

CHIVA (ES)

Bringing back synergies.

New green-blue infrastructure to value Chiva's synergies

The 'Barranco de Chiva' is a river ravine with a 40km route through the Valencian Community that flows into the Albufera of Valencia. As it passes through Chiva, it crosses the urban centre fragmenting in two parts the old town, which is of Islamic origin, settled at the water's edge. The 'Barranco de Chiva' ravine is an element that brings together communities and confers a unique character to its surroundings.

Over the course of the last 50 years a series of incidents have led to an imbalance in the dynamics of Chiva.

The actions and 'non-actions' carried out are; the partial canalization of the river that has been channeled into the city centre, triggering floods that produce multiple social and economic damages, such as the decrease of biodiversity, the neglect of the natural and anthropic heritage, the loss of links with the natural areas and the agricultural heritage of Chiva. There is also been a great lack of public space due to the occupation of motorized vehicles within the urban areas, more specifically in the historic centre due to the narrowness of its streets, and the social distancing that has historically been produced by the natural barrier; the ravine.



What is proposed?

It is proposed to promote a series of inter-scale strategies that constitute a green-blue infrastructure formed by a network of ecological-social systems where natural and anthropic areas are linked. Designed to revalue and foster the biodiversity of the place, provide connections that articulate the coexistence between natural-anthropic heritage and link urban fabrics to help foster social cohesion.

The infrastructure includes spaces and other "green" (a large ecological connector, urban parks, naturalized streets...) and "blue" (waterways, floodplains, reservoirs) components that will promote eco-systemic services such as regulating diseases and the climate, supporting the pollination of crops and providing recreational and cultural benefits for Chivas community. The proposal is programmed to recover the management dynamics of historical ecological infrastructures such as flood lands, links with natural areas and the liberation of public space from motorized vehicles.

What are the objectives?

- 1.** To contribute to the re-naturalization of the river channel to mitigate the social and economic effects of flooding in the historic centre, through water management at the watershed scale, creating a resilient landscape of pond areas and floodplains promoting compensatory agricultural activities.
- 2.** Preserve and enhance the biodiversity of the site through the revitalization and conservation of natural, agricultural, hydraulic, and urban areas. In addition, the dissemination of the value of Chiva's heritage will be promoted through new itineraries that will expand the knowledge of Chiva's agricultural culture.
- 3.** Boost connections between natural and anthropic heritage that articulate the green economy through long-term strategic alliances with local actors and by promoting economic initiatives (agriculture) that promote a more sustainable and biodiverse landscape. In addition, the road network will be expanded towards the Sierra de Chiva mountain range, incorporating short and long-distance walking routes through the city and countryside, and promoting the use of sustainable and healthy mobility through new cycle paths that run through the municipality and beyond.
- 4.** Freeing the historic centre from vehicular traffic by implementing a model of street transformation, with the aim of recovering for citizens a part of the space currently occupied by private vehicles. The objective is to achieve a healthy public space, with more shade which is fairer and safer and that favors social relations and the economy of proximity.
- 5.** Turning the river from what is seen as a natural barrier into a point of attraction in the area to promote social cohesion in the community. This new meeting point will be constituted by a program of trails and areas of confluence that guarantees to spread the social benefits across the whole community.

How are they defined? The result is that the Chiva ravine will function as a great territorial connector that will offer hybrid fluvial spaces for nature and social use. The proposal undertakes several scales of intervention and development.

GENERAL GUIDELINES

1 TO RECOVER THE SYNERGIES OF THE OLD 'ARMAJAL' WETLANDS.

The 'Barranco del Gallo' ravine adopted a flat, lagoon-shaped morphology and therefore it was called the Armajal (in Catalan), before reaching the town of Chiva. This fact was of vital importance in terms of flood mitigation, since the large plain through which the water passed spread throughout the basin, in floodplains, and allowing the retention and absorption of water. However, the riverbed was channeled, causing the water to evacuate quickly towards the city, causing serious historical flooding and the city to turn its back on the ravine, favouring its degradation.

*Environment
old 'Amarjal'.
Photograph 1956.*



The proposal: The intervention is to recover the dynamics of the old 'Armajal' wetlands by the partial widening of the ravine, allowing certain agricultural plots to become temporary floodplains. The condition of the ravine as a thin built up channel as it passes through the urban centre leaves few options in the vicinity of the village to expand on. Therefore the strategy adopted proposes to manage flooding in the areas leading up to Chivas city centre, mitigating the impact before reaching the urban sprawl. This is probably the only long-term strategy to mitigate the effect of flooding in the town centre and promote biodiversity in the municipality.

2 RECLAIMING THE CENTRE.

The objective is to invert the mobility pyramid and put citizens at the centre of everything, gaining new, safer, and less polluted living spaces.

The proposal: The transformation bets on a leap of scale and rhythm, an integral and equitable mobility model that prioritizes public modes of transportation. The intervention organizes the urban fabric by generating urban "superblocks" by reformulating its interior space to return to the community a part of the area currently occupied by private vehicles. To this end, the 'Avenida del Reino de Valencia' is transformed into three urban "superblocks", and the historic centre is freed of motorized vehicles, with the expectation of access to core essential services and to residential housing. The urban blocks are made up of two different scales: one on an urban scale, which directs fast and motorized traffic around the perimeter of the urban node, and another at community level, which is more friendly, domestic, and inclusive.

3 RECOVERING THE SYNERGIES OF CHIVA'S ECOLOGICAL CONNECTIVITY.

Historically Chiva was a rural municipality based on agriculture, so it was surrounded by crops, ravines and natural spaces of high environmental value that provided a nearby and quality green infrastructure for the population. But the abandonment of agriculture, urban growth and new mobility infrastructures have caused a loss of connection with this green infrastructure and a loss of its environmental quality.

The proposal: A new green-blue infrastructure is promoted where:

1# The Chiva Ravine is recovered as a great ecological and social connector on a territorial scale.

2# Pocket parks are developed. Ecotones. Large longitudinal parks of transition between nature and populated areas.

3# Urban green axes. Evolve from an archipelago of disconnected free spaces to an articulated system through green connecting axes.

STRATEGIES.

Based on the general guidelines, a set of five strategies are developed that cover various conditions and generate a specific framework for action. The strategies are as follows:

1 THE WATERSCAPE AS A BACKBONE MAKING "ROOM FOR THE RIVER".

The proposal is linked to the regulation of the integral water cycle and to protect/mitigate the effects of floods, giving back value to the ravine. The main objective is to let the river "do", to give it more room for manoeuvre to slow down its speed and improve its infiltration into the subsoil. Two strategies are proposed for the development of the ravine around the urban centre:

- A network of floodable agricultural plots for sudden floods that through changes in the micro-topography allow to decrease its speed, retaining and infiltrating the water into the soil.
- The occasional widening of the banks of the channel (currently channeled by concrete walls), to create a greater flow area, promoting riparian vegetation as a retainer of the speed of the floods.

2 SYSTEM OF INTERCONNECTED OPEN SPACES

The intervention promotes the connection of natural spaces with the urban nuclei, advocating the coexistence between nature and the city. The proposal is formed by a set of parks that connect both realities and by the conformation of green axes that favour public mobility in the urban core. These approaches will promote the increase of biodiversity that will support the mitigation of the heat island effect, the reduction of urban noise, and the absorption of polluting particles such as CO₂ and therefore the improvement of public health. The actions are structured as follows:

// The wetlands park. A large park that gives value back to Chiva's ravine as a great ecological and social connector on a territorial scale, it will become a great point of attraction that will favour social confluence. It will be structured in three parts: the floodable park of the Armajal, the Chiva river walk through the urban centre and the river park of 'La Rambla' (the central street).

// The border parks. Ecotones. Large longitudinal parks of transition between nature and city. These are made up of, on the one hand, the Castle-Agricultural Landscape Park that connects the Castle of Chiva with the agricultural landscape, supported by a large park projected in the general plan of Chiva. And, on the other hand, the Station Park which is designed to be a linear buffer that mitigates the impact of the large railway infrastructure and also connects the urban landscape with the surrounding agricultural landscapes.

// Urban green axes. They are articulated systems through connecting axes and an archipelago of free spaces.

3 RELEASE THE CENTER. MOBILITY PLAN

Given the size of the historic centre, (500 meters in diameter) we promote the freeing of the historic centre from motorized vehicles. The longest route from one end to the other end of the centre is 10 minutes on foot, which makes this operation a reasonable one.

- The development of the urban scale, with a priority for fast traffic (≥ 50 km/h), serves motorized vehicles and strategically establishes "shuttle" parking areas to make up for the lack of parking space occupied by vehicles in the centre of Chiva.

- On a local scale of mobility will be managed by a network of green axes and central squares where the pedestrian has priority (≥ 10 km/h). Priority will be given to residents and essential services accessing the centre of Chiva. In addition, a new bike lane network will be incorporated to support this new model with 15 new parking units scattered throughout the community centre.

4 PROMOTING SOCIAL COHESION

The intervention emphasizes the wetlands park as the new attraction point for the local communities of Chiva. The park will manage the connections between the urban centres. It is made up of a sequence of routes, with straight and zigzag sections that link the urban centres and are articulated through points of convergence, which favour transversal connections. The aim is to opt for a model that generates equity and promotes social links. The planned nodes are:

#1 Floodplains plaza Node; bringing the citizens of Chiva and beyond closer to the network of the new floodplains,
#2 Station/Castle Plaza node; articulating the connection between the Castle and the Station
#3 Square/Viewpoint Centre Node; public open space to give relief to the dense urban centre of Chiva. This is done by creating a 7,500.00 m² plaza, taking advantage of its central geographic positioning. This plaza will become the new recreational area of the centre of Chiva.

#4 'Almazara de Oliva de Chiva' plaza; the new plaza 'Almazara de Olivo' is freed up space next to the building 'Almazara de Olivo' on the edge of Chivas city centre which is developed as a prototype node next to the river creating a centre point for the community and a meeting point to manage connections with the urban core.

5. ACTIVITY PROGRAM

The proposal oversees supporting the revaluation of the existing free spaces and favouring the new main attraction of Chiva; being the wetlands park. It is given a program of uses with new pockets of activities in the areas of social confluence. Serving as a stimulus to generate synergies of community coexistence. In addition, this activities program will cater to the heterogeneous population of Chiva and its visitors, this itinerary will be extensive, intergenerational, and plural.