



# Brigade, lasagne and neighbourhood paths

**In Girona, we have been working on a replicable design method, of increasing scale and complexity, for the design and management of blue-green urban infrastructure. What started out as a joint expert-citizen initiative has become a city project.**

Meshing a peri-urban blue-green infrastructure that reveals, renders permeable and structures the eco-tone between city and territory, the edge, is a habitual aim of metropolitan projects; it involves re-working the strip where the links between urban and rural space are often destroyed and continuity is damaged.

There is a variety of arguments. Firstly, emerging forms of active, healthy mobility and citizen recreation, for which the route is the fundamental demand, call for long routes and large extensions. Secondly, the current pattern of the open space system in cities, in the form of an archipelago, is not functional. This archipelago has to be extended and meshed into large blue-green fabrics that are open to the territory. Thirdly, in consolidated cities, in the edge we need empty local “nat-urban” spaces that are suitable for forming this fabric. Fourthly, a managed edge that is connected with the street network can potentially become the largest public amenity in the metropolis, a multifunctional infrastructure that provides social and ecosystem services. Finally, in a context of persistent precariousness of the public sector in the south of Europe, this extensive framework that is the edge—and the more extensive the better—is only feasible if it can be managed at low cost. That is, its functionality depends on its extent and meshing, and its viability on austerity of implementation and management.

In Girona, we have been working since 2014 on a replicable design method, of increasing scale and complexity, for the design and management of blue-green urban infrastructure. What started out as a joint expert-citizen initiative has become a city project. Here, we will explore three dimensions.

The cornerstone is an operational dimension, based on differentiated management as a design practice to reconquer the edge. In differentiated management, mowing and standardising treatments are replaced by the definition of areas where different types of management are applied. The aim is to generate a mosaic rich in intermediate stages of ecological succession which, as well as improving biodiversity, promotes citizen appropriation of the edge. The range of solutions applied is limited; the solutions, simple, and execution, fast and necessarily recurrent. The impact is immediate and significant, and management costs are equivalent to 1.5 €/m<sup>2</sup> in the first year, and 0.35 €/m<sup>2</sup> thereafter.

Differentiated management design (DMD) is added for the desired formal footprint and the experiential dimension of cutting and mowing. It is a kind of design that draws out episodic paths and creates visuals with the idea of writing a new narrative of the edge, a narrative that celebrates the diversity of the landscape and transmits a feeling of care and value. And it is precisely this design of the management, this system of care, that introduces a new “naturban” aesthetic, neither natural nor urban, that we aim to make socially and economically sustainable. It is the brigade and the experts, co-conceptors, executors, managers and multipliers of the differentiated management design, who bring together all the knowledge and guarantee continuity. Paradoxically—or not—it is interesting to see how DMD transforms maintenance into planning resources, as well as listing the maintenance brigade and managers as planners. The operation has a high return in impact per investment.

A second dimension of the project is the time dimension. Like lasagne, it is made up of successive layers of projects, and multiple actors and scales. The design sequence is reversed, going from the operational tactics and tools of the pilot projects to the large-scale narrative. With no investment budget, and exclusively with the human resources of the brigade, we started out with an experimental project that brought immediate, tangible results to the meadows and scrub of the neighbourhood of Les Pedreres. The trial became a laboratory and a showcase of differentiated management design, an early victory that also provided information about landscape, techniques, effort, cost and social appropriation. It was followed by a second pilot project, on the embankment of the river Ter. These initial examples were joined by a series of diverse, scattered initiatives, with no overall vision. The brigade and municipal technical services acted as both virus carriers and managers. The concept and the subsequent care go hand in hand.

Two years later, the framework project began, offering an overview and structure of the city's edges. The framework project has a structure of 13 loops that respond to the geographical entities surrounding the city. The project proposes the management of 21 new "nat-urban" parks that federate currently divided spaces to interlink approximately 600 hectares. Each loop is accompanied by a plan of actions identifying the interventions that have to be carried out in terms of the effort and the resources that need to be mobilised. This individualisation by families of the interventions facilitates immediate management on the edges, sorting the interventions that require bureaucratic procedures, adjudication or significant resources.

The search for citizen connection, the social dimension, is the third pillar of the project, involving various perspectives. Firstly, the concept of edge in itself counteracts the usual epicentral, hierarchical nature of urban public space and spins it out to the edge, bringing it closer to each and every neighbourhood. Far is always near the edge. To this end, the Federation of Neighbourhood Associations of Girona, with the technical support of the Estudi Martí Franch (EMF), has developed a proposal for a network of neighbourhood paths interconnecting the entire city with the emphasis on discovering local spaces in nature between districts on the edges. If differentiated management design is a system of reconquest and landscape management, then neighbourhood paths represent the circulatory system. At the same time, EMF and the Landscape and Urban Habitat Service of Girona City Council are taking steps to attract various collectives and minority groups to discover and appropriate a reconquered edge. We take as our inspiration what in France has been termed animation, and, sometimes, *usage décalé*, or shifting use: programming cultural and sports events outside their usual venues. The impacts are still incipient, but after two years of dialogue with City Hall and with a growing number of collectives, we are regarded as useful links between the edge and its animation.

When working on the Island of Nantes project, Chemetoff asked: What is feasibility?  
His answer was:

*“It is the invention of the possibility of a project in a particular place, at a precise moment, to choose the operators and the agents, or to accompany those who are there already. [...] Feasibility is a way of exploring possible paths for a project to materialise, preparing the conditions and accompanying stages, from the invention of the concept to the follow-up of finished work [...]. Crossing scales and skills [...] to finally situate each intervention in a favourable context of space and time.”<sup>1</sup>*

The open, austere, immediate imprint of Girona’s edge project makes it perfectly transferable to other conurbations and river spaces. Because the method that we are refining serves to alternate conception and execution in short, recurrent cycles in order to adapt or to defer decisions in keeping with social, political and economic times. And to adapt, ladies and gentlemen, is to succeed and survive.

Martí Franch Batllori - Landscape architect. Principal of EMF arquitectura del paisatge.



Technical drawing with instructions for a differentiated management of the site. The base color and alphanumeric codes relate to concrete management actions while the red lines relate to spatial and visual relations.

<sup>1</sup> Alexandre Chemetoff . Île de Nantes. Le Plan-Guide (suites). Archibooks, 2010.

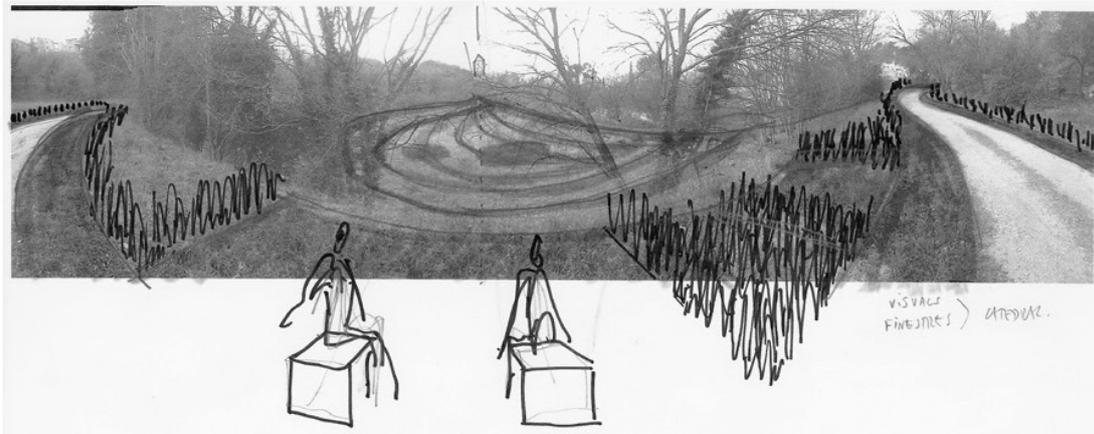
## Siting praxis as if only the feet could see

The Girona shore project debuted in 2014 with two bold pilot projects in contrasting landscapes, one in the mountains and the other on the riverside. They aimed to test the procedures and methods for repeating such projects around the perimeters of the city. The pilot projects are rooted in many hours of fieldwork, explorative walking, drone surveys, and mapping, resulting in detailed ground plans full of notes on how to differentiate the land mosaic of Girona through simple site-management procedures that celebrate site peculiarities and facilitate its appropriation by the citizens of Girona. Chemetoff describes beautifully what we attempt to do in this project when explaining his own project in Ile de Nantes: 'Changer tout sans tout changer . . . Comment ce qui n'a pas changé est changé parce ce qui a changé.' (To change everything without changing anything . . . to see how what has not been changed is changed by that which has been changed.) We completely change the experience of Girona's shores by carefully intensifying what is already there through gentle notations on the site itself; through marks made in the actual vegetation.

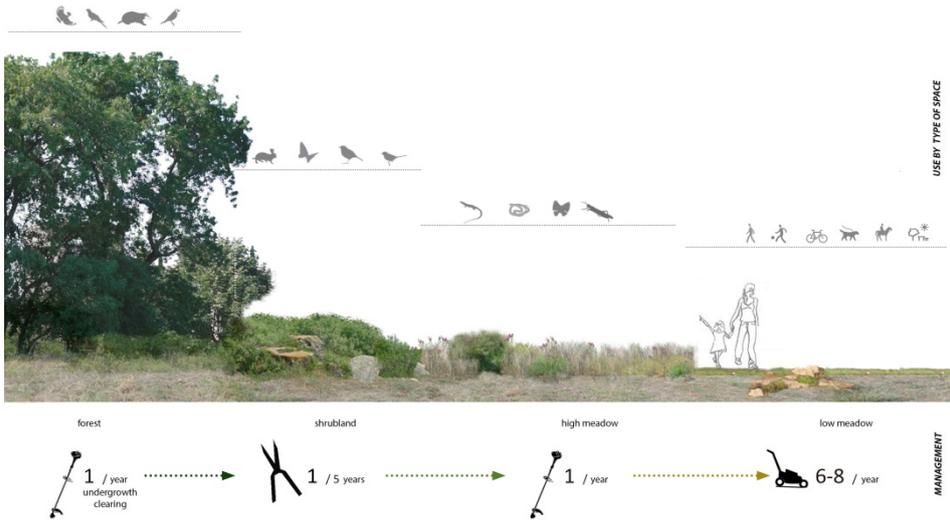


Drawing a path by walking 'as if only the feet could see', while looking for a former fluvial beach after its discovery in a 1945 aerial photograph.

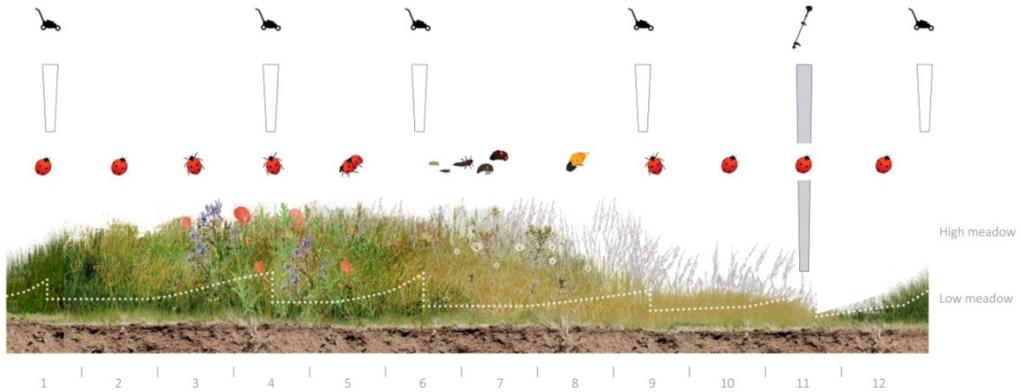
On-photo drawing claiming a view of Girona's cathedral and creating green rooms through differentiated management of vegetation through strategic mowing.



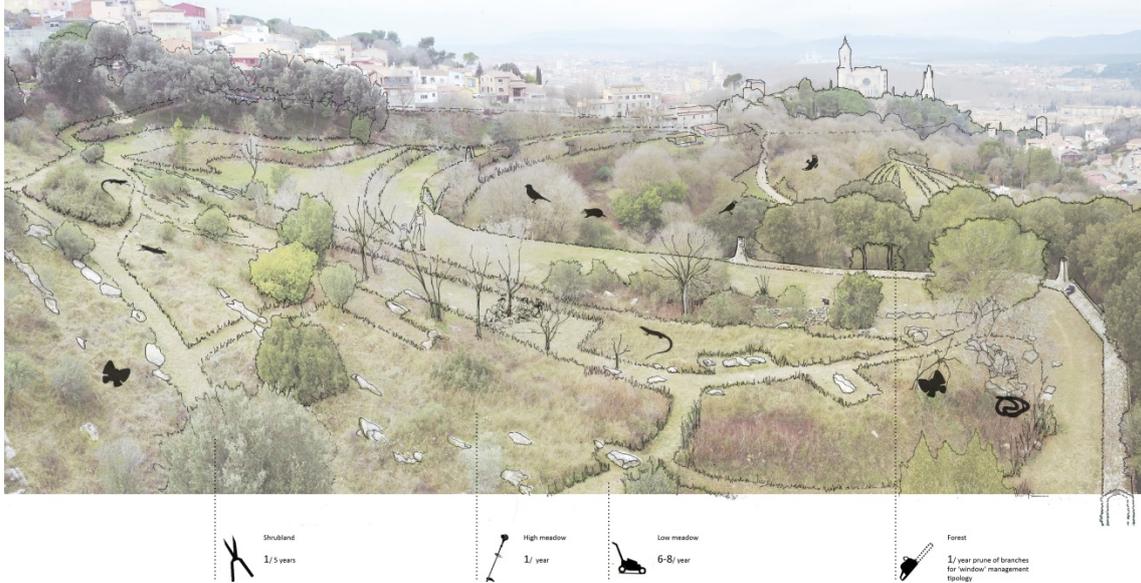




Evolution of a Mediterranean meadow and its fauna according to the regime of mowing.



Cross section showing ecological succession according to the regimes of care and the potential fauna and appropriation associated with them.

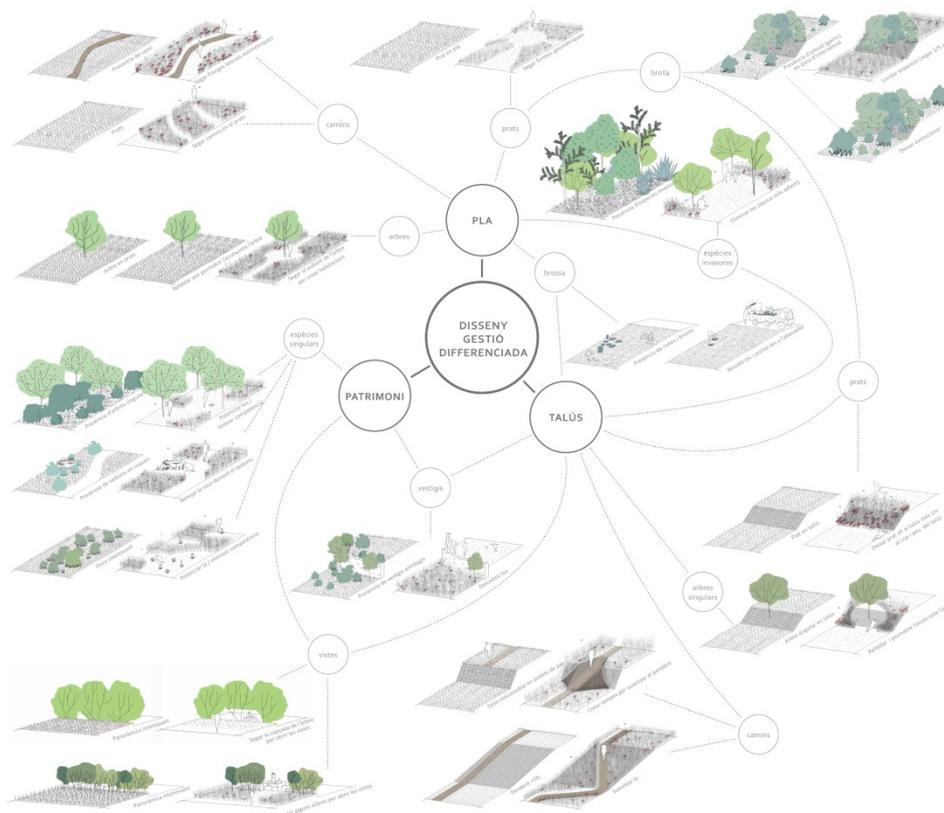


On-site design through differentiated management techniques related to the maintenance regimes required and their potential fauna and appropriation.

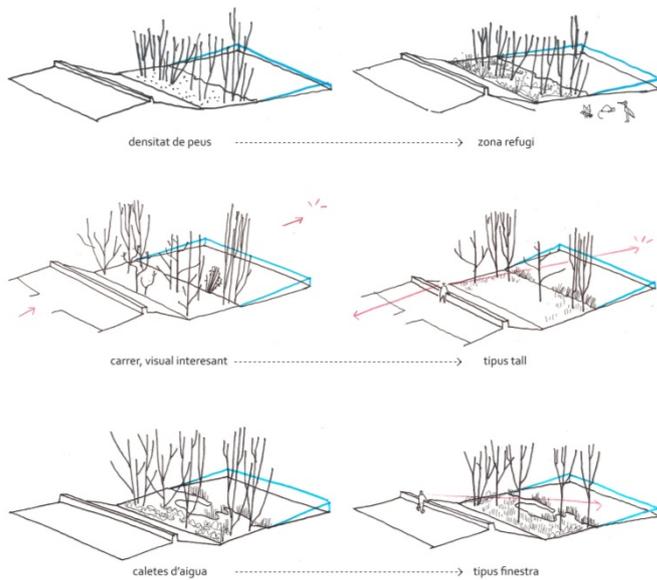
## Protocols and recurrence

Recurrence is a base condition of landscape maintenance, and the differentiated management behind a site-responsive, open vegetation strategy requires the landscape management brigade of the City of Girona to constantly be updated with new criteria and practices. The pilot projects on Girona's shores became laboratories where new praxis are tested, adjusted, and distilled into a more open, responsive protocol. The confluence of three actors are at the core of this protocol: The environmentalist civil servant who combines an ecological approach with the resources and manpower available and makes the inner-municipality maneuvers to make things possible.

The landscape designer, who has spatial intelligence and a relational approach to bridging science and culture with site specific conditions. The head of the landscape management brigade, who modulates the protocols in relation to technical know-how in land - scape management and his team of workers. This transversal knowledge alliance and the flexible proto - col that is constantly being rewritten in relation to actual site conditions is perhaps the most resilient and successful facet of this project. Indeed, all the knowhow derived from the pilot projects is now applied and amplified by new differentiated management protocols throughout the edges of the city.



A binary if/then system on how to act in embankments, flat areas (terraces) and heritage (natural and architectural) sites. The protocol was conceived by the municipality and EMF after two years of working on the pilot projects. It sorts out 60 to 70 per cent of the standard conditions in Girona's shore areas and requires no further design.



1. A typology for 'windows'. Clearing the underbrush and the lowest branches to have short-distance views.

2. A typology for a 'cut.' Clearing some trees to expose interesting views.

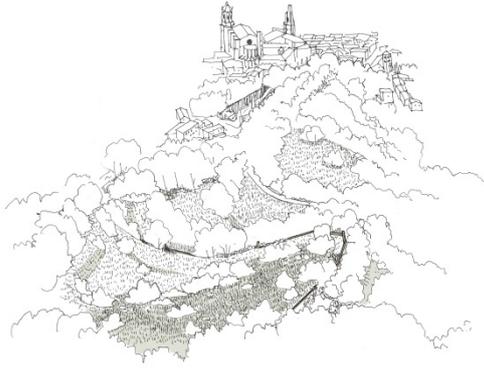
3. A biodiversity typology. Letting the vegetation grow freely as a refuge for fauna.

The landscape maintenance brigade in action on the shore.

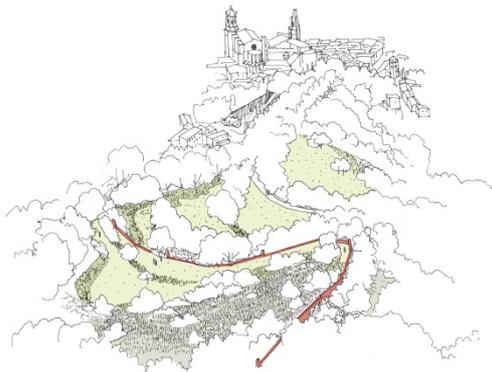


### Responsive upgrading through successive acting

Behind the landscape management protocol are questions of site-specificity and time-specificity, or peculiarity and opportunity. While differentiated management is the starting point for changing perceptions of a place, further action was required to guarantee its functional connectivity, ameliorate the comfort of paths, and to celebrate its views or singular elements. When funding is scarce, specific initiatives such as festivals can result in time-specific opportunities that generate resources to realize projects. In the last three years, pairing our ideas for Girona with flower, art, and land art festivals has secured certain funding and invited new publics to visit the shore. More of such initiatives are still required. In order to be responsive enough to such time-specificities and technical demands, (see example in up-scale), actions are sorted according to the investment and resources and degree of administrative procedures required for their implementation. By doing so, we can class actions according to their ease of execution or isolate particular sites to adapt to specific sources of funding.



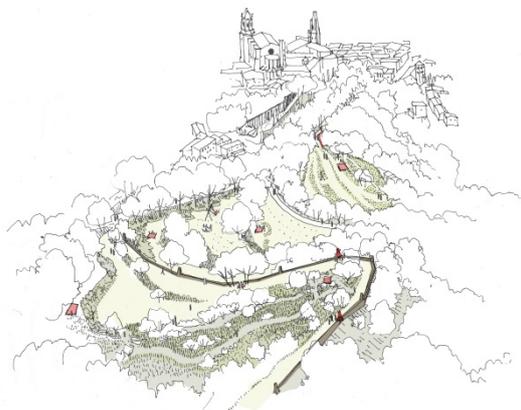
**Original situation.** No management or only a yearly general mowing.



**Act.I.** Differentiated management stage 1 by the landscape management brigade, considering the 'if/then' protocol: slopes, heritage, etcetera.



**Act.II.** Designed differentiated management, requiring additional drawing and investment beyond the work that can be done by the brigade. This includes opening up new paths, the layout of relational cuttings, clearing views, and minimal site furniture.



**Act.III.** Interventions requiring higher investments and those that might require an adjudication procedure, such as paving a path, constructing viewpoints, and planting.



'Confetti', the ad-hoc micro-interventions that celebrate the site's specificities and show and share appreciation for the site.



## Upscaling and downscaling

These drawings show the project's trans-scalar ambition and the operatives needed to upscale the praxis already tested in the pilot projects. Operationally, the 'shore' is divided into thirteen loops referring to the town's major geographical units, mountains, river shores, plains. These loops are then divided into forty urban nature parks to make them more manageable, appropriable by citizens, and to stagger the costs of implementation. This is action planning that is responsive to costs and procedures.

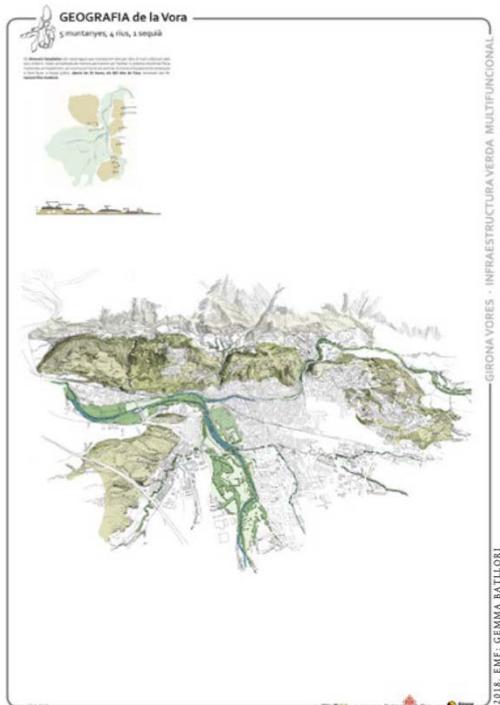


## Ways of looking

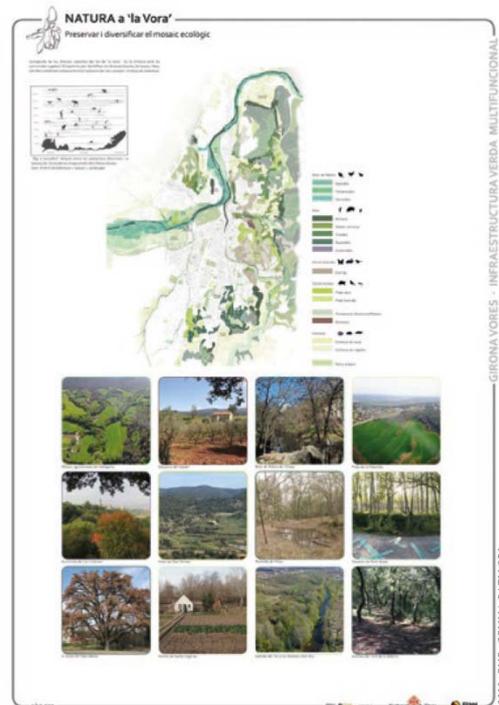
Girona has little soil available for construction. While in previous centuries the town's growth has been solved by examples, these consume the surrounding agricultural soil. Now is the time for the gradual metamorphoses of the existing spaces within the constructed fabric of the town. In this uncontested context, the shore project fosters a vision that champions a green infrastructure in the form of a ring park system on the town's edge, as a twenty-first-century exiample. Extensive and distributed, this infrastructural approach delivers more services and quality of life and it does so affordably, mostly through a new culture of landscape management. Testing ideas and thinking directly on the ground through prototype projects and maintenance protocols made it possible to implement multifaceted ways of designing Girona and its shores.



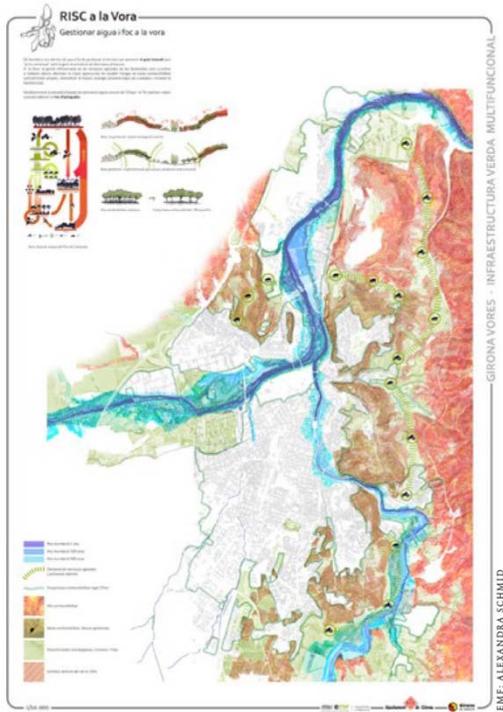
1.Girona's street finder map.; 2 The disregarded 'shore'. The city's ecotone to nature; 3 Vision for the S.XXI century city's expansion, a green infrastructure. + 600ha



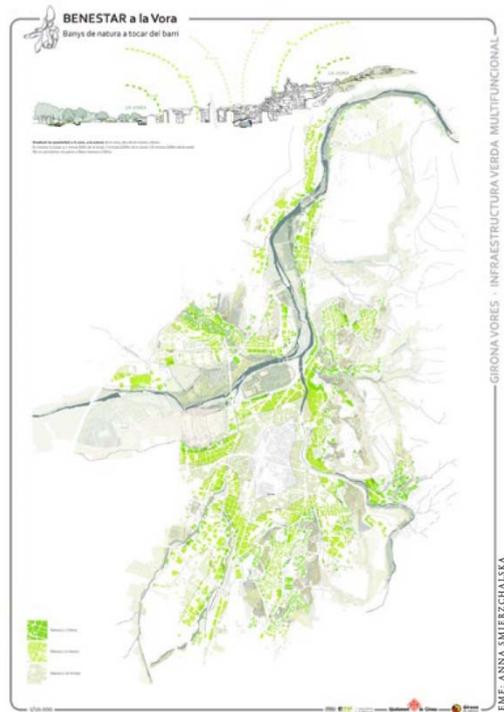
**Landscape.** Reading the geography of the shore: mountains, rivers, and plains.



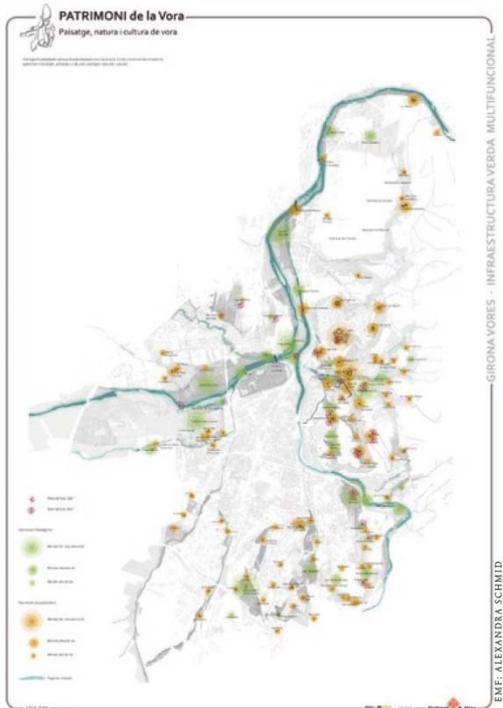
**Nature**



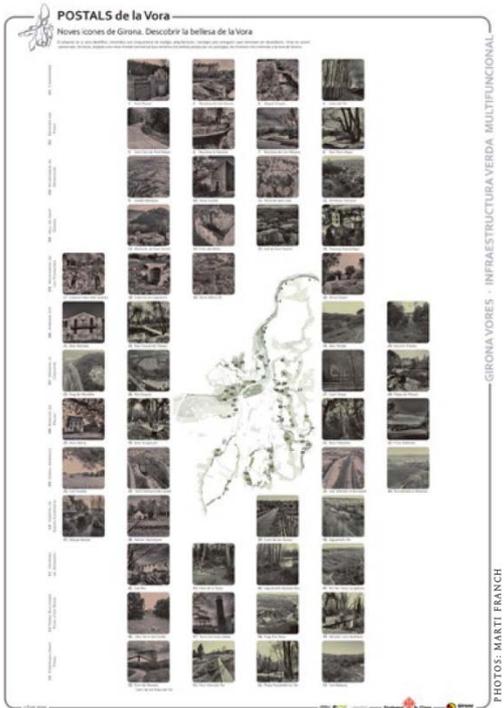
**Risks.** Floods and fire management at the shore.



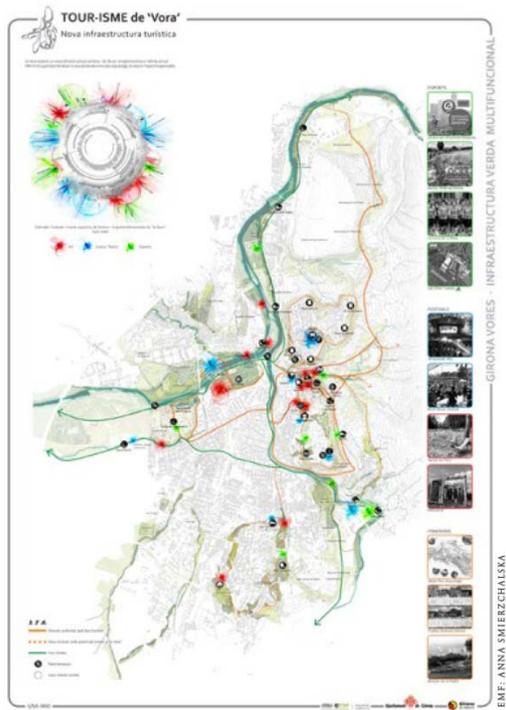
**Well being.** Distance to a nature bath. Distance in minutes from the city to the nature of the shore.



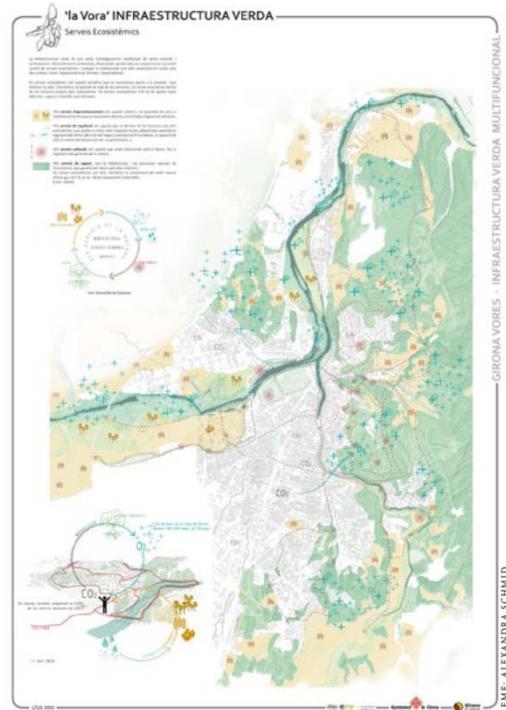
**Heritage.** Defining heritage through landscape and artifacts at the shore.



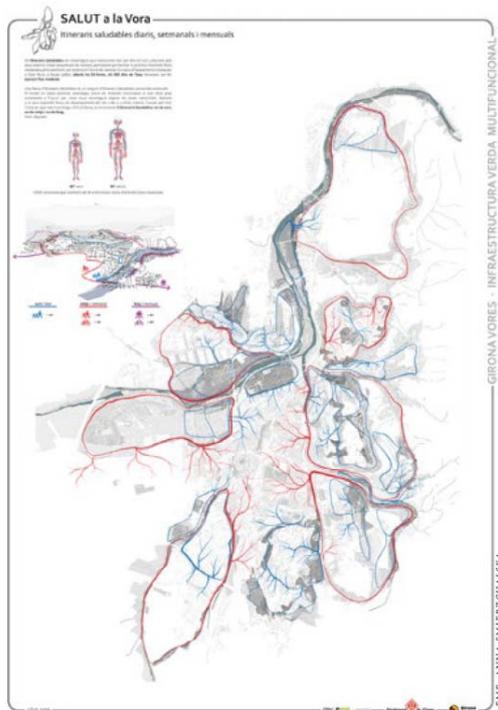
**50 postcards**



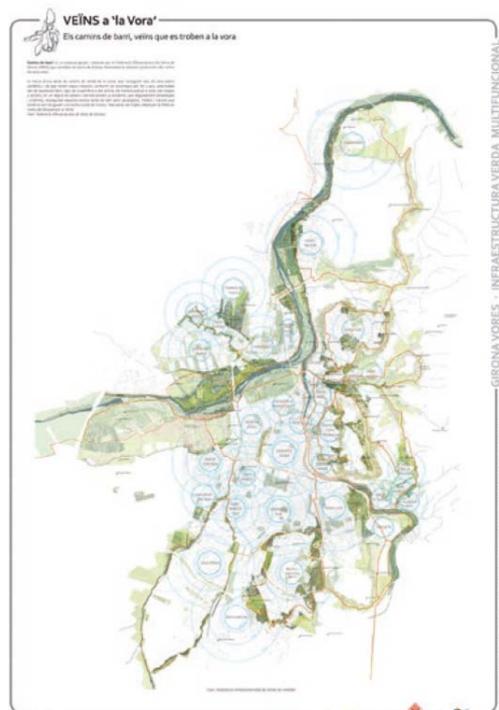
**Tourism.** The shore as a new tourist infrastructure: sports, festivals, and art.



**Ecosystem services.** The shore' as green infrastructure.



**Health.** Daily, weekly, and monthly healthy itineraries at the shore.



**Citizens.** An extensive system of paths that connects all the neighborhood with the shore.