Reference project

‘Regional groundwater monitoring network Vallei en Eem’

Project
Regional groundwater monitoring network

Customers
Platform Water Vallei en Eem (19 municipalities, 1 water board en 2 provinces)

Country
The Netherlands

Background and objective
The ‘Platform Water Vallei en Eem’ awarded Eijkelkamp Agrisearch Equipment the realisation and management of the ‘Regional groundwater monitoring network Vallei en Eem’. Eijkelkamp will establish 571 Diver water level logger survey points for the Platform and maintain them for the next ten years.

As the policy officer of the Planning Department at Water Board Vallei & Eem, Jan Wisse has been involved in the project from the beginning: ‘Since 2007, the ‘Municipal Water Management Act’ is in force, which introduces a duty of care for the groundwater. This new duty for care entails that municipalities are responsible for the prevention of structural groundwater problems. To this end, they must formulate a plan of action within five years. The groundwater project was established by the Platform Water in anticipation of this statutory term. The aim of the partnership is to bring uniformity in the approach of the new duty for care. In addition, the scale size of the partnership will provide contract benefits.’

Marije Stronks, project manager of the Platform, adds: ‘If citizens experience problems due to excess or lack of groundwater, they go to the local authority. They are responsible for handling the matter. Some municipalities adopt a hesitant attitude, others are more active and say: ‘I want to have a monitoring network now so I know if something is going on at certain locations.’ Imagine if people suddenly complain of moisture in their homes. When you use a monitoring system it is possible to analyse data gathered over multiple years to demonstrate whether it indeed occurred spontaneously or if this has always been the case.

A challenging project
Wisse: ‘Currently, the Water Boards of Vallei & Eem and Veluwe are in the middle of a merger. This way, we were able to benefit from the experience...’
the Water Board of Veluwe already had with an established groundwater monitoring network. Within the Platform Water, we have chosen to develop a functional design for the monitoring network, so we do not get lost in the technology. After all, technology is developing at an incredible speed. Therefore, we have left the technical details to the creativity of the expert, in this case Eijkelkamp.

Why platform Vallei en Eem chose Eijkelkamp
‘The tender procedure started with a public pre-selection in which references played a key role. Does the organisation have sufficient experience with projects that involve this many parties? Moreover, a stable financial situation was required. After all, you enter into a partnership for at least ten years. In the end, five parties remained after the pre-selection who could submit a tender for the functional design. Eijkelkamp scored the highest, so they are now our partner in this special project.’

Stronks: ‘It is certainly a special project, especially with regard to the approach. It may sound funny, but it is special for me to be here. In many projects, tendering and gathering data in cooperation occurs, but usually, there is no one to actively manage this data. The Platform contracted me specifically for this task. From my position as a Measurement and Monitoring expert, I am responsible for analysing, reporting and giving advice based on the measuring data. The focus thereby often lies on the waste water chain, but the groundwater monitoring network also forms part of it. The combination of the two may also yield interesting information. Wisse: ‘The number of parties participating is considerable.’ Stronks: ‘It is also an interesting monitoring area due to the mix of woodland and urban areas, which additionally present great differences in height. Push-moraines, slopes, insofar as you can actually speak of them in the Netherlands, and an extremely moist soil in the Valley of Gelderland.’

Looking into the future
Wisse: ‘We often speak of the 3-criteria approach: quality, vulnerability and costs. Especially human vulnerability plays an important role in our project. After all, how will you manage this data centrally, thus decreasing the vulnerability of your human organisation? Regarding quality, we have looked at how you can increase the quality of the data by joining activities. The measuring and monitoring task is usually a ‘chop job’, for which often no more than 0.1 to 0.2 FTE is estimated. By bundling this activity, support is created for a joint approach. The participating municipalities are increasingly confident about this partnership form. Confidence is built up, which enables you to set out tasks in an ever larger and wider regional context. Stronks: ‘Although the design of the monitoring network is a big task, the real start will be after this. This project focuses strongly on the quality of the data. The monitoring network should result in a closed set of reliable data. If successful, I expect that the monitoring network to grow. Since more insight often leads to more questions.’ Wisse: ‘It is of course always possible that more municipalities apply to be included in the monitoring network. I therefore expect the monitoring network to be very different in five years than it is now. In this regard, the monitoring network is a living instrument.’