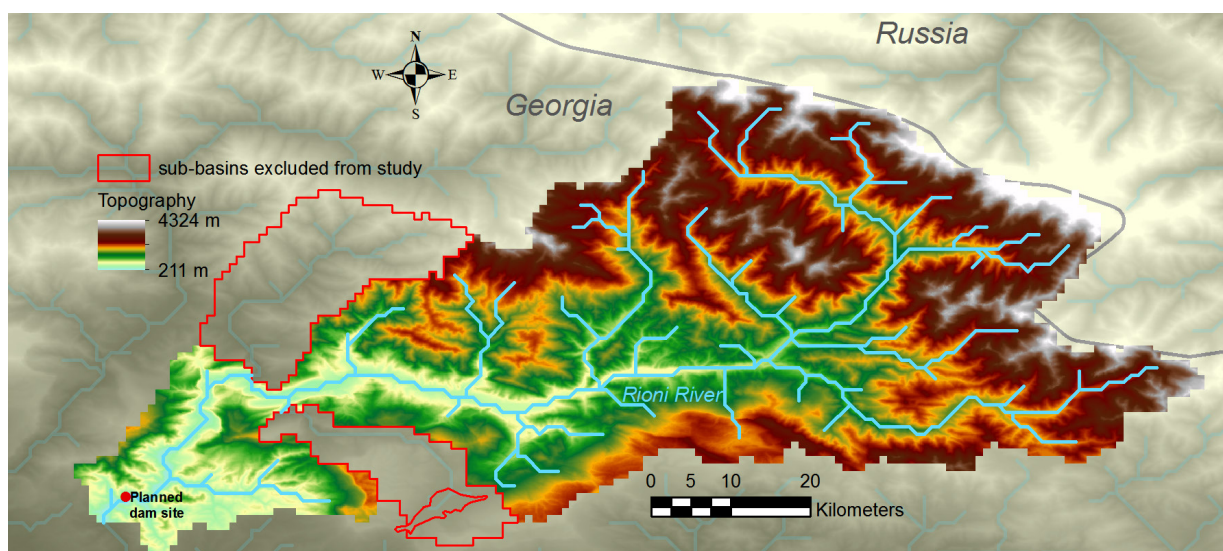


REFERENCE PROJECT

IMPACT OF CLIMATE CHANGE IN THE RIONI RIVER, GEORGIA

Considering the impact of climate change on watersheds when planning new dams or revise existing dams is most important for human safety and economic reasons. With the hydrological model E-Hype climate change impacts on the river flow discharge were calculated for the Rioni River, Georgia commissioned by Clean Energy Group, Norway.



With the hydrological model E-Hype hydrological variables can be calculated for almost all watersheds within Europe. Changes in precipitation, temperature, maximal yearly snow water content and discharge from the period 1981-2010 to the period 2021-2050 were predicted for a site at Namakhvani, Georgia where a hydropower dam was planned. Simulations were conducted for the two different emission scenarios RCP 4.5 and RCP 8.5. The precipitation and temperature scenarios driving the

model were derived from 9 different climate models. Together with a report describing the results in form of standard years and 30 years running means the result data for precipitation, temperature, maximal yearly snow water content and discharge were provided to the customer to be used by another consultancy service. A close collaboration between the Clean Energy Group, the other consultancy service and SMHI guaranteed that the delivered data could be used in its best way.

Delivered service
Report and data.

Duration of the project
October–December 2017

Contracting company
Clean Energy Group, Norway

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