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HYDRAULICS OF SHALLOW FLOW THROUGH SIMULATED VEGETATION

by

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SUMMARY

Although Manning's equation is commonly used to predict the effective velocity of flow through unsubmerged grass, the work described indicates that it is inadequate for this purpose. For example, results from a series of tests on a range of simulated stems showed a wide range of exponents in the depth-discharge relationship, rather than the expected 0.6 from Manning.

In addition, it was found that form drag of the simulated stems was dominant, and the surface tension drag of the menisci between stems was negligible in all the tests studied.

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