

DORA RIPARIA

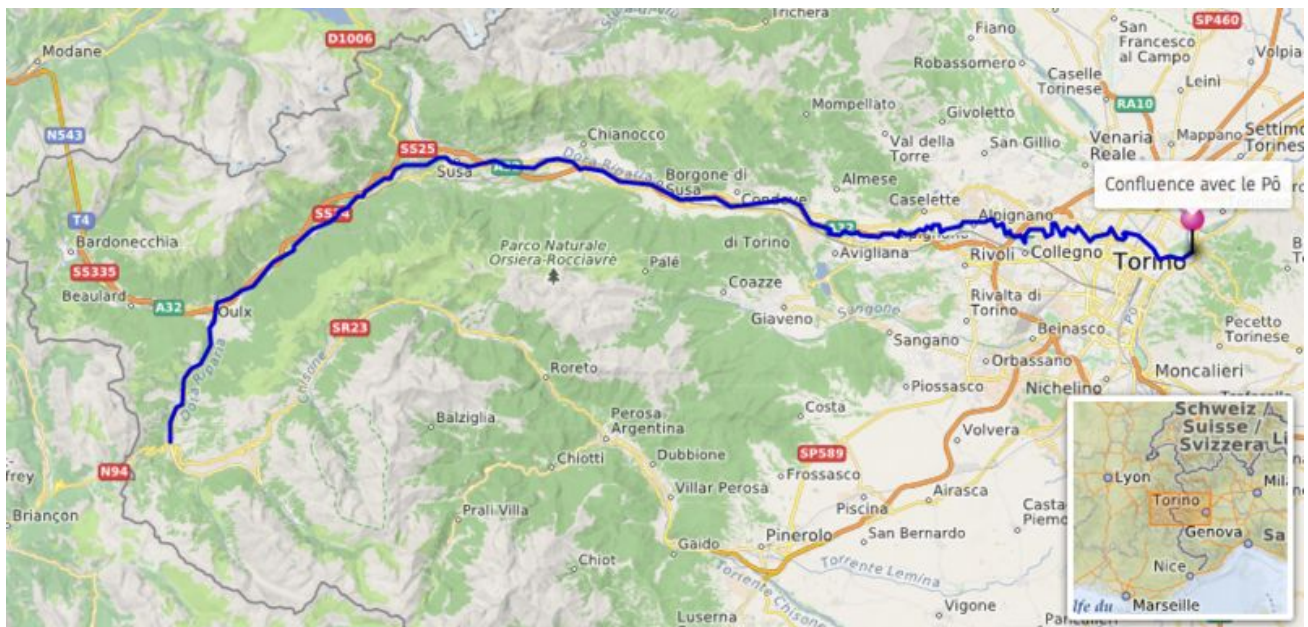
INTRODUCTION

The aim of the project is to involve people in the activities of requalification carried out on the Dora Riparia. We believe it is very important to learn about the river, its problems and all the activities influenced the environment and the inhabitants in the surrounding areas and in other urban areas.

GEOGRAPHICAL LOCATION

The Dora river originates in the Alpi Cozie, from the confluence of two rivers: the Piccola Dora and the Ripa stream. From Cesana to the confluence with the Po, the Dora runs for 125 km. Joint near Oulx the river swells thanks to the contribution from the left of its tributary, the Dora di Bardonecchia and then narrow just before the town of Susa. Once in the plain it crosses the territories of the municipalities of Avigliana, Alpignano, Pianezza, Collegno and then arrives in Turin. In Turin, after crossing the park of the Pellerina, continues its descent in the northern part of the city, then going to merge into the Po at the Colletta Park.

Its name derives from the Latin Duria minor, as opposed to Duria Maior (Dora Baltea). The name Riparia comes from the Ripa stream, its main spring branch.



HISTORY

Already in the Middle Ages its waters were used to power mills, jacks and other plants. The industrialization of the areas along the urban course of the Dora in the area located to the west of the historic center of Turin led to the deterioration of environmental conditions of the river. In 1917, Fiat acquired the land occupied by the

Piedmontese Ironworks in the area Valdocco, between the railway to Milan, the Dora river, via Livorno, via Ceva and corso Mortara, in order to independently produce the steel necessary for all sectors of the car factory.

In the 50s / 60s the course of the Dora Riparia was buried in order to recover spaces for material handling, for new logistic infrastructures and railways and for the deposit of iron scrap to be used in foundries.

The roof is made entirely of reinforced concrete capable of withstanding a 17,000 kg / sqm. The grafting of the Dora brought numerous damages during the flood of 2000 which hit Turin, in fact the reinforced concrete structure led to the flooding of the watercourse near the Balon (historic Turin market) creating inconvenience for the safety of citizens.



Other problems are added by the particular geomorphological conformation of the basin, characterized by lithotypes in large quantities that are easily disintegrated, which make it easy for the water to become cloudy, with a consequent negative influence on living beings.

Important impacts are also evident, such as hydraulic arrangement that cause the degradation of river functionality and discharges. Thanks to continuous studies carried out on water, it confirms a rather negative general condition, mainly due to biological evaluation elements. In particular, there is an Ecological State at least "sufficient" upstream of Susa, but still lower than the objectives of expected qualities. Downstream the situation is quite serious, with an ecological state "insufficient" and throughout the river stretch of the plain. The achievement of the quality objective for the Dora Riparia basin therefore passes through the requalification of the river ecosystem putting particular attention to the elements biological quality (EQB) and physico-chemical of water.

THE RIVER RESTORATION

River restoration involves a multi-disciplinary approach that does reference to a large number of measures aimed in restoring a state and a more natural functioning of the river system, supporting biodiversity, recreation, flood management and landscape development - all of which lead to multiple environmental, social and economic benefits. The goal of the redevelopment is to create waterways that are useful for

people and the environment and to know the way of integrating it into our current territorial systems and modern society. The goal will be achieved with the creation of a functioning ecosystem and improving the quality of the water.

Among the most used naturalistic engineering interventions in the river area are the following:

- re-naturalization of banks;
- increase in morphological diversity, by restoring the trend originating in the river route, the creation of river bars, the restoration or preparation and greening of expansion tanks and floodplain areas;
- creation of shelters for fish fauna and interventions for the areas of scrub;
- preparation of artificial passages for the fish fauna.

THE DORA PARK

Dora Park, which takes its name from the river that crosses it, is a post-industrial park in the city of Turin.

The area was characterized by strong industrialization until the nineties, when this industrial area was gradually abandoned, thanks to its proximity to the railway and the Dora river.

In autumn 2007, the park project was included among the works to be carried out for the celebration of the 150th anniversary of the Unification of Italy.

Today, the park is the most important work in the urban transformation and represents one of the largest green lungs of the city, after Pellerina Park.

Each area integrates naturalistic environments and pre-existing structures deriving from the industrial past of the area, preserved and re-functionalized; among these the Michelin cooling tower, the stripping structure and the thermal power plant of the

Fiat steelworks. The comparison with the history of the place and its industrial character is a substantial element of the project.

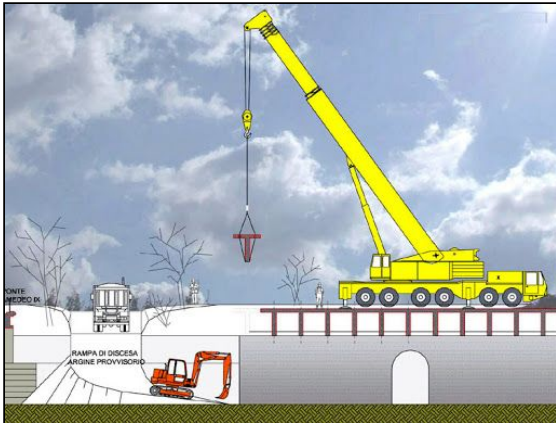
In 2017, work began to remove the river bedding and numerous initiatives for the rehabilitation of the waters and banks. The

redevelopment of the banks is part of the project "Torino Città d'Acque" and involves the construction of a

cycle / pedestrian path that will link the area to the already existing cycle paths along the Dora river.



THE DAYLIGHTING WORK



Major works to remove the reinforced concrete roof slab are bringing to light entire stretches of the river that were drained after the war to create production spaces for the large steel factories in the Lucento area. Finally, in the summer of 2019, work began on completing the "green lung" of the park.

The park can be divided into several areas:

VALDOCCO AREA



Pedestrian walks and green areas extend along the Dora, alternating lawn areas and others equipped for play and relaxation. These areas are protected by a "canopy", that is a continuous cover consisting of the crown of trees distributed with regular scanning and belonging to different plant species.

MORTARA AREA



It consists of two parts: the disused section of Mortara course, between Orvieto street and Piero della Francesca place, and the area corresponding to the route of the new underground course of Mortara.

VITALI AREA



The Vitali area is the largest in the park and is characterized by the presence of pre-existing industrial buildings. The area is dominated by the imposing structure of the stripping shed, of which the tall red painted steel pillars and part of the roof have been preserved. Under the roof there is a multifunctional space equipped with playgrounds and designed to host events and sports activities; next to it there is a vast garden, which is articulated around the pillars of the dismantled steel plant alternating flower beds, play areas and an elevated walkway in galvanized steel.

INGEST AREA



The design of this lot is characterized by a succession of areas with different configurations: lawn areas, tree-lined areas, areas equipped for play, flower beds

and an aquatic garden with deep pools and moving water channels. The latter is made using the large plinths and concrete foundation structures of the Fiat rolling mills that occupied the area before the transformation. Finally, the perimeter walls of the former service shed define a “hortus conclusus”, a protected garden that welcomes particular plant species.

MICHELIN AREA



The presence of the river represents the most significant character of the area: the morphology of the land has been modeled to create a vast green lawn that slopes gently towards the Dora until reaching the bank, creating a sort of "urban beach". The small valley overlooking the river also allows it to receive water in the event of a flood

FONTS:

<http://www.orticalab.it/>

https://it.wikipedia.org/wiki/Parco_Dora

<http://www.museotorino.it/>

<http://www.museotorino.it/view/s/2393d480122c41b4bf77b05b373abf7e>

https://it.wikipedia.org/wiki/Dora_Riparia

<https://www.laboratoriovalsusa.it/natura-ed-escursionismo/dora-riparia>

http://www.crestsnc.it/natura/media/progetto_dora_riparia.pdf