# **FutureWater**

# **Curriculum Vitae**

Name:	R. Koster MSc.
First Name:	Reinier
Date of Birth:	15 February 1991
Nationality:	Dutch
Main Disciplines:	Hydrology, Water management, Hydrological modelling, Hydraulic modelling, Flood risk assessments, GIS.
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#### **Key Qualifications**

Reinier Koster is a hydrologist with 5 years of experience in surface water and geohydrology. Reinier has advanced skills in hydraulic and hydrological modeling and GIS analysis using a variety of tools (e.g. SPHY, Sobek2 (1D, 1D-2D), Sobek3, WEAP, iMOD, Groundwater Vistas, ArcGIS, QGis, R, Python). Countries of work experience include The Netherlands, Rwanda, Madagascar, China, Ghana, Madagascar, Angola and Egypt. Reinier is currently a consultant / researcher Hydrology at the FutureWater office in Wageningen.

#### **Educational Background**

2013 – 2016	MSc Hydrology and Water Resources, Wageningen University and Research Centre,	
	Wageningen, The Netherlands	
2010 – 2013	BSc Soil, Water and Atmosphere, Wageningen University and Research Centre,	
	Wageningen, The Netherlands	

#### **Professional Experience**

2019 – present	Consultant / researcher Hydrology, FutureWater, The Netherlands
2016 – 2019	Specialist Surface Water Hydrology, Arcadis BV, The Netherlands

#### **Overseas Professional Experience**

As non-resident: Rwanda, Ghana, Egypt

#### **Selection of Assignments and Projects**

2021	Biophysical assessment of two catchments in Rwanda: Hydrological assessment of the
	Mukungwa and Akagera Lower catchment in Rwanda to optimize water allocation given
	future economic and climate change scenarios (client: IUCN)
2020 - 2021	Tailor Made Training for Rwandan water professionals: Tailor made e-learning and
	onsite training on water resources management using WEAP and Google Earth Engine
	(client: Rwanda Water Resources Board (RWB))
2020 – 2021	NCBA Clusa: Development of an online monitoring portal on water productivity and crop
	growth for small holder farmers in Mozambique (client: Agência do Zambeze (AdvZ))
2020 – 2021	Apsan Vale: Development of an online monitoring portal on water productivity and crop
	growth for small holder farmers in Mozambique (client: Agência do Zambeze (AdvZ))
2020	Flood Risk Assessment for the Li River in China.

2020	Flood Risk Assessment for future climate conditions of the northern part of Dutch Waterboard Vechtstromen's management area. (client: Waterboard Vechtstromen)
2020	HiHydroSoil v2.0: Development of a new HiHydroSoil dataset, a global dataset containing soil hydraulic properties.
2020	Hydrological assessment of a catchment in Georgia to assess the suitability of the development of a small hydropower plant in the Luhkra river in Georgia (client; EKOHYDROPLIUSI)
2019	MIT Climate Risk Assessment Tool for Small Hydropower (client: RVO)
2019	Land use planning for enhanced resilience of landscapes (LAUREL) in Madagascar using SPHY (client: World Bank)
2019	Flood risk assessment of the northern part of Dutch Waterboard Vechtstromen's management area. (client: Waterboard Vechtstromen)
2019	Secondment at Dutch Waterboard Rivierenland: improving the quality of geodata for flood risk and hydraulic modelling (client: Waterboard Rivierenland)
2018 – 2019	Multiple flood risk assessments for different waterboard and municipalities in the Netherlands
2016 – 2018	Multiple (geo)hydrological projects for waterboards, provinces and industrial companies in the Netherlands.
2016	Secondment at Waterboard Drents Overijsselse Delta: Supporting decisionmakers by answering multiple (geo)hydrological questions (client: Waterboard Drents Overijsselse Delta).
2016	Improving the SIWARE model for Egypt's irrigated Nile-delta. Alterra, The Netherlands
2015 – 2016	MSc. Thesis: 'Water demand forecasting in the Sisili-Kulpawn basin; using the water
	balance approach and soil moisture data to predict irrigation requirements.' IWAD Ghana, Ghana / The Netherlands
2015	MSc. Internship, 'Transboundary assessment of discharge and water level data and
	measuring techniques to improve calibration and validation of FEWS Vecht'. Royal
	HaskoningDHV / Waterboard Vechtstromen, The Netherlands

#### Selection of Technical Reports and Other Publications

- Kaune, A., **R. Koster**. 2020. Land suitability service in Angola: Planting options for closing the yield gaps
- Kaune, A., **R. Koster**. 2020. Supporting decisions on irrigation and fertilizer application in large farms in Angola
- Koster, R. A. Kaune. 2020. Hydrological Assessment for Hydropower, Lukhra River, Georgia. FutureWater Report 210
- Simons, G.W.H., **R. Koster**, P. Droogers. 2020. HiHydroSoil v2.0 A high resolution soil map of global hydraulic properties. FutureWater Report 213.
- Koster, R., G.W.H. Simons. 2020. Evaluation of PAGDP plans in Madagascar with the LANDSIM-R prototype. FutureWater Report 209.
- Koster, R., P. Droogers. 2019. Haalbaarheid van 'small-hydro climate risk assessment tool'. FutureWater Report 193.

#### Language Skills

Dutch:	Mother tongue
English:	Fluent in writing and speech
German:	Basic to Moderate in writing and speech

#### **Computer Skills**

Simulation models:	SPHY, Sobek 2 (1D, 1D-2D), Sobek 3, WEAP, iMOD, Menyanthes (proficient),
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Programming: GIS: Standard software: Others: Groundwater Vistas (basic) R (advanced), Python (proficient), VBA (basic) ArcGIS, QGIS (advanced) MS Office (advanced) Wordpress (proficient)

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