 2017.

Following the data mapping process, we worked with primary school children to create a “discovery game” around ecological features of peri-urban parks. This will be used for further educational activities. We also created a guide to public parks and gardens based on pathways from the city to the mountains for citizens and tourists.

Among more transversal activities the city sought cooperation with other European initiatives (En-Route european commission programme, Urbabio alpintown programme, Saturn EIT Climate-Kic project) and with local and foreign universities to expand the dedicated network and integrate research activities into the daily practice of local officers. Examples of such activities are the design workshops or bootcamps developed with TUM or EIT Climate-Kic, internship collaborations and theses with UNITN and FEM.

TOOLS

- BRANDING OF LANDSCAPE TREASURES
- HIGH SCHOOL CO-DESIGN
- GIS ANALYSIS
- PUBLIC PARTICIPATORY GIS
- COOPERATION WITH SCHOOLS AND UNIVERSITIES
- COLLABORATION AGREEMENT ON URBAN COMMONS

CHALLENGES

- CHALLENGE 3

PILOT ACTIVITIES

PIEDMONT

The metropolitan region of Turin has grown disorderly in the last decades. At a political and technical level, the realisation that the territorial order needs to be better governed instigated the pilot project. Within the pilot project, we aimed to tackle challenges such as human well-being, climate change and water protection.

Our multidisciplinary team developed a multi-scale approach which aims to recognise the value of the benefits that green and blue infrastructure provide to urban and peri-urban territories and their inhabitants.

We addressed three scale levels: the metropolitan scale of Corona Verde, which includes 90 municipalities; the scale of the hydrographic basin Stura di Lanzo; and the local scale with a focus on a specific area in the municipalities of SettimoT.se, San Mauro, and Mappano.

Our approach was to build on principles of landscape ecology and environmental economics.

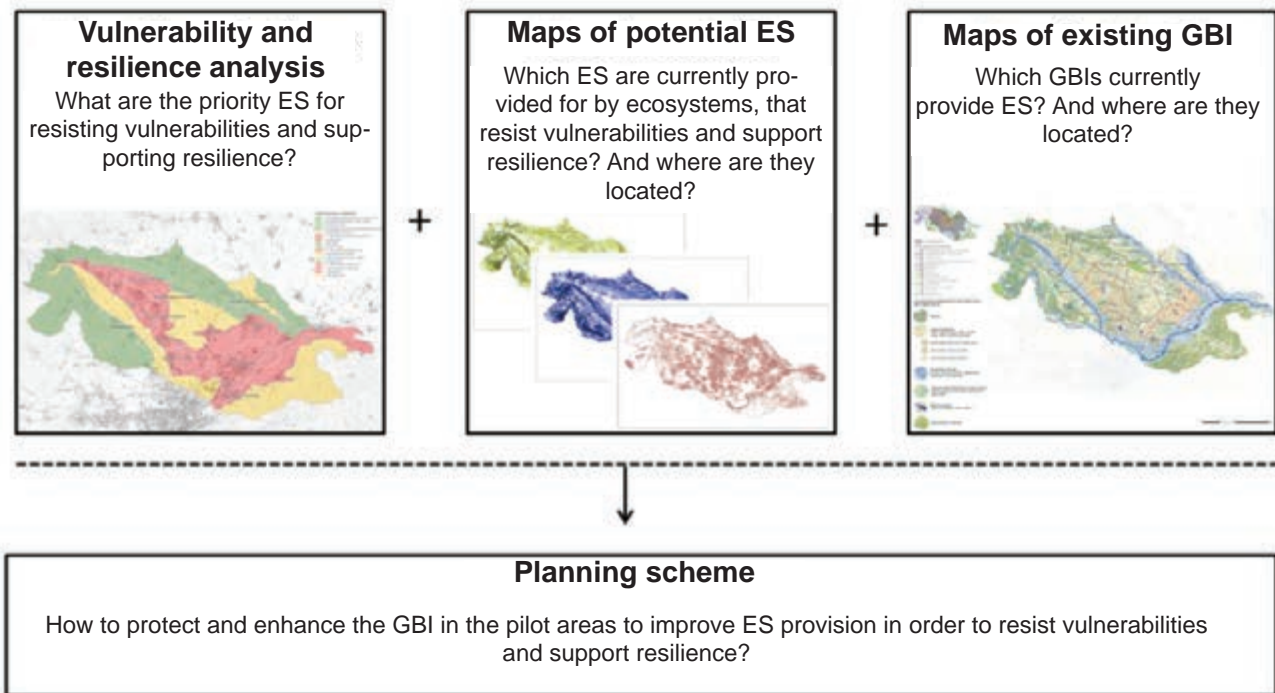
We conducted an analysis to identify the most important factors of vulnerability and resilience for the area of Corona Verde. To do this, we divided the area into landscape-environmental units (LEU). Through the application of spatial indicators, we were able to identify the characteristic factors for landscapes of Corona Verde and the LEUs.



Aerial view of Stura di Lanzo river.

Based on the analysis, we developed instruments to steer environmental landscape scenarios. In these scenarios, we used green and blue infrastructure as the major strategy to respond to the identified vulnerabilities and increase resilience in the LEUs, while considering links to the other LEUs.

The results was a planning document with a set of territorial planning missions for the various LEUs. These planning missions direct the development of the pilot area. Within the planning missions, different types of GBIs are identified based on the characteristics and needs of the various LEUs. To support the implementation of the GBI, we determined the most suitable nature-based solutions.



The overall scheme of the GBI network in the pilot area of Turin.

This overall strategy helps to enrich the environmental landscape mosaic, to increase its natural capital and the provisioning of Ecosystem Services, and ultimately to improve the resilience of the pilot area.

Breaking down the missions into objectives, strategies, actions and interventions allowed for easier integration of them into existing planning tools in the regional context.

TOOLS

- ECOSYSTEM SERVICES STAKEHOLDER ANALYSIS
- PARTICIPATORY MAPPING OF ECOSYSTEM SERVICES
- GREEN AND BLUE INFRASTRUCTURE MANAGEMENT SYSTEM

CHALLENGES

- CHALLENGE 2

PILOT ACTIVITIES

LJUBLJANA

Pilot activities in the Ljubljana Urban Region are divided into two separate but connected parts:

On the intermunicipal sub-regional level a proposal for “Thematic green infrastructure concept” is being developed for the area of the Ljubljana Marsh Nature Park. The activity was carried out by landscape architects – project group experts – based on spatial analysis and consultation with the concerned municipalities. During the process it was discussed and updated with experts in local landscape. The plan was further presented and updated with stakeholders from the involved municipalities and nature park authorities to be used as an expert base for the integrated and comprehensive planning of green area development on a local and sub-regional level. This thematically focussed GI approach was necessary due to the predominantly green space (landscape) character of the pilot project area and its existing natural conservation regimes. Such thematic focus on GI provision enables effective analysis and a coordinated proposal for GI development within peri-urban landscapes. The focus on leisure and recreational purpose is based on different spatial and stakeholder analyses defining the context of the wider pilot area, its spatial characteristics and recognised development trends.

The thematic GI concept was designed from three diverse users’ perspectives: (1) local population - focus on living quality, (2) visitors from Ljubljana and neighbouring towns -

recreational and leisure use, (3) visitors for the purpose of sightseeing (tourists, educational trips, school excursions). During the design process, the diverse needs and places of main interests of the three users’ groups were discussed, optimised and connected into a joint system of interrelated areas and corridors which define spatial GI elements for recreational and leisure time activities and enable a (more) even and balanced use of areas, as well as mixed and multiple use of certain areas.

On the local level, the second pilot activity consists of behavioural mapping in two separate locations within the Ljubljana Marsh Nature Park (gorge Iški vintgar and lake Jezero pri Podpeči). They are characterised by high natural and ecological values resulting in a high number of visitors which is also causing conflicts and visible damage in the landscape. The results of the behavioural mapping were presented and discussed with concerned stakeholders in a joint workshop. Further, a research lab was held at Jezero to check the situation on a typically busy summer day, which included a survey and checking the needs and spatial requirements of visitors.

Both pilot activities are interlinked by the topic of recreational and leisure use of place and aim to provide proposals to improve development and management e. g. by defining multi-functional areas as additional places for outdoor recreation and leisure-time activities and applying co-

management of the most occupied destinations as part of the green infrastructure concept.

The pilot activities address the following goals:

- Exploring possibilities for establishing conflict-free inter-connections of people and nature within peri-urban landscapes.
- Creating knowledge and governance related background so that different stakeholders (inhabitants, visitors, local communities, sectoral agencies) will be able to understand the importance of natural and cultural heritage as well as possible synergies with local development.
- Exploring possibilities of using the green infrastructure plan for better use of potentials and overcoming the obstacles to synergies between nature conservation and use of peri-urban landscapes.
- Contributing to the identification of possibilities and solutions for combining both use and conservation and for stimulating local development of the Ljubljana Marsh Nature Park.
- Informing and raising the awareness of different stakeholders about the importance of nature-based leisure activities and finding common solutions for them.



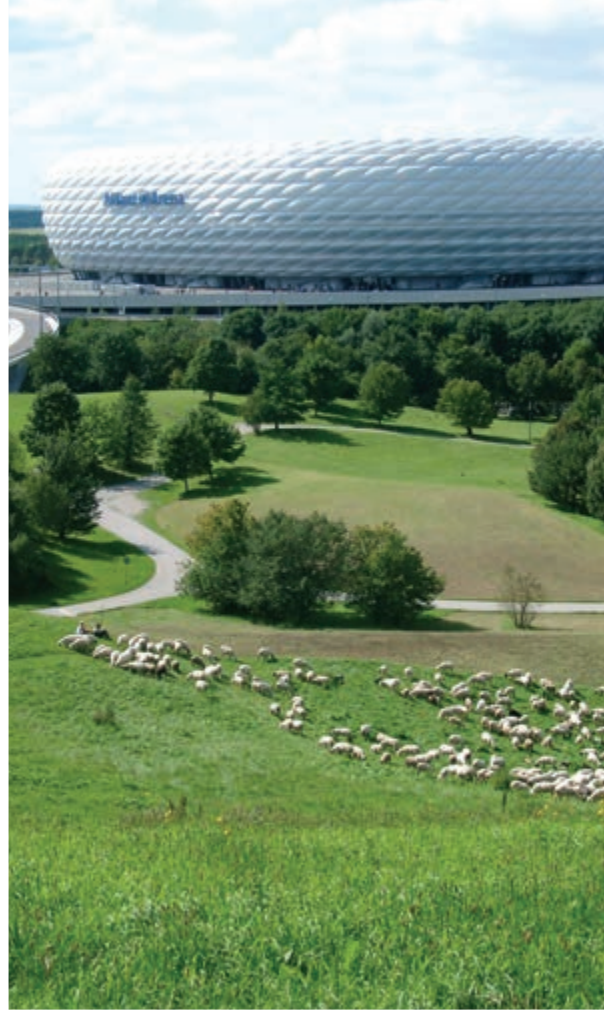
Lake Podpeč south of Ljubljana.

TOOLS

- BEHAVIOURAL MAPPING
- STAKEHOLDER ANALYSIS
- RESEARCH LAB AT PILOT SITE
- THEMATIC GREEN INFRASTRUCTURE CONCEPT

CHALLENGES

- CHALLENGE 1



LOS_DAMA! ENHANCING PERI-URBAN GREEN INFRASTRUCTURE

European Regional Development Fund



CHALLENGE 1

HOW TO ENABLE SHARED USE AND SYNERGIES

Multifunctionality is the essence of green infrastructure; it is the ability to host more than one function at the same time.

Landscapes in peri-urban areas intrinsically host diverse land uses: settlements, infrastructure and recreational facilities as well as agriculture and forestry. Landscape and land in general is a limited asset. The possibilities for allocating each desired activity to a certain area are not unlimited. Green infrastructure (GI) can provide multiple functions. GI is a network consisting of open spaces including managed natural and semi-natural areas, transformed natural and designed areas, water corridors and the connecting links among them. Yet, GI is also considered a strategy supporting spatial planning, and sustainable land and water management.

GI can help to enhance the living quality of urban areas and peri-urban areas connecting the urban and rural. Through nature-based solutions, such as retention floodplains along rivers, GI improves living and working environments, improves air and water quality, and lowers heat stress. GI also provides opportunities for healthier lifestyles by encouraging recreational use and sustainable modes of transportation, like cycling or walking.

The main concern of GI planning and development is to respond effectively to multiple interests and needs for the specific, spatially

limited areas. The solution is to find ways to enable multiple uses of land and to support co-existence and synergies between various functions combined in one area, or different users using the same GI facilities. This is also one of the main principles of GI: the same area or land can offer many environmental, social, cultural and economic benefits at the same time, providing for a healthy balance in the ecosystem.

Nevertheless, this multifunctionality should be coordinated and balanced with ecosystems demands such as biodiversity in the process of spatial planning. Looking from a spatial planning perspective, there are certain activities or land uses which could successfully co-exist in the same place or could even strengthen each other. Co-existing and diverse functions might also improve the sustainability of ecosystems. For instance, recreational uses do not need to be separated if diverse users can agree and use the infrastructure responsibly and safely. Thus, GI can be considered an asset for territorial development, providing multiple functions within the same area with respect to its ecological functions. Managing this multifunctionality requires both co-planning and co-management of different sectors to optimise diverse functions in space and time. As the management of different sectors is a domain of spatial planning on a local and/or regional level, it is important that integrated spatial planning and a holistic understanding of the GI is achieved.



Marshland park south of Ljubljana.

LJUBLJANA

Recreational and leisure time activities are one of many land uses in peri-urban landscapes. These activities usually coexist alongside one another. They take place in outdoor areas, which primarily serve other purposes, such as agriculture or forestry. Even the most common recreational activities, such as walking, hiking, running and cycling “use” infrastructure or land which is not primarily recreational. A good example is strolling among the fields.

The Ljubljana Marsh Nature Park is designated as a nature protection area, which forms the basis for planning its development. The park consists mainly of marshy meadows, which are maintained as extensive agriculture. On the other hand, the park provides a setting for leisure activities for inhabitants and visitors from

the nearby city of Ljubljana. The spatial values of the area are a key driver, which is attracting more and more visitors. The municipalities of the Ljubljana Marsh Nature Park are starting to see the development potentials of the area for recreational use as well as for (sustainable) tourism. Keeping in mind the duality between the ecosystem’s vulnerability and its attractiveness for visitors, development of green infrastructure in the area should be tackled with great care.

In LOS_DAMA!, we started from a bottom-up perspective. We set the pilot activities on a local level by looking at the two most visited locations. We conducted behavioural mapping, a workshop and a joint event. These activities brought interesting insights in what attracts visitors and what bothers them. To prevent/solve conflicts between the diversity of visitors, a careful dialogue with involved parties was held.



“I was surprised by how UIRS is supporting local administrations. They are offering knowledge and expertise to introduce more innovative processes. The work of UIRS to reduce the conflicts and increase multi-functionality in the Ljubljana Marsh Regional Park is very important”

Job Shadow: Alessandro from Trento, Italy

Job Host: Urban Planning Institute of the Republic of Slovenia in Ljubljana

Outcomes from this dialogue are being incorporated and transformed into management plans and spatial planning documents. Simultaneously, a top down view was prepared: a GI concept for the whole area. This concept plans a GI network for recreational use, while at the same time aims to achieve the nature conservation goals in order to preserve the ecological value and other land use characteristics.

The GI proposals from the concept can be applied in local planning to coordinate municipal plans and to bridge gaps in the GI network. Moreover, the GI concept can support the allocation of new multifunctional areas to more evenly distribute visitors throughout the area, as well as to provide equal accessibility for recreational use for all inhabitants.

GRENOBLE

In the metropolitan region of Grenoble we tried to address the high multifunctionality of uses in peri-urban landscapes with two different target groups: local citizens using the landscapes for recreation, and practitioners as well as decision-makers planning these landscapes. The “Les Vouillants” recreational park is characterised by high levels of biodiversity but is also an area for recreational activities and a place for agriculture. Citizens use this near-natural park for various active sports like climbing or mountain-biking as well as more relaxing activities such as walking or having a picnic with the family. These recreational activities may interfere with each other, for example, when families and mountain-bikers use the same narrow pathways. Additionally, recreational uses can have negative impacts on the flora and fauna of the park. With our local pilot implementation “7 Snakes of La Tour Sans-Venin” we launched



Recreation area south of Ljubljana.

a scavenger hunt to create more tolerance for different demands, functions and uses within the park. Games, riddles and costumed actors addressed different points of view. The personal and lively presentation of demands created insights and empathy for other uses among participants. More than 1,500 citizens, mostly families, enjoyed the entertaining game while learning more about the park and its multifunctional uses. In order to reach practitioners and decision-makers, we launched four masterclasses on different topics. The aim of the masterclasses was to discuss how to strengthen ecological stakes. As the participants were practitioners and decision-makers from different sectors, improving multifunctionality of uses was a key topic. We learned that addressing multifunctionality by using concrete real-world examples greatly helped a great deal in creating a common understanding and reducing implementation difficulties.

REFERENCES

European Union (2013) Building a Green Infrastructure for Europe. DOI: 10.2779/54125
Gensheimer, M., Raugze, I., Frideres, L., lotzov, V. (eds.) (2018) Territorial potentials for green infrastructure; Working paper. Espon EGTC, Luxembourg.

CHALLENGE 2

HOW TO ADAPT REGIONAL AND URBAN PLANNING

Urban and regional planning should include green and blue infrastructures (GI) as a strategic approach for developing networks of green and blue spaces. By developing GI, cities and city regions are able to create and restore green space connections to support processes, functions and benefits of natural systems that singular green spaces cannot provide.

Many regional and urban planners and authorities such as municipalities are aware of the potential that green spaces contribute to solutions for e.g. climate change and biodiversity enhancement. Most cities have a strategic concept that recognises the added value and promotes the development of connected green and open spaces.

However, these strategic concepts do not always refer to the GI concept. They might contain most aspects that are associated with GI, such as multifunctionality, green space connections, and balancing of functions. Including the GI concept in common planning processes may, however, result in a more holistic approach. Planning with GI provides the context for experimenting with innovative approaches in landscape planning and management. It requires cooperation with different disciplines and experimentation with interdisciplinary approaches.

The GI concept also includes aspects of social and economic sustainability, linked to a community's capacity to maintain a network over time.

Including GI in regional planning might be more complex. Most concepts of urban authorities are limited to the borders of the municipality. By including GI, municipalities need to look beyond the borders as the planning of (green) infrastructures requires cooperation within the region.

Within LOS_DAMA!, we developed different approaches to including GI in planning processes. For example, the Piedmont Region developed a model for a planning process which includes GI in the analysis and planning of and on different scale levels. This planning process model can now be applied in real world projects to find solutions across municipal borders. The City of Vienna implemented a real world project, by testing the best ways to develop GI across municipal and even federal state borders.

The approach from the Piedmont Region now needs to be disseminated and applied in the planning process, and the results from the City of Vienna's planning process can now be transferred into a planning process model applicable in other planning contexts.

"CORONA VERDE" in LOS_DAMA ! Project

A new approach:
NATURE BASED-SOLUTIONS

GI EU POLICY
Green Infrastructure
(COM 2013-249 final)

ECOSYSTEM SERVICES
(Rif. AlpES Project)



CORONA VERDE
is a strategic plan that affects the metropolitan area and the hills of Turin



- Four main strategies:
1. Strengthening the ecological network
 2. Completion and upgrading of the network fruition
 3. Qualification peri-urban agriculture
 4. Redrawing of borders and the gates of the city

€ 10 million funding
POR-FESR 2007-2013

CORONA VERDE MASTERPLAN

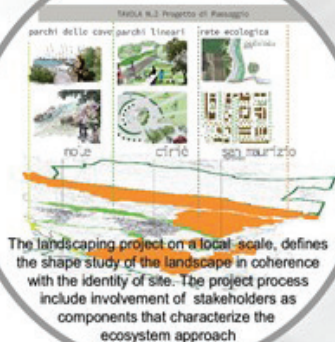


INTEGRATED TERRITORIAL VISION

The vision will be based on new concepts: Nature Based Solutions, Landscape Ecology, and on ability of Ecosystem Services and Green Infrastructures to produce benefits in ecological, social and economic terms. Furthermore, an Integrated Environment, Territory and Landscape Management System (possibly registered EMAS) is planned for a Sustainable and innovative management of Metropolitan Green Infrastructure



INTEGRATED MANAGEMENT SYSTEM
Environment - Territory - Landscape



The landscaping project on a local scale, defines the shape study of the landscape in coherence with the identity of site. The project process include involvement of stakeholders as components that characterize the ecosystem approach

LANDSCAPE PROJECT



Metodology for assessing the environmental, social and economic benefits of green infrastructure

EVALUATION BENEFITS
Green Infrastructures

Vision of how to integrate GBI in the Corona Verde plan in Turin.

“The essential principle of Vienna’s green and open space planning is that every citizen has green spaces available in different qualities and, above all, reasonably accessible from home”

Job Shadow: Claudia from Salzburg

Job Host: City of Vienna, Austria



PIEDMONT

In the local pilot activity, Piedmont Region aimed to include the concepts of Nature-Based-Solutions (NBS) and Ecosystem Services (ES) in the ongoing planning process of the “Corona Verde”. The Corona Verde is a strategic masterplan to develop GI in the metropolitan area of Turin. The output is a manual on how to apply GI and NBS in planning projects for a more resilient development of peri-urban landscapes.

First, we evaluated the vulnerabilities of the metropolitan area of Turin and the potential benefits of GI to counteract these vulnerabilities. Based on this assessment, we developed NBS that can be applied to certain spatial situations, such as public or private green or private water designs. The result of our work is a planning document, which proposes a redevelopment

scenario. The document gives suggestions for how to govern the current spatial structure and how to tackle challenges such as climate change, or human health. The document consists of a conceptual map and a textual part. The map shows an outline of the GI network for the pilot area. The textual part contains planning missions to protect, enhance or reconstruct ecosystem services in the pilot area.

The new approach to include ecosystem services within pending projects should lead to enhancing multiple benefits of GI (see figure 1). For example, during the planning of settlements authorities and planners consider how to integrate NBS that contribute added value to the project. The next step will be the dissemination of the document among practitioners technical officers, planning offices, agencies and decision-makers to unfold its added value.

VIENNA

The City of Vienna aimed to develop the new regional park “DreiAnger” together with the neighbouring city community of Gerasdorf. The pilot area is located not only in the community border area, but also in the federal state border area between Vienna and Lower Austria. In order to draw on existing cooperation experiences between the two federal states, the regional management association SUM was a close collaboration partner during the pilot activity.

In Austria, federal states have so far only cooperated in the management of existing national and biosphere parks, but not in the development and implementation of any new green infrastructure project. The City of Vienna and the city community of Gerasdorf jointly developed and implemented the first project and thus established a new planning procedure that goes beyond previous cooperation approaches. The aim of developing a new regional park resulted from the approach to extend the existing green belt of the City of Vienna in order to restore ecological and recreational connections, to strengthen ecosystem functionality, to guarantee and improve quality of life and seize on opportunities for economic development linked to agriculture. Instead of designing the planning process first, Vienna started with implementing the project to develop the regional park “DreiAnger” as inter-municipal GI. As a first step, a landscape planning office was assigned to analyse the landscape between Vienna and Gerasdorf, including the strengths and weaknesses of the current, mostly agricultural, land use. Based on initial dialogues with

important stakeholders, like farming and hunting associations, several stakeholders as well as citizens from Vienna and Gerasdorf were invited to express their demands and develop scenarios in a two-day ideas workshop and a green space conference.

The results of the landscape plan and the participatory green space conference were taken as the basis for developing an action plan that would set out further steps for the implementation of the regional park. Initial steps of the action plan, such as renovated paths, a new bikeway and an online survey for the name, were implemented. This new approach to developing GI in a regional planning context will hopefully trigger additional GI development projects.

REFERENCES

www.regionalpark.wien.at

GI Concepts in LOS_DAMA! pilot projects by Aurore Meyfroidt

CHALLENGE 3

HOW TO INVOLVE VARIOUS STAKEHOLDERS

Involving different stakeholder groups is always a challenge. There are politicians, communities, administration officers, experts, citizens, NGOs, interest groups, the general public, etc. There are aggrieved persons and beneficiaries, proponents and opponents. Within a project, stakeholders can play different roles and their level of participation can differ. By involving diverse stakeholders on different levels in each process step, the project becomes steadily more complex. Often different interests or strategies collide, and this needs to be mitigated. As always, a lack of resources (staff and money) makes it hard to establish a broad participatory effort. And the question is always how results might be embedded in other projects and plans.

So why should we involve stakeholders? Stakeholders are the key to successfully implementing a project. They can be (come) drivers and ambassadors or the critical voice that demands a more inclusive approach. Stakeholder involvement can be used to start a dialogue or collaboration or to bring up a critical issue.

The decision whom to involve depends a lot on the project content. For some LOS_DAMA! partners it proved to be helpful to involve citizens such as school children, for others it was necessary to address the administrative level of governmental structures.

Great thought needs to be given to when and how to involve different stakeholders. The time and type of involvement depends a lot on the particular case. Sometimes it might be helpful to involve certain parties separately at different levels and intensities.

The intensity of involvement or participation ranges from providing information about the project and raising awareness about a specific issue, to consulting and involving people in the project development and progress, and onto giving people control over the project.

During the LOS_DAMA! implementation phase, two stakeholder groups seemed especially important across all project partners: non-organised groups such as citizens using peri-urban landscapes for recreation and politicians as they are decision-makers.

LOS_DAMA! project partners found that non-organised groups were best reached through specific adapted interactive formats, such as (online) surveys and interactive treasure games.

In contrast, local politicians and decision makers are easier to get involved as project-related activities belong to their remit. But this group also requires smart planning and communication due to political sensitivities and election cycles, to prevent the project from being sacrificed to political campaigning.

SALZBURG

The pilot project “Ecopool Salzburg” aims to facilitate regional compensation measures in the green belt and other green areas around the City of Salzburg. We aimed to identify and plan suitable compensation areas at the inter-municipal level that are key for the green belt’s interconnectivity and multifunctionality. At the same time, we intended to improve informal inter-municipal and cross-sectoral cooperation on a city-regional level. In Austria, compensations for urban development do not necessarily need to be implemented within the region. In order to use compensation measures to enhance the regional green belt, it is necessary to establish a trusting collaboration among key stakeholders of the city and regional level, as well as among agricultural and nature-conservation focused target groups.

Two main stakeholder groups were involved in the “Ecopool Salzburg” project: governmental and non-governmental stakeholders. The first and core group are governmental stakeholders, namely the administrative level of the City of Salzburg, the Regional Association of Salzburg City and its surrounding communities, and the regional government of Land Salzburg, with the departments of nature conservation, spatial planning, agriculture, etc.. They were chosen because they are decision makers, key stakeholders and/or own planning sovereignty. We involved them through individual talks, discussions as well as several meetings and workshops. We aimed to design the cooperation process based on equal communication on a level playing field. The cautious start with



Working group in Salzburg.

many individual talks and discussions proved to be an advantage for better acceptance. This approach was essential for building trust among the governmental stakeholders. We were able to tackle doubts in advance and mediate between different demands individually before initiating the cross-level exchange.

The second stakeholder group are private property owners of the potential compensation areas such as farmers, public and semi-public landowners, etc. The participation of these non-governmental stakeholders played a lesser role and took place at a later stage of the project. We mainly focused on the farmers, as their acceptance was essential for successful compensation measure management. Local farmers' representatives from the communities and official representatives of the Salzburg Chamber of Agriculture were involved in a forum

“It’s exciting to learn more about the points of view of stakeholders and how they can be involved, whether they are politicians, officers or farmers (...) An open and timely involvement, based on mutual trust, is the best starting point for cooperation and helps to consider different perspectives in a project”



Job Shadow: Christina from Vienna, Austria

Job Host: City of Salzburg, Austria

event, where they could ask questions, make statements and define their position on the elaborated compensation measures map. Editing our activities and their advantages for regional development in a way that is easy to understand for laymen is essential.

TRENTO

The City of Trento applied a multidisciplinary multi-scale approach in which cooperation with different sectors on different administrative levels was deemed important. We also aimed for participation of and cooperation with other non-governmental stakeholder groups in different ways. On a regional level, we involved officers of the Autonomous Province of Trento and other administrative bodies via meetings and project presentations on a more informal basis for exchange. The main challenges with

the Province of Trento was the sectoral division between departments, which made it difficult to understand who should be involved in the project activities. Moreover, the fact that the City of Trento is the biggest municipality and is home to more than 20% of the population of the province makes it quite complicated to balance the respective forces. The city of Trento faces certain issues that do not apply to other municipalities of the province. On an intermediate scale, the City of Trento tried to involve citizens in mapping issues in relation to recreational and ecological connectivity. The aim of this participatory approach is to raise awareness of peri-urban landscapes among citizens and to initiate commitment towards recreational facilities by using their insider-knowledge. On a local level, the neighbourhood councils and schools were involved through field visits and workshops. These events made it easier to

get in contact and collect the different opinions and demands. Moreover, the City of Trento has an interesting initiative to support citizens through a “department” for bottom-up initiatives. This department helps citizen initiatives to find partners and plots.

The neighbourhood councils and schools were one of the most important stakeholders of the pilot project in Trento. They are fundamental to 'translating' the key messages of “LOS_DAMA!” on the ground and into a more operational level. The local participatory implementation projects were also experiments for learning lessons for upscaling measures to other neighbourhoods and impulses for long-term strategic planning. With regard to the neighbourhood councils, the most challenging issue was to relate their involvement to long-term strategic projects as these projects do not have an immediate and specific impact on their own territory. To tackle this challenge we tried to break down our activities to the local level to show the added benefits for the neighbourhood. We discussed our intermediate results frequently with the neighbourhood councils to get as much feedback as possible during the process and thus create commitment and a common mind-set. The pilot project with its steps towards a comprehensible strategic plan illustrates a new and more transparent process of planning with stakeholder involvement for the future. In the future, collaboration between departments in the administrative bodies should be further strengthened. In addition, more attention should be paid to the social aspects of planning, which implies collaboration also with the social departments in order to work together on required improvements.



Bike trip in Trento.

REFERENCES

www.oekopool-sbg.at

CHALLENGE 4

HOW TO RAISE AWARENESS AND PERCEPTION OF VALUE

Raising awareness for the cultural and natural value and the benefits of our landscapes is an important precondition for the enhancement of green infrastructure. It is important to decide on and get to know the different target groups before designing a set of actions. Public awareness is especially important for inducing a more sustainable way of living, a higher appreciation, and a more respectful way of dealing with conflicting interests. Gaining the awareness of decision makers for green issues is necessary to have a stake in the setting of priorities and for improved framework conditions and more resources. There are two sides to this: public awareness can influence decision-makers in setting priorities, and institutional campaigns for the public can help people become more aware of how green areas improve their well-being. Good targeting is even more complex since neither citizens nor decision-makers are homogenous groups. Citizens are the general public, landowners, individual housing dwellers or others. Decision makers can be elected or they can be decisive actors of the economy such as real estate developers. A successful approach has to take all relevant groups into account and know about their specific stakes, motivations and the context they are acting in. Here, we present LOS_DAMA! activities from Grenoble and Munich. Although citizens seem the easiest target group to address, it is, at the same time, more difficult to measure impact. And while

awareness of ecological issues and a new way to live more sustainably are popular nowadays, deep cutting behavioral changes are difficult to reach and need time. And, for success, a change in policies and supporting frameworks and incentives are necessary.

GRENOBLE

In a metropolitan context driven by the modalities of urban growth, green areas are competing with diverse and very strong stakes. Stakes and objectives must be strengthened in favour of green infrastructure in order to keep up. Grenoble provides an interesting example with its new metropolitan land use plan (PLUi). Although this plan does not call for an end to the consumption of arable land, it does ask for a decrease in land consumption of around 20%. The Vouillants treasure hunt in Grenoble and the treasure map in Munich (see pilots) what is of natural and cultural value for society, thus asking for a better consideration of these spaces within territorial politics. They used different ways of highlighting the qualities of their peri-urban spaces. However, focusing on spatial “treasures” alone does not show the value of more “ordinary” spaces or raise the issue of competing uses. It is not so easy for a public authority to criticise the system of territorial development it is a part of. This limits the possibilities of dealing with the issues at hand. Grenoble-Alpes Métropole tries



Information stand at a local market south of Munich.

to avoid these shortcomings. It will mount an exhibition showing how the functions of six areas have evolved and what they could be in 20 to 30 years' time:

- Venon, island of biodiversity with dry grassland;
- Le Sappey-en-Chartreuse, historical place for mountain leisure, climate refuge;
- Isere valley development of an activity zone in an agricultural environment;
- Seyssins former countryside, now becoming a suburb;
- Séchillienne former industrial village, now a dormitory place;
- Reymure-Rochefort, agricultural plain and water-reservoir protected from development.

It is intended to display this for two to three years and it may be accompanied by conferences and

debates, which gives it a higher awareness-raising potential than the treasure hunt. Today, public decision-makers better understand climate issues and the importance of green belts. Yet, due to other demands from society, they deliver policies where economy and housing are still prioritised over ecology. An ever greater consumption of space for new built-up areas reflects this. The LOS_DAMA! Grenoble masterclasses did not focus on criticizing this but introduced tools for how to better integrate biodiversity, ecology and landscape objectives in projects and actions. Thus, we can involve technicians and some elected officials who are open to climate and green issues. This approach could complement Munich's "Let's do Moor" conference which facilitated a stronger commitment from key local decision-makers for the landscape. It seems useful to target those who act/advise and those who make



“In the competition for land and other resources, grey infrastructure seems to be the biggest opponent to green areas. In the Grenoble Alpes Metropole there is a great dedication to enhancing green areas. Many institutions work to raise awareness of the benefits and need for green infrastructure. This public engagement needs to continue and grow, especially for this principle to become mainstream in decision making processes!”

Job Shadow: Linda from Munich, Germany

Job Host: Grenoble-Alpes Métropole, France

decisions concomitantly if we want to support implementation as well as go beyond statements and good intentions.

In France, the definition of regional ecological coherence schemes (SRCE) and their implementation in major territorial planning documents at the local level is important. Nevertheless, the ecological quality of a territory, and in particular of its suburban fringes, requires a much more complete and precise approach. While major urbanisation projects are subject to significant environmental control, this is not the case for all of the “diffuse urbanisation”. Developers and other small scale “urban makers” remain only marginally addressed and the prescriptions for small-scale developments are still weak. In Grenoble, the PLUi guidelines “landscape and biodiversity” target this issue. It has just started and evaluation is still pending.

Yet, LOS_DAMA! actions seem to foster the potential for increasing the stance for preserving and valuing “ordinary” nature in the long-run.

MUNICH

In three areas, Munich tested three different ways of improving cooperation and raising awareness with different inter-municipal associations. An important added-value was that we strengthened the network between managers and reviewed our activities together. So all involved learned from each other. We found that the treasure hunt was really successful with the public. Yet, and especially compared to the conference for the Dachauer marshland, we realised that we missed out on deeply involving decision makers of the Würm area from the beginning. Luckily, due to media coverage and positive feedback, politicians became interested and publicly

presented the treasure map. At the same time, the other two associations realised the added-value and beauty of the treasure hunt approach. Based on our first local activity experience, it will be transferred to more areas.

The special choreography of the “Let’s do Moor” conference with its presentation of stakeholders, perspectives at the same level as political statements and its market of possibilities framed by the unique location drew a lot of attention. It brought together different sectors and levels of decision making, with contributions ranging from history and personal appreciation to scientific insights. Decision makers and other participants alike seem to have discovered their pride in the beautiful yet endangered landscape through this setting. According to the overall feedback, we got the ball rolling for new networks and long-term effects.

With our third pilot activity, Munich and the northern heathland association are focussing on better visualisation and a stronger digital presence of landscapes. At the core, we have a long existing, yet non-binding landscape plan that will be transformed with a new and modern design. While we hope to activate implementation for enhancing green infrastructure, this new and attractive presentation will also reach out to the public. We gave a makeover not only to the umbrella website of the association, but also to individual members' websites. During this process, we found that landscape issues have often been missing on municipal websites. Hopefully, the new “picture” of Munich’s peri-urban landscapes will paint a thousand words about their importance for our well-being and reconnect the responsible municipalities.



Treasure hunt in Grenoble.

REFERENCES

www.youtube.com/watch?v=Ojjog57m3js

<https://www.youtube.com/watch?v=W8aOgq74ow4>

CHALLENGE 5

HOW TO INCREASE INTER-MUNICIPAL COOPERATION

Inter-municipal cooperation has been an issue for many decades, yet its importance remains. Housing, work, transport, mobility, public services and more are spatially interlinked. Landscapes, too, are not confined to territories or administrative borders. The development of connected green areas in city regions requires inter-municipal cooperation.

Transformation and growth of our cities exert pressure on open spaces. This is particularly noticeable in the Alpine region: the remaining open and green areas face a multitude of demands. New work-life-patterns result in more time to spend outside and new ways to spend it. Sporting activities sometimes clash with the need for calm recreation. The commitment for sustainable development and resilience asks for maintaining agriculture, horticulture, and forestry within agglomerations, including citizens' initiatives for gardening and farming. Protecting and regaining near-natural areas as hubs of ecologic connectivity is an acknowledged target throughout Europe.

All these demands call for integrated planning and conflict management beyond administrative borders. Yet, not all states of the Alpine region have metropolitan authorities with formalised decision-making bodies. Even where such institutions exist, more inter-municipal cooperation is needed to overcome barriers to developing, enhancing and managing green infrastructure.

Especially in Germany and Austria, local planning sovereignty is strong and deeply rooted in government systems. Hence, tailored forms of informal cooperation are necessary for joint efforts and shared solutions. EU-projects like LOS_DAMA! offer unique chances to facilitate better inter-municipal collaboration and governance.

LOS_DAMA! pilots applied a kind of “context making” to support metropolitan governance for green infrastructure. With communication and strategic actions set at the centre, as opposed to ad-hoc actions, the pilots created space for encounters between different “worlds”. Meetings and joint commitment took place between political representatives, experts, and stakeholders, between different levels of government, between different sectors.

Raising awareness for the natural and cultural assets of green areas and landscapes is one of LOS_DAMA!s' most important aims. Thus, many of the actions highlighted the beauty and tapped into the potential of landscapes to induce feelings of belonging and identity. While raising awareness for the “treasures” of the landscape, activities aimed successfully at stronger commitment for shared actions between all stakeholders.



Landscape conference with politicians near Munich.

MUNICH

One of Munich's pilots brought together all key stakeholders for a marshland area north of the city. The "Dachauer Moos" is a landscape with remaining patches of moor and heathland and high biodiversity. Yet nowadays, agriculture prevails. The aim was to raise awareness for the natural and cultural assets of the area, revive political commitment for its protection, and boost inter-municipal collaboration within and beyond the Dachauer Moos association. In October 2018, the Landscape Development Conference "Let's do MOOR" gathered key stakeholders from different sectors and political representatives from local to federal state (Land) level. Nine mayors and two county councillors were to sign a joint declaration for the Dachauer Moos including strategic goals. This was rejected with a one vote majority in one of the municipalities.

Some council members opposed the declaration since they saw too many obligations, while others criticised it for being too weak in its statements. Nevertheless, the preliminaries and the conference proved a worthwhile investment. The common vision, which emerged during and through the conference, reflects the contents of the declaration.

The conference set-up was rather unconventional with the first part giving the floor to local hunters, farmers, historians, voluntary conservationists, photographers, and hiking guides. This was especially appreciated by the political participants, as they got an insight into citizen's perspectives. The close collaboration of LOS_DAMA! with the Action Group 7 for the implementation of the European Strategy for the Alpine Region (EUSALP AG7) opened a window of opportunity to combine the event with the



“I think it is very important, especially in planning and territorial development, to have a good common understanding between the administration and the political decision makers of the city. It seems very useful, like in Munich, to have a head of department who is a member of and elected by the city council and, at the same time is in charge of the overall management of the planning and building offices”

Job Shadow: Stefano from Trento, Italy

Job Host: City of Munich, Germany

ten-year anniversary celebration for Bavaria's Climate Protection Programme (KliP). Thus, one part of the conference offered a more scientific view of the importance of all marshlands for climate change mitigation. Finally, a “Market of Possibilities” displayed the value of marshlands for various users. This informal session invited external contributors to present possible inter-municipal cooperation forms in order to enhance landscapes and was received as inspiring. The event received outstanding feedback, created positive energy, and worked as a catalyst for further activities.

SALZBURG

In 2013, the City of Salzburg, together with the surrounding municipalities, set-up a peri-urban green belt to counter land use pressure and urban sprawl. It is a framework for obligatory land

use plans. However, it does not offer any further measures for the development or management of green areas. With the help of LOS_DAMA!, it should evolve to a green infrastructure providing for nature conservation, environmental connectivity, recreation and more. To this end, SIR initiated an ecological compensation account and established a steering group for this “Ökopool” (Eco-pool). It manages a regional “pool” of compensation areas and financial sources. The approach is strategic, building on inter-municipal and cross-sectoral cooperation in the city-region.

SIR commissioned a GIS-analysis to identify fitting compensation areas. A landscape plan includes key areas and interconnection, preventing ad-hoc decisions in favour of long-term green infrastructure development. Local action plans ensure first compensation measures



Multifunctional GI near Salzburg.

and provide test beds for the approach. Cautious steps at the start included many individual talks, thus gaining acceptance and exceeding initial expectations. Workshops involved more experts and stakeholders. The steering group includes the Regional Association Salzburg City and the Surrounding Municipalities, the City of Salzburg, the Federal State of Salzburg, and the District Authority of Salzburg with SIR leading the Eco-pool activities. Actions to consolidate the Eco-pool are included in follow-up projects, legal adjustments and nesting the concept in the new development plan of the Federal State of Salzburg. As the project aims to network and influence mind-sets in favour of cooperation, a gradual process is required. Where interests collide, conflicts need to be defused. For a more participatory approach including the broader public, additional resources are necessary.

REFERENCES

<https://www.verein-dachauer-moos.de/>

<https://www.oekopool-sbg.at/>



LOS_DAMA! THE ALPINE CITY NETWORK

European Regional Development Fund



LOS_DAMA! AND BEYOND ...

THE ALPINE CITY NETWORK

Green infrastructure needs long-term commitment and cross-border cooperation at all levels. To keep the momentum and expand the partnership, we launched the Alpine Network of Cities and Metropolitan Authorities. Grenoble Alps, Munich, Trento, and Vienna started things off: on 2 October 2017, our political representatives pledged further cooperation. So far, Graz, Innsbruck, Salzburg, Milan, Verona and Bergamo as well as the metropolitan regions of Milan and Turin have joined in. In a Memorandum of Understanding and Cooperation (MoU) we commit to improving the development, design and maintenance of peri-urban green spaces and landscapes. We acknowledge the importance of their benefits and functions for urban areas and for the Alpine region as a whole.

WHAT WE, THE MEMBERS OF THE ALPINE CITY NETWORK, STAND FOR

We strive for cooperation of local authorities in metropolitan areas to enhance urban, peri-urban and rural open spaces. Working together with interest groups, stakeholders and the broader community is a core feature of our activities. Our goal is to identify areas and existing infrastructures suitable for continuing development into green infrastructure. We will further develop tools and approaches



Signed Memorandum of Understanding.

enabling urban and regional open spaces to serve a variety of functions – thus raising their potential as green infrastructure. We will allocate resources as well as lobby for the necessary legal and financial conditions and invest sustainably in green infrastructures. Building on our experience and successful policies, we trust in collaboration and will continue to engage in mutual exchange and learn from each other.

COOPERATION WITH EUSALP

Our network of cities and metropolitan areas works closely with the European Strategy for the Alpine Region (EUSALP). The European Alpine macroregion is providing for multilevel





© Political representatives of cities and metropolitan regions and national/regional (EUSALP) ministers

governance. The strategy is an integrated framework endorsed by the European Council addressing common challenges faced by the Alpine core and its surrounding areas. EUSALP provides an opportunity to improve cross-border cooperation, identifying common goals and implementing them more effectively together. EUSALP action group 7 focuses on developing ecological connectivity to enhance ecosystem service provision across the entire Alpine region. At a joint conference, as we launched our Network, the EUSALP environmental ministers approved the political declaration “Alpine Green Infrastructure – Joining forces for nature, people and the economy”. We, the City Network members, welcome the initiative of AG 7 for

making the Alpine region a model region for green infrastructure. By implementing activities on the local level, we emphasise the importance of peri-urban open spaces and inter-municipal collaboration. Through our strategic cooperation, we also contribute to the development of policies at EU and transnational level.

JOIN OUR CITY NETWORK

We invite other cities and metropolitan authorities to share our objectives of protecting precious open spaces and landscapes, enhancing and developing them further as green infrastructure and to join our network!

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LOS_DAMA! project partners visiting the City of Zurich.

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