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Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XLIV-M-1-2020, 683–690, 2020

<https://doi.org/10.5194/isprs-archives-XLIV-M-1-2020-683-2020>

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24 Jul 2020

WATER-RISK MANAGEMENT IN TCHOGHA ZANBIL WORLD HERITAGE SITE IN IRAN, WITH A FOCUS ON THE ANCIENT MANAGEMENT SYSTEM

M. Nakhaei¹ and M. Correia²

¹Pasargadae World Heritage Research Center, Iran

²CI-ESG, Centro de Investigação, Escola Superior Gallaecia, Largo das Oliveiras 4920-251 Vila Nova de Cerveira, Portugal

Keywords: water-risk, management, conservation, earthen heritage, Tchogha Zanbil

Abstract. Water-risk management is one of the most challenging issues in the conservation of earthen sites, because of the inherent weakness of earth to moisture, and also the severe damage after rainfall as a result of a combination of many factors in the deterioration processes. In Tchogha Zanbil World Heritage Site (WHS) in Iran, this problem causes more damage due to the heavy rains that impact the site in a short period of time. The property encompasses a vast area, which makes regular maintenance more difficult. Also, there are insufficient strategies for controlling water runoff on the structures. Archaeological studies have revealed an ancient system for managing surface water at this site which could be compatible and adaptable for further development of the current management system. This study aims to present sustainable approaches in managing water-risk in the Tchogha Zanbil WHS, by identifying the authenticity values, investigating the problems and challenges in the current water-management system, and more importantly, assessing ancient strategies for controlling water, based on archaeological evidence.

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How to cite. Nakhaei, M. and Correia, M.: WATER-RISK MANAGEMENT IN TCHOGHA ZANBIL WORLD HERITAGE SITE IN IRAN, WITH A FOCUS ON THE ANCIENT MANAGEMENT SYSTEM, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XLIV-M-1-2020, 683–690, <https://doi.org/10.5194/isprs-archives-XLIV-M-1-2020-683-2020>, 2020.



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