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Positions

8/2016	*Professor* for Environmental Hydrological Systems, University of Freiburg
8/2016-7/2021	*DFG Heisenberg Professor* for Environmental Hydrological Systems, University of Freiburg
2014 -2016	*Interim/Acting Professor* for Environmental Hydrology, University of Freiburg
2010-2014	*Research Scientist*, Institute of Hydrology, University of Freiburg
2008-2010	*Research Scientist*, University of Oslo, Norway (50%), Univ. of Freiburg (50%)
2004-2007	*Postdoctoral Fellow*, Dept of Geography, University of British Columbia, Canada
2002-2003	*German Research Foundation Scholar*, Dept Geosciences, Oregon State University, USA
1998-2001	*PhD Student/Research Assistant*, Institute of Hydrology, University of Freiburg, Germany

University Degrees

2015	*Habilitation* and *Venia Legendi*, University of Freiburg,
2001	*PhD* Hydrology, University of Freiburg, Hydrological Drought – a study across Europe.
1997	*MSc* Hydrology, University of Freiburg, Impact of large-scale weather patterns on lowflows

Awards and Scholarships

2019	*FRIAS Fellowship* (Freiburg Institute of Advanced Studies, EUR 30K for teaching substitute)
2015	*DFG Heisenberg Professorship 2016-2021* (EUR 500K)
2002	*DFG Research Scholarship* (EUR 50K) to Oregon State University, USA
2000	*Travel Grant* European Geophysical Society (now EGU)
1994	*Scholarship* within the University Freiburg – Brock University Exchange Program

Publication Record Summary

H-Index	41 Publons, (Researcher ID I-8138-2012); 50 Google Scholar
Numbers	>95 Peer-reviewed in ISI listed journals >10 Commentaries/Articles in Journals with minor or only editorial review >25 Conference proceedings papers 11 Chapters in edited volumes (incl. two textbook chapters) 20 Project reports (15 published on-line or in print)

Conference Summary (2016-2021)

Presentations	1-3 invited presentations annually 5-10 oral and poster presentations (incl. with students and colleagues) annually at international conferences
Organization	EGU program chair for Hydrology Subdivision HS2: Catchment Hydrology (2019-); Stakeholder workshops and project meetings for several projects, Annual colloquium series 'Boden-Wasser-Luft, Uni Freiburg, FRIEND Low flow and drought meeting, Oct. 2017; IAHS Panta Rhei 'Drought in the Anthropocene' workshop, Oct 2017.

Editorial and Review Activities (2016-2021)

Editor	Hydrology and Earth System Sciences (since 2013); EOS Science Advisor AGU (2019-21), Special Issue Ed. in Frontiers in Env. Sc.
Reviewer	*Journal articles (frequently to occasionally):* Water Resources Research, Journal of Hydroloy, Hydrology and Earth System Sciences, Hydrological Processes, Natural Hazards and Earth Syst. Sci, Earth Syst. Sci. Data, Nature, Nature–Geosciences, Nature-Climate Change, Scientific Reports, Environ. Research Letters, Geophysical Research Letters, International Journal of Climatology, Climatic Change *Research proposals and scholarships* (8/2016-7/2021): 6 DFG, 2 BMBF, 1 Netherlands, 1 Austria, 2 Swiss National Science Fund, 1 NSF (USA), 1 NERC (UK) , 4 Humboldt Foundation, 1 BW-MvW, 1 Helmholtz Nachwuchs, panels (multiple proposals): DAAD Prime, BW - LGFG, *Theses, positions, promotions* (8/2016-7/2021): external examiner for 4 PhD theses (Heidelberg, Wageningen, Freiburg, Potsdam), Prof. hiring committees (3 Freiburg, 1 Kassel, 1 Graz), promotions (1 USA, 1 Norway, 1 Helmholtz), habilitations (1 Potsdam)

Active Research Networks

GDI	*European Groundwater Drought Initiative*, Europe (John Bloomfield/Anne van Loon, NERC)
ILFT	*International Low Flow Trends,* (Glenn Hodgins, USGS; colleagues from FR, AT, AU, CAN)
FRIEND	*Flow Regimes from International Experimental and Network Data,* UNESCO IHP, **Chair**: FRIEND-Water European Low flow and drought group (2017-2021)
EDC	*European Drought Centre*, founding and core group member

Funded Projects (8/2016-7/2021)

NW-Stresstest	Evaluation of baseflow series for low flow stress test models. LUB. With Lead-PI: Michael Stölzle (EUR 100K, 2021-2022)
TropicDrought	Drought in the tropics: do we over or underestimate drought with methods and indices developed in other climates? DFG Kollaborationsanbahnung. with Iris Stewart, Santa Clara, CA, USA. (EUR 10K, 8/2019-12/2021)
DüMaDreisam	*Drought Management Dreisam River*. Innovtationsfond Badenova. With Lead-PI: Veit Blauhut, (EUR 344K, 10/2019-9/2022)
ADO	*Alpine Drought Observatory*. Interreg Alpine Space. **Partner PI** and Lead of WP3 Drought impacts in the Alpine Space. (EUR 240K, Total 1.5M, 10/2019-9/2022.)
FRIAS Focus	*Environmental Forecasting: interdisciplinary exploration of modelling cultures.* Focus Area of the Freiburg Institute of Advanced Studies (EUR 30K + guests&workshops, 10/2019-9/2020.
ASG Rhein-2	*Glacier and snow runoff contributions to streamflow along the River Rhine in the future,* The International Commission on the Hydrology of the Rhine Basin (KHR/CHR), **Lead-PI**, Partners J. Seibert, Univ. Zürich; K. Gerlinger HYDRON GmbH (EUR 350K total, 4/2018-6/2022).
NW-BW	*Stress testing models for low flows & human influences.* Two collaboration projects with M. Weiler, M.Stoelzle, Freiburg (LUBW). (EUR 100K & 38K, 2018-2020)
Hydro-CH2018	*Low Flow Events— a Review in the Context of Climate Change in Switzerland*: Funding by Swiss FOEN (BAFU). **PI** (EUR 40K, 2017-2020)
TrenDHy	*Tracing Trends and Changes of Drought in Hydrosystems.* DFG Sachbeihilfe. **PI** (EUR 385K, 9/2016-4/2021)
DRIeR	*Drought impacts, processes and resilience: making the invisible visible*, Foschungsnetzwerk Wasser Baden-Württemberg, **Lead PI and speaker** together with J. Lange, Partners: Freiburg (5 Chairs of UNR, Freiburg), Uni Heidelberg, Uni Tübingen (Total EUR 1.9M, 2016-2021)

Project proposals (submitted - under review)

EDORA	EU Scientific Support to JRC's European Drought Observatory (granted Dec 2021)
ROBIN	NERC (UK, granted Nov 2021 - only travel funds for FR)
REENFORCE	DFG Research Training Group (Skizze)
DropDry	DFG SPP (Skizze)
StressRes	BMBF Call Sustainable Groundwater Use

Advising and Teaching (8/2016-7/2021)

Current	*Habil cand.*: Dr. Manuela Brunner, *PhD cand.:*, Amelie Herzog, Ruth Stephan, Jonas Götte (Umwelthydrosysteme FR, first advisor); Yonca Cavus (DAAD, cotutelle with ITU)
Graduated	*PhD degrees*: Annette Boesmeier, Mathilde Erfurt (Geographie, FR, second advisor); Marit van Tiel (Umwelthydrosysteme FR), Georgios Skiadaresis (Waldbau FR, second advisor, 2020), Jost Hellwig (Umwelthydrosysteme, FR, first advisor, 2019), Benedikt Heudorfer (Umwelthydrosysteme, FR, first advisor, 2018), Erik Tijdeman, Freiburg (Umwelthydrosysteme, FR, first advisor, 2017); Veit Blauhut, Freiburg (Umwelthydrosysteme, FR, first advisor, 2016); *MSc in Hydrology (main supervisor)*: ca. 15, *BSc NF Env. Hydrol.*: ca. 20
MSc courses	Global Hydrology (annually 2SWS), HydPro (since 2017, 1-2SWS), 10-day Field Trip (since 2011); Statistics and Regionalisation (2008-2012, 2017), Hydrohazards (2015, 2016), Global Environmental Changes (since 2020, 4SWS)
BSc courses	Introduction to Hydrology (annually since 2014); River Ecology (co-taught 2014-2016); Current Topics in Hydrology (Seminar; incl. Introduction to presentation skills, since 2012), Water resources and protection (2017), Hydrological Research (2021)
PhD workshops	Member Board of Directors: Graduate School of the Faculty of Env. and Nat. Res. Uni FR Regular Hydro-Workshops: Scientific presentation, Paper review, Abstract writing, CV

Presentations (8/2016-7/2021)

Invited

Das Unsichtbare sichtbar machen: Dürregefahr, Dürrefolgen und Relienz gegenüber Dürre. Abschlusstagung des Forschungsnetzwerks Wasser Baden-Württemberg. 6/2021 (virtueller Vortrag)

At-Risk of drought: prediction challenges from climate to hydrology to impact. *Water Research Horizon Conference 6/2021* (virtual presentation).

Der Rhein im Fluss - Klimafolgen von den vergletscherten Quellgebieten bis ins Tiefland. Studium Generale, Samstaguni 5/2021 (virtuell - vorher aufgenommen)

Dürre in Deutschland: Niedrigwasser, Grundwasseranomalien und wasserwirtschaftliche Folgen. *Wasserseminar* (virtual presentation). Technical University Dresden. 6/2020

Recent drought events in Germany: impact of climate change and changing impacts. *Colloquium.* University of Potsdam, Germany (virtual presentation). 6/2020

The Drought of 2018 in Germany - impact of climate change or changing socio-economic impacts? *Colloquium,* KIT, Karlsruhe, 12/2019.

Drought in Germany: impact of climate change or changing socio-economic impacts? Dinner Speech. *Freiburg Institute for Advanced Studies* (FRIAS). 12/2019

Trockenheit und Wassermangel - Regionale Folgen des Klimawandels. *Symposium Trinkwassermangel*. Hinterzarten, DE, 11/2019

Drought Impact Inventories. Keynote. *DriDanube Interreg* Final Conference. Vienna, 5/2019.

Customizing drought indices to improve drought impact monitoring and prediction. Keynote. NERC. *About Drought Conference.* Oxford UK, 3/2019.

Dürre in Deutschland: Folge des Wandels oder Wandel der Folgen. *DFG Heisenbergtreffen* - After-dinner Speech. DFG, Bonn, 1/2019.

Potential of drought impact patterns for early-warning. *Aspen Global Change Institute Workshop*: When the Rain Stops: Drought on Subseasonal and Longer Time scales, Aspen, CO, 9/2018.

Hydrological Drought from a headwater perspective. *Colloquium.* MPI, Jena, DE, 11/2018

Centurial changes in the augmentation of low flows by snow and glacier melt in the River Rhine *Colloquium. ITT Köln.* 2/2018

Die Risiken von Trockenheit im Anthropozän: Was ist noch ein Extremereignis? *Symposium Umweltrisiken in der Wasserforschung*. Forschungsnetzwerk Wasser BW. Karlsruhe, 1/2018.

The European Drought impact inventory EDII. Keynote. *Kick-off conference Interreg DriDanube.* Ljubiljana. Slovenia, 3/2017

Contributed (selection and only first-author contributions)

Stahl, K., van Tiel, M., Moore, D. (2021) Peakwater in observed glacier-fed streamflow time series. EGU 2021. (virtual)

Stahl, K. Stoelzle, M. Staudinger, M. Weiler, M. (2019) Stress-Test Szenarien zur Bestimmung der Klimasensitivität von Niedrigwasser in Kopfeinzugsgebieten. *Trinationaler Workshop Alpine Hydrologie*, Obergurgl, AT, 11/2019

Stahl K., Tijdeman E., Blauhut V., Stoelzle M., Barker L. J., Hannaford J. (2019) Hydrological Services as an important part of drought monitoring and risk management. *IUGG*. Montreal, Canada, 7/2019

Stahl, K., Blauhut, V., Stölzle, M., Tijdeman, E., Menzel, L., Lange, J. Linking muli-sectorial impacts to hydrometeorological extremes during the drought of 2018 in Germany. *EGU.* Vienna. 4/2019 (poster)

Stahl, K., Blauhut, V., Stölzle, M., Tijdeman, E., Menzel, L., Lange, J. Die Dürre 2018: extreme Hydrometeorologie und ein sichtbares Spektrum an Auswirkungen. *Tag der Hydrologie*, Karlsruhe 3/2019. (poster)

Stahl K., Vidal J.P., Hannaford J., Tijdeman E., Laaha G., Tallaksen L.M (2018) The challenges of hydrological drought definition, quantification and communication: an interdisciplinary perspective. *8th Global FRIEND-Water Conference.* Beijing, Nov. 2018.

Stahl, K. (2017) When a drought unfolds the question comes: is this climate change?. EGU, Vienna.

Stahl, K. et al. (2017) The challenges of empirical impact prediction with monitored drought indices. EGU.

Stahl, K. et al. (2017) Langfristige Veränderungen der Abflusskomponenten aus Schnee- und Gletscherschmelze in Niedrigwassersituationen am Rhein. Tag der Hydrologie, Trier.

Stahl, K. et al. (2017) Quantifying centuraial changes in upstream snow and glacier melt contribution to downstream river discharge of the Rhine. Canadian Geophysical Union Conference. Vanoucver, CA.

Stahl, K. et al (2016) Building better drought resilience through improved monitoring and early warning: learning from stakeholders in Europe, the USA and Australia. AGU Fall Meeting. San Francisco.

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Publication List (Years 2016-2021)

JOURNAL ARTICLES (ISI LISTED, PEER-REVIEWED)

2021

Stewart, I. T., Maurer, E. P., **Stahl, K**., & Joseph, K. (2021). Recent evidence for warmer and drier growing seasons in climate sensitive regions of Central America from multiple global datasets. International Journal of Climatology, 1–19. https://doi.org/10.1002/joc.7310

Stephan, R., Erfurt, M., Terzi, S., Žun, M., Kristan, B., Haslinger, K., and **Stahl, K**.: An inventory of Alpine drought impact reports to explore past droughts in a mountain region, Nat. Hazards Earth Syst. Sci., 21, 2485–2501, https://doi.org/10.5194/nhess-21-2485-2021, 2021.

Van Tiel, M., Van Loon, A. F., Seibert, J., and **Stahl, K**.: Hydrological response to warm and dry weather: do glaciers compensate?, Hydrol. Earth Syst. Sci., 25, 3245–3265, https://doi.org/10.5194/hess-25-3245-2021, 2021.

Hellwig, J., Stoelzle, M., and **Stahl, K**.: Groundwater and baseflow drought responses to synthetic recharge stress tests, Hydrol. Earth Syst. Sci., 25, 1053–1068, https://doi.org/10.5194/hess-25-1053-2021, 2021.

Skiadaresis, G., Schwarz, J., **Stahl, K**. *et al.* Groundwater extraction reduces tree vitality, growth and xylem hydraulic capacity in *Quercus robur* during and after drought events.*Sci Rep* **11,** 5149 (2021). https://doi.org/10.1038/s41598-021-84322-6

Barthel R., Haaf, E, Giese M., Nygren M, Heudorfer B, **Stahl K**. 2021 Similarity-based approaches in hydrogeology: proposal of a new concept for data-scarce groundwater resource characterization and prediction. Hydrogeology Journal; https://doi.org/10.1007/s10040-021-02358-4

2020

Erfurt, M., Skiadaresis, G., Tijdeman, E., Blauhut, V., Bauhus, J., Glaser, R., Schwarz, J., Tegel, W., and **Stahl, K**.: A multidisciplinary drought catalogue for southwestern Germany dating back to 1801, Nat. Hazards Earth Syst. Sci., 20, 2979–2995, https://doi.org/10.5194/nhess-20-2979-2020, 2020.

Haaf, E., Giese, M., Heudorfer, B., **Stahl, K.**, Barthel, R. (2020) Physiographic and climatic controls on regional groundwater dynamics. *Water Resour. Res.*, 56, e2019WR026545. https://doi.org/10.1029/2019WR026545

Hellwig J., de Graaf I. E. M., Weiler M., **Stahl K**. (2020) Large-Scale Assessment of Delayed Groundwater Responses to Drought. *Water Resour. Res.,* 56. doi:10.1029/2019WR025441

Pendergrass, A.G., Meehl, G.A., Pulwarty, R....**Stahl. K**.... *et al.* (2020) Flash droughts present a new challenge for subseasonal-to-seasonal prediction. *Nat. Clim. Chang.* 10, 191–199. doi:10.1038/s41558-020-0709-0

Staudinger, M., Seeger, S., Herbstritt, B., Stoelzle, M., Seibert, J., **Stahl, K**., and Weiler, M. (2020) The CH-IRP data set: a decade of fortnightly data on δ^2H and δ^{18}O in streamflow and precipitation in Switzerland, Earth Syst. Sci. Data, 12, 3057–3066, https://doi.org/10.5194/essd-12-3057-2020, 2020.

Stoelzle, M., Schuetz, T., Weiler, M., **Stahl, K**., and Tallaksen, L. M. (2020) Beyond binary baseflow separation: a delayed-flow index for multiple streamflow contributions, *Hydrol. Earth Syst. Sci*., 24, 849–867, doi:10.5194/hess-24-849-2020.

Tijdeman, E., **Stahl, K**., Tallaksen, L. M. (2020): Drought characteristics derived based on the Standardized Streamflow Index: A large sample comparison for parametric and nonparametric methods. *Water Resources Research, 56*, e2019WR026315. https://doi.org/10.1029/2019WR026315

Van Tiel, M., Kohn, I., Van Loon, A. F., & **Stahl, K**. (2020). The compensating effect of glaciers: Characterizing the relation between interannual streamflow variability and glacier cover. *Hydrol. Proc.*, *34*(3), 553-568. doi:10.1002/hyp.13603

Van Tiel, M., **Stahl, K**, Freudiger, D., Seibert, J. (2020): Glacio-hydrological model calibration and evaluation, *WIREs Water, 7,* e1483. https://onlinelibrary.wiley.com/doi/10.1002/wat2.1483

2019

Heudorfer, B., Haaf, E., **Stahl, K.**, Barthel, R. (2019) Index-based characterization and quantification of groundwater dynamics. *Water Resources Research.* 55, 5575-5592. doi:10.1029/2018WR024418

Meyer, J., Kohn, I., **Stahl, K**., Hakala, K., Seibert, J., and Cannon, A. J. (2019) Effects of univariate and multivariate bias correction on hydrological impact projections in alpine catchments, *Hydrol. Earth Syst. Sci. 23*:1339-1354. doi:10.5194/hess-23-1339-2019

2018

Bachmair, S., Tanguy, M., Hannaford, J., and **Stahl, K**. (2018). How well do meteorological indicators represent agricultural and forest drought across Europe? *Environmental Research Letters*, *13*(3), 034042, doi:10.1088/1748-9326/aaafda

Hellwig, J. & **Stahl, K**. (2018): An assessment of trends and potential future changes in groundwater-baseflow drought based on catchment response times. *Hydrol. Earth Syst. Sci.*, 22, 6209-6224, doi:10.5194/hess-22-6209-2018

Hellwig, J., **Stahl, K**., Ziese, M., & Becker, A. (2018) The impact of the resolution of meteorological data sets on catchment-scale precipitation and drought studies. *International Journal of Climatology*. 38 (7), 3069-3081 doi:10.1002/joc.5483

Seibert, J., Vis, M. J. P., Kohn, I., Weiler, M., and **Stahl, K**. (2018) Technical note: Representing glacier geometry changes in a semi-distributed hydrological model, *Hydrol. Earth Syst. Sci.*, 22, 2211-2224, doi:10.5194/hess-22-2211-2018

Tijdeman, E., Barker, L. J., Svoboda, M. D., and **Stahl, K**. (2018): Natural and human influences on the link between meteorological and hydrological drought indices for a large set of catchments in the contiguous United States. *Water Res. Res*., 54, 6005-6023. doi:10.1029/2017WR022412

Tijdeman, E., Hannaford, J., & **Stahl, K**. (2018). Human influences on streamflow drought characteristics in England and Wales. *Hydrol. Earth Syst. Sci.*, *22*(2), 1051. DOI: 10.5194/hess-22-463-2018

Van Tiel, M., Teuling, A. J., Wanders, N., Vis, M. J., **Stahl, K**., & Van Loon, A. F. (2018). The role of glacier changes and threshold definition in the characterisation of future streamflow droughts in glacierised catchments. *Hydrol. Earth Syst. Sci.*, *22*(1), 463. doi:10.5194/hess-22-463-2018

2017

Bachmair, S., Svensson, C., Prosdocimi, I., Hannaford, J., & **Stahl, K**. (2017). Developing drought impact functions for drought risk management. *Natural Hazards and Earth System Sciences*, *17*(11), 1947. doi: 10.5194/nhess-17-1947-2017

Freudiger, D., Kohn, I., Seibert, J., **Stahl, K**., & Weiler, M. (2017). Snow redistribution for the hydrological modeling of alpine catchments. Wiley Interdisciplinary Reviews: Water, 4(5), e1232. doi:10.1002/wat2.1232

Hellwig, J., **Stahl, K**., & Lange, J. (2017). Patterns in the linkage of water quantity and quality during low-flows. *Hydrological Processes*, *31*(23), 4195-4205. doi:10.1002/hyp.11354

Heudorfer, B., & **Stahl, K**. (2017). Comparison of different threshold level methods for drought propagation analysis in Germany. Hydrology Research, 48(5), 1311-1326. doi:10.2166/nh.2016.258

Hodgkins, G. A., Whitfield, P. H., Burn, D. H., Hannaford, J., Renard, B., **Stahl, K**., ... & Murphy, C. (2017). Climate-driven variability in the occurrence of major floods across North America and Europe. Journal of Hydrology, 552, 704-717.

Laaha, G., Gauster, T., Tallaksen, L. M., Vidal, J. P., **Stahl, K**., Prudhomme, C., ... & Van Loon, A. F. (2017). The European 2015 drought from a hydrological perspective. Hydrology and Earth System Sciences, 21(6), 3001-3024.

Staudinger, M., Stoelzle, M., Seeger, S., Seibert, J., Weiler, M., & **Stahl, K**. (2017). Catchment water storage variation with elevation. Hydrological Processes, 31(11), 2000-2015. doi:10.1002/hyp.11158

2016

Bachmair, S., **Stahl, K**., Collins, K., Hannaford, J., Acreman, M., Svoboda, M., Knutson, C., Smith, K., Wall, N., Fuchs, B., Crossman, N., Overton, I. (2016) Drought indicators revisited: the need for a wider consideration of environment and society. *Wiley Interdisciplinary Reviews: Water*. doi:10.1002/wat2.1154.

Bachmair, S., Svensson, C. , Hannaford, J., Barker, L. J., **Stahl, K**.: A quantitative analysis to objectively appraise drought indicators and model drought impacts. *Hydrol. Earth Syst. Sci*., 20(7), 2589–2609, doi:10.5194/hess-20-2589-2016, 2016

Blauhut, V., **Stahl, K**., Stagge, J. H., Tallaksen, L. M., De Stefano, L., and Vogt, J. (2016) Estimating drought risk across Europe from reported drought impacts, drought indices, and vulnerability factors, *Hydrol. Earth Syst. Sci*., 20, 2779-2800, doi:10.5194/hess-20-2779-2016.

Freudiger, D., Frielingsdorf, B., **Stahl, K**., Steinbrich, A., Weiler, M., Griessinger, N., & Seibert, J. (2016). The Potential of meteorological gridded datasets for hydrological modeling in alpine basins. *Hydrologie und Wasserbewirtschaftung*, *60*(6), 353-367.

Stahl, K., Kohn, I., Blauhut, V. , Urquijo, J., De Stefano, L., Acácio, V., Dias, S., Stagge, J. H., Tallaksen, L. M., Kampragou, E., Van Loon, A. F., Barker, L. J., Melsen, L. A., Bifulco, C., Musolino, D., de Carli, A. , Massarutto, A., Assimacopoulos, D., Van Lanen, H. A. J.: Impacts of European drought events: insights from an international database of text-based reports *Nat. Hazards Earth Syst. Sci*., 16, 801-819, doi:10.5194/nhess-16-801-2016

Van Loon, A. F., **Stahl, K**., Di Baldassarre, G., Clark, J., Rangecroft, S., Wanders, N., Gleeson, T., Van Dijk, A. I. J. M., Tallaksen, L. M., Hannaford, J., Uijlenhoet, R., Teuling, A. J., Hannah, D. M., Sheffield, J., Svoboda, M., Verbeiren, B., Wagener, T., and Van Lanen, H. A. J.: Drought in a human-modified world: reframing drought definitions, understanding, and analysis approaches, *Hydrol. Earth Syst. Sci*., 20, 3631-3650, doi:10.5194/hess-20-3631-2016, 2016.

BOOK CHAPTERS

Stahl, K. & Hisdal, H. (2. Edition in prep, 1. Edition from 2004): Chapter 2 Hydroclimatology of Drought and Chapter 11 (new) Drought Impacts. In: HYDROLOGICAL DROUGHT – Processes and Estimation Methods for Streamflow and Groundwater (edited by Tallaksen, L.M. and van Lanen, H.A.J. *Development in Water Sciences* no. 48. Elsevier Publ. The Netherlands.

Stahl K., Tallaksen L.M. and Hannaford J. (2019) Chapter 1.2 Recent Trends in Historical Drought. In: *Drought: Science and Policy* (edited by Ana Iglesias, Dionysis Assimacopoulos, and Henny A.J. Van Lanen). Series: Hydrometeorological extreme events. Wiley Blackwell. 1st Edition.

Naumann, G., **Stahl, K.** (2017) Drought Impacts *In: Science for disaster risk management 2017: knowing better and losing less.* Publications Office of the European Union.

Stahl, K. (2016) Kapitel 21: Hydrologie der Hochgebirge. In: Fohrer et al (Eds). Hydrologie. UTB.

COMMENTARIES, NAT. JOURNALS, PROCEEDINGS (SIMPLIFIED-REVIEW)

Siebert C, Blauhut V, **Stahl K** (2021) Das Dürrerisiko des Wasserkraftsektors in Baden-Württemberg. Wasserwirtschaft 6: 48-51.

Blauhut V, **Stahl K** and Falasca G (2020) Dürre und die öffentliche Wasserversorgung in Baden-Württemberg: Folgen, Umgang und Wahrnehmung. Wasserwirtschaft 11: 40-45.

Stahl, K., Vidal, J.-P., Hannaford, J., Tijdeman, E., Laaha, G., Gauster, T., and Tallaksen, L. M. (2020) The challenges of hydrological drought definition, quantification and communication: an interdisciplinary perspective, Proc. IAHS, 383, 291–295, https://doi.org/10.5194/piahs-383-291-2020.

Stoelzle, M., Staudinger, M., **Stahl, K.,** Weiler, M. (2020): Stress testing as complement to climate scenarios: recharge scenarios to quantify streamflow drought sensitivity, Proc. IAHS, 383, 43–50. https://doi.org/10.5194/piahs-383-43-2020

Weiler, M., Seibert, J., & **Stahl, K**. (2018). Magic components—why quantifying rain, snowmelt, and icemelt in river discharge is not easy. Invited Commentary. *Hydrological Processes*, *32*(1), 160-166. DOI: 10.1002/hyp.11361

Blauhut, V., **Stahl, K.** (2018) Risikomanagement von Dürren in Deutschland: von der Messung von Auswirkungen zur Modellierung. *Forum für Hydrologie und Wasserbewirtschaftung* 39.18: 203 - 213. Tagungsband.

Stahl, K., Kohn, I., Böhm, M., Freudiger, D., Gerlinger, K., Seibert, J., Weiler, M. (2017) Veränderungen der Abflusskomponenten aus Schnee- und Gletscherschmelze in Niedrigwassersituationen am Rhein. *Forum für Hydrologie und Wasserbewirtschaftung* 38.17: 217 - 226. Tagungsband.

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