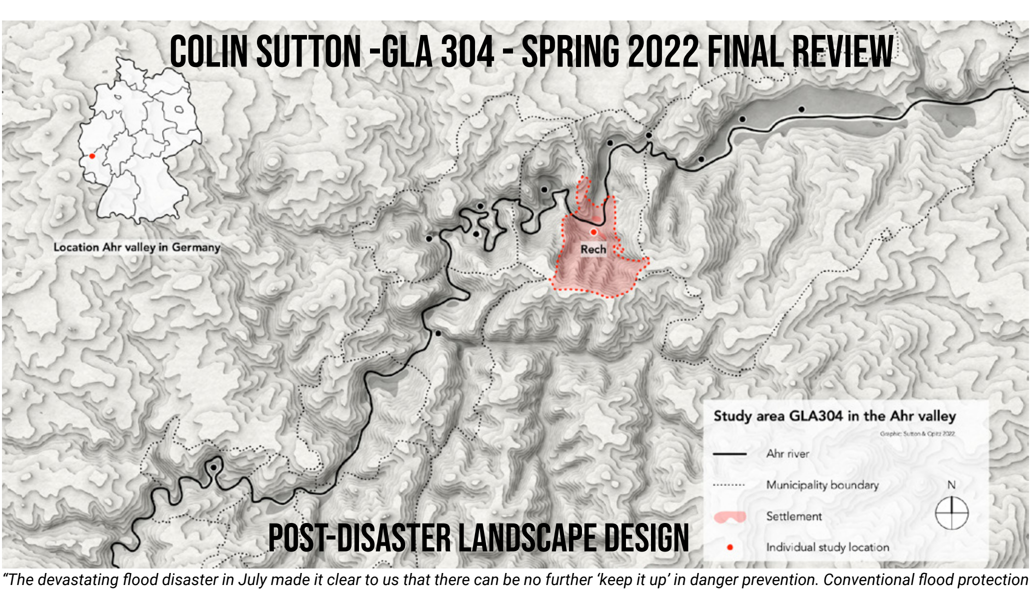
COLIN SUTTON -GLA 304 - SPRING 2022 FINAL REVIEW



POST-DISASTER LANDSCAPE DESIGN

"The devastating flood disaster in July made it clear to us that there can be no further 'keep it up' in danger prevention. Conventional flood protection measures reach their limits in such extreme weather events. We need new approaches, and we have to move away from pure hazard prevention towards a comprehensive, forward-looking risk culture. Efforts must be significantly increased both in terms of climate protection and adaptation to climate change—because the more effective our current climate policy is, the greater the chances of future generations to be able to cope with the consequences of climate change"

Anne Spiegel, Climate Protection Minister at the Special Environment Minister's Conference on Flood Disaster

"EXPERIMENTATION IS A WAY OF SEARCHING AND DISCOVERING SOMETHING, THIS IS WHAT WE INTEND TO DO WITH THE STUDIO GROUP IN GLA304 (2022)"
Jörg Rekittke 2022

	Schuld	Ahrbrück	Kreuzberg	Altenburg	Altenahr	Mayschoß	Rech	Dernau	Marienthal	Walporzheim	Ahrweiler	Bad Neuenahr
WHAT HAPPENED?	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online	Videos, Footage, Photos, Postings, etc., available online
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WHAT SHOULD HAPPEN?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?	? ? ?

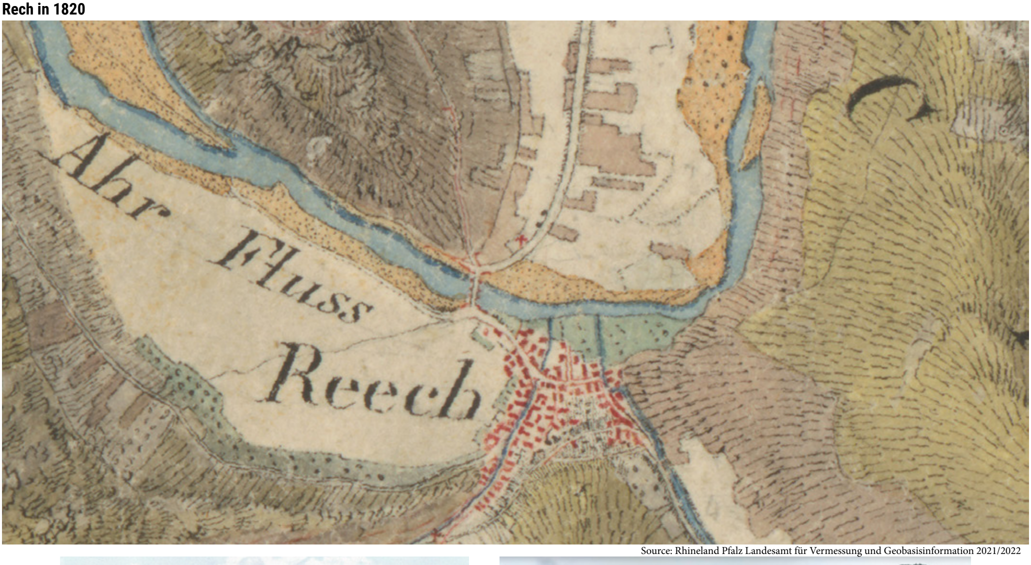
Jörg Rekittke 2022

Photos by Colin Sutton 2022

"WE GO, TOGETHER, THROUGH A PROCESS OF READING, SEARCHING, MAPPING, ANALYZING, TESTING, REFLECTING, PROPOSING, AND PRESENTING"
Jörg Rekittke 2022

Rech Settlement - Historical Findings

Rech in 1820



Source: Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022

Rech between 1890 and 1905

Rech in 2021 (prior to flood event)

Rech Settlement - Existing Community Findings

Image Source: Google - Ralk Krob - March 2021

Image Source: Google - Uwe Schamberg - August 2017

Image Source: Google - Ingo Erven - July 2018

Image Source: Google - Pola Lorenz - August 2019

What happened during the flood in the Rech, in 2021? What evidence can be found and analyzed (footage, photos, reports, data, etc.)?

The village of Rech has a long history as a settlement in the Ahr river valley. It has historically been a prominent village for wine production and tourism. Over the last couple of hundred years, the village has slowly encroached on the Ahr hill-river landscape . On July 14/15th, 2021 an extreme rain-precipitation event drenched the Ahr Valley region. Several factors led to extreme flooding along the Ahr river on its way to the Rhine River. Massive and high speed flood water engulfed the Ahr valley landscape, with several villages resembling a bathtub. The residents of Rech, largely caught by surprise, were unprepared for such an event. During the evening of July 14th and early hours July 15th, much of the village of Rech was destroyed by the destructive flood waters mixed with debris. The historic multi-arched bridge, part of the village's identity and history, was a large contributor to the destructive nature of the flood in Rech.

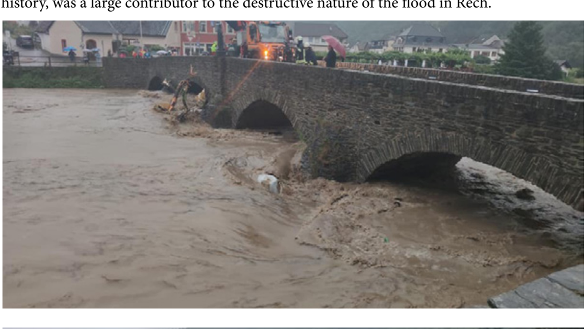
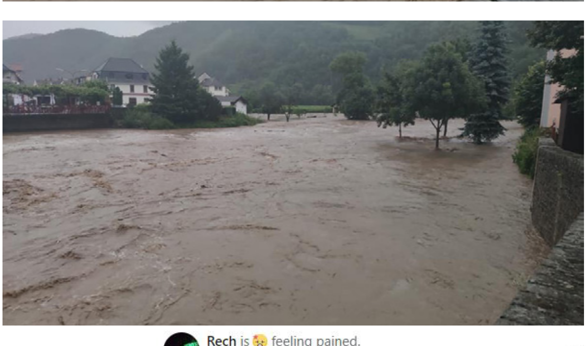



Photo Sources: Facebook - Rech - 14/07/2021

Rech is 😟 feeling concerned.
July 14, 2021

Stromausfall im Dorf.
Die Brücke kurz vor der Überflutung.
Katastrophe im ganzen Ahrtal

> Power outage in the village.
> The bridge just before the flood.
> Disaster in the entire Ahrtal

Rech is 😥 feeling exhausted.
July 15, 2021

Unfassbar traurig

> Unbelievably sad

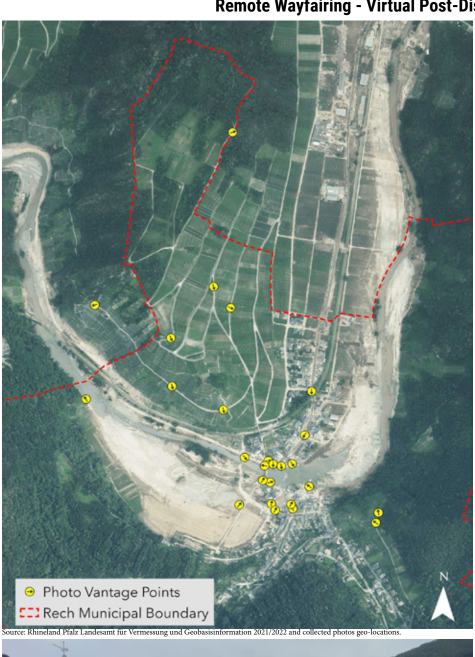
Rech is 😢 feeling pained.
July 17, 2021

Bitte nicht unnötig zum nur mal gucken nach Rech durch den Wald fahren.
Das ist unsere Lebensader.
Der Weg wird sonst immer schlechter.
Hier sind Bilder zum sehen.

> Please don't drive through the forest unnecessarily just to look at Rech.
> This is our lifeline.
> Otherwise, the road just keeps getting worse.
> Here are the pictures to look at.

Media Source: Facebook - Rech - 17/07/2021

Remote Wayfairing - Virtual Post-Disaster Fieldwork (within 10 days of flood event)



Source: Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022 and collected photos geo-locations.

Source: Facebook - Rech - 17/07/2021

Source: Facebook - TheFlyPeople- 19/07/2021

Source: Facebook - Rech - 17/07/2021

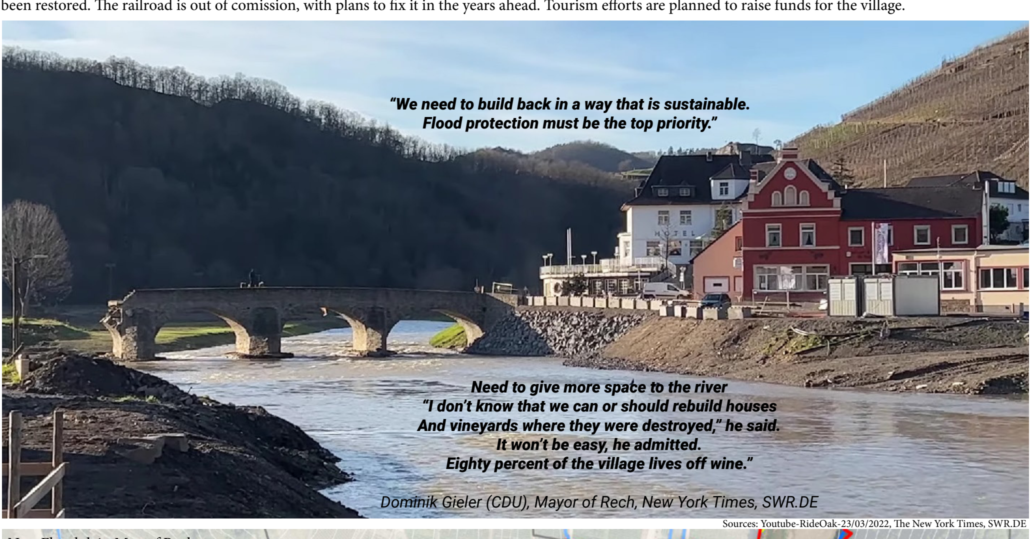
3D Simulation of flood event

Video footage of the flood event in Rech exists before the sunset and cresting of the historic bridge. After the sunset on July 14th, there exist little to no video evidence of the actual flood levels available online. Using geographic information systems, I created a 3D representation of the flood. This animation effectively visualized the movement and depths of the flood as it moved through the Rech village and terrain.

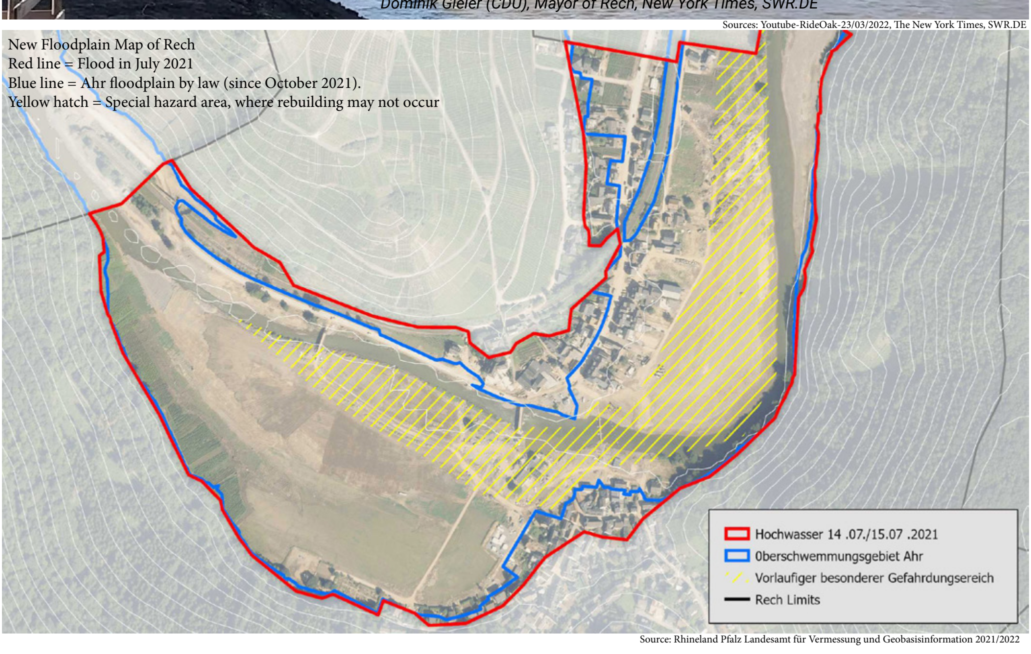
Source: Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022, Open Street Map 2022

What happens—post-disaster—in Rech currently? What information is available? What plans or concepts are known? Which of them are under implementation yet?

Since the July 2021 flood event, the Mayor of Rech has expressed a need for a more sustainable path for the village of Rech. Much of the current discussion has been focused on renewable energy and a modern heating grid. In early 2022, the German government provided an update on the recovery and reconstruction of the Ahr Valley. What I have observed by my findings is the critical response that occurs post disaster; a need to restore infrastructure and basic necessities to the village. Much work has been done to re-install and fix the water and wastewater utilities. Also, crucial for Rech was to provide access to the southern and northern portions of the village, as the historic bridge was destroyed. Temporary bridges and one long term bridge have been erected. The river and village landscape has been reshaped to the pre-flood river footprint. Heavily destroyed structures have been removed, with 13 lots not allowed to rebuild. The highway traffic has been restored. The railroad is out of comission, with plans to fix it in the years ahead. Tourism efforts are planned to raise funds for the village.



Sources: Youtube-RideOak-23/03/2022, The New York Times, SWR.DE



Source: Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022

Sources: Youtube-RideOak-23/03/2022

Sources: Youtube-RideOak-03/03/2022

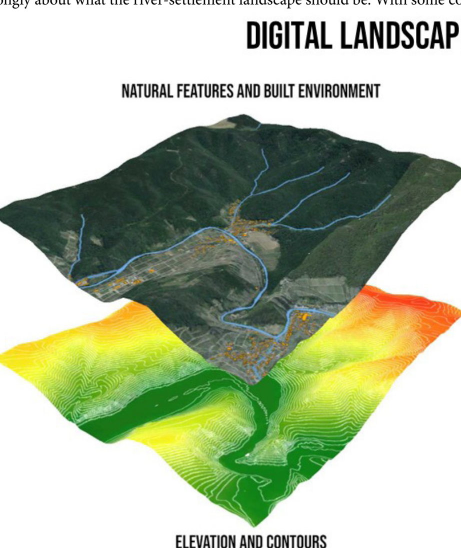
Sources: Youtube-RideOak-03/03/2022

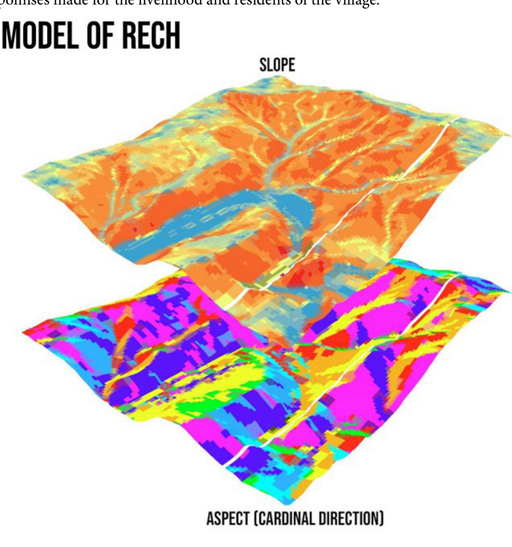
Sources: Kristin Pederson 24/02/2022

What should ideally happen—post-disaster—for Rech in the future? What needs to be done to improve the situation found and to alleviate identified problems?

Accessing The State Office for Surveying and Basic Geoinformation (LVermGeo) Rhineland-Palatinate, a data catalog was produced for the GLA 304 Ahr Valley study area. I produced a digital landscape model for the Rech village, using ESRI's ArcGIS Pro software. My post-disaster landscape design is based on analysis of the collected media documentation of the flood disaster in Rech, aerial imagery (pre and post flood), topography, and the flood-zone guidance established by the official government. The result is proposed land use designations for the current and future Rech village, to be adapted to the Ahr river. The evidence speaks strongly about what the river-settlement landscape should be. With some compomises made for the livelihood and residents of the village.

DIGITAL LANDSCAPE MODEL OF RECH





Sources: Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022

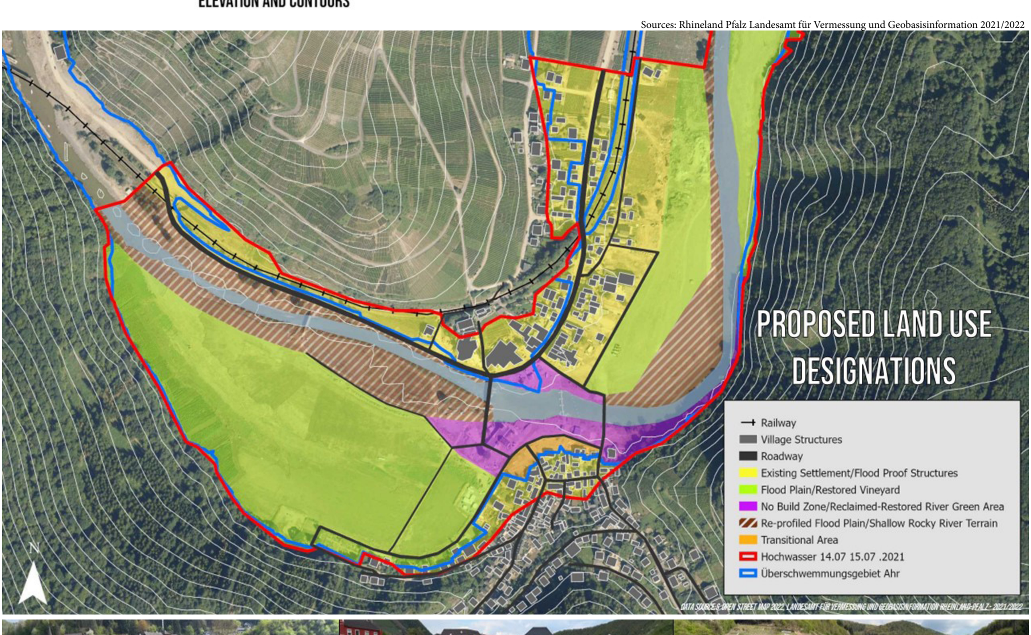
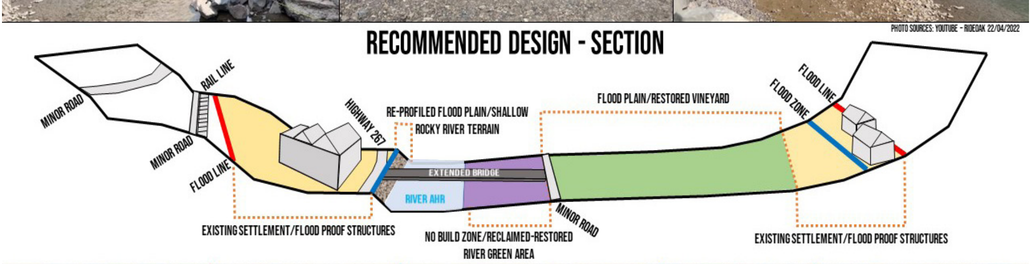


PHOTO SOURCES: YOUTUBE - RIDEOAK 22/04/2022

RECOMMENDED DESIGN - SECTION



Sources: Youtube-RideOak-17/04/2022, Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022

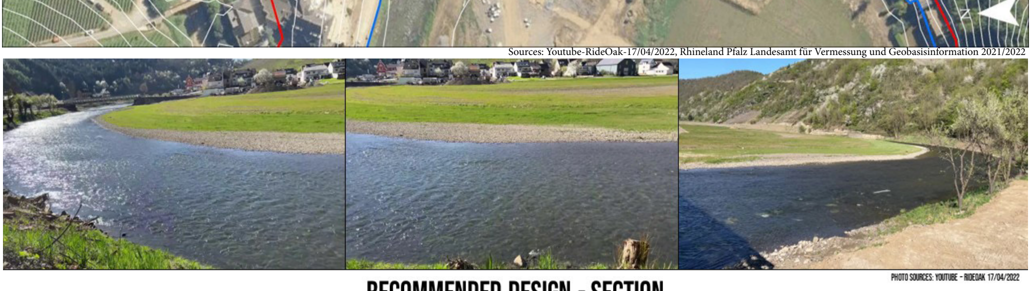


PHOTO SOURCES: YOUTUBE - RIDEOAK 17/04/2022

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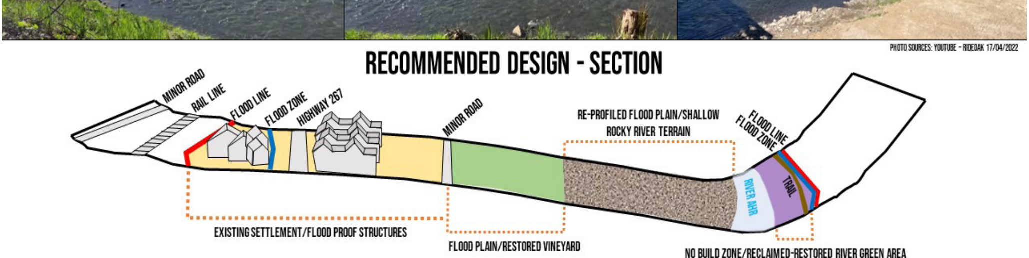

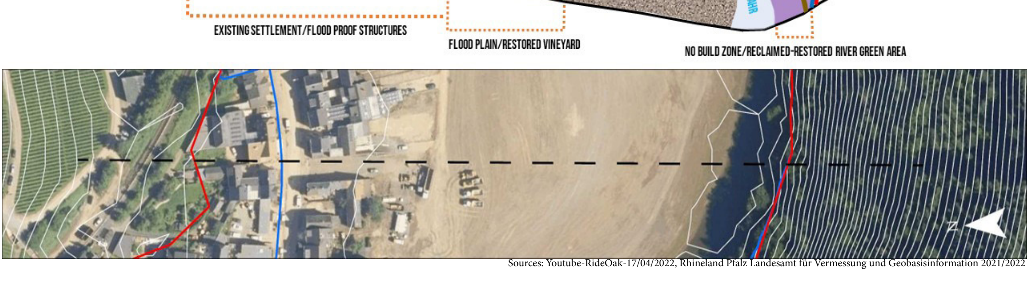

Sources: Youtube-RideOak-17/04/2022, Rhineland Pfalz Landesamt für Vermessung und Geobasisinformation 2021/2022