

Digitalisation of General Drainage Planning

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SUMMARY

Urban drainage is an important component in protecting the environment from harmful influences. Urban drainage in Switzerland is in the responsibility of the municipality.

In many places, the operation of wastewater treatment plants is jointly regulated by several municipalities in an association. Important tasks in the planning, operation and maintenance of urban drainage must therefore be better handled at association level than at municipal level.

The tool called "General Drainage Planning" is used for strategic planning, action planning for maintenance and controlling of compliance with water protection regulations. This planning is revised every 10 to 15 years.

The municipalities and associations elaborate the general drainage plans for their respective territories, which are then approved by the canton as the supervisory authority.

The municipalities are faced with different challenges in their infrastructure management. Many actors with different tasks collect different information for the documentation of existing infrastructures, planning and measures. Until the early 2000s, general drainage planning was an "analogue" matter, with very limited digital structured data.

With the emerging of digitisation, a wide variety of information in historically evolved structures was captured digitally but uncoordinatedly by different organisations.

It soon became apparent that the lack of agreements on the form and content of the data made it very difficult for involved organisations to exchange and share information. The lack of regulations

on responsibility has meant that data from different sources were not consistent with one another and that it was therefore not possible to make reliable statements by aggregating data on larger areas.

The following paper describes which approaches were chosen in the canton of Aargau to improve the situation. It will show which challenges of decentralised data collection and management combined with a central use have to be mastered and at the same time so that the content consistency (data quality and integrity) can be guaranteed. Organisational, legal, formal, financial and technical aspects are highlighted.

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