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# Old documents and past maps as a tool to identify the riskiest areas along the Po riverbed (Northern Italy)

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## Abstract

The Po is the longest Italian river (652 km), with a basin of 74,000 km<sup>2</sup>. It flows almost horizontally across the Northern Italy from West to East and it ends at a delta projecting into the Adriatic Sea near Venice.

As along all water courses, even on the banks of the Po initially the first small villages arose and then towns and cities. Now on its banks about 16 million people live and over a third of Italian industries and agricultural production are concentrated in that area, as well as more than half of the livestock. This makes the Po River and its basin a nerve center for the entire Italian economy and one of the European areas with the highest concentration of population, industries and businesses.

The Po River, in the last century, has undergone significant altimetric and planimetric changes, mostly induced by a progressively increasing human pressure. The present embankments were developed in part on ancient detected that bordered intermittently some sections of Po, when its course was planimetrically quite different than today; the development of more continuous levees, realized in the last three centuries, has resulted in a quite widening of their intersection with long abandoned Po riverbeds that, for granulometric composition, represent an insecure support ground and, in the case of the route of the detected, constitute preferential ways of spreading of overflowed waters.

This paper provides an overview of the most important evolutionary processes of the hydrographic Po network, starting from Roman times, by reference to the best information sources documented.

The aim is to highlight the most critical and dangerous areas by the help of old documents and past maps, areas which could become at high-risk for people, structures and infrastructures during severe flood events.

**Keywords:** Past documents and maps, flood risk, urban areas, Po River, Northern Italy

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