# **PROGETTO PO** (Po river project). Plans, programmes and projects for the protection and enhancement of the Po river in Piedmont (Italy).

Partners: Parco Fluviale del Po Torinese Turin Po River Park; Parco Fluviale del Po Vercellese/Alessandrino Vercellese/Alessandrino Po River Park.

## Contents

The title evokes a cordinated set of programmes, plans and projects developed since 1987 in order to preserve and enhance the Po river and floodplains, as a basic resource for the regional social and economic sustainable development. It includes he first proposal of "Progetto Po" by IRES (Istituto Ricerche Economiche e Sociali, 1989), the "Progetto Territoriale Operativo" by Regione Piemonte (PTO, 1995), the "Piano d'area" of the Po river regional Park (PdA, 1995), referring to the whole fluvial strip in Piedmont. The set also contains some projects for specific critical areas, relevant for the requalification and transformation of the river strip.

## Responsibility

The planning and research process was started in 1987 by Regione Piemonte (Programmazione economica e pianificazione territoriale) and IRES with the help of Politecnico di Torino (Dipartimento Interateneo Territorio) under the scientific coordination of Prof. Roberto Gambino, and developed till the approval of PTO and PdA. Later a relevant role has been assumed by the management Authorities of the river Park (Po river system of protected areas, set up in 1990), which support both the extension of protection area to the main affluents (Sangone, Dora, Stura) and the implementation of the plans and projects on the whole protected area.

## Context

The wide context of Progetto Po is the Po watershed basin (75000 km2, 652 km of the river length), enclosed by the Alps, the Appennines and the Adriatic Sea, one of the largest economic and productive areas in Europe, the main theatre of the Italian demographic, social and economic development. The Piedmont region houses the 36% of the entire Po course, subtending the 40% of the whole basin. Its problems (such as hydrological management and risks, pollution, environmental degradation, energy production) have heavy influence on the other part of the basin and the Adriatic Sea. So, even if the river strip considered by the Project (the "enlarged" strip, including the surface of nearly 80 Communes interested by the river's dynamics, covers 2000 km2, the "restricted" one only 475 km2) looks very slight, its management planning has a strategic European inter-regional importance. This explains the complexity of the relationship between Progetto Po and the regional and territorial planning for the whole basin, in particular the Po Basin Plan, put in charge of the Basin Authority by the Law 183/1989. In a regional perspective, the conceptual and political background of the PTO is the Piano Regionale di Sviluppo (Regione Piemonte, 1985), which, in front of the worsening of ecological conditions and environmental risks, stated the need for more integrated policies, joining the hydrologic and hydrogeologic aspects with those concerning economics, infrastructure and settlement organization, land uses, ecology, landscape, social enjoyment and cultural aspects. The attempt was to avoid the negative effects of the sectorial and "emergency" policies. In the meanwhile, the safeguard of the Po river, as one of the main ecological corridors of the European Ecological Network and as a basic resource for many tens of millions people, implied special protection measures. A first step was in 1990 the constitution of the Park of the River Po ("Sistema delle aree protette della fascia fluviale del Po"), covering the whole Piedmont's river strip, from the sources in Monviso mountain to the boundaries of Lombardia region.

#### Project as a process.

The relevance of territorial, economic and environment changes, combined with the dynamic complexity of planning issues, induced to conceive the Progetto Po as an open and inclusive process, in which every phase could be enriched and, to some extent, even modified by the subsequent ones – without prejudices to the basic options or principles. The main steps of the process are:

- Progetto Po first proposal (IRES, 1989),
- Progetto Territoriale Operativo per la fascia fluviale del Po (PTO, Regione Piemonte, 1995)

- Piano d'area del Parco del Po (PdA, Regione Piemonte, 1995)
- ampliamenti del PTO (on the affluents Sangone, Dora, Stura)
- progetti operativi locali, concerning 10 areas of specific interest
- the local developments, in particular the *Contratti di fiume*, based on specific agreements among the involved municipalities and other stakeholders.

A special remark is needed for the intertwining between PTO and PdA: in fact, their spatial delimitation is roughly the same (both refer to the whole strip, but PdA refers to the boundaries of the Park, while PTO includes some more small areas) but their regulations are based on different cultural matrices: deriving, for the PTO, from the urban and regional planning and, for PdA, from the environmental and landscape planning, in the light of the national laws for nature and landscape.

## **Basic options.**

The key option is a very simple and ambitious one: it concerns the freedom of the river dynamics and evolution, which requires more coherent and sustainable land uses and development patterns, avoiding, as far as possible, every aggravation of the human pressures. To this principle must be referred every other option, concerning in a hierarchical order: the strategies for the water quality and safeness, the safeguard of the sensible areas and the ecological continuity, the conservation of the historic structure and the enhancement of the cultural heritage, the responsive exploitation of agriculture and forestry, the improvement of opportunities for accessibility and enjoyment of the river and its banks, the preservation and enhancement of the river landscape. Given the complexity of the fluvial landscape mosaic, where a lot of various and even conflicting interests and stakeholders are often present, the above basic options requires a mix of different strategies, ranging from the spatial separation, when necessary, to the functional integration, every time that is possible.

## **Project guidelines.**

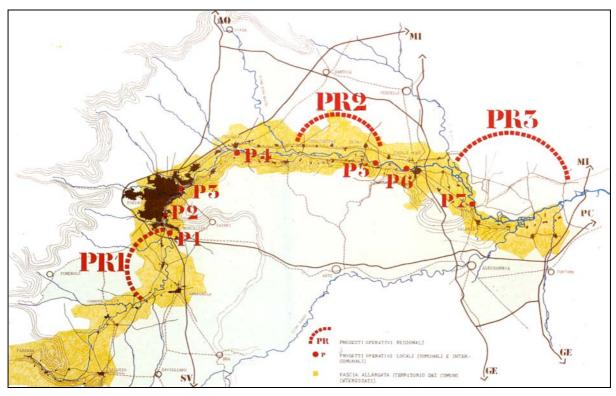
- 1) A central role in the project process has been plaid by the concept of the territory to be reserved to the river dynamics and evolution (FPF, *Fascia di Pertinenza del Fiume*), including the floodplains as well as other areas ecologically linked to the river. In the FPF no further settlement or infrastructure can be permitted. The FPF concept, already defined "fascia di divagazione" in the first proposal (1989,) has been later assumed by the Po Basin Authority and extensively applied in the whole basin. It implies a separation strategy, aiming to reduce risks and damages deriving from urban and productive development (in particular the quarries).
- 2) A complementary concept concerns the *networking* of natural and cultural resources, both in longitudinal and transversal direction. Ecological networks, as well as systems of trails, paths and equipments for cultural connections, aim to mitigate the present barriers and fragmentation, and improve the connectivity of the river system as a whole.
- 3) A third concept concerns the *diversification* of measures for the active protection of habitats and single resources. The Project makes a clear distinction between the areas included in the "restricted" strip (where compelling rules are in force) and the ones included in the "enlarged" strip, where the basic regulation is provided by the local plans, in the frame of the Project's strategies. The restricted strip is divided ("zoning") in 502 areas characterized by diverse ecological situations, landscape features, agricultural and urban developments, and consequently by specific rules.
- 4) A fourth concept concerns some areas that, for the critical gravity of the risks and damages to be faced (mainly due the extraction activities). or the relevance and complexity of the needed or expected transformations, require a thoroughly projectual investigation, and specific agreements with the involved operators, on the basis of more flexible rules.

### **Emerging features.**

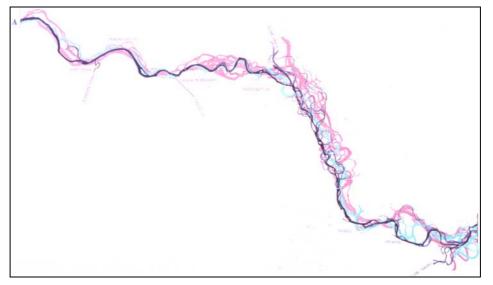
If compared with the aims of the European Awards, the Po Project meets the following criteria:

a) Sustainability: the Project tries to conjugate the requalification of a territory threatened and degraded but still rich of incomparable resources, with the appropriate improvement of the economic, social and cultural activities.

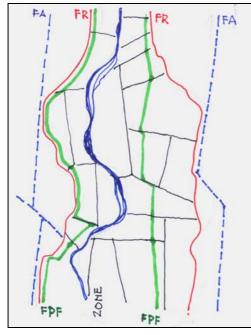
- b) Originality and innovation: the Project proposes a radical shift in policies concerning the fluvial systems, fostering a holistic approach and introducing some innovative concepts (like the FPF or the network paradigm), later applied in other contexts.
- c) Quality of the professional work: the process of the Project implies a large use of innovative techniques, both in connecting efficiently the specialised analysis and understanding with the plan's drawing up, and in connecting the strategic approach with the normative one.
- d) Exemplarity: the Po Project, as a powerful example of an integrated approach to the management of a large fluvial system, has already influenced planning and policies both at the national and regional level.
- e) Planning role: the Project has well proved that the planner's work plays a crucial and irreplaceable role in steering the governance strategies and connecting them effectively with the specific intervention projects.



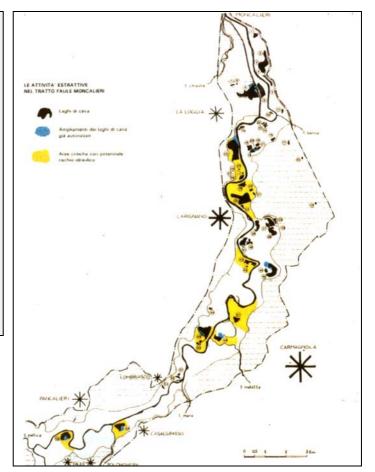
Spatial scheme (yellow: the enlarged strip).



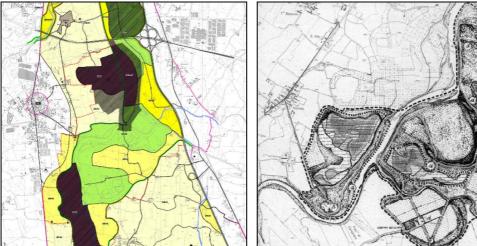
Different courses in different time.



Different delimitation of fluvial strip FA: enlarged strip, FR: restricted strip, *FPF: "fascia di pertinenza fluviale".* 



Mining activities along the Po River.



PTO: an example of zoning.



PTO and PdA: an example of outline project.