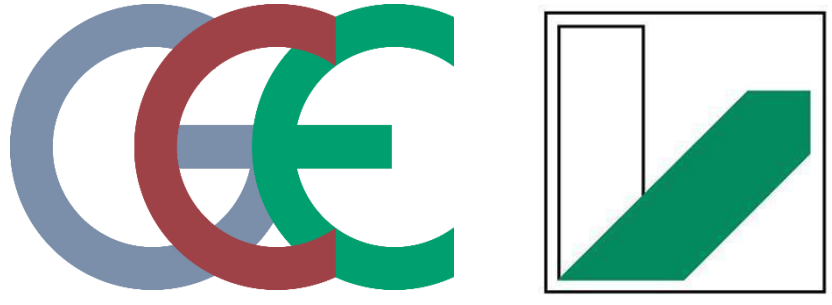


FLOOD RISK REDUCTION IN URBAN AREAS LOCATED ALONG THE RIVER MAIN:



Adeleke Emmanuel. D. **A case study of Haßfurter Berge, Bavaria**

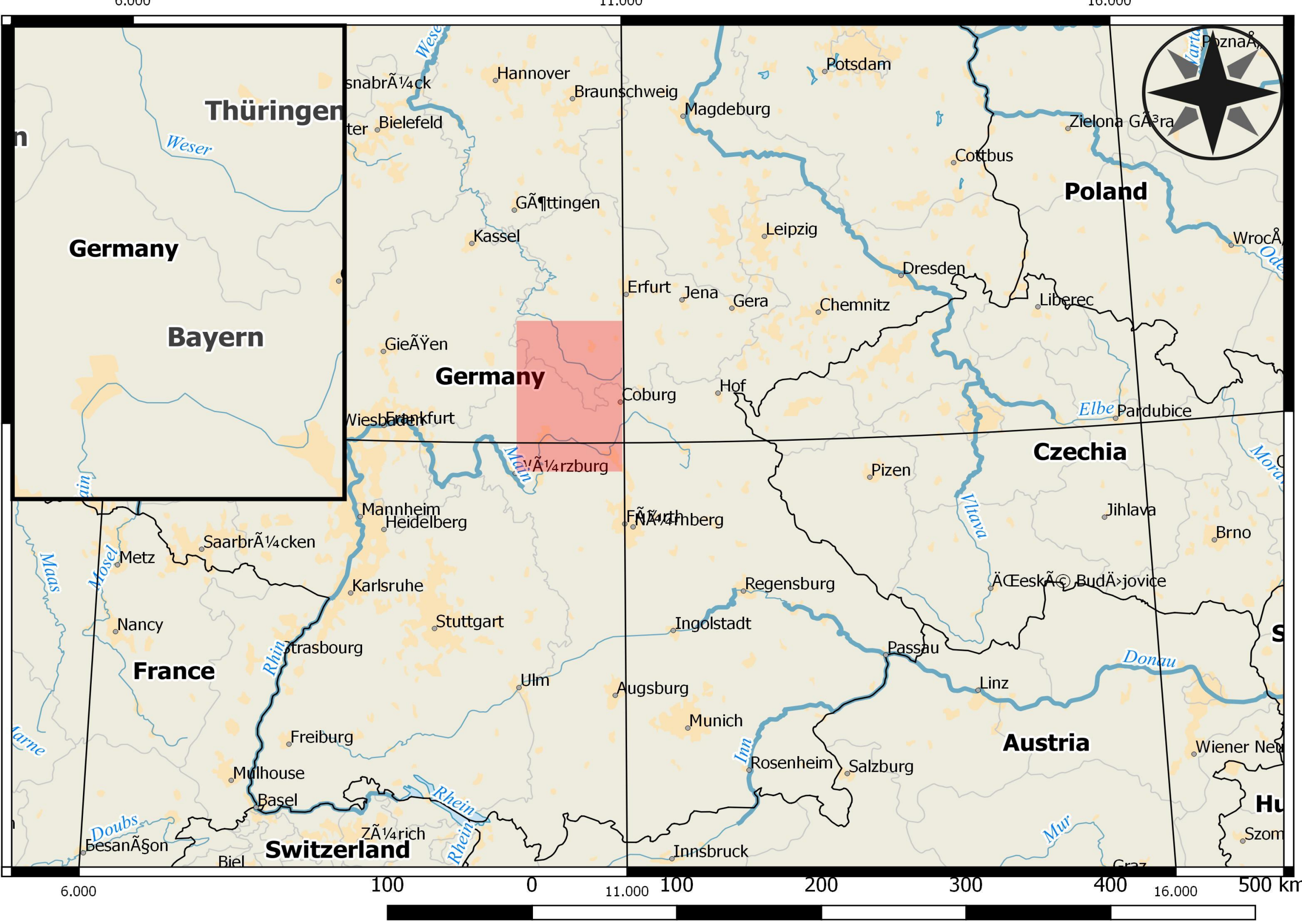
STATEMENT OF PROBLEMS

- Increasing risk & vulnerability of urban centres in Bavaria to river floods
 - Location of settlements on the floodplains or close to rivers
 - Rural to Urban Migration
 - Industrialization & economic activities
 - Climate Change & LULCC, sea level rise.
 - Degradation of ecosystem services at upstream areas.

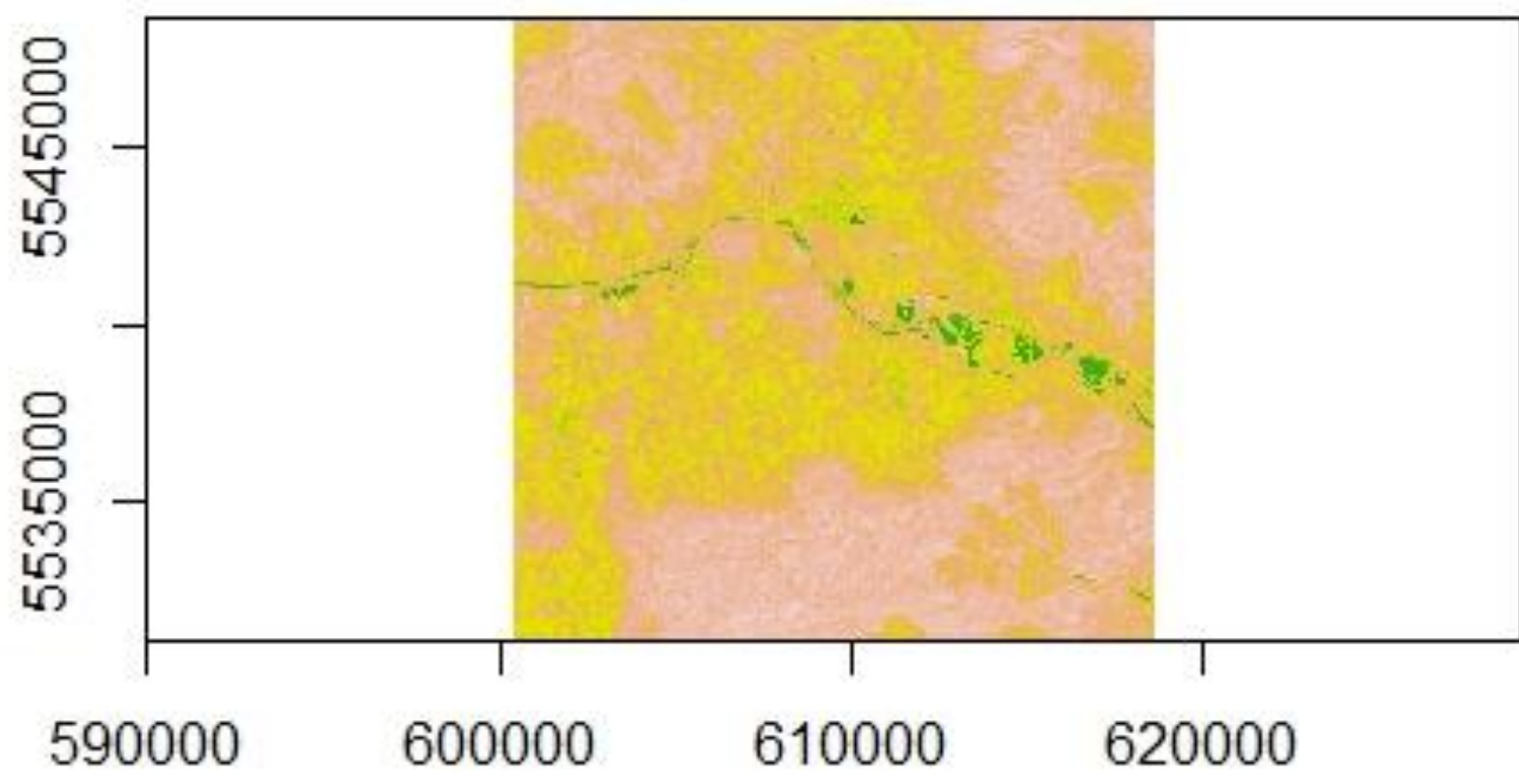
RECOMMENDATIONS

- Spatial planning; construction developments shouldn't be located in floodplains
- More jobs and investments in towns and rural areas
- Warning systems should be expanded
- Self-private precautions should be encouraged
- Constructional facilities, like dams, storage, reservoirs, polders should be provided for upstream rural areas.

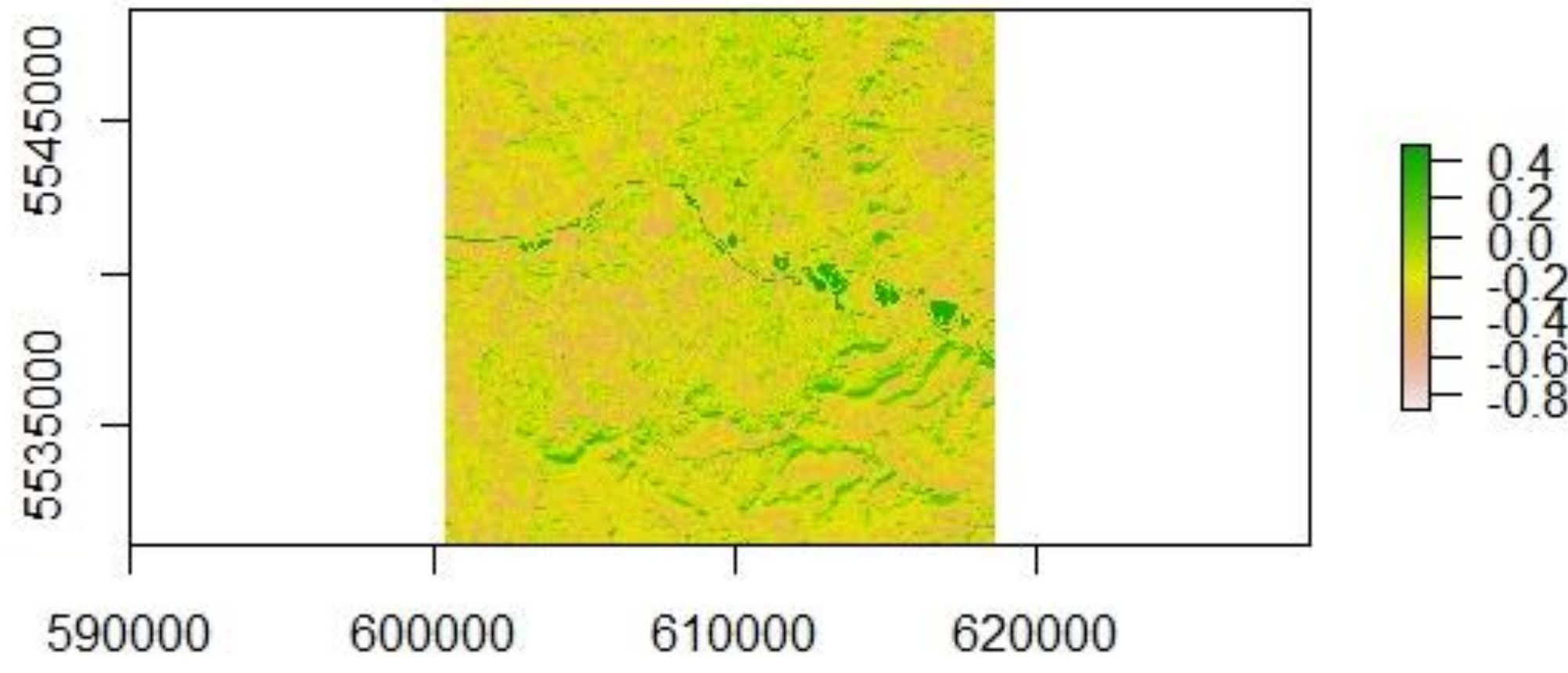
The Study Area



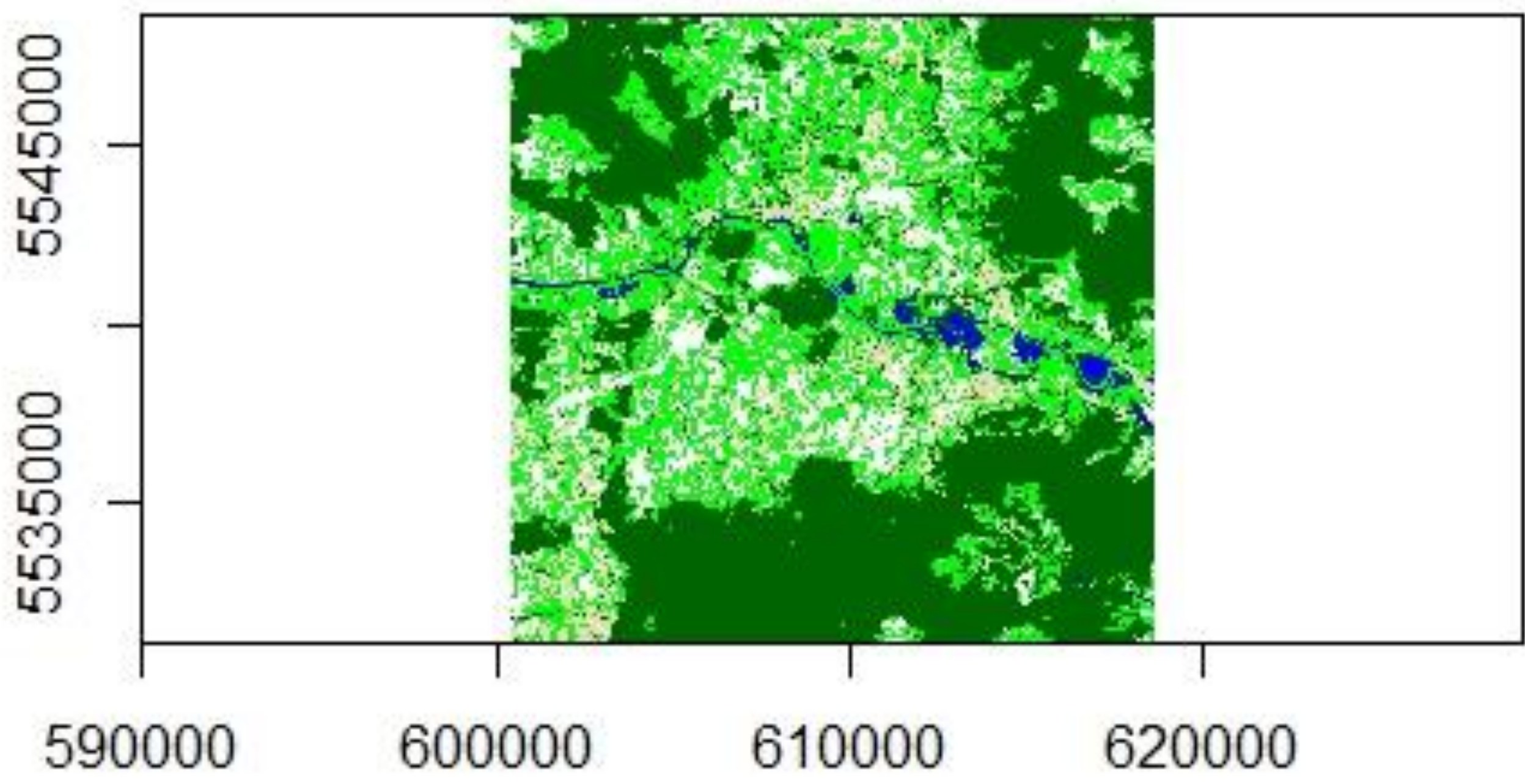
NDWI 2015



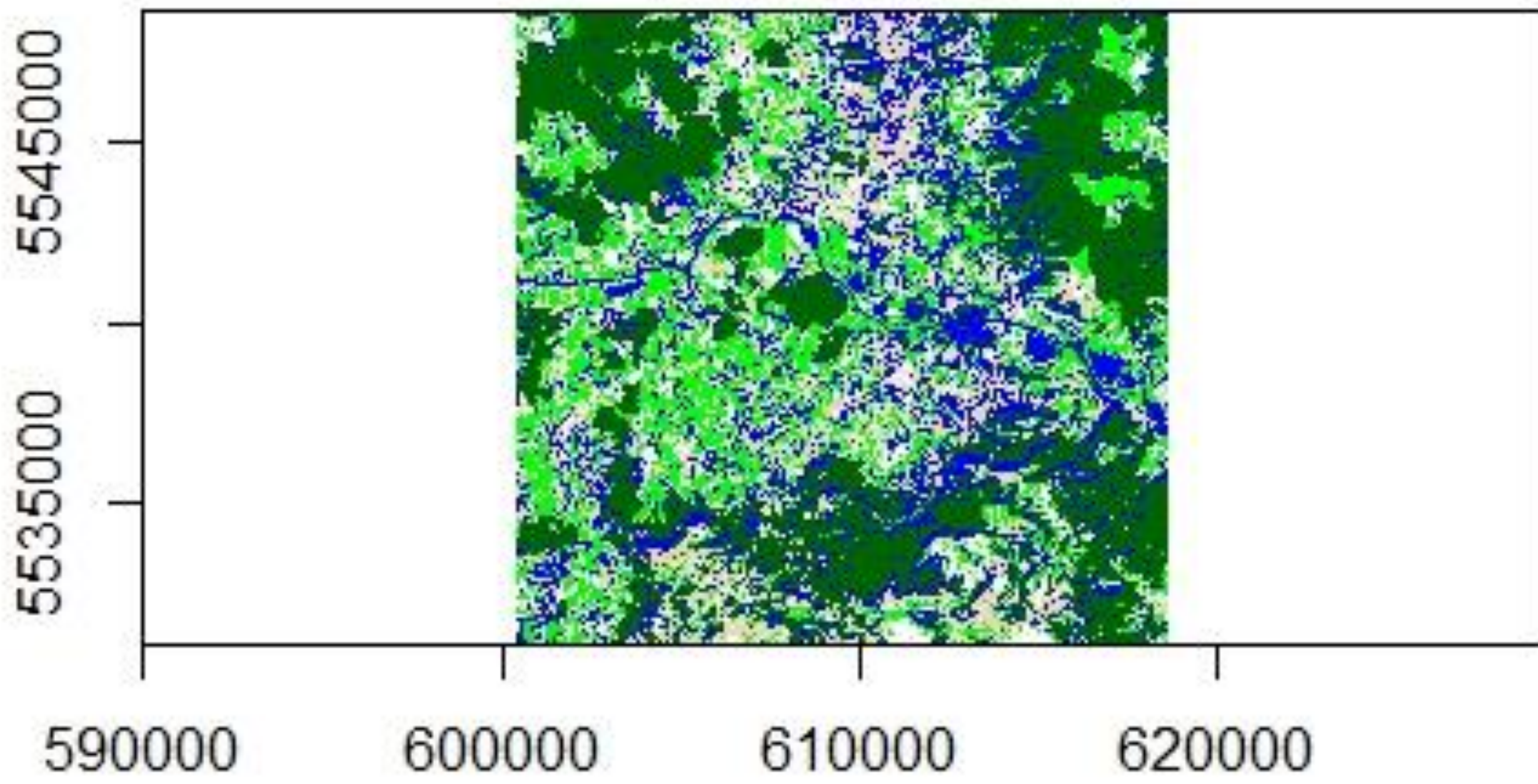
NDWI 2019



Supervised Classification for 2015



Supervised Classification image for 2019



POLICY IMPLICATIONS

Responsibility shared by the FG and the German States (Länder).

- Guidelines for a Future-Oriented Flood Protection (LAWA, 1995)
- Programmes of Action for sustainable flood protection in Bavaria contained similar and confusing terms
- European Floods Directive (FD) and EU strategy on adaptation to climate change (2013)

CONCLUSIONS

Cities situated along or on the paths of River Main in Bavaria are expanding, and this leads to a rise in the size of population at risk of floods. However, new risk reduction measures should be added to existing measures in order to meet new demands.

