

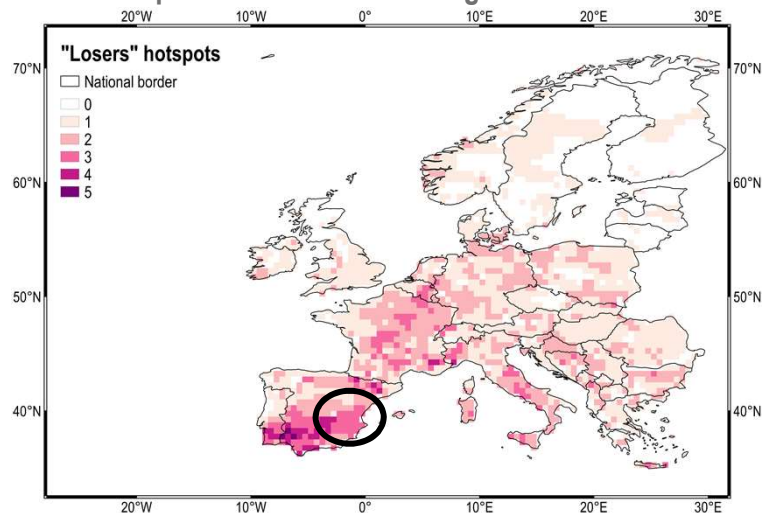
Towards resolving cross-sectoral interactions and trade-offs in regional adaptation planning

Claas Teichmann and María Máñez
January 25, 2018



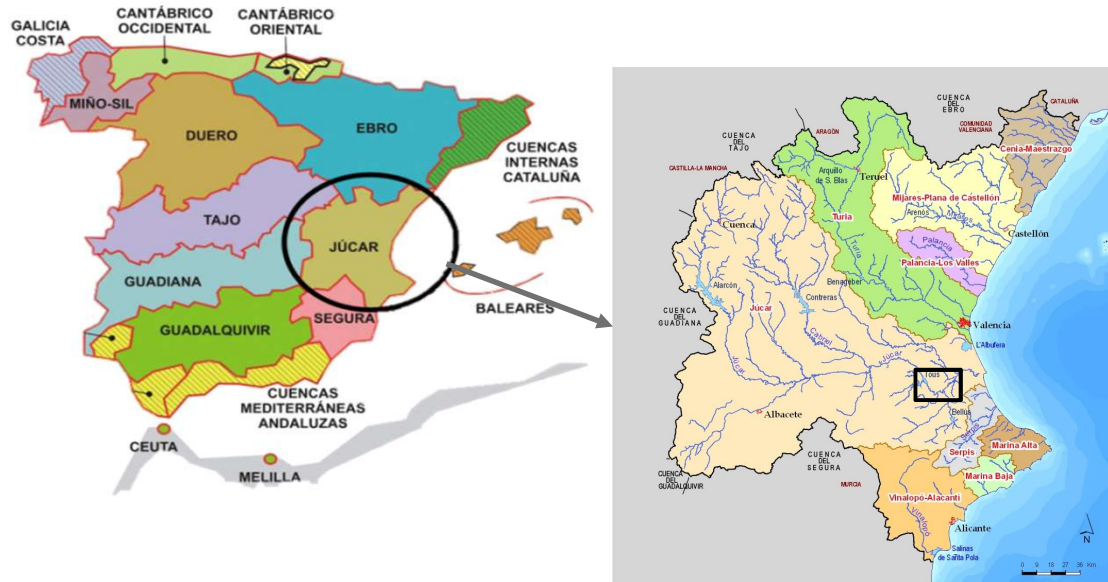
■ Identification of hot-spot regions

Climate impact “losers” in a two degree world



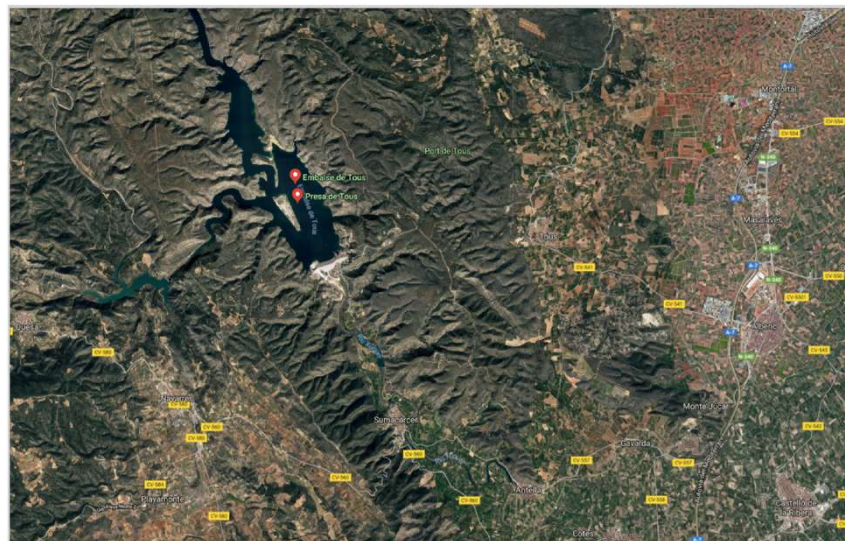
(refer to the presentation of Paul Bowyer, yesterday)

■ Júcar River Basin



■ A region under climate change

Presa de Tous in the Júcar river basin



© google, 2017

Adapt a region under climate change

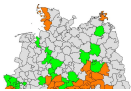
Fact Sheets



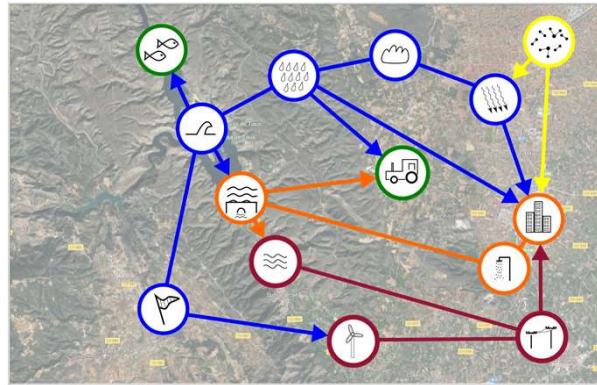
Toolkits



Maps and Visualizations



Presa de Tous in the Júcar river basin



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GERICS products make use of: climate models, impact models, observation data, economic models, decision-support tools, ...

Publications



Webportals

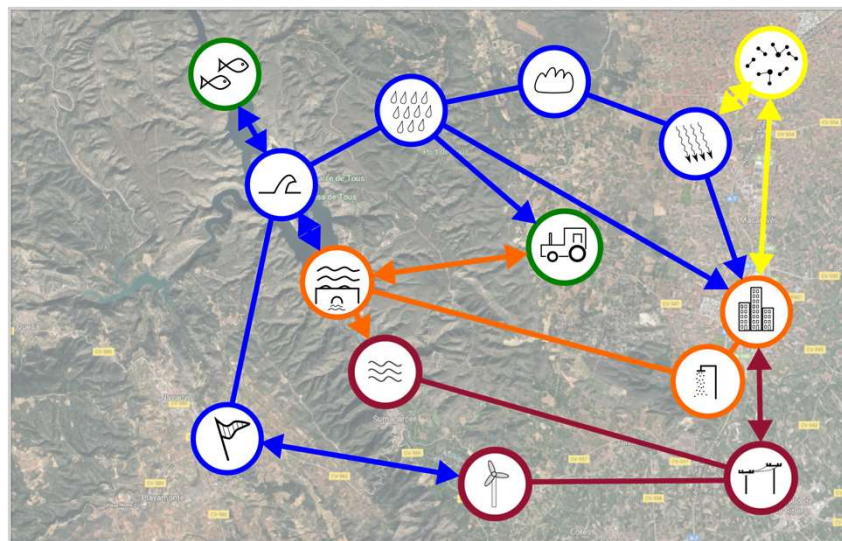


Trainings



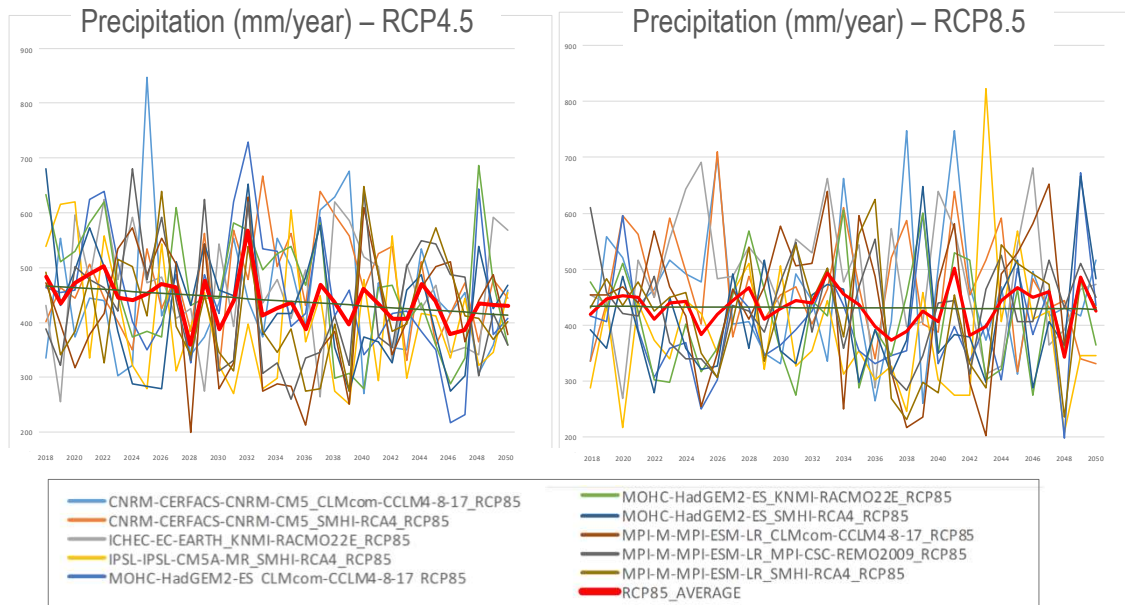
Towards a regional modelling toolkit

Presa de Tous in the Júcar river basin

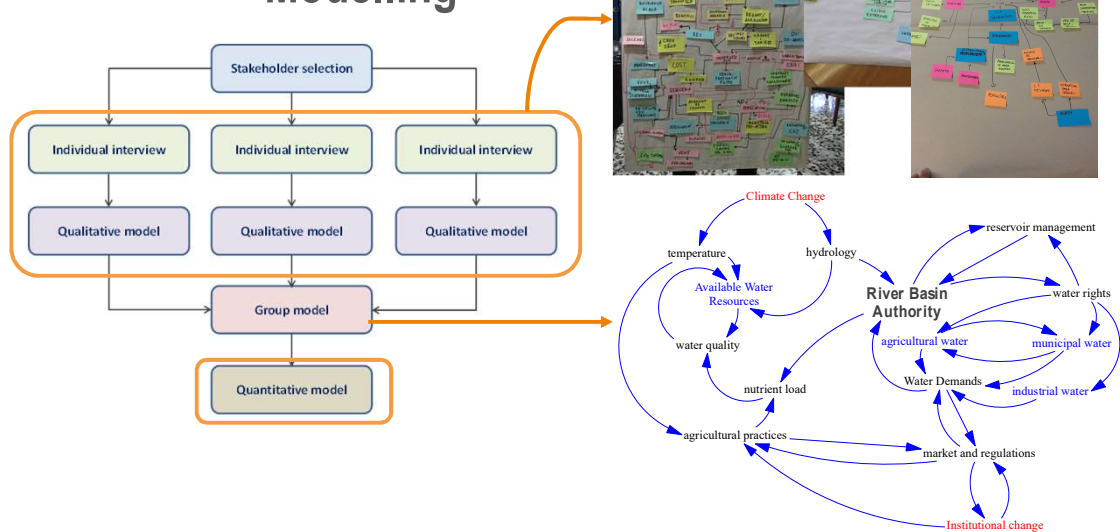


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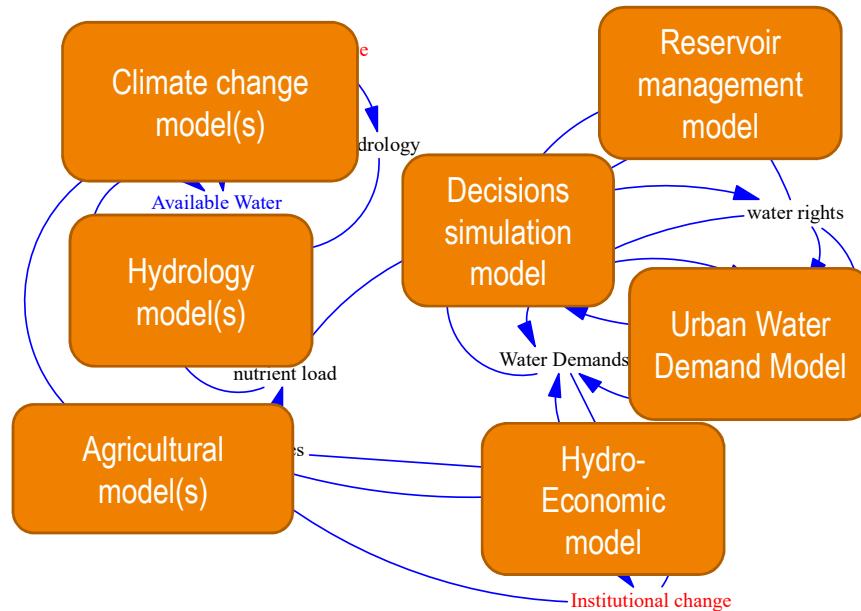
Annual Precipitation projections



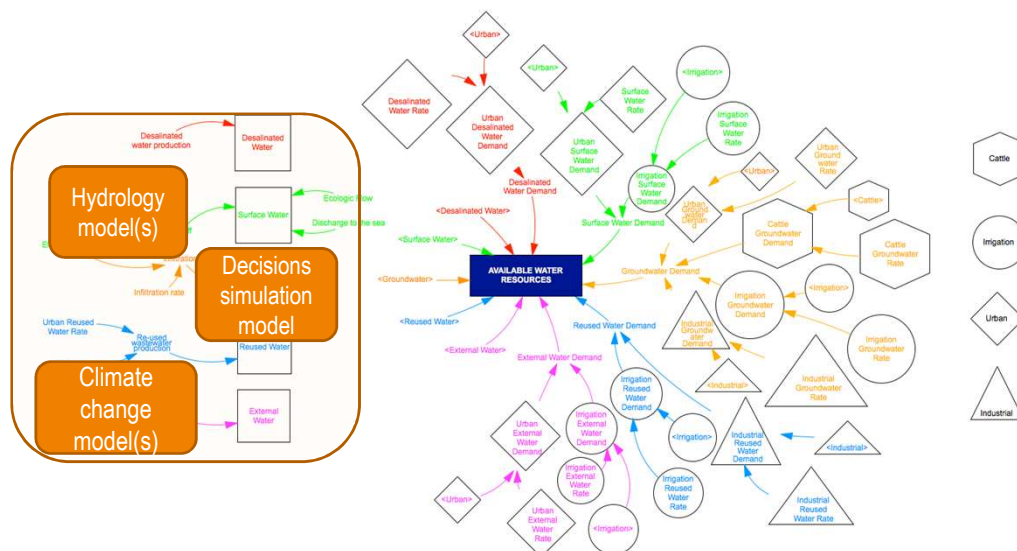
System Dynamics Modelling



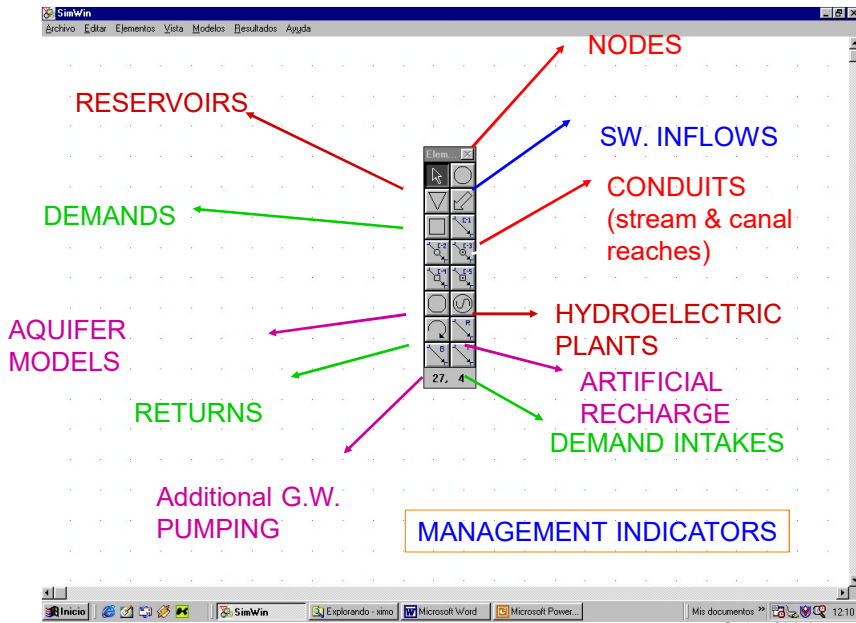
■ Qualitative group model



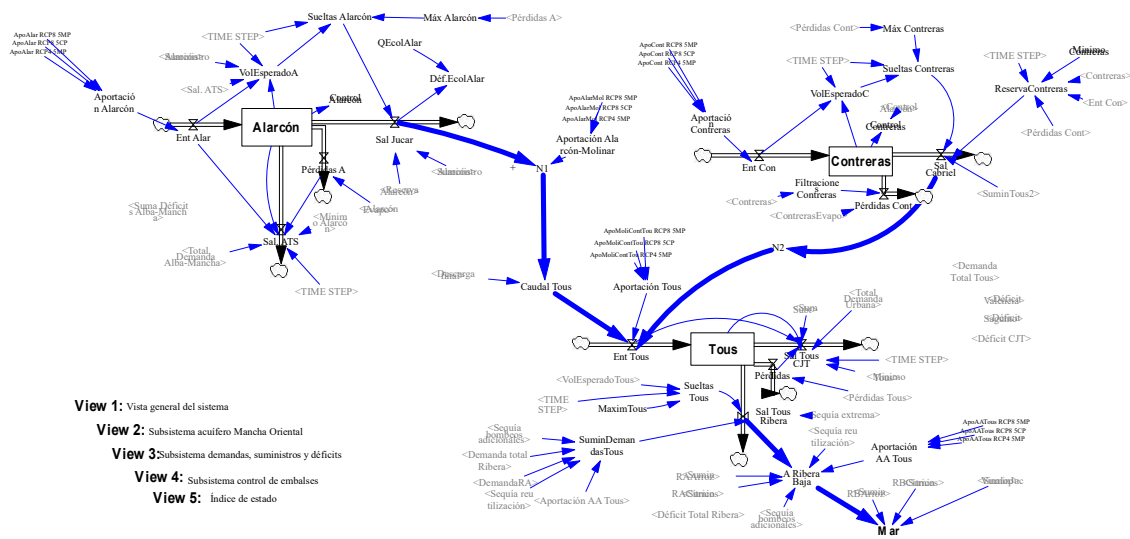
■ Quantitative transformation: Rainbow model



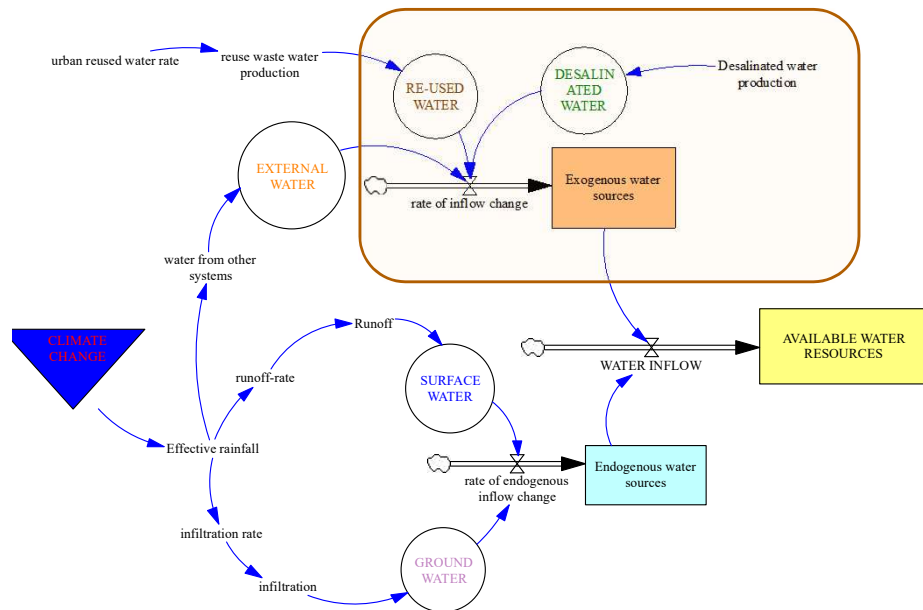
Elements



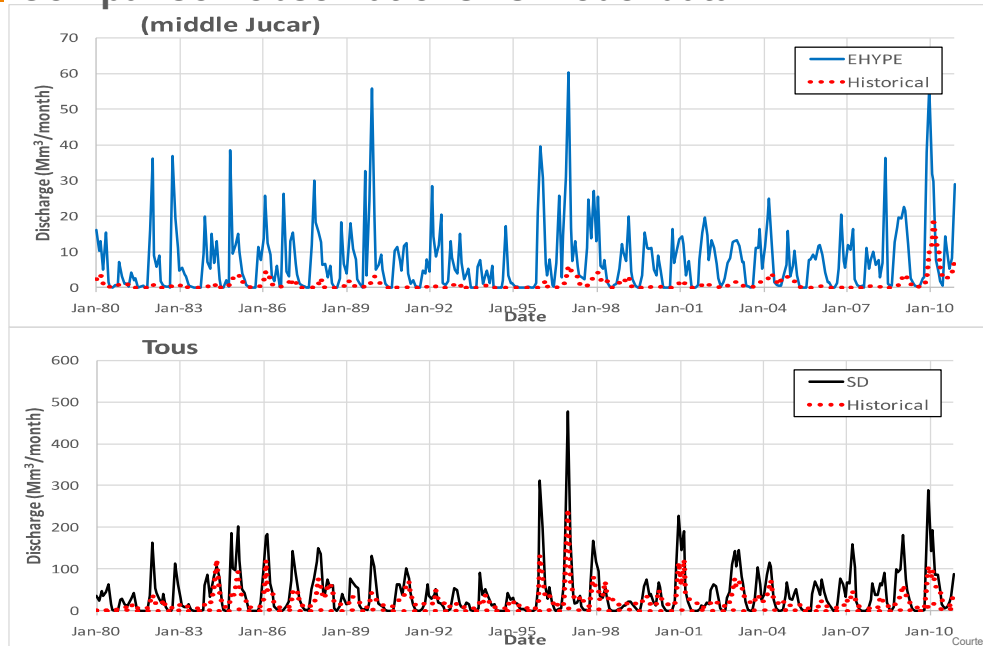
Jucar River Basin Hydrological Model



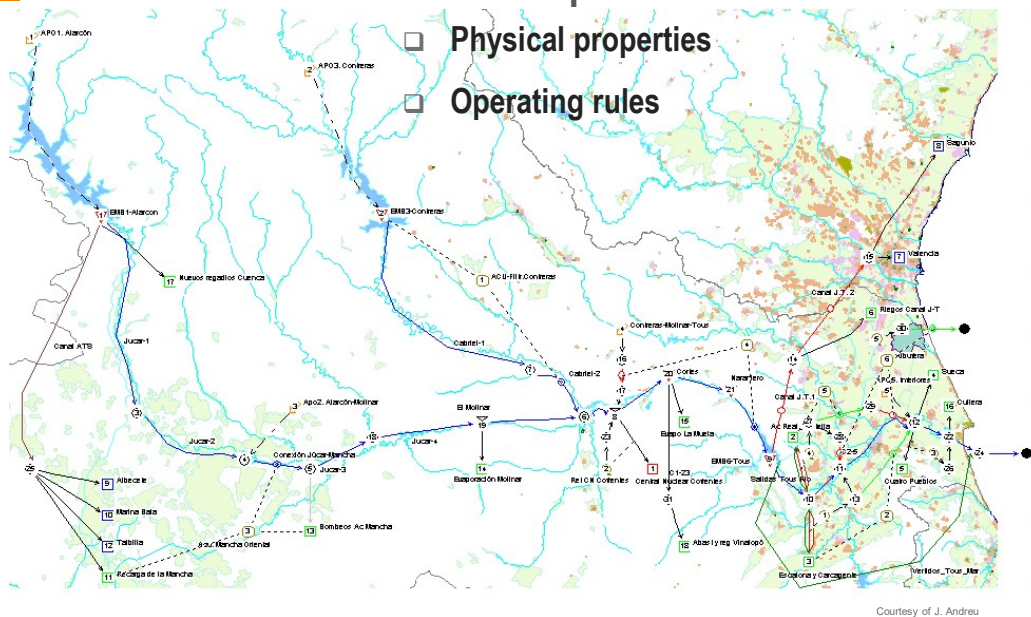
Hydrological metamodel for the Júcar



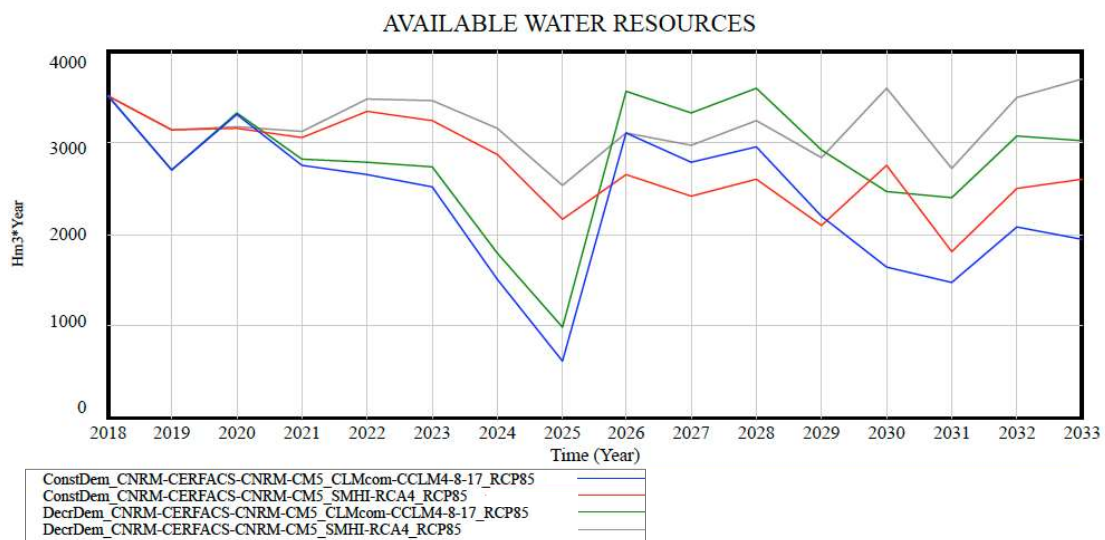
Comparison observations vs model data



Júcar schematic river basin representation



Social policy experiment – Permanent drought commission





■ Outlook – Work in progress

The Regional Modelling Toolkit will help to



- identify relevant model components and their interactions
- analyze climate change and cross-sectoral interactions
- indicate limits, uncertainties, trade-offs and thresholds
- support decision making for sustainable management of a region