

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: 22.7.2025)

In reviewed journals (H factor 43, web of science):

Nölting, B.; Kopfmüller, J.; Zimmermann, A. B.; Bernert, P.; Barth, M.; Becker, S.; Fischer, D.; Molitor, H.; Pechlaner, H.; Schneider, F.; Schweizer, P.-J.; Stamm, C.; Wäger, P.; Wilhelm, R. (2025) Wissenschaftsorganisationen als Impulsgeber einer Nachhaltigkeitstransformation, *GAIA: Ecological Perspectives for Science and Society*, 34(2), 83-87, doi:10.14512/gaia.34.2.4.

Davies, E.; Stamm, C.; Fuhrmann, S.; Chow, R. (2024) Mixed pesticide sources identified by using wastewater tracers in rivers of South African agricultural catchments, *Science of the Total Environment*, 956, 177206 (15 pp.), doi:10.1016/j.scitotenv.2024.177206.

Quaglia, G., Joris, I., Desmet, N., Koopmans, K., Nelissen, V., Boënné, 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., Wulschleger, 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., Rösli, 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 Baldeg, 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., Rösli, 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., Wiesenberger, 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 Schulín, 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.
- Burdon, F.J., Reyes, M., Alder, A.C., Joss, A., Ort, C., Räsänen, K., Jokela, J., Eggen, R.I.L. & Stamm, C. Environmental context and disturbance influence differing trait-mediated community responses to wastewater pollution in streams. *Ecology and Evolution*, **2016**, 6, 17 p.; doi: 10.1002/ece3.2165.
- 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.
- Doppler, T.; Lück, A.; Camenzuli, L.; Krauss, M.; Stamm, C. Critical source areas for herbicides can change location depending on rain events. *Agric. Ecosyst. Environ.* **2014**, 192, 85-94.

Eggen, R.I.L.; Hollender, J.; Joss, A.; Schärer, M.; Stamm, C. Reducing the discharge of micropollutants in the aquatic environment: The benefits of upgrading wastewater treatment plants. *Environ. Sci. Technol.* **2014**, *48* (14), 7683-7689.

Hahn, C.; Prasuhn, V.; Stamm, C.; Milledge, D.G.; Schulin, R. A comparison of three simple approaches to identify critical areas for runoff and dissolved reactive phosphorus losses. *Hydrol. Earth Syst. Sci.* **2014**, *18* (8), 2975-2991.

Honti, M.; Scheidegger, A.; Stamm, C. The importance of hydrological uncertainty assessment methods in climate change impact studies. *Hydrol. Earth Syst. Sci.* **2014**, *18* (8), 3301-3317.

Moschet, C.; Wittmer, I.; Simovic, J.; Junghans, M.; Piazzoli, A.; Singer, H.; Stamm, C.; Leu, C.; Hollender, J. How a complete pesticide screening changes the assessment of surface water quality. *Environ. Sci. Technol.* **2014**, *48* (10), 5423-5432.

Robinson, C.T.; Schuwirth, N.; Baumgartner, S.; Stamm, C. Spatial relationships between land-use, habitat, water quality and lotic macroinvertebrates in two Swiss catchments. *Aquat. Sci.* **2014**, *76* (3), 375-392.

Stamm, C.; Jarvie, H.P.; Scott, T. What's more important for managing phosphorus: Loads, concentrations or both? *Environ. Sci. Technol.* **2014**, *48* (1), 23-24.

Gassmann, M.; Stamm, C.; Olsson, O.; Lange, J.; Kümmerer, K.; Weiler, M. Model-based estimation of pesticides and transformation products and their export pathways in a headwater catchment. *Hydrol. Earth Syst. Sci.* **2013**, *17*, 5213-5228.

Hahn, C.; Prasuhn, V.; Stamm, C.; Lazzarotto, P.; Evangelou, M.W.H.; Schulin, R. Prediction of dissolved reactive phosphorus losses from small agricultural catchments: Calibration and validation of a parsimonious model. *Hydrol. Earth Syst. Sci.* **2013**, *17* (10), 3679-3693.

Honti, M.; Stamm, C.; Reichert, P. Integrated uncertainty assessment of discharge predictions with a statistical error model. *Water Resour. Res.* **2013**, *49* (8), 4866-4884.

Speiser, B.; Stolze, M.; Oehen, B.; Gessler, C.; Weibel, F.P.; Bravin, E.; Kilchenmann, A.; Widmer, A.; Charles, R.; Lang, A.; Stamm, C.; Triloff, P.; Tamm, L. Sustainability assessment of GM crops in a Swiss agricultural context. *Agron. Sustain. Dev.* **2013**, *33* (1), 21-61.

Doppler, T.; Camenzuli, L.; Hirzel, G.; Krauss, M.; Lück, A.; Stamm, C. Spatial variability of herbicide mobilisation and transport at catchment scale: Insights from a field experiment. *Hydrol. Earth Syst. Sci.* **2012**, *16* (7), 1947-1967.

Hahn, C.; Prasuhn, V.; Stamm, C.; Schulin, R. Phosphorus losses in runoff from manured grassland of different soil P status at two rainfall intensities. *Agric. Ecosyst. Environ.* **2012**, *153* (15 June 2012), 65-74.

Hering, J.G.; Hoehn, E.; Klink, A.; Maurer, M.; Peter, A.; Reichert, P.; Robinson, C.T.; Schirmer, K.; Schirmer, M.; Stamm, C.; Wehrli, B. Moving targets, long-lived infrastructure, and increasing

needs for integration and adaptation in water management: An illustration from Switzerland. *Environ. Sci. Technol.* **2012**, *46* (1), 112-118.

Ashauer, R.; Wittmer, I.; Stamm, C.; Escher, B.I. Environmental risk assessment of fluctuating diazinon concentrations in an urban and agricultural catchment using toxicokinetic-toxicodynamic modeling. *Environ. Sci. Technol.* **2011**, *45* (22), 9783-9792.

Frey, M.P.; Stamm, C.; Schneider, M.K.; Reichert, P. Using discharge data to reduce structural deficits in a hydrological model with a Bayesian inference approach and the implications for the prediction of critical source areas. *Water Resour. Res.* **2011**, *47* (12), W12529 (18 pp).

Wittmer, I.K.; Scheidegger, R.; Bader, H.P.; Singer, H.; Stamm, C. Loss rates of urban biocides can exceed those of agricultural pesticides. *Sci. Total Environ.* **2011**, *409* (5), 920-932.

Wittmer, I.K.; Scheidegger, R.; Stamm, C.; Gujer, W.; Bader, H.P. Modelling biocide leaching from facades. *Water Res.* **2011**, *45* (11), 3453-3460.

Götz, C.W.; Stamm, C.; Fenner, K.; Singer, H.; Schärer, M.; Hollender, J. Targeting aquatic microcontaminants for monitoring: Exposure categorization and application to the Swiss situation. *Environ. Sci. Pollut. R.* **2010**, *17* (2), 341-354.

Hanke, I.; Wittmer, I.; Bischofberger, S.; Stamm, C.; Singer, H. Relevance of urban glyphosate use for surface water quality. *Chemosphere* **2010**, *81* (3), 422-429.

Leu, C.; Schneider, M.K.; Stamm, C. Estimating catchment vulnerability to diffuse herbicide losses from hydrograph statistics. *J. Environ. Qual.* **2010**, *39* (4), 1441-1450.

Wittmer, I.K.; Bader, H.P.; Scheidegger, R.; Singer, H.; Lück, A.; Hanke, I.; Carlsson, C.; Stamm, C. Significance of urban and agricultural land use for biocide and pesticide dynamics in surface waters. *Water Res.* **2010**, *44* (9), 2850-2862.

Frey, M.; Schneider, M.K.; Dietzel, A.; Reichert, P.; Stamm, C. Predicting critical source areas for diffuse herbicide losses to surface waters: Role of connectivity and boundary conditions. *J. Hydrol.* **2009**, *365* (1-2), 23-36.

Holländer, H.M.; Blume, T.; Bormann, H.; Buytaert, W.; Chirico, G.B.; Exbrayat, J.F.; Gustafsson, D.; Hölzel, ; Kraft, P.; Stamm, C.; Stoll, S.; Blöschl, G.; Flühler, H. Comparative predictions of discharge from an artificial catchment (Chicken Creek) using sparse data. *Hydrol. Earth Syst. Sci.* **2009**, *13* (11), 2069-2094.

Siber, R.; Stamm, C.; Reichert, P. Modeling potential herbicide loss to surface waters on the Swiss plateau. *J. Environ. Manage.* **2009**, *91* (1), 290-302.

Freitas, L.G.; Singer, H.P.; Müller, S.R.; Schwarzenbach, R.P.; Stamm, C. Source area effects on herbicide losses to surface waters-A case study in the Swiss Plateau. *Agric. Ecosyst. Environ.* **2008**, *128* (3), 177-184.

Larsbo, M.; Fenner, K.; Stoob, K.; Burkhardt, M.; Abbaspour, K.C.; Stamm, C. Simulating sulfadimidine transport in surface runoff and soil at the microplot and field scale. *J. Environ. Qual.* **2008**, *37* (3), 788-797.

Stamm, C.; Alder, A.C.; Fenner, K.; Hollender, J.; Krauss, M.; McArdell, C.S.; Ort, C.; Schneider, M.K. Spatial and temporal patterns of pharmaceuticals in the aquatic environment: A review. *Geography Compass* **2008**, *2* (3), 920-955.

Burkhardt, M. and Stamm, C. Depth distribution of sulfonamide antibiotics in pore water of an undisturbed loamy grassland soil. *J. Environ. Qual.* **2007**, *36* (2), 588-596.

Kahle, M. and Stamm, C. Sorption of the veterinary antimicrobial sulfathiazole to organic materials of different origin. *Environ. Sci. Technol.* **2007**, *41* (1), 132-138.

Kahle, M., and Stamm, C. Time and pH-dependent sorption of the veterinary antibiotic sulfathiazole to clay minerals and ferrihydrite. *Chemosphere*, **2007**, *68*, 1224 - 1231.

Stoob, K., Singer, H. P., Mueller, S. R., Schwarzenbach, R., and Stamm, C. Dissipation and transport of veterinary sulfonamides after manure application to grassland in a small catchment. *Environmental Science and Technology* **2007**, *41*, 7349-7355.

Schärer, M.; Stamm, C.; Vollmer, T.; Frossard, E.; Oberson, A.; Flühler, H.; Sinaj, S. Reducing phosphorus losses from over-fertilized grassland soils proves difficult in the short term. *Soil Use Manage.* **2007**, *23* (SUPPL. 1), 154-164.

Schneider, M.K.; Brunner, F.; Hollis, J.M.; Stamm, C. Towards a hydrological classification of European soils: Preliminary test of its predictive power for the base flow index using river discharge data. *Hydrol. Earth Syst. Sci.* **2007**, *11* (4), 1501-1513.

Schneider, M.K.; Stamm, C.; Fenner, K. Selecting scenarios to assess exposure of surface waters to veterinary medicines in Europe. *Environ. Sci. Technol.* **2007**, *41* (13), 4669-4676.

Chèvre, N.; Loepfe, C.; Singer, H.P.; Stamm, C.; Fenner, K.; Escher, B.I. Including mixtures in the determination of water quality criteria for herbicides in surface water. *Environ. Sci. Technol.* **2006**, *40* (2), 426-435.

Lazzarotto, P.; Stamm, C.; Prasuhn, V.; Flühler, H. A parsimonious soil-type based rainfall-runoff model simultaneously tested in four small agricultural catchments. *J. Hydrol.* **2006**, *321* (1-4), 21-38.

Schärer, M.; Vollmer, T.; Frossard, E.; Stamm, C.; Flühler, H.; Sinaj, S. Effect of water composition on phosphorus concentration in runoff and water-soluble phosphate in two grassland soils. *Eur. J. Soil Sci.* **2006**, *57* (2), 228-234.

Stoob, K.; Singer, H.P.; Stettler, S.; Hartmann, N.; Müller, S.R.; Stamm, C. Exhaustive extraction of sulfonamide antibiotics from aged agricultural soils using pressurized liquid extraction. *J. Chromatogr. A* **2006**, *1128* (1-2), 1-9.

Burkhardt, M.; Stamm, C.; Waul, C.; Singer, H.P.; Müller, S.R. Surface runoff and transport of sulfonamide antibiotics and tracers on manured grassland. *Journal of Environmental Quality* **2005**, *34*, 1363-1371.

Lazzarotto, P.; Prasuhn, V.; Butscher, E.; Crespi, C.; Flühler, H.; Stamm, C. Phosphorus export dynamics from two Swiss grassland catchments. *J. Hydrol.* **2005**, *304* (1-4), 139-150.

Leu, C.; Singer, H.P.; Müller, S.R.; Schwarzenbach, R.P.; Stamm, C. Comparison of atrazine losses in three small headwater catchments. *J. Environ. Qual.* **2005**, *34* (5), 1873-1882.

Leu, C.; Singer, H.P.; Stamm, C.; Müller, S.R.; Schwarzenbach, R.P. Simultaneous assessment of sources, processes, and factors influencing herbicide losses to surface waters in a small agricultural catchment. *Environ. Sci. Technol.* **2004**, *38* (14), 3827-3834.

Leu, C.; Singer, H.P.; Stamm, C.; Müller, S.R.; Schwarzenbach, R.P. Variability of herbicide losses from 13 fields to surface water within a small catchment after a controlled herbicide application. *Environ. Sci. Technol.* **2004**, *38* (14), 3835-3841.

Schneeberger, K.; Schwank, M.; Stamm, C.; de Rosnay, P.; Mätzler, C.; Flühler, H. Topsoil structure influencing soil water retrieval by microwave radiometry. *Soil Sci. Soc. Am. J.* **2004**, *3*, 1169-1179.

Schneeberger, K.; Stamm, C.; Mätzler, C.; Flühler, H. Ground-based dual-frequency radiometry of bare soil at high temporal resolution. *IEEE Trans. Geosci. Remote Sensing* **2004**, *42* (3), 588-595.

Stamm, C.; Waul, C.; Leu, C.; Gomides Freitas, L.; Popow, G.; Singer, H.P.; Müller, S.R. Sorption effects on herbicide losses to surface waters in a small catchment of the Swiss Plateau. *Journal of Plant Diseases and Protection* **2004**, *19*, 951-958.

Kulli, B.; Stamm, C.; Papritz, A.; Flühler, H. Discrimination of flow regions on the basis of stained infiltration patterns in soil profiles. *Vadose Zone Journal* **2003**, *2*, 338-348.

Withers, P.J.A.; Ulén, B.; Stamm, C.; Bechmann, M. Incidental phosphorus losses - are they significant and can they be predicted? *Journal of Plant Nutrition and Soil Science* **2003**, *166*, 459-468.

Sinaj, S., Stamm, C., Toor, G. S., Condron, L. M., Hendry, T., Di, H. J., Cameron, K. C., and Frossard, E. Phosphorus exchangeability and leaching losses from two grassland soils. *Journal of Environmental Quality* **2002**, *31*, 319 - 330.

Stamm, C., Sermet, R., Leuenberger, J., Wunderli, H., Wydler, H., Flühler, H., and Gehre, M. Multiple tracing of fast transport in a drained grassland soil. *Geoderma* **2002**, *109*, 245-268.

Stamm, C. Comment on "Kinetics and Modeling of Dissolved Phosphorus Export from a Tile-Drained Agricultural Watershed" by Y. Xue, M.B. David, L.E. Gentry, and D.A. Kovacic. *Journal of Environmental Quality* **1999**, *28*, 1046 - 1047.

Gächter, R.; Ngatiah, J.M.; Stamm, C. Transport of phosphate from soil to surface waters by preferential flow. *Environ. Sci. Technol.* **1998**, 32 (13), 1865-1869.

Stamm, C.; Flühler, H.; Gächter, R.; Leuenberger, J.; Wunderli, H. Preferential transport of phosphorus in drained grassland soils. *Journal of Environmental Quality* **1998**, 27 (3), 515-522.

Other journals, proceedings:

Doppler, T., Dietzel, A., & Stamm, C. (2024). Pestizide in Bächen und Flüssen. Wirkung des Aktionsplans Pflanzenschutzmittel. *Aqua & Gas*, 104(7+8), 63-69.

Storck, F. R., Riva, A., Stähli, M., Schönenberger, U., Freudemann, D., Stamm, C., Hug, S. J., Dolf, R., Mazacek, J., Zobrist, J., Randlett, M.-È. (2022). 50 Jahre NADUF. Nationale Daueruntersuchung der Fliessgewässer. *Aqua & Gas*, **2022**(12), 34 - 41.

la Cecilia, D., Schönenberger, U., Dax, A., Koster, M., Konz, N., Minkowski, C., Singer, H., Stamm, C. (2022). Identifizierung von Transportprozessen von Pflanzenschutzmitteln in Gewässer anhand von Monitoringstudien *Aqua & Gas*, **2022**(4), 68 - 74.

Dax, A., M. Stravs, C. Stamm, C. Ort, D. la Cecilia, and H. Singer (2020) MS2Field: Mikroverunreinigungen mobil messen. *Aqua & Gas* **100**(12):14 - 19.

Dietzel, A., P. Zaffarano, and C. Stamm (2020) Transparenter Umgang mit Zielkonflikten für eine gewässerschonende Schweizer Landwirtschaft. *Agrarforschung Schweiz* **11**:217 - 223.

Schönenberger, U.; Dax, A.; Singer, H.; Stamm, C. (2020) Hydraulische Kurzschlüsse - Hohe Bedeutung für die Belastung der Gewässer mit Pflanzenschutzmitteln, *Aqua & Gas*, **100**(11): 65-71.

Kobierska, F., U. Koch, R. Kasteel, C. Stamm and V. Prasuhn (2020). Plant protection product losses via tile drainage: a conceptual model and mitigation measures. *Agrarforschung Schweiz*, **11**: 115-123, doi:110.34776/afs34711-34115.

Rösch, A., Beck, B., Hollender, J., Stamm, C., Singer, H., Doppler, T., & Junghans, M. (2019). Geringe Konzentrationen mit grosser Wirkung. Nachweis von Pyrethroid- und Organophosphat-Insektiziden in Schweizer Bächen im pg L⁻¹-Bereich. *Aqua & Gas*, **11/2019**, 54 - 66.

Spycher, S., Teichler, R., Daouk, S., Doppler, T., Junghans, M., Vonwyl, E., Longrée, P., Kunz, M., Stamm, C. & Singer, H. (2019) Anhaltend hohe PSM-Belastung in Bächen. *Aqua&Gas*, **4/2019**, 14-25.

Daouk, S., T. Doppler, I. Wittmer, M. Junghans, C. Stamm and C. Mathieu (2019). "Mesures de reduction et monitoring des pesticides dans les eaux de surface. Synthèse des apprentissages liés aux projets « Phytos 62a »." *Aqua & Gas* **2019/1**: 66 - 73.

- Prasuhn, V., Doppler, T., Spycher, S. & Stamm, C. Reduktion der Pflanzenschutzmitteleinträge in Gewässer durch Erosion und Abschwemmung. *Agrarforschung Schweiz*, 9, 44 – 51, **2018**.
- Stamm, C., Burdon, F., Fischer, S., Kienle, C., Munz, N., Tlili, A., Altermatt, F., Behra, R., Bürgmann, H., Joss, A., Räsänen, K., Eggen, R.I.L., Einfluss von Mikroverunreinigungen. Lebensgemeinschaften in Fließgewässern - Ergebnisse aus dem Projekt EcolImpact. *Aqua & Gas* 2017/6, 90 – 95, 2017.
- Doppler, T., Mangold, S., Wittmer, I., Spycher, S., Comte, R., Stamm, C., Singer, H., Junghans, M., Kunz, M., Hohe PSM-Belastung in Schweizer Bächen. *Aqua&Gas* 4/2017, 46 – 56, 2017.
- Wittmer, I., Leu, C., Kunz, M., Stamm, C. & Ochsenbein, U. (2016) Wasserqualität. Wissen-plattform des VSA. *Aqua & Gas*, **2016**, 82 - 88.
- Moschet, C., Wittmer, I., Stamm, C., Singer, H., Hollender, J. Insektizide und Fungizide in Fließgewässern. Wichtig zur Beurteilung der Gewässerqualität. *Aqua & Gas* **2015**, 95 (4), 54-65.
- Eggen, R.I.L., Stamm, C. Pflanzenschutzmittel in Oberflächengewässern - Aktuelles Thema mit viel Erklärungsbedarf. *Aqua & Gas* **2014**, 94 (11), 80-82.
- Lanz, K., Fuhrer, J., Haeberli, W., Stamm, C. Steigender Nutzungsdruck im Wasserschloss. *Aqua & Gas* **2014**, 94 (11), 24-29.
- Lanz, K., E. Rahn, R. Siber, C. Stamm. Bewirtschaftung der Wasserressourcen unter steigendem Nutzungsdruck. NFP 61 – Thematische Synthese 2 im Rahmen des Nationalen Forschungsprogramms NFP 61«Nachhaltige Wassernutzung» Schweizerischer Nationalfonds, **2014**. Bern.
- Lanz, K., E. Rahn, R. Siber, C. Stamm. 2014. La gestion des ressources en eau face à la pression accrue de leur utilisation. PNR 61 – Synthèse thématique 2 dans le cadre du Programme national de recherche PNR 61 «Gestion durable de l'eau». 2014. Fonds Nationale Suisse. Bern.
- Stamm, C., Czekalski, N., Singer, H. Flusswasser als Ressource – Einflussfaktoren für die Wasserqualität. **2014**, 8-11.
- Stamm, C., Czekalski, N., Singer, H. L'eau des rivières, une source d'eau potable sous influence. **2014**, 8-11.
- Wittmer, I., Moschet, C., Simovic, J.; Singer, H.; Stamm, C.; Hollender, J.; Junghans, M.; Leu, C. Plus de 100 pesticides dans les cours d'eau. *Aqua & Gas* **2014**, 94 (11), 68-79.
- Wittmer, I.; Moschet, C.; Simovic, J.; Stamm, C.; Hollender, J.; Junghans, M.; Leu, C. Ueber 100 Pestizide in Fließgewässern. Programm Nawa Spez zeigt die Pestizidbelastung der Schweizer Fließgewässer auf. *Aqua & Gas* **2014**, 94 (3), 32-43.
- Strahm, I.; Munz, N.; Leu, C.; Wittmer, I.; Stamm, C. Landnutzung entlang des Gewässernetzes. Quellen für Mikroverunreinigungen. *Aqua & Gas* **2013**, 93 (5), 36-45.

Stamm, C.; Siber, R.; Singer, H.; Ochsenbein, U.; Berset, J.D.; Scheiwiler, E.; Muff, D. Ereignisbezogenes Pestizidmonitoring. Am Beispiel der Grube (Kanton Bern). *Aqua & Gas* **2012**, 92 (4), 24-32.

Bormann, H.; Holländer, H.M.; Blume, T.; Buytaert, W.; Chirico, G.B.; Exbrayat, J.F.; Gustafsson, D.; Hölzel, H.; Kraft, P.; Krausse, T.; Nazemi, A.; Stamm, C.; Stoll, S.; Blöschl, G.; Flühler, H. Modellkonzept vs. Modellierer – wer oder was ist wichtiger? Vergleichende Modellanwendung am Hühnerwasser-Einzugsgebiet. *Forum für Hydrologie und Wasserbewirtschaftung* **2011**, 30, 152-158.

Bormann, H.; Holländer, H.M.; Blume, T.; Buytaert, W.; Chirico, G.B.; Exbrayat, J.F.; Gustafsson, D.; Hölzel, H.; Kraft, P.; Krausse, T.; Nazemi, A.; Stamm, C.; Stoll, S.; Blöschl, G.; Flühler, H. Modellkonzept vs. Modellierer – wer oder was ist wichtiger? Vergleichende Modellanwendung am Hühnerwasser-Einzugsgebiet. *KW Korrespondenz Wasserwirtschaft* **2011**, 4 (9), 487-491.

Bormann, H.; Holländer, H.M.; Blume, T.; Buytaert, W.; Chirico, G.B.; Exbrayat, J.F.; Gustafsson, D.; Hölzel, H.; Kraft, P.; Krauß, T.; Nazemi, A.; Stamm, C.; Stoll, S.; Blöschl, G.; Flühler, H. Comparative discharge prediction from a small artificial catchment without model calibration: Representation of initial hydrological catchment development. *Die Bodenkultur* **2011**, 62 (1-4), 23-29.

Frey, M.; Konz, N.; Stamm, C.; Prasuhn, V. Identifizierung von Flächen, die überproportional zur Gewässerbelastung beitragen. *Agrarforschung Schweiz* **2011**, 2 (4), 156-161.

Frey, M.; Konz, N.; Stamm, C.; Prasuhn, V. Identification des surfaces qui contribuent démesurément à la pollution des eaux. *Recherche Agronomique Suisse* **2011**, 2 (4), 156-161.

Prasuhn, V.; Konz, N.; Stamm, C.; Frey, M. Machbarkeitsstudie Kartierung beitragender Flächen – Problem fehlender Bodendaten. *Bulletin BGS* **2011**, 32, 71-74.

van der Voet, J. and C. Stamm Organische Mikroschadstoffe. Machbarkeitsstudie: Konzentrationen und Frachten in Oberflächengewässern untersucht. *Umwelt Perspektiven*. **2010**. 21 - 23.

Hanke, I.; Bohnenblust, S.; Singer, H.; Stamm, C.; Müller, A. Pflanzenschutzmittel im Gleisabwasser. *GWA* **2009**, 89 (7), 1-8.

Stamm, C. Neue Herausforderungen für die Schweizer Wasserwirtschaft. *Natur und Mensch* **2009**, 51 (4-5), 25-27.

Wittmer, I., Stamm, C., Scheidegger, R., und Bader, H.-P. Ein Vergleich der Belastung von Oberflächengewässern durch urbane Biozide und landwirtschaftliche Pestizide während Regenereignissen. In *Simulation in Umwelt- und Geowissenschaften*. **2008**. pp. 105 - 114, Dübendorf.

Chèvre, N.; Loepfe, C.; Fenner, K.; Singer, H.P.; Escher, B.I.; Stamm, C. Pestizide in Schweizer Oberflächengewässern. *GWA* **2006**, 86 (4), 297-307.

Stamm, C.; Siber, R.; Fenner, K.; Singer, H.P. Monitoring von Pestizidbelastungen in Schweizer Oberflächengewässern. *GWA Gas, Wasser, Abwasser* **2006**, *8*, 629-636.

Stamm, C. Agrochemikalien - wie gefährlich sind sie für die Gewässer? *EAWAG news* **2005**, *59d*, 3-5.

Burkhardt, M.; Stoob, K.; Stamm, C.; Singer, H.P.; Müller, S.R. Veterinary antibiotics in animal slurries - a new environmental issue in grassland research. *Grassland Science in Europe* **2004**, *9*, 322-324.

Stamm, C.; Singer, H.P.; Szerencsits, E.; Zraggen, K.; Flury, C. Standort und Herbizideinsatz aus Sicht des Gewässerschutzes. *Agrarforschung* **2004**, *11* (10), 446-451.

Müller, S.R.; Singer, H.P.; Stoob, K.; Burkhardt, M.; Hartmann, N.; Götz, C.W.; Stamm, C.; Waul, C. Occurrence and fate of antibiotics in manure, soil and water. *Mitt. Lebensm. Hyg.* **2003**, *94*, 574-578.

Schneeberger, K.; Stamm, C.; Mätzler, C.; Flühler, H.; Lehmann, E.; Willneff, J. Multifrequency ground-based radiometer and in-situ measurements of soil moisture at high temporal resolution, In *Remote Sensing for Agriculture, Ecosystems, and Hydrology IV*, Owe, M., D'Urso, G. and Toullos, L., Eds.; Proceedings of SPIE: **2003**; Vol.4879 pp. 174-183.

Stamm, C.; Schneeberger, K.; Flühler, H.; Mätzler, C. Estimating soil hydraulic properties from time-series of remotely sensed and in-situ measured topsoil water contents, In *Remote Sensing for Agriculture, Ecosystems, and Hydrology IV*, Owe, M., D'Urso, G. and Toullos, L., Eds.; Proceedings of SPIE: **2003**; Vol.4879 pp. 211-220.

Stamm, C. Water transport at the field scale. In W. J. Chardon and O. Schoumans, (eds.), Proceedings of the Meeting of Working Group 2 of COST Action 832, Gumpenstein (A). **2002**. 21 - 35. Alterra, Wageningen, The Netherlands,

Gächter, R., Marès, A., Stamm, C., Kunze, U., Blum, J. Dünger düngt Sempachersee. *Agrarforschung* **1996**, 329-332.

Stamm, C., Gächter, R., Flühler, H., Leuenberger, J., and Wunderli, H. Konzentrationsganglinien von Phosphor und Nitrat in Drainagen im Einzugsgebiet des Sempachersees. *Mitteilungen der Deutschen Bodenkundlichen Gesellschaft*. **1995**. 76, 943 - 946.

Stamm, C. Causes of eutrophication in a rural watershed. An integrated approach in practice. In: J.F.T. Schoute et al. (eds.). Scenario Studies for the Rural Environment. **1995**. 377 – 381. Kluwer.

Reports, Thesis:

Benateau, S., Gaudard, A., Stamm, C. & Altermatt, F. (2019) Climate change and freshwater ecosystems. Impacts on water quality and ecological status. Eawag. doi: 10.5167/uzh-169641.

Dietzel, A., Zaffarano, P. & Stamm, C. Zukunftsfähige gewässerschonende landwirtschaftliche Produktion in der Schweiz. Schlussbericht zum Projekt AProWa. **2015**. 75 S. Eawag, BLW, Dübendorf, Bern.

Wittmer, I., M. Junghans, H. Singer und C. Stamm. Mikroverunreinigungen - Beurteilungskonzept für organische Spurenstoffe aus diffusen Einträgen. Studie im Auftrag des Bundesamtes für Umwelt (BAFU); **2014**. Eawag, Dübendorf.

Stamm, C., R. Scheidegger, J. van der Voet, H. Singer, und H.P. Bader. Organische Spurenstoffe im Rahmen von NADUF. Machbarkeitsstudie - Schlussbericht. **2012**. Eawag, Dübendorf.

Frey, M., N. Konz, C. Stamm, und V. Prasuhn. Machbarkeitsstudie Kartierung beitragender Flächen. **2011**. Eawag, ART Reckenholz-Tänikon, Dübendorf, Zürich.

Steiner, C., Schneider, M. K., Mazacek, J., Hörger, C., Singer, H., und Stamm, C. Bodenkarten als Grundlagen für die Festlegung des Zuströmbereichs Zo. Eine Machbarkeitsstudie. **2007**. Eawag, Dübendorf.

Stamm, C., Gomides Freitas, L., Singer, H. Quellen, Eintragswege und Verhalten von Pflanzenschutzmitteln (PSM) im Einzugsgebiet des Greifensees. **2005**. Eawag.

Steiner, C., Schneider, M. K., Mazacek, J., Hörger, C., Singer, H., Stamm, C. Atrazinbelastung in Schweizer Fließgewässern. Ein Vergleich auf unterschiedlicher Grössenskala. **2005**. Eawag.

Stamm, C. Rapid transport of phosphorus in drained grassland soils. **1997**. PhD Thesis, Swiss Federal Institute of Technology, Zürich.

Stamm, C. Sempachersee: Einzugsgebiet der Grossen Aa. Zusammenhänge zwischen Nutzung und Phosphorbelastung. Synthesebericht. Gemeindeverband Sempachersee. **1994**. Kantonales Amt für Umweltschutz Luzern. Zentralstelle für Ökologie in der Landwirtschaft, Luzern.

Stamm, C. Ueberprüfung von Verfahren zur Ausscheidung von Pufferzonen gegen Stoffeintrag. **1992**. Ökozentrum Schattweid, Wolhusen.

Züst, B., Stamm, C., Pohl, C. Sand-Pflanzen-Kläranlage Schattweid - Schlussbericht zur Untersuchungsperiode 1986 - 1989. **1991**. Ökozentrum Schattweid, Wolhusen.

Book chapters:

Stamm, C. 2020. Die Belastung von Bächen und Flüssen. Pages 78-86 in M. Forster and C. Schümann, editors. Das Gift und wir. Westend Verlag.

Gburek, W. J., Barberis, E., Haygarth, P., Kronvang, B., and Stamm, C. Phosphorus mobility in the landscape. In "Phosphorus: Agriculture and the environment" (J. T. Sims and A. Sharpley, eds.), pp. 941 - 979. **2005**. American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Madison, WI.

Factsheets:

Guntern, J., Baur, B., Ingold, K., Stamm, C., Widmer, I., Wittmer, I., & Altermatt, F. (2021). Pestizide: Auswirkungen auf Umwelt, Biodiversität und Ökosystemleistungen. Swiss Academies Factsheet, 16 (2).

Guntern, J., Eichler, A., Hagedorn, F., Pellissier, L., Schwikowski, M., Seehausen, O., Stamm, C., van der Heijden, M., Waldner, P., Widmer, I., Altermatt, F. (2020). Übermässige Stickstoff- und Phosphoreinträge schädigen Biodiversität, Wald und Gewässer. . Swiss Academies Factsheet, 15 (8).

Public method description:

Schönenberger, U., Patrick, M., Wullschleger, S., & Stamm, C. (2020). A water-level proportional water sampler for remote areas. <https://zenodo.org/record/4280534>.

Reber, U., Ingold, K., & Stamm, C. (2023). Codebook for the analysis of evidence use in the public discourse on pesticides in Switzerland. <https://doi.org/10.5281/zenodo.8124824>.

Invited presentations (since 2012):

Scientific audiences:

Nachhaltiger Pflanzenschutz - Forschung und Politik aus einer Gewässerperspektive. 9. Fachtagung Dialog Grün (2025), 10 June 2025, ETHZ, Zürich, [9. Fachtagung Dialog Grün \(2025\)](#) | [ETH Zürich Videoportal](#).

Diffuse pollution: New insights into dynamic patterns and overlooked transport pathways. 12th Micropoll & Ecotoxicology Conference, 6. – 10. June 2022, Santiago de Compostela, Spain.

New insights into rain-driven pesticide dynamics with high-temporal resolution on-site measurements in agricultural catchments. Water Research Horizon Conference, 16.6.2021, on-line.

Bewirtschaftung von Wasserressourcen und Landwirtschaft. 7. Agrarrechtstage, Universität Luzern, 11.6. 2021, Luzern.

New insights about pesticide exposure through measuring and modelling in catchments of the Rhine basin, Fresenius Agro Conference on Behaviour of Pesticides in Air, Soil and Water, Mainz, 25. 6. 2019.

Unravelling the impacts of wastewater-born micropollutants in stream ecosystems. Nankai University, Tianjin, China, 6 July 2018.

Integrated river basin management for water quality - The role of analytical innovation. Swiss Innovation Week, Beijing, China 5 July 2018.

Lessons learned from success and failures with integrated water resource management in Switzerland, Water Security Conference, Toronto, 17 – 20 June, 2018.

Auswirkungen der Spurenstoffexposition auf Gewässerorganismen und Gewässer – Ergebnisse aus Schweizer Untersuchungen, Ruhrtagung, Essen, 22. Nov. 2017.

Pesticide transport in small catchments - Relevance of hydrological processes and chemical properties, GeoEnvironm Seminar, Tübingen, 30. June 2017.

Ecological impacts of micropollutants in stream ecosystems, Athene Workshop, Koblenz, 8. March 2017.

Unravelling the impacts of wastewater-born micropollutants in stream ecosystems, Waterloo Water Lecture, Waterloo, 12. Jan, 2017

Managing water quality as real-world experiments, Water Research Horizon Conference, Dessau, 27. – 29. June 2016.

Herbicide transport to tile drains in the Swiss Plateau, TOPPS-BMPs Workshop on Drainage and Leaching, Neustadt, 19. – 20. May 2016.

Pesticide pollution in Swiss streams – new monitoring approaches, Universidad Nacional, Heredia, Costa Rica, 10. Aug. 2015.

EcolImpact - Unraveling the ecological impact of micropollutants in streams, Workshop IP 'Aquatic Ecosystems', Magdeburg, 25. June 2015.

Phosphorus losses from agriculture to water bodies, PHOSPHORUS IN AGRICULTURE: WHERE ARE WE GOING?, Zürich, 15. Jan 2015.

Future challenges for the Swiss water sector: Results out of NRP 61 on Sustainable Water Management, SETAC Europe, Basel, 13. May 2014.

EcolImpact – on the way to link exposure to micropollutants to ecological effects, Colloque Hydroecologie, Paris, 24. Oct. 2013.

Transport pathways of P from soil to water – partitioning and dominance of different flow paths, 7th International Phosphorus Workshop, Uppsala, 9. – 13. Sept. 2013.

Transfer von Pestiziden in Oberflächengewässer kleiner landwirtschaftlicher Einzugsgebiete - Mechanismen und Bedeutung. PhytoRed, Colmar, 9. Oct. 2012.

Phosphorus Transport - The Critical Source Area concept - a review and beyond, IsoPhos2012, Monte Verità, 24. – 29.6.2012.

Practitioners, general public:

Guntern, J., Altermann, M., Seehausen, O., Stamm, C., & van Der Heijden, K. (2022). Auswirkungen übermässiger Stickstoff- und Phosphoreinträge auf die Biodiversität. Umweltrecht in der Praxis, 2022-7, S. 735 - 752.

MS²Field: Mikroverunreinigungen mobil messen. IGKB und IBK-U – Fachsymposium «Pflanzenschutzmittel und Gewässerschutz», 31. Mai 2022, Friedrichshafen, Germany.

Vom Feld in Bach und ins Grundwasser: Pflanzenschutzmittel, ihre Auswirkungen und mögliche Lösungsstrategien, Vortragsreihe Winter 2021-2022, Geografische Gesellschaft Bern, 25.1.2022.

Zum Einfluss von Siedlung und Landwirtschaft auf die Lebensgemeinschaften im Gewässer. 10. DWA Workshop zu Flusseinzugsgebietmanagement. 10.11.2021 (Essen, Germany, on-line).

Landwirtschaft und Wasserqualität – auf dem Weg zur Nachhaltigkeit? Geographische Gesellschaft Ostschweiz, 20.10.2021, St. Gallen.

Pestizide in unseren Gewässern. Wie Pestizide in unser Wasser gelangen und welche Bedeutung das für Mensch und Umwelt hat. Naturforschende Gesellschaft Winterthur, 13. 10. 2020.
<https://tube.switch.ch/switchcast/zhaw.ch/events/86980268-24be-447b-9d48-5fca490c8fb2>

Vom Feld ins Wasser? Was bewirken Pestizide & Co in unseren Gewässern? Wasserforum Gantrisch, 26. 5.5 2021.

Wasserqualität: Wie sauber sind unsere Gewässer? Was bewirken Pestizide & Co in unseren Gewässern? Retreat Baudepartement Kanton St. Gallen, 17.3.2021, St. Gallen.

Wie Pestizide ins unser Wasser gelangen und welche Bedeutung das Mensch und Umwelt hat. 16. Wirtschaftsapéro, Villmergen, 21. Oktober 2020.

(K)ein guter Tropfen! – Wie gefährdet ist die Qualität unseres Wassers? Biostiftung Schweiz, Bern, 24. Sept. 2020.

Gewässerbelastung mit Pflanzenschutzmitteln in der Schweiz. Landwirtschaftliches Zentrum Liebegg, Gränichen. 13. November 2019.

New insights about pesticide exposure through measuring and modelling in catchments of the Rhine basin. 21st International Fresenius AGRO Conference, Mainz, 25 June 2019.

ARA-Aufrüstung: Welche Effekte sehen wir im Gewässer? VSA-Tagung, Luzern, 14. März 2019.

Pestizidbelastung Schweizer Fliessgewässer, Wülflinger Wintertagung, Bauernverband Zürich, 10. Januar 2018.

Pestizidbelastung Schweizer Fliessgewässer, BioZug Tagung, Cham, 8. Sept. 2017.

Drainagen und Stoffeintrag von Agrochemikalien in Oberflächengewässer, Drainagen-Tagung Pro Natura, Bern, 7. Sept. 2017.

Die Bedeutung der Landwirtschaft für die Gewässer. Eawag-Infotag, Dübendorf, 5. Sept. 2017.
Pestizidtransport in landwirtschaftlichen Einzugsgebieten, BGS Jahresexkursion, Kastanienbaum, 25.Aug. 2017.

Bewirtschaftung der Wasserressourcen unter steigendem Nutzungsdruck, VUR-Tagung, Solothurn, 14. June 2017.

EcolImpact: Auswirkungen von MV in Gewässern. Emmetten-Tagung Mikroverunreinigungen, Emmetten, 2. Nov. 2016.

EcolImpact: Auswirkungen von MV in Gewässern. Emmetten-Tagung Mikroverunreinigungen, Emmetten, 1. Juni 2016.

EcolImpact: Ökologische Auswirkungen von Mikroverunreinigungen aus Kläranlagen. Cercl'Eau-Tagung, Luzern, 16. June 2016.

3. Nationale Ackerbautagung, Murten, 27. Jan 2016.

Flusswasser als Ressource - Einflussfaktoren auf die Wasserqualität, Eawag Infotag, Dübendorf, 9. Sept. 2014.

iWaQa - Integriertes Management der Wasserqualität von Fliessgewässern, VSA-Tagung, Olten, 25. April 2014.

Temperatur in Fliessgewässern - Einflussfaktoren, vergangene und zukünftige Entwicklungen, Cercl'Eau-Tagung, La Neuville, 13. June 2013.

Transfer von Pestiziden in Oberflächengewässer kleiner landwirtschaftlicher Einzugsgebiete- Mechanismen und Bedeutung, Agridea-Tagung Trends im Pflanzenbau, Olten, 28. Nov. 2012.

Last update: 10 August 2024