

Governance at the climate/flood risk policy nexus

Short description: Despite uncertainties about the exact impacts of climate change, many experts (including the IPCC) emphasize that “climate change contribute[s] to an increase in the likelihood and adverse impacts of flood events” (European Union 2007) and that flood risk management should address climate change adaptation in a proactive way. The political reality is different, however: Flood protection policies are highly reactive, i.e. political action is largely driven by major flooding events, and the appropriate integration of climate policy goals into flood protection policies is still missing in many instances.

A collaborative research project with partners from Vienna, Bern, and Freiburg strives to address this puzzle. The project *Flood-Adapt* investigates (i) the factors that determine the degree to which possible climate change impacts are mainstreamed into flood protection policies and (ii) how adaptation measures are integrated horizontally into key sectors and vertically across levels of government in federal state settings (with Austria, Germany, and Switzerland as case studies).

The Flood-Adapt team is reaching out to students who would like to write their Master thesis on topics at the climate-flood risk management nexus. We both welcome topics that are directly tied to the Flood-Adapt project and its study regions, i.e. Southern Germany, Switzerland, and Austria¹; as well as topics that deal with the topic in a more general sense.

Possible research foci could be:

- Literature review: provide a systematic overview on theoretical approaches and/or empirical case studies on climate policy integration in the field of flood protection policies;
- Policy integration: conceptualize and study how flood protection policies (both on the level of policy objectives and policy measures) are coordinated (a) vertically across levels of government and/or (b) horizontally across sectors;
- Adaptive capacities: review the literature on ‘adaptive capacities’ and provide an exemplary assessment of adaptive capacities in selected regions;
- Policy innovations: identify and analyze promising (or failed) flood protection policy innovations;
- Integrated Flood Risk Management (IFRM): trace and critically assess the (proclaimed) shift towards IFRM as a new paradigm in flood policies;
- Science-policy interface: conceptualize and study the role of science and expertise in integrated flood protection policies;
- Uncertainty: conceptualize and study how actors in the field of flood protection policies deal with risk, uncertainties, and ignorance (e.g. with a special focus on the role of the ‘precautionary principle’);
- Perception of climate change: conceptualize and study how actors in the field of flood protection policies perceive and frame climate-related risks;
- EU policies: study the role of EU policies (in particular the EU Floods Directive) on national and regional flood risk management;
- International comparison: provide a comparison of different flood protection policies – across levels, between countries etc.

¹ For research on the German case studies, the project might be able to cover study-related travel costs.

Methods: various (depending on research focus), incl. systematic review, qualitative interviews

References:

Clar, Christoph & Steurer, Reinhard (2014): Mainstreaming adaptation to climate change in a federal state setting: Policy changes in flood protection and tourism promotion in Austria? *Österreichische Zeitschrift für Politikwissenschaft*, 43/1, 23-47.

Ward, P.J., Pauw, W.P., van Buuren, M.W. & Marfai, M.A. (2012): Governance of flood risk management in a time of climate change: the cases of Jakarta and Rotterdam. *Environmental Politics*, 22/3, 518-536

Starting date: for FloodAdapt-related topics: a.s.a.p.; for other topics: at any time

For how many students this topic is available: several (for some topics German required)²

Supervisors: [Michael Pregernig](#) and [Melani Pelaez](#)

Featured topic: *Climate Change in the German Flood Risk Discourse*

In the last decades, some European countries including Germany have endured several extreme flood events. In reaction to that, the European Union has developed and adopted the Floods Directive in 2007. This Directive, *inter alia*, calls for adequate and coordinated measures to reduce flood risks. Thereby, the Directive also emphasizes the inclusion of *climate change* in the long term flood risk and water management policies of the EU Member States. At the same time, however, the correlation between climate change impacts and severe flooding events is still fraught with high scientific and technical and political ambiguities.

In Germany, the connection between climate change impacts and the increase of extreme flood events has been discussed and factored into national and federal policies long before 2007 through e.g. the cooperation framework KLIWA (Climate Change and Consequences for Water Management, cf. www.kliwa.de). Yet, at the same time, some experts and policy makers claim that climate change impacts are rather minor in flood risk strategies with other factors, e.g. land-use change, playing a bigger role.

Before that background, the key question is: *In how far is the factor 'climate change' part of the mainstream flood risk discourse in Germany?* In the context of the abovementioned *FloodAdapt* project, a central interest for this research task is to examine (i) when the factor 'climate change' emerged in the flood risk and water management policy fields in Germany, (ii) which arguments are brought to legitimize the discourse, and (iii) what role scientific arguments and actors played therein. Analytically, the focus should be on the federal states of Baden Württemberg and/or Bavaria. Methodologically the analysis should take a chronological approach, analyzing the discourse in the context of policymaking frameworks like KLIWA and LAWA (Federal-State Working Group on Water) and other related venues.

Starting date: a.s.a.p.

Contact: [Melani Pelaez](#) or [Michael Pregernig](#)

² Students working on a case study in Baden-Württemberg and/or Bavaria might get involved in the Flood-Adapt project (in publications or as a project researcher), later on.