Impact study and 2D hydraulic modeling

Backfilling works in watercourse floodplains modify river hydraulics and sedimentary behaviour. Effects on alluvial habitats and related species are also expected. It seems therefore important to evaluate works impacts on the river to reorient the project if necessary.

This is the mission that was undertaken by SAR Consult in partnership with IMDC for the part of public works. A precise topographic study of the site (floodplain), watercourse and civil works components were carried out to generate the required data.

A hydraulic 2D modeling allows to simulate river flooding behaviour and to consider the lateral flow directions. This is not possible with 1D modeling which assumes unidirectional water flow.

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