



POLITECNICO
DI TORINO

Honors thesis

COURSE IN
Territorial, Urban, Environmental and Landscape Planning
Curriculum: Urban and Regional Planning

Abstract

WATER AND RESILIENT CITIES
Theories and practices to foster urban adaptation
to water-related climate effects

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By

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The number of disasters related to climate change is steadily rising, and the concept of urban resilience as a city's response is gaining popularity.

The present research aims to analyse the climate change effects on our cities and to investigate the solutions adopted so far. Climate change is global, and global must be the responses to reduce risk and ensure liveability. This research focuses on water resources management in the urban context, both theoretical and practical, in different geographical contexts. The theoretical investigation will represent a structuring part of the study, deepening the urban resilience paradigm applied to water management and conducting a comparative analysis of Urban Metabolism and Water Sensitive Cities approaches. A practical part will follow, in which theoretical methods and tools will be used as a guide for the collection and classification of the best practices adopted worldwide in water management under climatic stress conditions. The preliminary theoretical research is also be applied, in a third phase, to the evaluation of the above-mentioned best practices through a multi-criteria matrix that will give qualitative assessments about the efficiency and replicability of the analysed practices. The ultimate goal that the present thesis wishes to achieve is to encourage and enhance the sharing of ideas and practices, towards more secure and liveable cities, in harmony with the ecosystem to which we belong.

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