

**CFD MODELING VEGETATED CHANNEL FLOWS:
THE STATE OF THE ART REVIEW**

SUNG-UK CHOI¹, WONJUN YANG²

1 Associate Professor, School of Civil and Environmental Engineering,
Yonsei University, Seoul, Korea
(Tel: +82-2-2123-2797, Fax: +82-2-364-5300, e-mail: schoi@yonsei.ac.kr)
2 Ph.D. Student, School of Civil and Environmental Engineering,
Yonsei University, Seoul, Korea
(Tel: +82-2-2123-2797, Fax: +82-2-364-5300, e-mail: pulip@yonsei.ac.kr)

This paper presents the state of the art of the CFD applications to vegetated open-channel flows. First, important aspects of the physics of vegetated flows found through the laboratory experiments are briefly reviewed. Then, previous CFD applications to 1D vertical structure, partly vegetated flows, compound open-channel flows with floodplain vegetation, and fully 3D numerical simulations are reviewed. Recommendations on the future studies are finally suggested.