

## Groyne Structure Repair and Improvement by Geotextile Tubes

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**ABSTRACT:** This is a successful case introducing ACETube<sup>®</sup> applied to repair and improve the existed and new build hydraulic structure. In the case, groyne structure was constructed with concrete pile and continuous gabion to protect the river bank originally; however the gabion structure was failed due to long term erosion problem at the foundation soil. To protect the foundation of groyne effectively, designer adopted the solution of using ACETube<sup>®</sup>, size of 4.3m in circumference and 20m in length according to the length of groyne. Filling material is sandy soil next to the river side. After filling, gabion was placed on top of geotextile tubes as a riprap. The advantages of application by Geotextile tubes include simple equipment, short construction duration as well as lower construction cost. Combined with these advantages, Geotextile tube can be a suitable choice for revetment application while hydraulic engineers look for similar application case.