

# Groundwater recharge to secure waterflow in streams during dry spells



As a result of climate change, many small and medium-sized streams run dry more frequently and for longer periods of time. Working in the framework of a federal pilot project, we examined how the water that is available during periods of higher flow can be stored as groundwater resulting in a return to surface water during dry spells. The aim is to safeguard aquatic habitats and maintain water exploitation for human use. We tested our findings in a case study that involved identifying suitable locations for groundwater recharge.

#### **Our Services**

- Assessment of the advantages and disadvantages of various recharge options
- Ascertainment of the necessary parameters at a specific stream
- Clarification of the prerequisites for streamside water storage (hydrogeological prerequisites and existing uses)
- Establishment of ways of determining proper recharge dimensions
- Coordination of case-study arrangements on the Eibach, including the identification of suitable locations for groundwater recharge

### Client

Office of Environmental Protection and Energy, Canton of Basel-Landschaft / Environmental Protection Agency, Canton of Solothurn / Swiss Federal Office for Agriculture / Swiss Federal Office for the Environment

#### **Facts**

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Project Country Switzerland

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Locations above the municipality of Gelterkinden where the Eibach runs dry (in red)  $\,$ 



The Eibach above Gelterkinden in the year 2015  $\,$ 



On-site inspection to evaluate suitable locations for groundwater recharge