

Curriculum vitae

Christian Stamm, Dr. sc. nat. ETHZ



Swiss Federal Institute of Aquatic Science and Technology (Eawag)
Dep. Environmental Chemistry
Ueberlandstr. 133
8600 Dübendorf, Switzerland

ORCID: 0000-0001-5888-6535;

<https://www.webofscience.com/wos/author/record/ABF-9581-2021>

<https://scholar.google.com/citations?hl=en&user=Qmf-fhkAAAAJ>

Education:

1984 - 1990 Studies in biology, University of Zurich, Diploma in Zoology
1994 - 1997 PhD in soil physics (Prof. Dr. H. Flühler), ETH Zurich

Professional experience:

Since 2023 Deputy director Eawag
Jan/Feb 2017 Visiting professor at the Water Institute, University of Waterloo (Canada)
2007 – 2022 Deputy head of the department of Environmental Chemistry at Eawag
2004 / 2005 Head a.i. of the Department „Water & Agriculture“
since 2002 Senior scientist at Eawag
2000 Short-term leave for experimental collaboration at Lincoln University,
Christchurch (NZ), (L. Condron, Agriculture and Life Sciences Division)
1999 – 2002 Oberassistent, Soil physics, ETH Zürich (50%)
1998 – 2001 Manager of the conference organization „Centro Stefano Franscini“ of ETH Zurich
on the Monte Verità (Ascona, Ticino, Switzerland; 1998: 100%, 1999 – 2001: 50%)
1993 – 1997 PhD in soil physics (ETH Zurich). („Rapid transport of phosphorus in drained
grassland soils“)
1992 / 1993 Freelance scientist, project on eutrophication of Lake Sempach (Lucerne,
Switzerland)
1990 – 1992 Collaborator at the private ecocenter „Schattweid“ (Wolhusen, Lucerne,
Switzerland). Project on buffer strips against nutrient input into vulnerable
ecosystems

Major Research Areas:

- Transdisciplinary approaches for fostering the science-policy dialogue
- Interdisciplinary approaches for developing scientific bases of sustainable agriculture and assessment of water quality
- Interdisciplinary research on ecological effects of micropollutants in aquatic ecosystems

- Transport of agrochemicals (herbicides, veterinary antibiotics, nutrients) from soils to (surface) water bodies

Major projects (starting/on-going):

- Sisal: Swiss Biosites for Sustainable Agriculture and Agroecology (Swiss Roadmap for Research Infrastructures; preparatory work starting in 2023, full implementation 2025 – 28)
- Climate change and aquatic biodiversity: Eawag-project funded by FOEN (collaborator, 2023 – 2026).
- Engage: Evidence-based dialogue on trade-offs in wicked societal problems (PI, Joint Initiative, ETH domain, 2023 – 2025)
- Trapego: Evidence-based transformation in pesticide governance (collaborator, SNF, 2021 – 2024)

Major projects in the past:

- Remediation of overfertilized grassland soils (1999 – 2002; partners: Soil Physics and Plant Nutrition groups, ETHZ)
- Microwave radiometry for soil moisture estimation (2000 – 2003; partners: Soil Physics ETHZ, Applied Physics, University of Bern)
- Modelling P transport at the catchment scale (2000 – 2003; partners: Soil Physics ETHZ, Swiss Federal Research Station for Agroecology and Agriculture Agroscope Reckenholz)
- Mobilization of P from grassland soils (2002 – 2003; partners: Soil Physics and Plant Nutrition groups at ETHZ)
- Fate and transport of veterinary sulfonamide antibiotics. Project within the National Research Programme 49 “Antibiotic Resistance”. (2003 – 2006).
- Predicting contributing areas for herbicide losses to surface waters (2004 – 2008).
- Realistic exposure scenarios for biocidal compounds in surface waters (Rexpo) (2006 – 2010).
- Site-adapted agriculture to minimize losses of herbicides to surface waters (2006 – 2011).
- Prediction of contributing areas for P-losses from agricultural land (2007 – 2009; co-investigator with V. Prasuhn, Agroscope Reckenholz-Tänikon) within COST Action 869.
- Pilot study on organic pollutants within the national long-term monitoring of Swiss rivers (NADUF) (2009 – 2010).
- Feasibility study for the prediction of contributing areas for diffuse pollution from agricultural land” (2009 – 2010; co-investigator with V. Prasuhn, Agroscope Reckenholz-Tänikon)
- Integrated River Water Quality Management” (iWaQa) within the National Research Programme 61 on Sustainable Water Management (2010 – 2013).
- Thematic synthesis on water conflicts in the Swiss Water Sector within the National Research Programme 61 on Sustainable Water Management (2013 – 2014).
- Zukunftsfähige, gewässerschonende Landwirtschaft (AProWa) (Water-friendly agriculture for the future) for the Federal Office for Agriculture (FOAG) (PI, 2012 – 2015)
- CrossWater: Transboundary micropollution regulation in Europe (Co-PI, SNF, 2013 – 2017)
- PESTROP: Environmental exposures, health effects and institutional determinants of pesticide use in two tropical settings (Co-PI, SNIS/Eawag, 2015 – 2018)
- MS²Field: Development and testing of a mobile high-resolution massspec instrument. (Co-PI, Eawag, 2019 – 2020).
- Shortcut: Relevance of pesticide transport through hydraulic shortcuts in rural landscapes (PI, FOEN, 2016 – 2020)

- NAWA Flowpath: In-depth data analysis of existing monitoring data to identify sources and flowpaths of pesticides to streams (PI, FOEN, 2019 – 2021)
- MachTrend: Feasibility study for Evaluating the National Pesticide Action Plan (PI, FOEN, 2019 – 2021)
- EcolImpact: Influence of micropollutants on stream ecosystems (PI, interdisciplinary Eawag-project, 2012 – 2016; 2nd phase: 2019 –2022)

Major teaching activities:

- ETHZ: Master course on “Agriculture and Water Quality” (since 2007)
- University Tübingen, Geographical Institute: Master course “Bodenhydrologische Modellierung“ (2007, 2008)

Other Professional Activities

- International Phosphorus Workshop IPW9, ETH Zürich, 2019, Scientific & organizing committee (member).
- Topical editor of Hydrology and Earth System Sciences (HESS, since 2014)
- Associate editor of the Journal Environmental Quality (2009 – 2014, 2014 Citation of Excellence for Associate Editor)
- Member of the Steering Board of the World Food System Center (WFSC) at ETH Zürich.
- Reviewer of different scientific journals (Agronomy, ES&T, Journal of Hydrology, Science, WRR etc.)
- President of the foundation “Praktischer Umweltschutz Schweiz (Pusch)” (since 2005)
- Professional Associations: American Geophysical Union (AGU), Bodenkundliche Gesellschaft der Schweiz (BGS), Deutsche Bodenkundliche Gesellschaft (DBG), European Geophysical Union (EGU), Schweizerische Gesellschaft für Hydrologie und Limnologie (SGHL)
- Member of the several national expert groups and panels (e.g., Swiss strategic planning group for monitoring surface waters, National Pesticide Action Plan etc.)
- Vice president of glatec, the non-profit business incubator for Empa and Eawag start-ups

PhD students:

- Ammann, L., 2016 – 2020, with F. Fenicia, P. Reichert (Eawag)
- Doppler, T., 2007 - 2013, with P. Burlando (ETHZ)
- Frey, M., 2004 - 2009, with P. Reichert (Eawag/ETHZ)
- Gomides Freitas, L., 2000 - 2005, with S. Müller (formerly Eawag, now SAEFL) & R. Schwarzenbach (Eawag / ETHZ)
- Hahn, C., 2007 – 2011, with R. Schulin (ETHZ) & V. Prasuhn (Agroscope Reckenholz)
- Lazzarotto, P., 2000 – 2004, with H. Flühler (ETHZ) & V. Prasuhn (Agroscope Reckenholz)
- Leu, C., 1999 – 2003, with S. Müller (formerly Eawag, SAEFL) & R. Schwarzenbach (Eawag / ETHZ)
- Munz, N., 2014 – 2018, with J. Hollender (Eawag/ETHZ)
- Schneeberger, K. 2000 – 2003, with H. Flühler (ETHZ) & C. Mätzler (University of Bern)
- Schönenberger, U., 2016 – 2020, with M. Maurer (Eawag/ETHZ)
- Staudacher, P., 2016 – 2021, with R. Eggen (Eawag/ETHZ)
- Stoob, K., 2001 – 2005, with S. Müller (formerly Eawag, SAEFL) & R. Schwarzenbach (Eawag / ETHZ)
- Weiss, F., 2014 – 2021, with R. Eggen (Eawag/ETHZ)
- Wittmer, I., 2006 - 2010, with H.-P. Bader and P. Reichert (Eawag / ETHZ)

Publication list Christian Stamm (last update: 10.8. 2024)

In reviewed journals (H factor 41, web of science):

Quaglia, G., Joris, I., Desmet, N., Koopmans, K., Nelissen, V., Boëne, W., ... Van De Vijver, E. (2024). Mitigating glyphosate levels in surface waters: long-term assessment in an agricultural catchment in Belgium. *Journal of Environmental Management*, 359, 121046 (13 pp.). <https://doi.org/10.1016/j.jenvman.2024.121046>

Chow, R.; Spycher, S.; Scheidegger, R.; Doppler, T.; Dietzel, A.; Fenicia, F.; Stamm, C. (2023) Methods comparison for detecting trends in herbicide monitoring time-series in streams, *Science of the Total Environment*, 891, 164226 (11 pp.), doi:10.1016/j.scitotenv.2023.164226

Lafuente, E., Carles, L., Walser, J. C., Giulio, M., Wullschleger, S., Stamm, C., & Räsänen, K. (2023). Effects of anthropogenic stress on hosts and their microbiomes: treated wastewater alters performance and gut microbiome of a key detritivore (*Asellus aquaticus*). *Evolutionary Applications*, <https://doi.org/10.1111/eva.13540>.

la Cecilia, D., M. Tom, C. Stamm & D. Odermatt (2023) Pixel-based mapping of open field and protected agriculture using constrained Sentinel-2 data. *ISPRS Open Journal of Photogrammetry and Remote Sensing*, 8, 100033.

Fabre, C., T. Doppler, R. Chow, F. Fenicia, R. Scheidegger, A. Dietzel & C. Stamm (2023) Challenges of spatially extrapolating aquatic pesticide pollution for policy evaluation. *Science of The Total Environment*, 875, 162639.

La Cecilia, D., Dax, A., Ehmann, H., Koster, M., Singer, H., & Stamm, C. (2023). Continuous high-frequency pesticide monitoring in a small tile-drained agricultural stream to reveal diel concentration fluctuations in dry periods. *Frontiers in Water, Sec. Environmental Water Quality*, <https://doi.org/10.3389/frwa.2022.1062198>.

Weiss, F. T.; Ruepert, C.; Echeverría-Sáenz, S.; Eggen, R. I. L.; Stamm, C. (2023) Agricultural pesticides pose a continuous ecotoxicological risk to aquatic organisms in a tropical horticulture catchment, *Environmental Advances*, 11, 100339 (10 pp.), doi:10.1016/j.envadv.2022.100339.

Burdon, F. J., Reyes, M., Schönenberger, U., Räsänen, K., Tiegs, S. D., Eggen, R. I. L., & Stamm, C. (2022). Environmental context determines pollution impacts on ecosystem functioning. *Oikos*, e09131. doi:<https://doi.org/10.1111/oik.09131>.

Hofmann, B., Ingold, K., Stamm, C., Ammann, P., Eggen, R. I. L., Finger, R., Fuhrmann, S., Lienert, J., Mark, J., McCallum, C., Probst-Hensch, N., Reber, U., Tamm, L., Wiget, M., Winkler, M. S., Zachmann, L., Hoffmann, S. (2022). Barriers to evidence use for sustainability: Insights from pesticide policy and practice. *Ambio*. doi:10.1007/s13280-022-01790-4.

Chow, R., Curchod, L., Davies, E., Veludo, A. F., Oltramare, C., Dalvie, M. A., Stamm, C., Rössli, M., Fuhrmann, S. (2023). Seasonal drivers and risks of aquatic pesticide pollution in drought and post-

drought conditions in three Mediterranean watersheds. *Science of the Total Environment*, 858, 159784. doi:<https://doi.org/10.1016/j.scitotenv.2022.159784>.

Carles, L., Wullschleger, S., Joss, A., Eggen, R. I. L., Schirmer, K., Schuwirth, N., Stamm, C., Tlili, A. (2022). Wastewater microorganisms impact microbial diversity and important ecological functions of stream periphyton. *Water Research*, 225, 119119. doi:<https://doi.org/10.1016/j.watres.2022.119119>.

Oltramare, C., F. T. Weiss, P. Staudacher, O. Kibirango, A. Atuhaire, and C. Stamm. 2022. Pesticides monitoring in surface water of a subsistence agricultural catchment in Uganda using passive samplers. *Environ Sci Pollut Res* (2022). <https://doi.org/10.1007/s11356-022-22717-2>.

Galli, A., M. S. Winkler, T. Doanthu, S. Fuhrmann, T. Huynh, E. Rahn, C. Stamm, P. Staudacher, T. Van Huynh and G. Loss (2022). "Assessment of pesticide safety knowledge and practices in Vietnam: A cross-sectional study of smallholder farmers in the Mekong Delta." *Journal of Occupational and Environmental Hygiene*: 1-15, doi: 10.1080/15459624.2022.2100403.

Brosse, M.; Benateau, S.; Gaudard, A.; Stamm, C.; Altermatt, F. (2022) The importance of indirect effects of climate change adaptations on alpine and pre-alpine freshwater systems, *Ecological Solutions and Evidence*, 3(1), e12127 (8 pp.), doi:10.1002/2688-8319.12127.

Schönenberger, U. T.; Beck, B.; Dax, A.; Vogler, B.; Stamm, C. (2022) Pesticide concentrations in agricultural storm drainage inlets of a small Swiss catchment, *Environmental Science and Pollution Research*, doi:10.1007/s11356-022-18933-5.

Wiedemann, R., Stamm, C., & Staudacher, P. (2022). Participatory knowledge integration to promote safe pesticide use in Uganda *Environmental Science and Policy*, 128, 154 - 164.

Tamminen, M., Spaak, P., Tlili, A., Eggen, R. I. L., Stamm, C., & Räsänen, K. (2022). Wastewater constituents impact biofilm microbial community in receiving streams. *Science of the Total Environment*, 807, 151080. doi:doi.org/10.1016/j.scitotenv.2021.151080.

La Cecilia, D., Dax, A., Ehmann, H., Koster, M., Singer, H., & Stamm, C. (2021). Continuous high-frequency pesticide monitoring to observe the unexpected and the overlooked. *Water Research X*, 13, 11 p. . doi:<https://doi.org/10.1016/j.wroa.2021.100125>

Schönenberger, U., Simon, J., & Stamm, C. (2021). Are spray drift losses to agricultural roads more important for surface water contamination than direct drift to surface waters? *Science of The Total Environment*, in press. doi:doi.org/10.1016/j.scitotenv.2021.151102

Staudacher, P., Brugger, C., Winkler, M. S., Stamm, C., Farnham, A., Mubeezi, R., . . . Günther, I. (2021). What agro-input dealers know, sell and say to smallholder farmers about pesticides: A mystery shopping and KAP analysis in Uganda. *Environmental Health*, 20:100. doi:doi.org/10.1186/s12940-021-00775-2

Ammann, L., Stamm, C., Fenicia, F., & Reichert, P. (2021). Quantifying the uncertainty of a conceptual herbicide transport model with time-dependent, stochastic parameters. *Water Resources Research*, 57(8), e2020WR028311 (27 pp.). <https://doi.org/10.1029/2020WR028311>

von Arb, C.; Stoll, S.; Frossard, E.; Stamm, C.; Prasuhn, V. (2021) The time it takes to reduce soil legacy phosphorus to a tolerable level for surface waters: what we learn from a case study in the catchment of Lake Baldegg, Switzerland, *Geoderma*, **403**, 115257 (12 pp.), doi:10.1016/j.geoderma.2021.115257, Institutional Repository

Stamm, C.; Binder, C. R.; Frossard, E.; Haygarth, P. M.; Oberson, A.; Richardson, A. E.; Schaum, C.; Schoumans, O.; Udert, K. M. (2021) Towards circular phosphorus: the need of inter- and transdisciplinary research to close the broken cycle, *Ambio*, doi:10.1007/s13280-021-01562-6, Institutional Repository

Stravs, M. A.; Stamm, C.; Ort, C.; Singer, H. (2021) Transportable automated HRMS platform "mS2field" enables insights into water-quality dynamics in real time, *Environmental Science and Technology Letters*, **8**(5), 373-380, doi:10.1021/acs.estlett.1c00066, Institutional Repository

Schönenberger, U.; Stamm, C. (2021) Hydraulic shortcuts increase the connectivity of arable land areas to surface waters, *Hydrology and Earth System Sciences*, **25**(4), 1727-1746, doi:10.5194/hess-25-1727-2021.

Lee, J.; Ju, F.; Maile-Moskowitz, A.; Beck, K.; Maccagnan, A.; McArdell, C. S.; Dal Molin, M.; Fenicia, F.; Vikesland, P.; Pruden, A.; Stamm, C.; Bürgmann, H. (2021) Unraveling the riverine antibiotic resistome: the downstream fate of anthropogenic inputs, *Water Research*, **197**, 117050 (12 pp.), doi:10.1016/j.watres.2021.117050.

Staudacher, P., S. Fuhrmann, A. Farnham, A. M. Mora, A. Atuhaire, C. Niwagaba, C. Stamm, R. I. Eggen, and M. S. Winkler. 2020. Comparative Analysis of Pesticide Use Determinants Among Smallholder Farmers From Costa Rica and Uganda. *Environmental Health Insights* **14**:1178630220972417.

Arlos, M., A. Focks, J. Hollender, and C. Stamm. 2020. Improving risk assessment by predicting the survival of field gammarids exposed to dynamic pesticide mixtures. *Environmental Science & Technology* **54**:12383–12392.

Chow, R., T. Doppler, R. Scheidegger, A. Dietzel, F. Fenicia and C. Stamm (2020). A review of long-term pesticide monitoring studies to assess surface water quality trends. *Water Research X*. **9**: 100064.

Burdon, F. J., Y. Bai, M. Reyes, M. Tamminen, P. Staudacher, S. Mangold, H. Singer, K. Räsänen, A. Joss, S. Tiegs, J. Jokela, R. I. L. Eggen and C. Stamm (2020). Stream microbial communities and ecosystem functioning show complex responses to multiple stressors in wastewater. *Global Change Biology* **2020**; 00: 1– 20. <https://doi.org/10.1111/gcb.15302>.

Ammann, L., T. Doppler, C. Stamm, P. Reichert and F. Fenicia (2020). Characterizing fast herbicide transport in a small agricultural catchment with conceptual models. *Journal of Hydrology*, **586**: 124812 (124815 pp.).

Creusot, N., C. Casado-Martinez, A. Chiaia-Hernandez, K. Kiefer, B. J. D. Ferrari, Q. Fu, N. Munz, C. Stamm, A. Tlili and J. Hollender (2020). Retrospective screening of high-resolution mass spectrometry archived digital samples can improve environmental risk assessment of emerging

contaminants: a case study on antifungal azoles. *Environment International* 139: 105708 (105710 pp.).

Arlos, M., F. Schürz, Q. Fu, B. Lauper, C. Stamm and J. Hollender (2020). Coupling river concentration simulations with a toxicokinetic model effectively predicts the internal concentrations of wastewater-derived micropollutants in field gammarids. *Environmental Science & Technology* 54: 1710-1719.

Curchod, L., Oltramare, C., Junghans, M., Stamm, C., Dalvie, M. A., Rössli, M., & Fuhrmann, S. 2020. Temporal variation of pesticide mixtures in rivers of three agricultural watersheds during a major drought in the Western Cape, South Africa. *Water Research (X)*, 6, 100039 (12 pp.), doi:10.1016/j.wroa.2019.100039.

Mansfeldt, C., Deiner, K., Mächler, E., Fenner, K., Eggen, R. I. L., Stamm, C., . Schönenberger, U. Walser, J.-C., Altermatt, F., 2020. Microbial community shifts in streams receiving treated wastewater effluent. *Science of The Total Environment*. 709, 135727 (12 pp.), doi:10.1016/j.scitotenv.2019.135727

Kienle, C., H. P. Singer, A. Schiffereli, E. Vermeirssen, C. Stamm, and I. Werner., 2019. Effects of treated wastewater on the ecotoxicity of small streams – unravelling the contribution of chemicals causing effects. *PLoS ONE*. 14, e0226278 (30 pp.), doi:10.1371/journal.pone.0226278.

Lavrieux, M., Meusburger, K., Birkholz, A., Wiesenberg, G., Stamm, C. & Alewell, C. (2019) Plants or bacteria? 130 yrs of mixed imprints in Baldegg Lake sediments (Switzerland), as revealed by compound-specific isotope analysis (CSIA) and biomarkers analysis. *Biogeosciences*, **16**, 2131–2146.

Fuhrmann, S., M. S. Winkler, P. Staudacher, F. T. Weiss, C. Stamm, R. I. L. Eggen, C. H. Lindh, J. A. Menezes-Filho, J. M. Baker, F. Ramírez, R. Gutiérrez and A. M. Mora (2019). "Exposure to pesticides and health effects in farm owners and workers from conventional and organic agricultural farms in Costa Rica: a study protocol." *JMIR Research Protocols*, doi: 10.2196/10914.

Burdon, F. J., N. A. Munz, M. Reyes, A. Focks, A. Joss, K. Räsänen, F. Altermatt, R. I. L. Eggen and C. Stamm (2019). "Agriculture versus wastewater pollution as drivers of macroinvertebrate community structure in streams." *Science of The Total Environment*, **659**: 1256–1265.

Schuwirth, N., M. Honti, I. Logar and C. Stamm (2018). "Multi-criteria decision analysis for integrated water quality assessment and management support." *Water Research (X)* **1**.

Munz, N. A., Q. Fu, C. Stamm, and J. Hollender. 2018. Internal concentrations uncover bioaccumulation of polar organic micropollutants in gammarids caught in wastewater-impacted streams and neonicotinoids as primary drivers of toxic pressure *Environmental Science & Technology*, doi: 10.1021/acs.est.8b03632.

Honti, M., F. Bischoff, A. Moser, C. Stamm, S. Baranya and K. Fenner (2018). "Relating degradation of pharmaceutical active ingredients in a stream network to degradation in water-sediment simulation tests." *Water Resources Research*: doi.org/10.1029/2018WR023592.

Moser, A., D. Wemyss, R. Scheidegger, F. Fenicia, M. Honti, and C. Stamm. Modelling biocide and herbicide concentrations in catchments of the Rhine basin. *Hydrology and Earth System Sciences* **22**:4229–4249, doi.org/10.5194/hess-22-4229-2018, 2018.

Liu, W., Yang, H., Ciais, P., Stamm, C., Zhao, X., Williams, J. R., Abbaspour, K. C., and Schulin, R.: Integrative crop-soil-management modelling to assess global phosphorus losses from major crop cultivations, *Global Biogeochemical Cycles*, **52**, 1074–1086, doi.org/10.1029/2017GB005849, 2018.

Gramlich, A., Stoll, S., Stamm, C., Walter, T., Prasuhn, V., Effects of artificial land drainage on hydrology, nutrient and pesticide fluxes from agricultural fields - A review. *Agric. Ecosyst. Environ.*, **266**, 84 – 99, 2018.

Salo, T., Räsänen, K., Stamm, C., Burdon, F. J., and Seppälä, O.: Simultaneous exposure to a pulsed and a prolonged anthropogenic stressor can alter consumer multifunctionality, *Oikos*, DOI: 10.1111/oik.05310, 2018.

Spycher, S., Mangold, S., Doppler, T., Junghans, M., Wittmer, I., Stamm, C. & Singer, H. Pesticide risks in small streams – How to get as close as possible to the stress imposed on aquatic organisms. *Environmental Science & Technology*, **52**, 4526-4535, 2018.

Ingold, K., Bader, H.-P., Herzog, L., Metz, F., Moser, A., Scheidegger, R. & Stamm, C. Misfit between physical affectedness and regulatory embeddedness of drinking water suppliers along the Rhine River. *Global Environmental Change*, **48**, 136 – 150, 2018.

Salo, T., Stamm, C., Burdon, F. J., Räsänen, K., and Seppälä, O.: Resilience to heat waves in the aquatic snail *Lymnea stagnalis*: Additive and interactive effects with micropollutants, *Freshwater Biology*, 1 - 16, 10.1111/fwb.12999, 2017.

Tang, T., Stamm, C., van Griensven, A., Seuntjens, P., and Bronders, J.: Hysteresis and parent-metabolite analyses unravel characteristic pesticide transport mechanisms in a mixed land use catchment, *Wat. Res.*, **124**, 663-672, 2017.

Honti, M., Rieckermann, J., Schuwirth, N., & Stamm, C. (2017). Can integrative catchment management mitigate future water quality issues caused by climate change and socio-economic development? *Hydrological and Earth System Sciences*, **21**, 1593–1609. doi:doi:10.5194/hess-21-1593-2017

Munz, N., L. Melo, M. Reyes, U. Schönenberger, H. Singer, B. Spycher, D. de Zwart, M. Junghans, J. Hollender and C. Stamm. Pesticides drive risk of micropollutants in wastewater-impacted streams during low flow conditions. *Water Research*, **110**, 366–377, 2017.

Neale, P. A., N. A. Munz, S. Aït-Aïssa, R. Altenburger, F. Brion, W. Busch, B. I. Escher, K. Hilscherová, C. Kienle, J. Novák, T.-B. Seiler, Y. Shao, C. Stamm and J. Hollender. Integrating chemical analysis and bioanalysis to evaluate the contribution of wastewater effluent on the micropollutant burden in small streams. *The Science of the Total Environment* **576**, 2017, 785–795.

Stamm, C., Räsänen, K., Burdon, F.J., Altermatt, F., Jokela, J., Joss, A., Ackermann, M. & Eggen, R.I.L., Unraveling the impacts of micropollutants in aquatic ecosystems: cross-disciplinary studies at the interface of large-scale ecology. *Advances in Ecological Research*, **24**, **2016**, 183 - 223.

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Wittmer, I.K., Bader, H.-P., Scheidegger, R. & Stamm, C..REXPO: a catchment model designed to understand and simulate the loss dynamics of plant protection products and biocides from agricultural and urban areas. *J. Hydrol.* **2016**, 533, 486 – 514.

Yapo, R.I., Mambo, V., Alder, A.C., Ohou, M.J., Ligban, R., Dao, D., Stamm, C., Bonfoh, B., Caractérisation saisonnière des eaux de puits à usage maraîchère et domestique de Korhogo (Côte d'Ivoire). *International Journal of Biological and Chemical Sciences* 10, 1433-1449, 2016.

Gassmann, M.; Olsson, O.; Stamm, C.; Weiler, M.; Kümmerer, K. Physico-chemical characteristics affect the spatial distribution of pesticide and transformation product loss to an agricultural brook. *Sci. Total Environ.* **2015**, 532, 733-743.

Moschet, C.; Vermeirssen, E.L.M.; Singer, H.; Stamm, C.; Hollender, J. Evaluation of in-situ calibration of Chemcatcher passive samplers for 322 micropollutants in agricultural and urban affected rivers. *Water Res.* **2015**, 71, 306-317.

Schuwirth, N.; Kattwinkel, M.; Stamm, C. How stressor specific are trait-based ecological indices for ecosystem management? *Sci. Total Environ.* **2015**, 505, 565-572.

Sharpley, A.N.; Bergström, L.; Aronsson, H.; Bechmann, M.; Bolster, C.H.; Börling, K.; Djodjic, F.; Jarvie, H.P.; Schoumans, O.F.; Stamm, C.; Tonderski, K.S.; Ulén, B.; Uusitalo, R.; Withers, P.J.A. Future agriculture with minimized phosphorus losses to waters: Research needs and direction. *Ambio* **2015**, 44 (2 (Suppl.)), 163-179.

Stamm, C.; Eggen, R.I.L.; Hering, J.G.; Hollender, J.; Joss, A.; Schärer, M. Micropollutant removal from wastewater: Facts and decision-making despite uncertainty. *Environ. Sci. Technol.* **2015**, 49 (11), 6374-6375.

Doppler, T.; Honti, M.; Zihlmann, U.; Weisskopf, P.; Stamm, C. Validating a spatially distributed hydrological model with soil morphology data. *Hydrol. Earth Syst. Sci.* **2014**, 18 (9), 3481-3498.

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