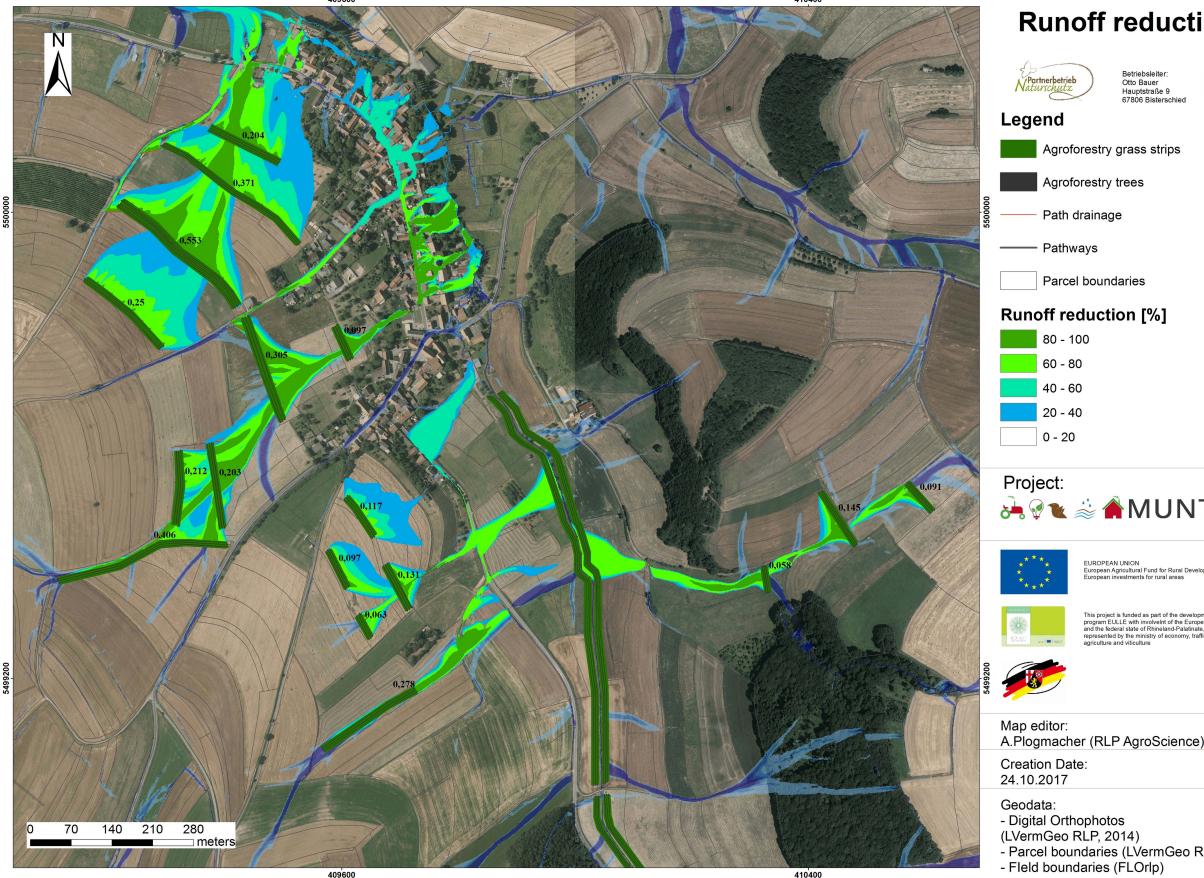


Development of a management system for farmers and communities

for more environment protection and nature conservation by an optimised cultivation of energy plants



## **Runoff reduction** Betriebsleiter: Otto Bauer Hauptstraße 9 67806 Bisterschied Agroforestry grass strips Agroforestry trees Parcel boundaries Runoff reduction [%]

#### WORKACTIVITIESOFTHEGROUP(1/2018)

### Agricultural farm Bauer & **Bisterschied** (Western Palatinate)

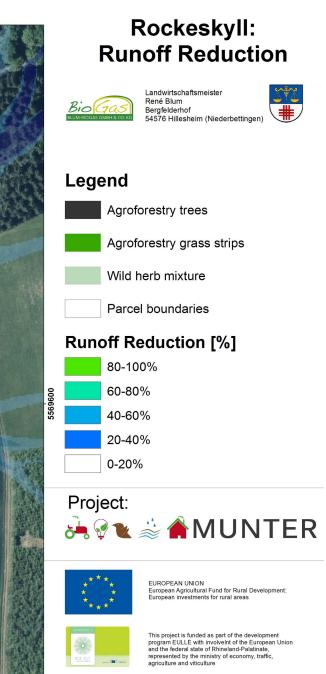
- Modeling of an efficient erosion protection system for heavy precipitation events at Bisterschied in 2017.
- Agroforestry systems / agricultural wood strips in short rotation coppice shall be planted in a



total area of 3.8 ha and additional 3.7 ha at a local water body (flood protection Layerbach). - The wood to harvest will be part of the bioenergy village Bisterschied, therefore a regional energetic concept will be worked out in 2018.

LVermGeo RLP, 2014) Parcel boundaries (LVermGeo RLP, 2016 eld boundaries (FLOrlp)

The agricultural area shall be protected by an agroforestry system and a mixture of wild herbs.



Agricultural farm Blum & Rockeskyll

# (Vulkaneifel)

- A heavy precipitation event caused significant erosion damages during the cultivation of maize on two agricultural areas of the Blum's farm.

- One area is going to be sowed with Silphie (Silphium perfoliatum) in 2018; another area is going to be equipped with an agroforestry system and a mixture of wild herbs functioning as sediment trap (map left).

- Simultaneously, a platform for an exchange of views with the local council of Rockeskyll is given to point out to the importance of a cooperative course of action between all farmers involved and the village.



The theoretical model has been implemented into the farmers' actual management systems via site inspection.



The flood channel takes in the peaks of flood waves of the Odenbach; the agricultural area functions as retention area.

## Agricultural farm Schönbeck & municipality Wolfstein (Western Palatinate)

- The "Odenbach" has been renaturalised over a length of 380 meters in the context of a water management-related compensation for canal constructions.
- The agricultural farm Schönbeck agreed to the integration of a flood channel at its neighboring agricultural area with the purpose of flood protection of the village Reipoltskirchen, located downstream.
- The agricultural area has been restructured with an agroforestry system which provides heat via a wood chip heating system to the retirement home "Ingweiler Hof".

Work activities of the operating group and guests.



Bisterschied is on the way of being a bioenergy village, that combines erosion and flood protection with the heat supply of a typical German village within the low mountain ranges.



Operating Group MUNTER: 3 farms, 2 institutes, 1 foundation work together solution-oriented with experts of water.

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