



## Lingener Land Water Board A Reference

Today, water boards in rural areas often face major challenges: Infrastructure frequently undergoes dynamic changes and responsibilities grow. Large amounts of data from various sources must be accepted, efficiently administered and used. A suitable geoinformation system is a key success factor.

### The Customer

#### A Board with Many Responsibilities

The Lingener Land Water Board is located in North-West Germany near the border to the Netherlands. It supplies approximately 21,000 household connections with drinking water through a water mains network of around 1,300 kilometres. The board's administrative region is mainly rural with a low population density. It consists of a district town and several municipalities. Both, the district and the water board have undergone massive changes over the last 10 years. Numerous industrial, commercial and development areas were added and the water board also assumed responsibility for waste water disposal on behalf of several associated municipalities.

### The Challenge

#### Growing Requirements and Data

Over time, the amount of data evolved into increasing data chaos. Numerous hand-drawn maps and analogue plans with inconsistent scales existed. Finding a network component or a connection frequently resembled a puzzle with many different pieces. Administration became inefficient and time-consuming. Citizens and municipalities often had to wait a long time for information. Overall, those in charge had the feeling that the existing resources were not being used to full advantage and that supply and disposal services to households were sub-optimal.

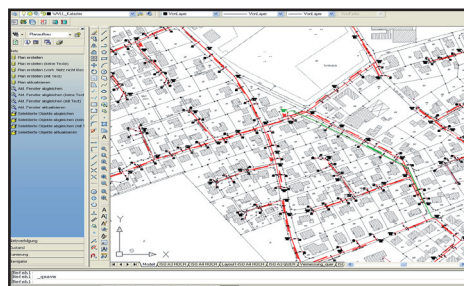
### The Solution

#### Conversion from Analogue to Digital System Documentation

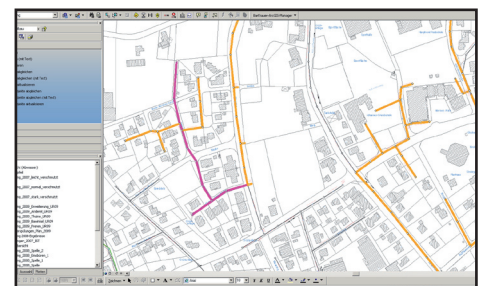
A contemporary and future-proof solution was needed. The objective of implementing a software for distribution networks was to improve service, optimise processes and incorporate the existing data. Integrated into the existing IT concept, the network information system (NIS) was to be available to all departments. In spite of a comprehensive overall concept, the ability to perform specialised tasks at various workstations was to be retained. The system was to be as open and flexible as possible, adapting to the individual needs of the water board without incurring additional costs. In addition, the water board expected technical depth and innovativeness.



High expectations for their new network information system: Peter Gödde and Helga Trentzsch of the Lingener Land Water Board



A layout plan in AutoCAD, an application that is especially well suited for design and data capture.



A network plan in ArcGIS, an application suitable for the development of content plans and the analysis of geographical data.



## The Implementation

## Easier than Expected

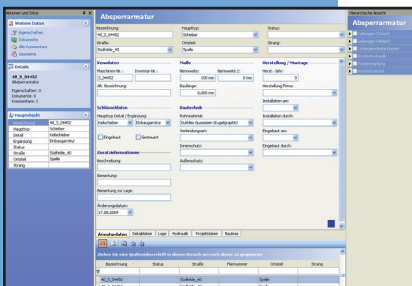
One system stood out from the rest when it came to meeting this extensive catalogue of requirements: BaSYS from BARTHAUER. Workstations for drinking water and waste water as well as several inquiry workstations were installed in 2001 after extensive testing. Internal employees looked after recording all initial data for waste water while an external engineering office captured the water supply network. Naturally, some of the employees had serious reservations about using a supposedly complicated GIS since analogue system documentation was familiar to them. Training tailored to individual requirements combined with webinars and telephone customer support eased the transition period and the results convinced all sceptics!

## The Result

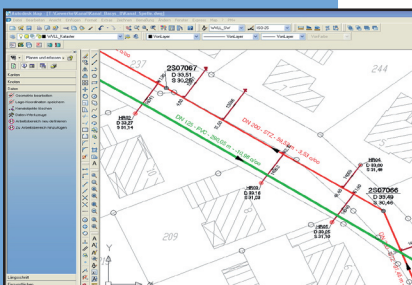
- "Working with various graphical applications has proven itself for us. Everyone benefits from the work of others, and ultimately the water board benefits from the strength of its employees"

## Efficient and Contemporary Pipeline Management

Today all drinking water and waste water networks are uniformly and jointly modelled and administered under BaSYS. Data chaos has yielded to efficient, transparent data management that benefits employees and customers equally. Within the water board, all employees have access to browser-based inquiry applications in order to access the required data quickly and easily without the risk of accidental deletion. On the other hand, the planning workstations for drinking water and waste water have significantly greater access rights and can select from several graphical applications based on a single database for processing. The multi-platform concept allows employees in each department to select the tools of their choice. For example, CAD systems are preferred for design and data capture while content plans are most readily prepared with ArcGIS. Workflows have been significantly accelerated thanks to BaSYS, which also benefits the water board's customers. Planning information for drinking water and waste water pipelines is now examined during a telephone inquiry and issued by e-mail within one day.



Modern data management



The overview

- Almost 10 years after the implementation of BaSYS, Peter Götde and the entire team are still excited about "their" NIS. "Our work is more economical and efficient. We only require a fraction of the time for many tasks compared to before. Problems with redundant data are a thing of the past and processes are more harmonious with a greater overall level of automation. We now have a powerful tool for planning and optimisation tasks. BaSYS makes it easy for us to work according to our self-image: The sustainable use of valuable resources and a fair price for our customers."

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