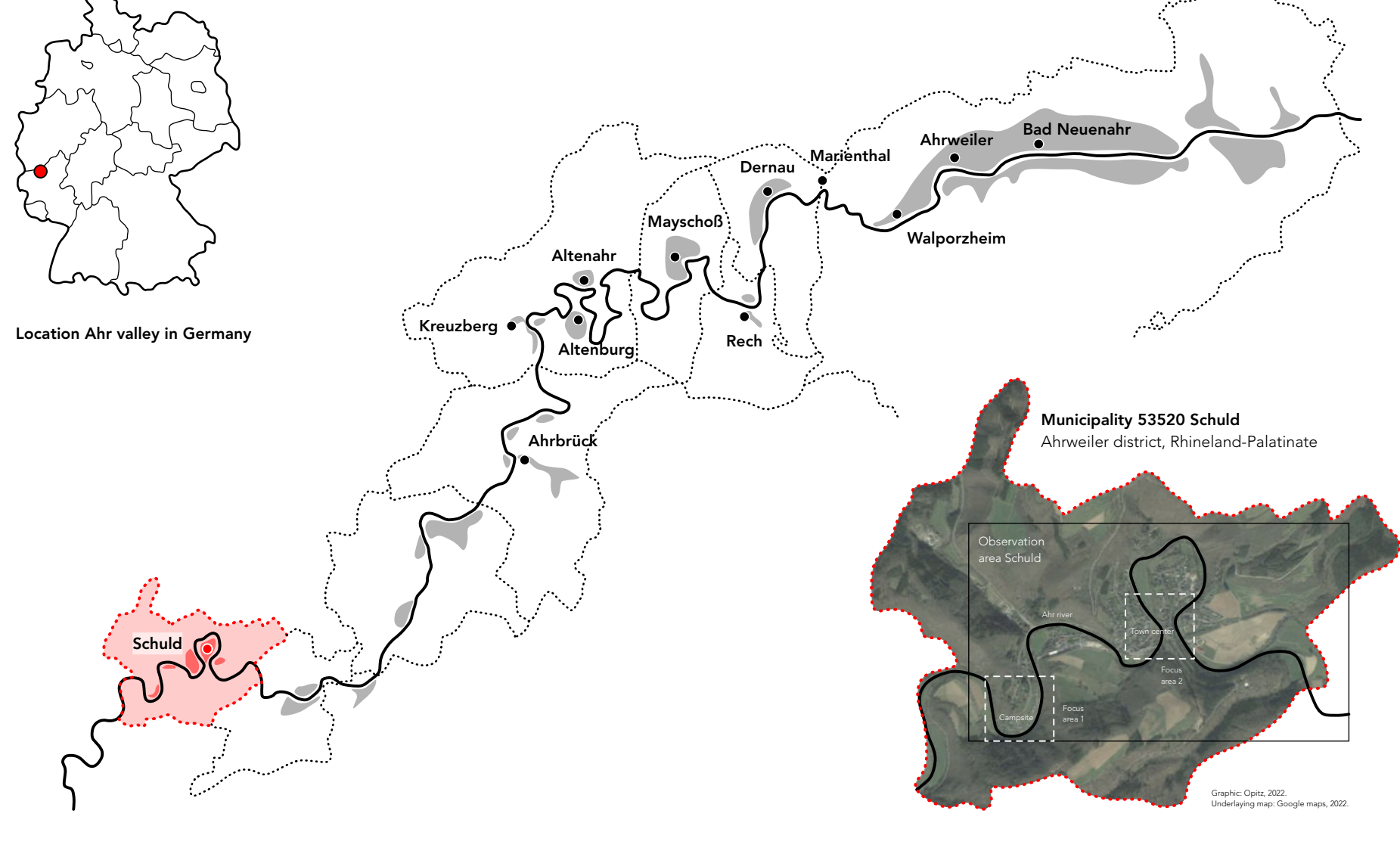


Post-disaster landscape design approaches

Ahr valley, Germany
Florian Opitz

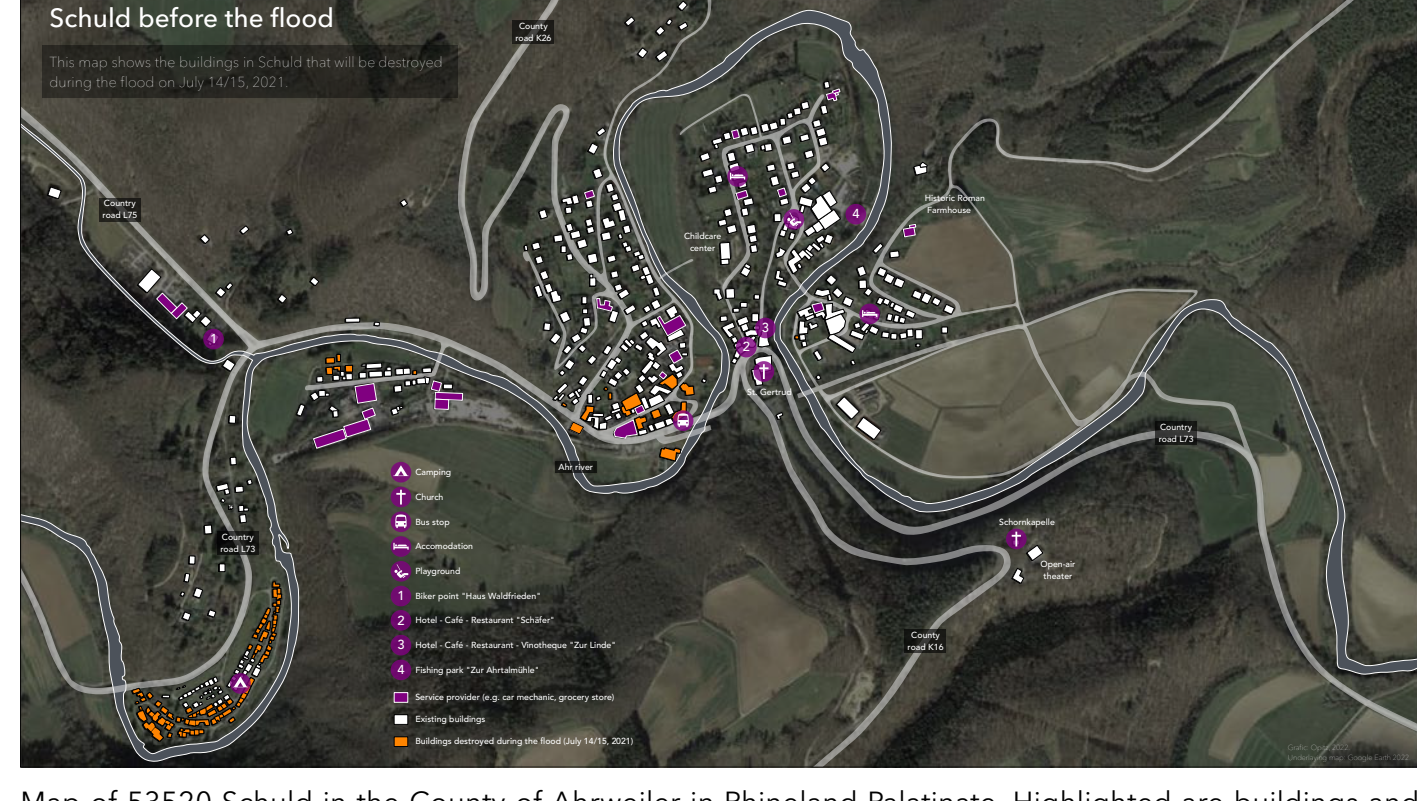


Study area GLA304 in the Ahr valley
Analysis and design of contested landscapes II, Spring Semester 2022, NMBU

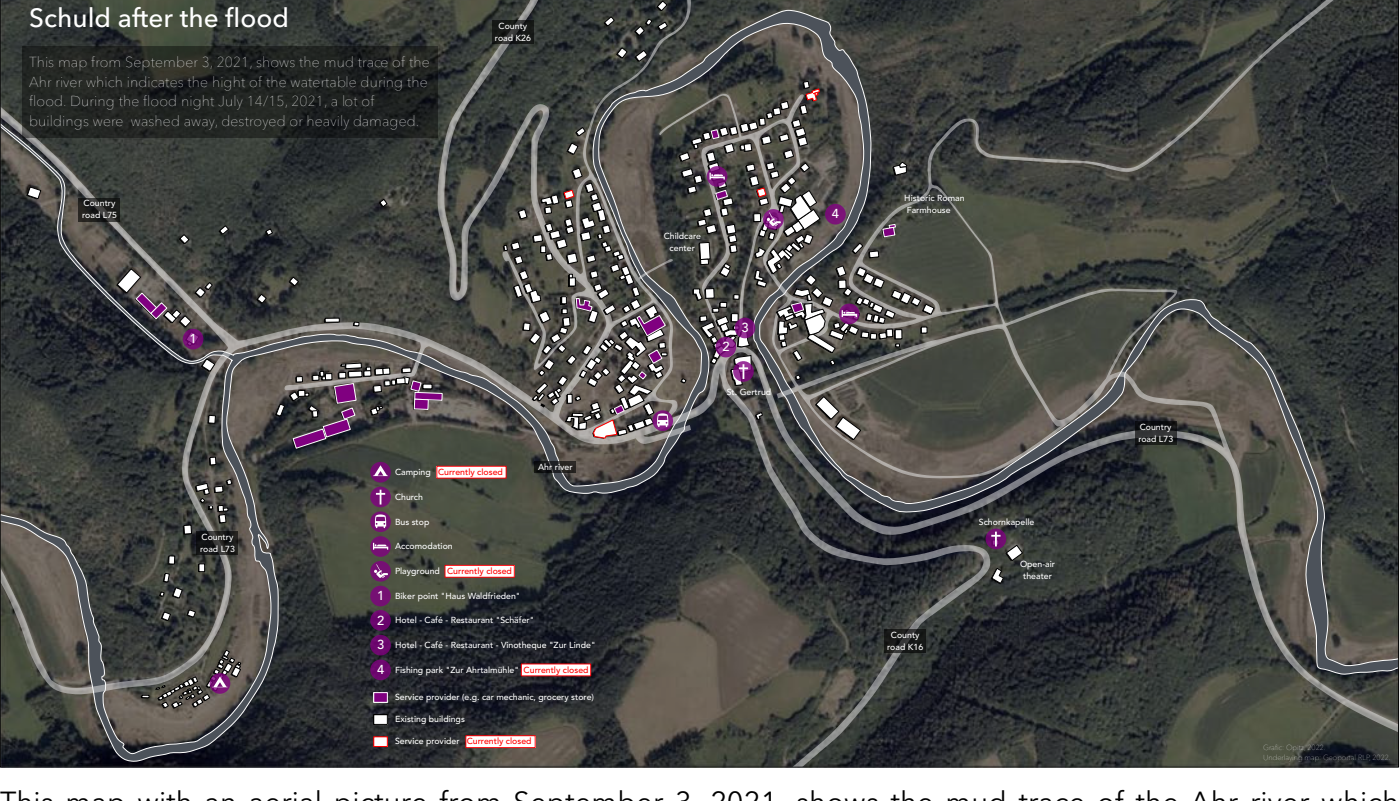
— Ahr river
— Settlement
- - - Municipality boundary
Study location Florian Opitz

Schuld is a small village situated on a meander of the Ahr river in the narrow Ahr valley in Rhineland-Palatinate. The valley is characterised by its viticulture and the picturesque landscape with a variety of hiking trails, including the "AhrSteig", that leads hikers from the source of the Ahr to its estuary. The approximately 660 inhabitants of Schuld were hit by a century flood on the evening of the 14/15 July, 2021, which severely damaged the low-lying part of the village, destroying not only many houses but also the water and electricity supply.

This studio project deals with the question of what should happen after the flood in Schuld. In order to gain a deeper understanding of what "flood" means in the context of the Ahr valley, I have studied in depth the events during the flood and what currently happens there. With this fundamental knowledge as a base, I propose interventions divided into two phases from now until 2042. I am concerned with the question of how to give more space to the river and natural processes without neglecting the people who have lived there for generations. The phases create a planned retreat from the river that is foreseeable. In addition, the expanded floodplain landscape will be accessible through hiking trails, offers space for a natural campsite, plant and bird protection zones, and a large festival meadow. In this way the floodplain gives space to the river and simultaneously creates value for the inhabitants and visitors of the Ahr valley.



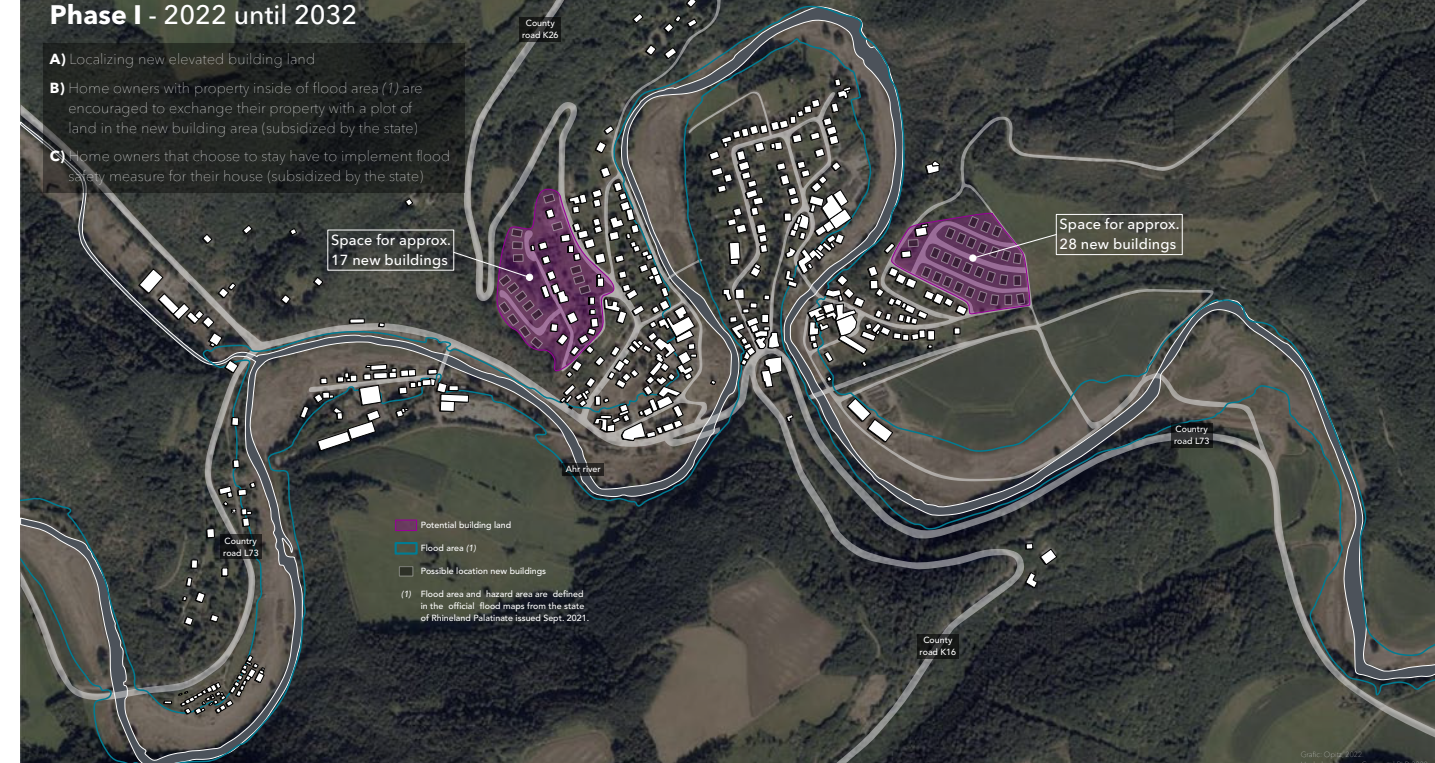
Map of 53520 Schuld in the County of Ahrweiler in Rhineland-Palatinate. Highlighted are buildings and their uses, streets and the course of the Ahr river as of March 24, 2020. The buildings in Schuld that will be destroyed by the flood on July 14/15, 2021, are marked in orange.



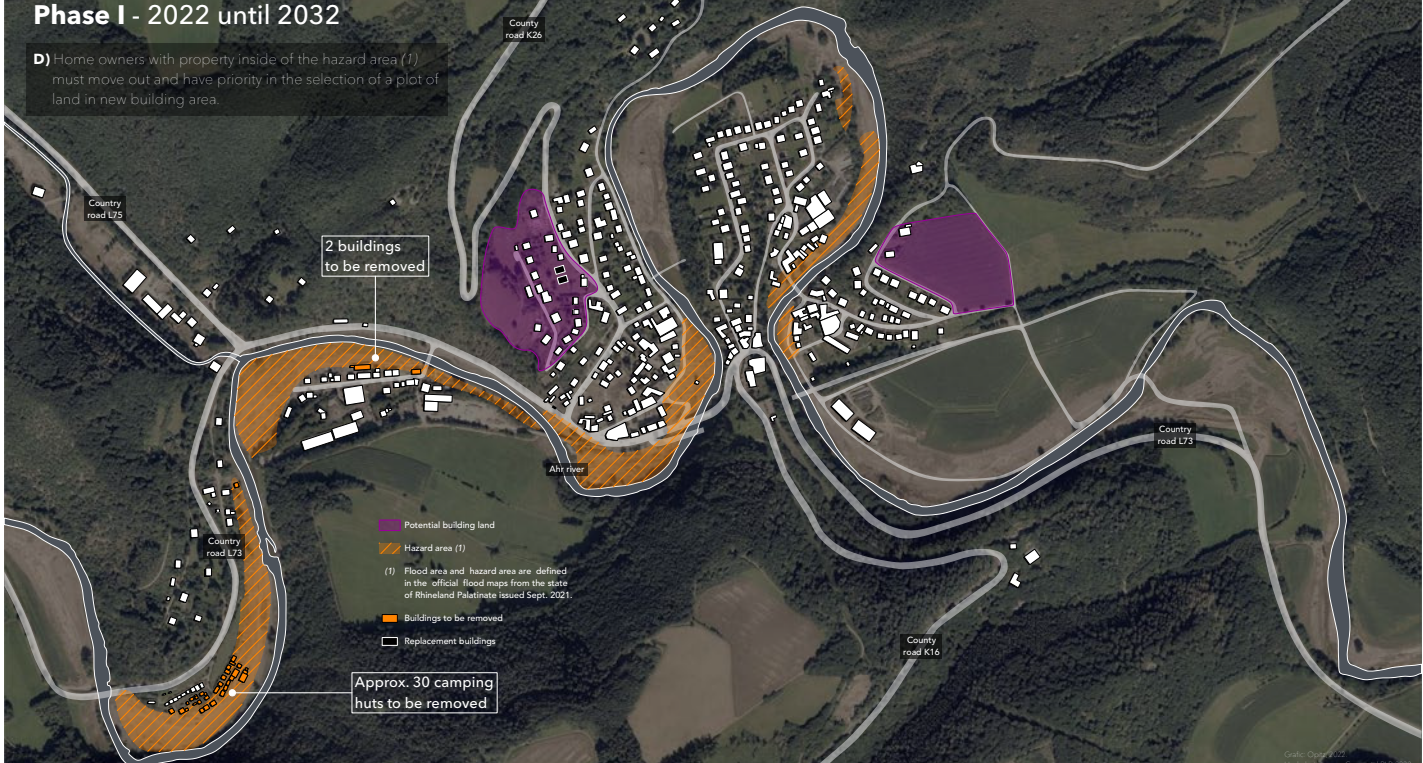
This map with an aerial picture from September 3, 2021, shows the mud trace of the Ahr river which indicates the height of the watertable during the flood. In the flood night (14/15 July, 2021) a lot of buildings were washed away, destroyed or heavily damaged.



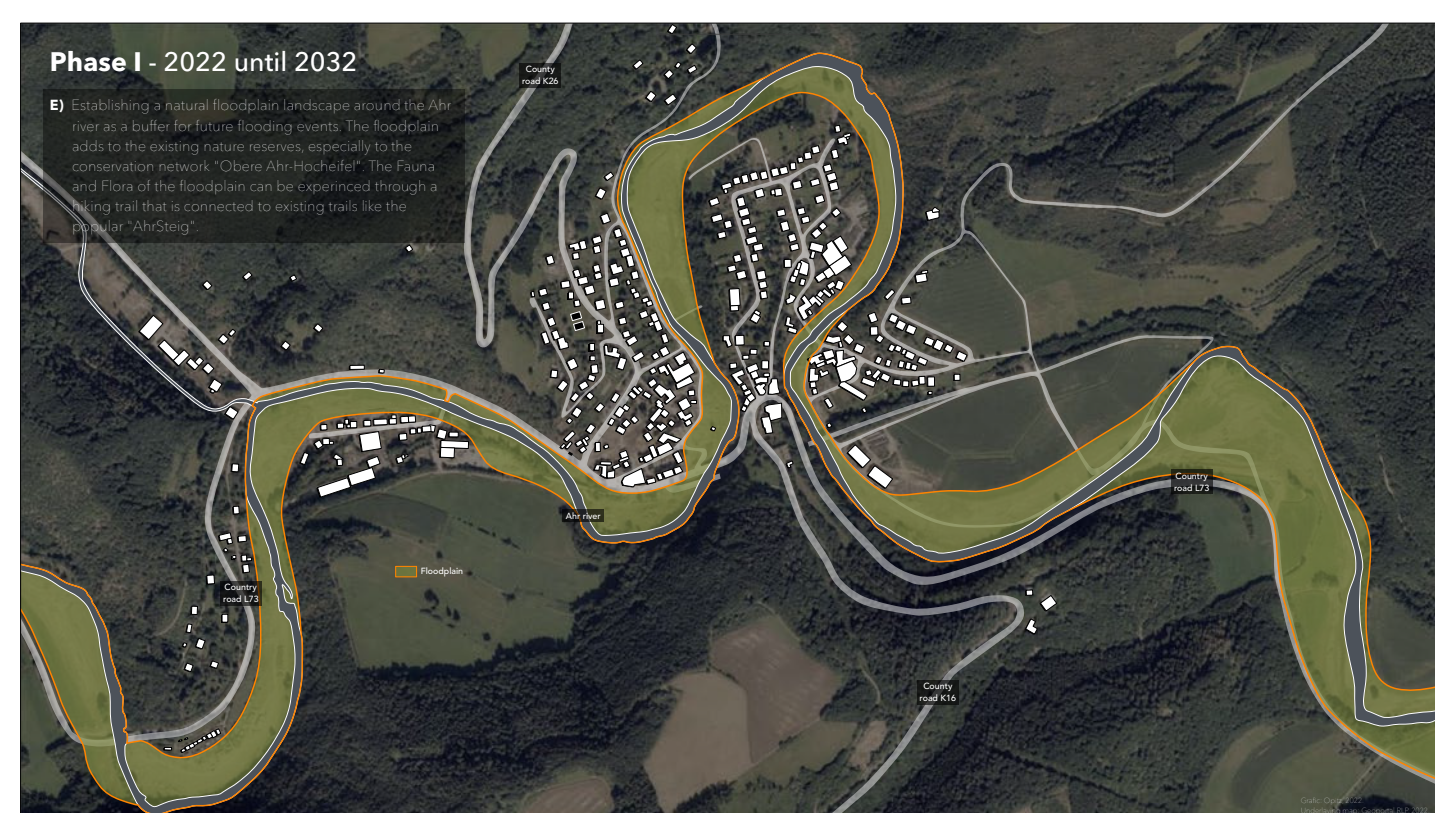
Phase I 2022 until 2032



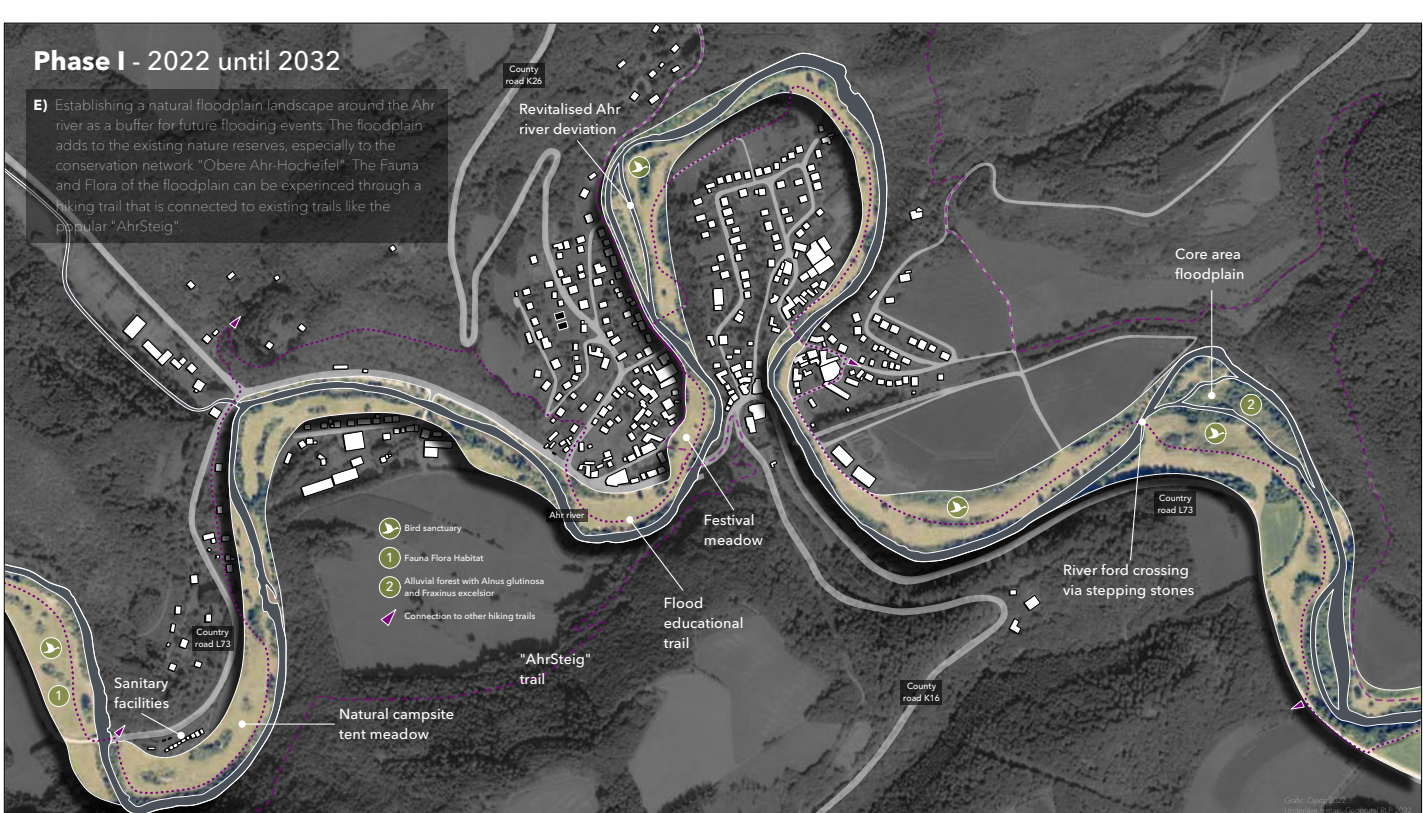
A) Localizing new elevated building land. B) Home owners with property inside the flood area are encouraged to exchange their property with a plot of land in the new building area. C) Home owners that choose to stay have to implement flood safety measures for their house.



D) Home owners with property inside of the hazard area must move out and have priority in the selection of a plot of land in the new building area.

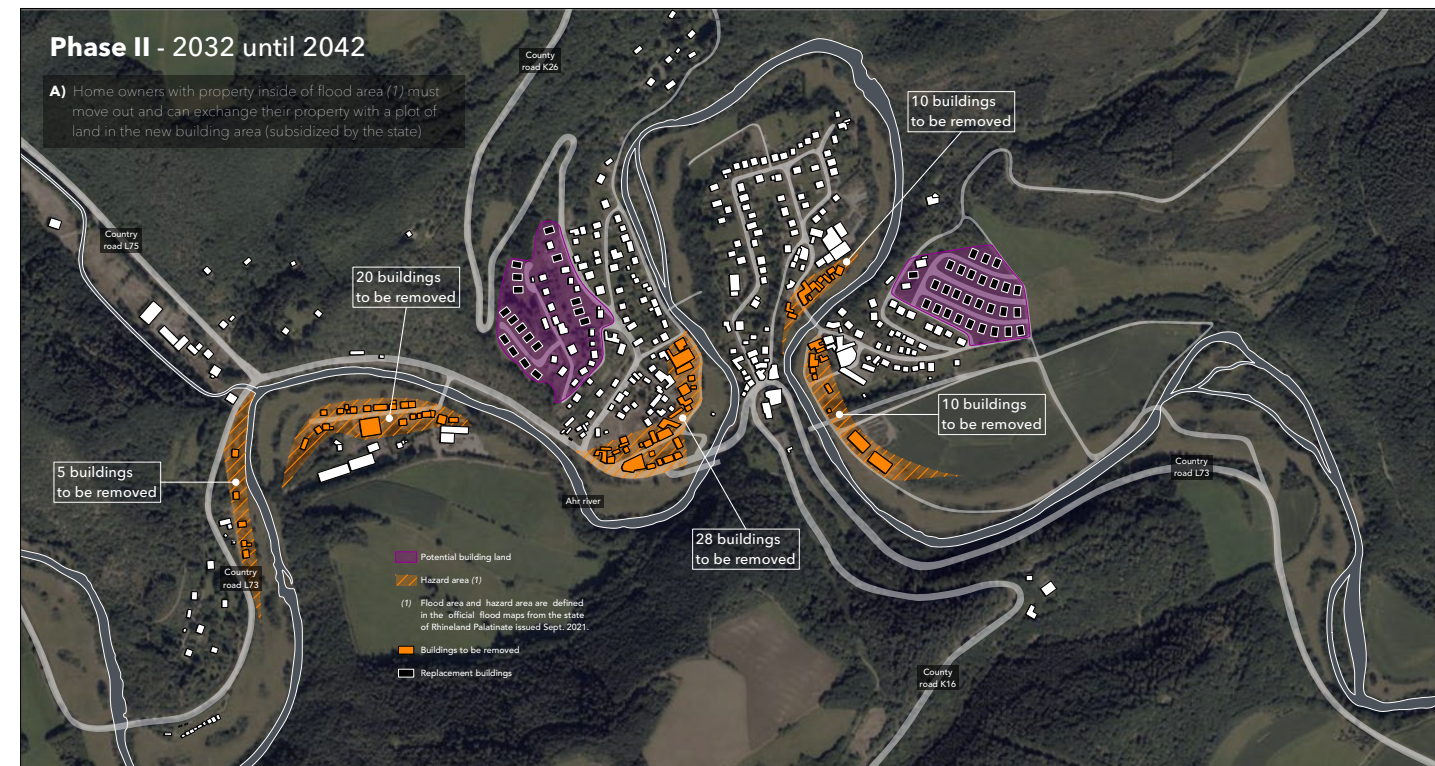


E) Establishing a natural floodplain landscape along the Ahr river as a buffer for future flooding events. The floodplain adds to the existing nature reserves, especially to the conservation network "Obere Ahr-Hochkeifel".

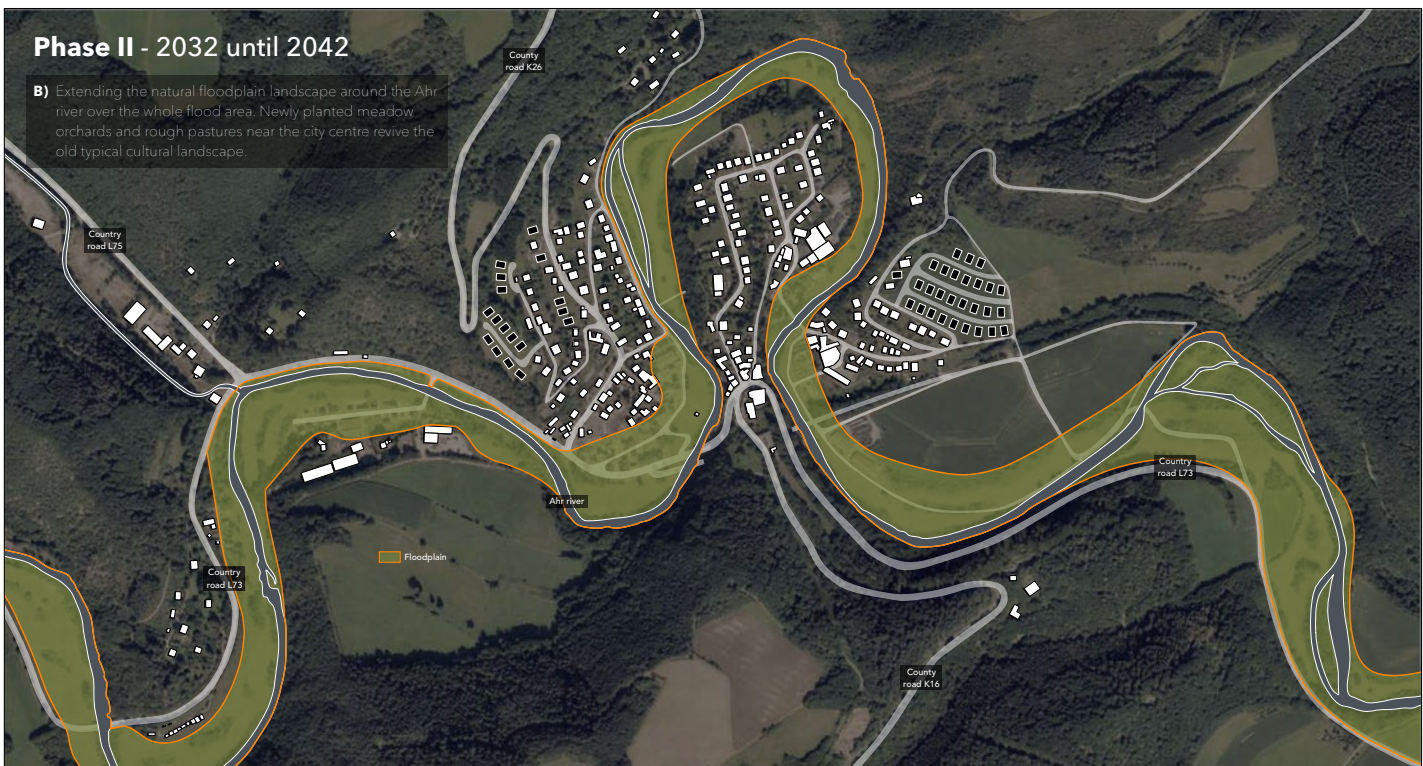


The flora and fauna of the floodplain can be experienced through a hiking trail that is connected to existing trails like the "AhrSteig".

Phase II 2032 until 2042



A) Home owners with property inside of the flood area must move out and can exchange their property with a plot of land in the new building area.



B) Extending the natural floodplain landscape around the Ahr river over the whole flood area.

