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Matera and Water: Systematic Literature Review and Guidelines for Future Scientific Research

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Abstract. The cultural landscape of Matera is the product of a thousand-year-old adaptive strategy based on sustainable management of resources necessary for survival. An adequate knowledge of the historical heritage represented by the water infrastructure of the city allows to understand the specificities of ancient settlements, assess the impacts that have determined the transformations over time and define lines of intervention that should enhance the value of ancient heritage, consolidate and improve the sustainability of urban development choices. Adopting a systematic literature review (SLR), based on peer-reviewed documents, the latest research into historical water interception, channeling, collection and use systems of Matera, the functions of each element, the changes over time and the effects on the urban landscape of Matera are hierarchically analyzed. The work carried out has also made it possible to acquire knowledge indispensable for guiding future scientific research trajectories capable of recovering and exploiting a considerable heritage of the past which, if properly managed, can be an efficient response to the effects of climate change.

Keywords. Matera and water; Historical water infrastructure of Matera; Matera water system; Systematic literature review; Guidelines for future scientific research.