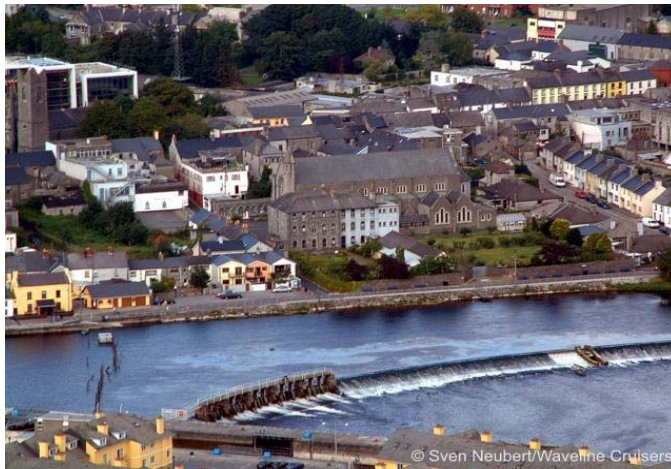


PROJECT DATA

Shannon Catchment Hydrological Modelling

CLIENT	Office of Public Works
PROJECT LOCATION	Dublin, Ireland
DATE OF PROJECT	2003
SERVICES PROVIDED	Project management, software development, modelling, hydrology services & training



The Office of Public Works requested Hydro Tasmania develop and calibrate a hydrological model for the River Shannon in Ireland. The consultancy provided a model suitable for the following applications;

- The River Shannon Flood Relief Pre-feasibility Study, investigate the operational management of the three principal storages (Loughs Allen, Ree and Derg) on the main channel to establish whether some reduction can be made to the stage and extent of the summer floods,
- Investigate the use of cutover (expended) bog areas as off-stream storage to attenuate the effects of summer floods,
- Run the model with flow hydrographs inputs (instead of rainfall inputs) as a routing model,

LEADERS IN CONSULTABILITY



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Hydro Tasmania
Consulting

PROJECT DATA

- An operational modelling tool, for the Electricity Supply Board (ESBI on behalf of ESB), including functionality to run model scenarios incorporating the statutory regulations that govern flow management on the River Shannon.

Additionally the functionality was provided to investigate modelling summer and winter floods, based on design rainfall scenarios using a loss rate provision rather than a water balance algorithm.

The consultancy provided training to OPW and ESBI staff so that they can use and further develop the supplied models for the following purposes in the future;

- Continuous rainfall-runoff modelling for other for other project applications
- ‘Real-timing’ of the hydrological model under continuous modelling conditions,
- Flow forecasting for flood warning, based on forecast rainfall,
- Interactive ‘real-time’ and ‘flow-forecast’ modelling based on forecast rainfall.

