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Award-winning paper in 2017.

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Announcement

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Water Management

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Award-winning paper in 2017

Papers published in *Water Management* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Monday 8 October 2018, ICE president Robert Mair presented an award to the following paper published in *Water Management* in 2017. The Editorial Panel nominated their best papers and an awards committee chaired by Nigel Wright allocated the awards.

Robert Alfred Carr Prize

The Robert Alfred Carr Prize, presented for the best paper published in *Water Management*, was awarded to Oliveto and Marino (2017).

Abstract

Scour at uniform cylindrical piers has received considerable attention in the past. However, bridge foundations can be subjected to the flow due to single or combined effects of long-term riverbed degradation, lateral shifting of the stream, contraction scour, local scour or other factors. This paper focuses on bed morphology changes due to local scour at piers founded on piles or caissons when the foundation is located at the initial bed level. Experiments were carried out in a 1 m wide 20 m long rectangular channel under clear-water and steady flow conditions. The majority of runs were of long duration in order to guarantee sufficient interaction between the flow and pier foundation and to approach the equilibrium phase. Two nearly uniform bed sediments were considered to assess grain size effects. The experimental data obtained provided new information on the temporal variation of scour depth, the areal extent of the scour hole and the scour volume, which are useful for validation of advanced numerical models. In this paper, scour depths are compared with the HEC-18 approach and agreements appear suitable only at the equilibrium phase. Moreover, scour progress is compared to that of uniform cylindrical piers and foundation effects are emphasised. A generalised scour equation is proposed, accounting for such effects.

REFERENCE

Oliveto G and Marino MC (2017) Temporal scour evolution at non-uniform bridge piers. *Proceedings of the Institution of Civil Engineers – Water Management* **170**(5): 254–261, <https://doi.org/10.1680/jwama.16.00005>.

Winners of the Robert Alfred Carr Prize, Giuseppe Oliveto and Maria Cristina Marino, with ICE President Robert Mair (centre)