



From Augustus to Today: The Tiber River's Enduring Battle with Nature's Extremes

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Overflows of the Tiber River have been a serious and recurrent threat to the city's security, economy and cultural heritage since time immemorial, requiring effective mitigation and adaptation measures to minimise their impact.

Since antiquity, classical authors such as Pliny the Elder and Dion Cassius have descriptively chronicled these events and their catastrophic effects, although in most cases associated with a strong ritual and religious character.

Over the centuries, various measures have been implemented to control floods, including infrastructure such as floodwalls and drainage systems. However, historic floods such as those of 54 BC, 414 AD, 1557 and even the most recent one in 2012 left an indelible mark on the city. This study examines the river historical management, starting with Emperor Augustus' efforts to channel the river to mitigate flooding and protect the expanding city.

Infact ass Rome has expanded and modernised, more sophisticated methods of dealing with flood management have been developed, but contemporary challenges such as climate change and urban growth continue to pose problems and threats that require attention and effective measures to protect the city and its inhabitants, leaving us to ask: is it too late to save Rome from its fate?

The research is aimed to draw parallels between ancient and modern methods of managing the Tiber's extremes events (floods as in 2012 and drought periods as it was in 2022), highlighting the resilience of Roman infrastructure and the lessons that can be learned for contemporary water management and safeguarding of cultural heritage in the face of climate change.

Keywords: floods; extreme events; classic Roman works; hydraulic engineering; River Tiber; Rome.

References

Bersani P., Ferranti C., Le piene del Tevere a Roma dal 1870 al 2020, *L'Acqua*, 2023, 2, 57-82.

Gómez, L. y Long, P. (2023), *The floods of the Tiber with additional documents on the Tiber flood of 1530*, Medieval & Renaissance Texts, New York.

Moreno Herrero, S. (2007), "Los desbordamientos del Tíber a su paso por Roma en época de Augusto", *El agua y las ciudades romanas* (Mangas, J. y Martínez, S. Eds.), 65-72.

