Software-supported hydrological evaluation of watercourses

As part of the modular stepwise procedure, the hydrology flow regime, step F (comprehensive), in short HYDMOD-F, represents the method for investigating watercourses in terms of the flow regime. The HYDMOD-FIT software has been developed by EBP, acting for the Swiss Federal Office for the Environment, BAFU, for easy application.

The Swiss Federal Office for the Environment (BAFU), together with the Swiss Federal Institute of Aquatic Science and Technology (EAWAG) and cantonal water conservation organisations have drawn up a comprehensive modular stepwise procedure, which offers standardised methods for the investigation and evaluation of watercourses in Switzerland.
As part of the modular stepwise procedure, the hydrology flow regime, step F (comprehensive), in short HYDMOD-F, represents the method for investigating watercourses in terms of the flow regime. Specialists from our Environment + Water department have recently revised this method.
The HYDMOD-FIT software has been developed in the IT + GIS department to facilitate the application of this method. This application enables project-based processing to be carried out for each catchment area and offers, among others, the following functions

- Reading of measurement series with daily and/or instant flows
- Calculation of hydrological values on the basis of the measurement series
- Determination of interventions and the evaluation thereof by means of indicators

Client

Swiss Federal Office for the Environment (BAFU)

Facts

Period	2010 - 2011
Project Country	Switzerland

Contact persons

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— Determination and evaluation of the watercourse sections
— Compilation of Excel reports of the data and results ascertained
— Generation of Dbf files for the cartographic representation in a GIS

EBP designed this desktop application and implemented it on the basis of Microsoft .NET in C#. The project was implemented in accordance with HERMES. The software runs on Windows Vista and Windows 7 in German and French and uses a HYDMOD-FIT-specific data format based on XML to save the data. HYDMOD-FIT can be ordered free of charge from the BAFU Modular Stepwise Procedure website by means of a form