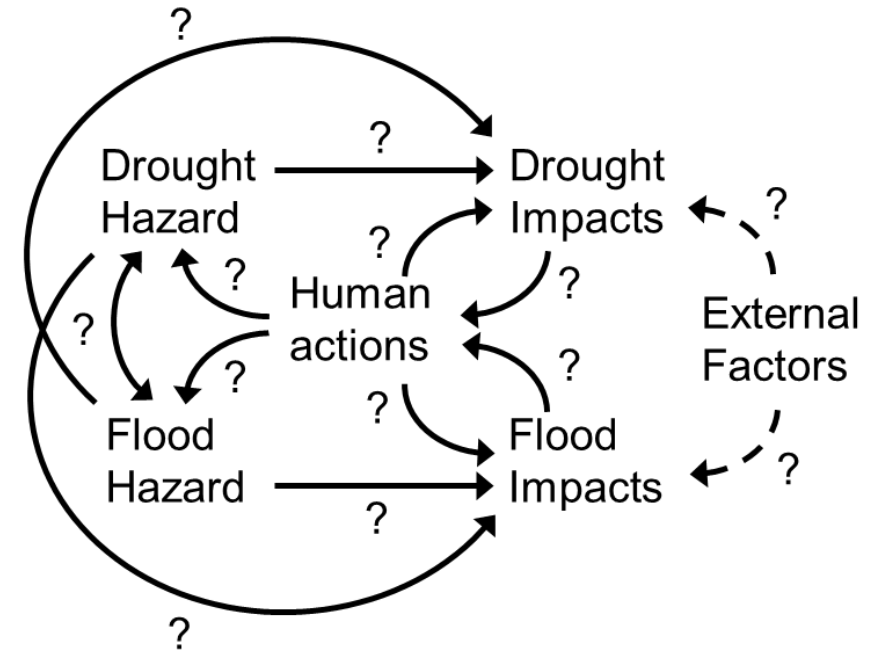


# Drought-to-flood events

- Not so much known about **interactions** between **drought** and **flood** risk
- Within the PerfectSTORM project we aim to learn more about the **dynamics and impacts of drought-to-flood events**
- I am particularly interested in **modelling the interactions** between **humans, floods** and **droughts**



“Now that the state is finally seeing some significant rainfall in December, **those wildfires created conditions conducive to flooding and mudslides.**”

*The Guardian, 8 December 2014*

“The potential for devastating floods is something California’s water managers will have to account for as the **state’s reservoirs juggle the contradictory jobs of flood protection and water.**”

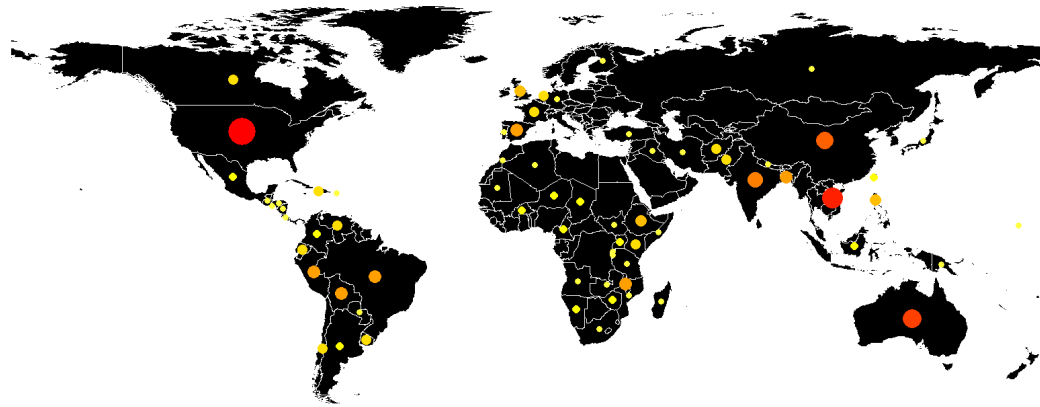
*The Verge, 27 February 2019*

“ ‘... we were able to **absorb a lot of the rainfall** that came early in the spring season **because the soil was so dry.** ’ ”

*Radio Iowa, 13 October 2014*

# A literature and case study review

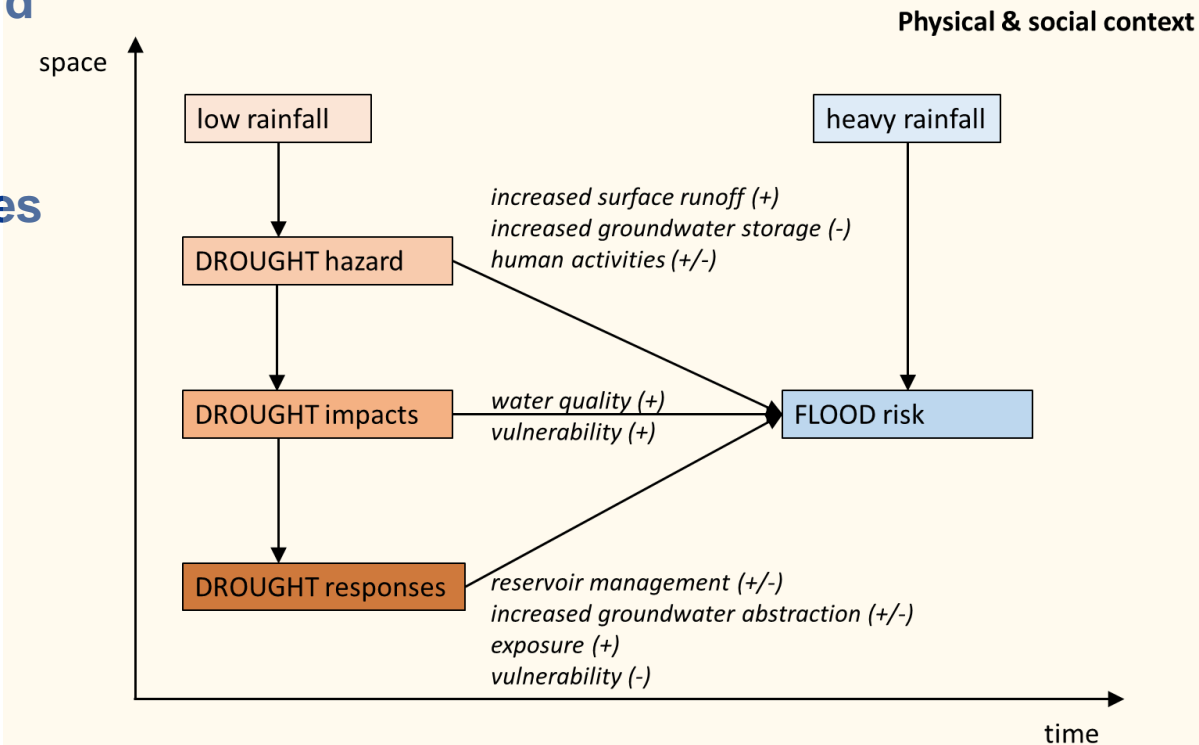
- We did a literature and case study review, the results of which have been presented by Anne van Loon on Monday in session NH10.2, presentation EGU22-1818
- The literature review provides an overview of the **influence of drought hazard, impacts and actions on flood hazard and impacts**.
- The case review analyses the **types and occurrence** of drought and flood hazard, impacts and actions in **196 cases** across the world.



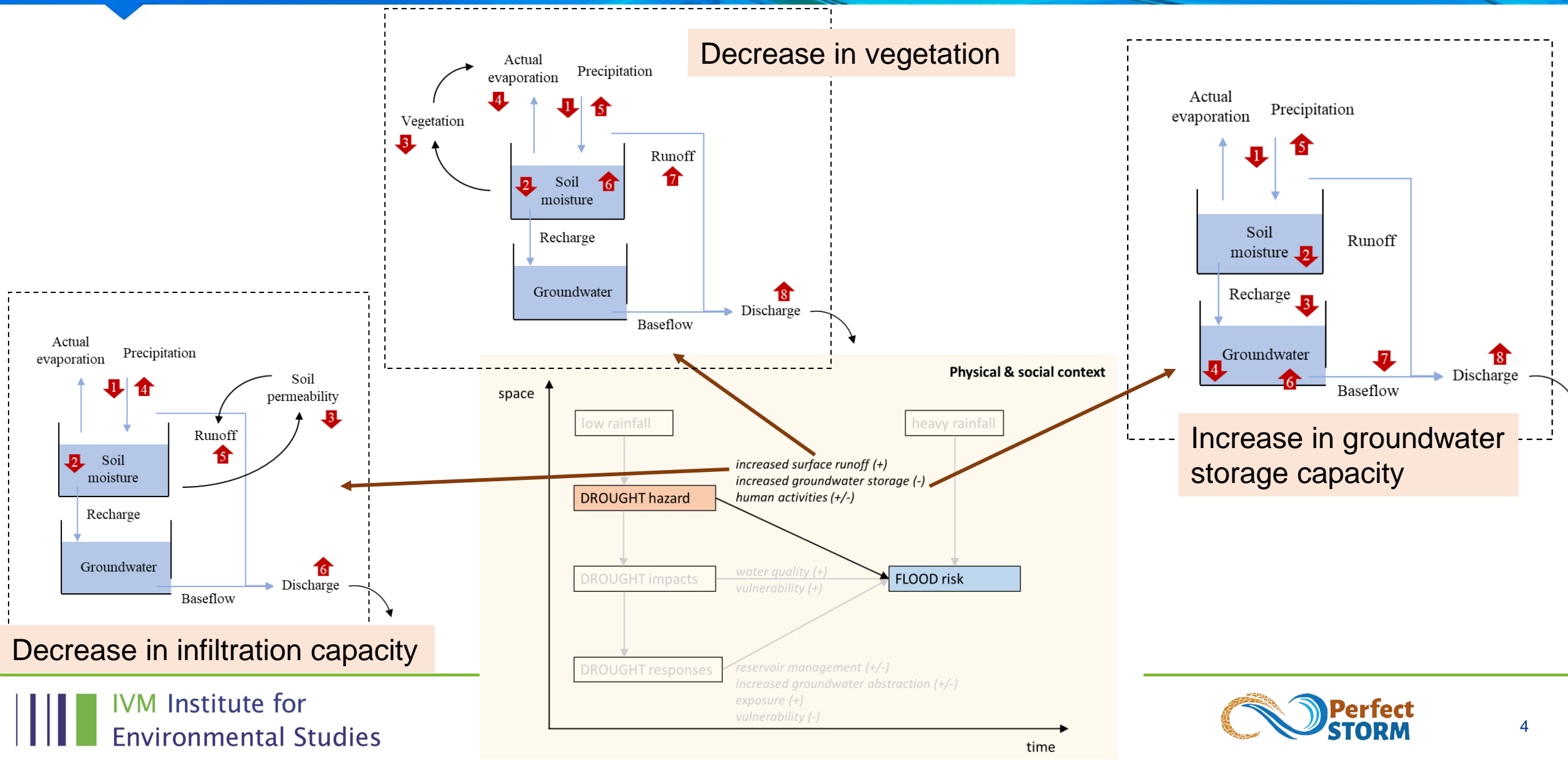
literature review



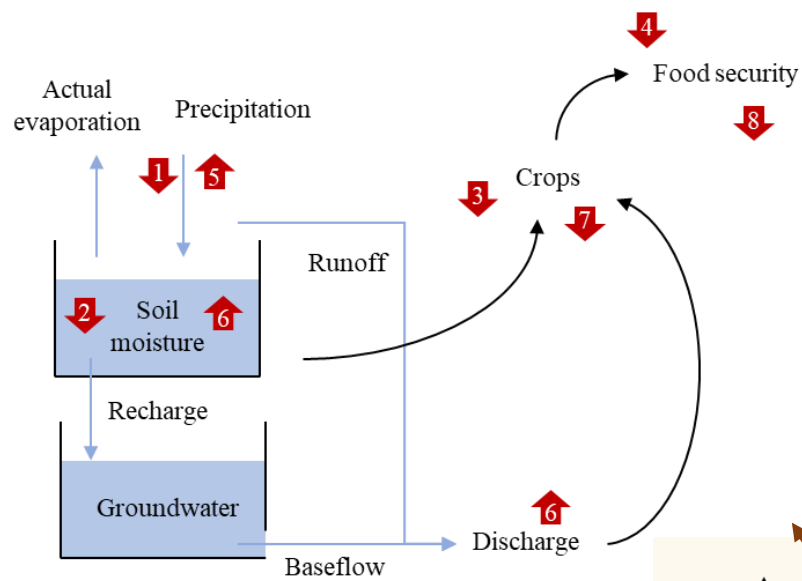
case review



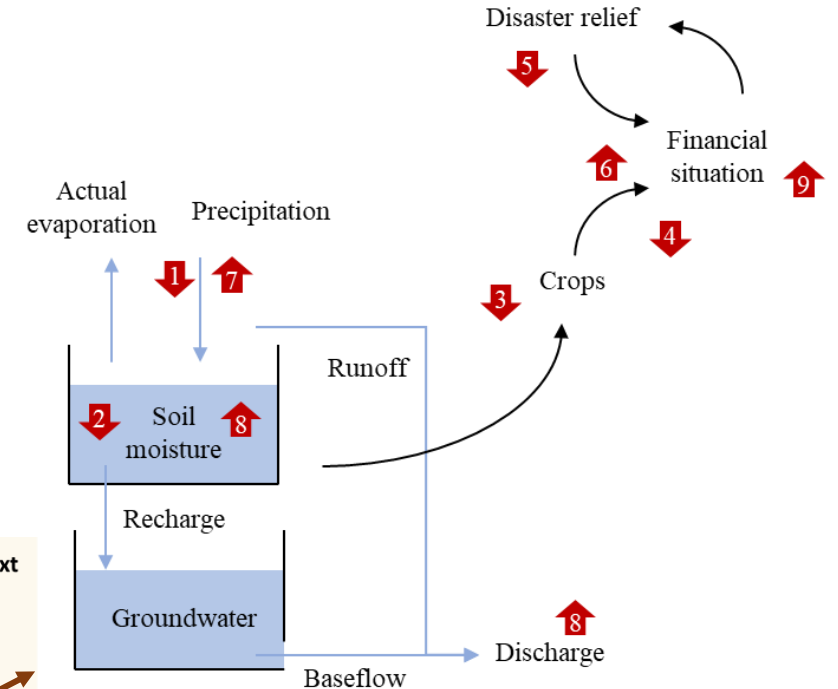
# What are the implications for modelling drought-to-flood events?



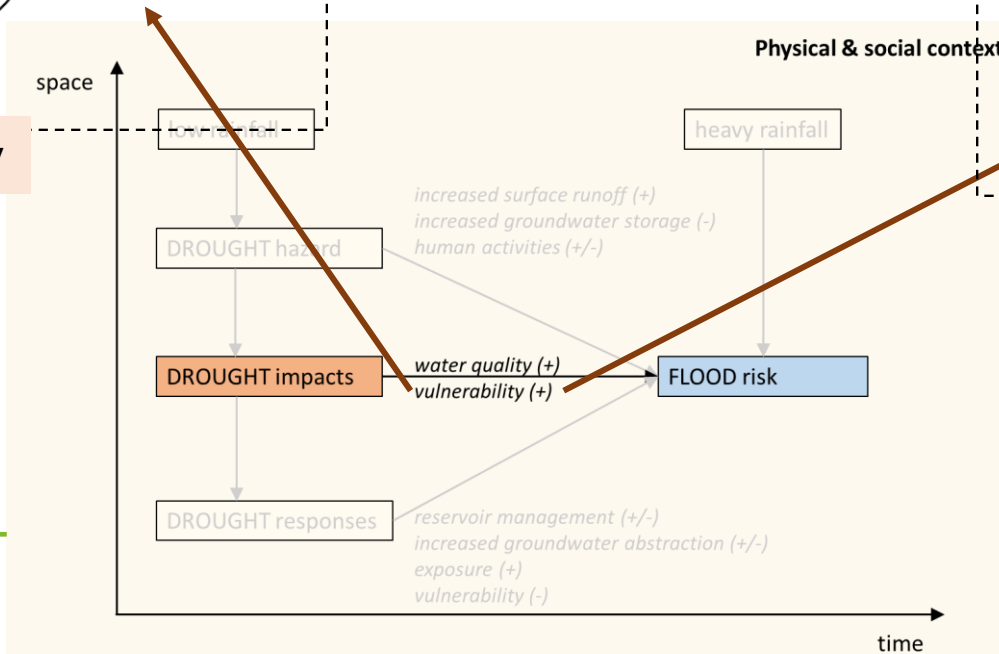
# What are the implications for modelling drought-to-flood events?



Double impact on food security

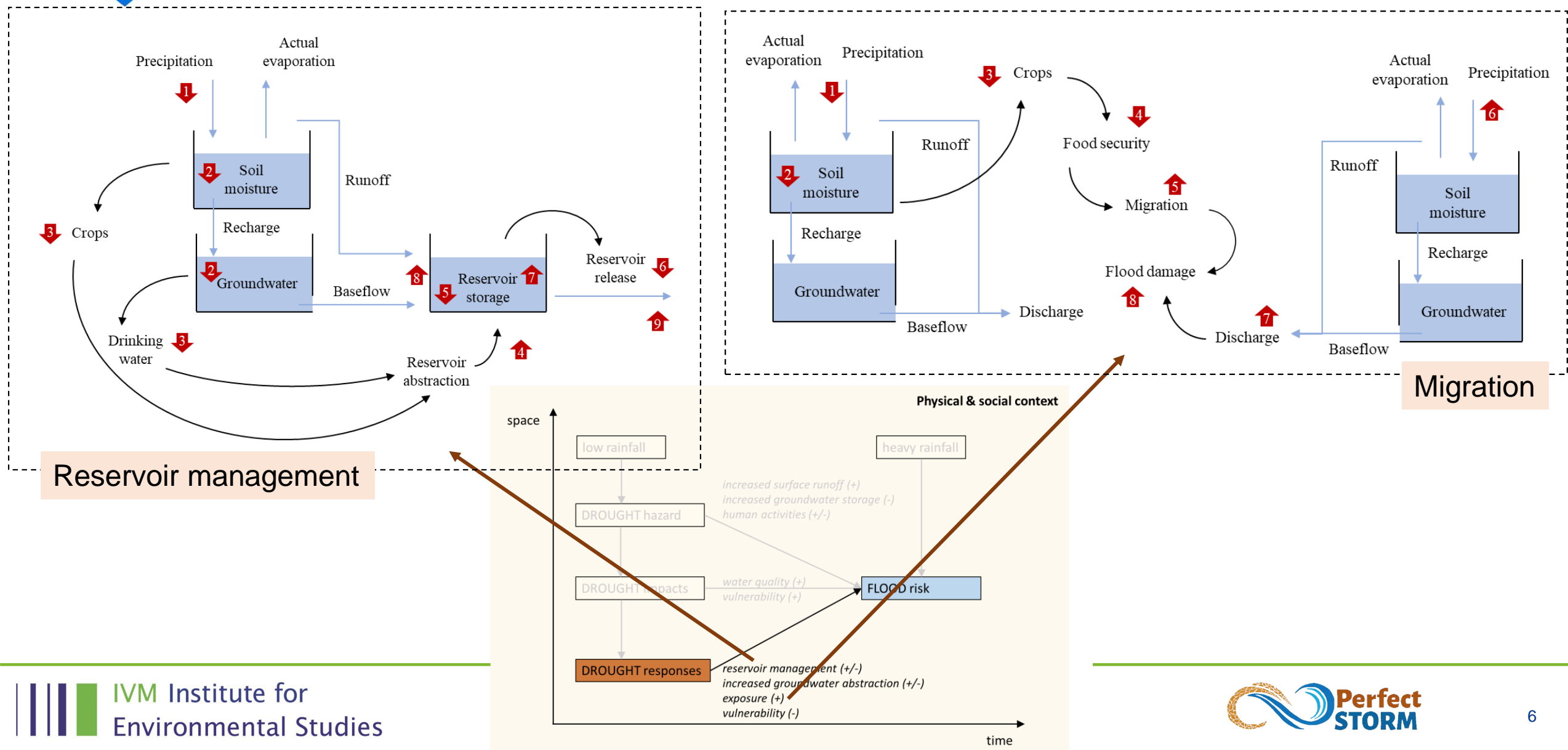


Financial situation





# What are the implications for modelling drought-to-flood events?



# Conclusions

- **Is there one model that fits all? Probably not**, but we do have some ideas about the interactions that need to go into the model.
- We are at the start of the project and now have some hypotheses about drought-to-flood interactions
- Interested? Follow updates about our work:
  - On our website: <https://perfect-storm.org>
  - On twitter: @PerfectSTORM\_VU



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