

## DAFTAR PUSTAKA

- Abbas, A., Bailey, R.T., Almahawis, M.K., White, J.T., & Arnold, J.F. (2024). Calibration Guide for Watershed Modeling with Distributed Groundwater Modeling: Application for the SWAT+ Model. *Hydrological Sciences Journal*, 69, 13, 1777–1796. <https://doi.org/10.1080/02626667.2024.2393414>
- Abbas, S., Yang, G., Zhong, Y., & Zhao, Y. (2021). Spatiotemporal Change Analysis and Future Scenario of LULC Using the CA-ANN Approach: A Case Study of the Greater Bay Area, China. *Land*, 10(6), 584. <https://doi.org/10.3390/land10060584>
- Adhiatama, R., Widiatmaka dan Lubis, I. (2020). Perubahan dan Prediksi Penggunaan/Penutupan Lahan di Kabupaten Lampung Selatan. *Journal of Natural Resources and Environmental Management*, 10(2), 234-246. <http://dx.doi.org/10.29244/jpsl.10.2.234-246>
- Adom, M. T., & Kumi, M. (2020). Assessment of the impact of land use and land cover change on groundwater recharge and baseflow. *Journal of Hydrology: Regional Studies*, 28, 100670. <https://doi.org/10.1016/j.ejrh.2020.100670>
- Akoko, George & Le, Tu & Gomi, Takashi & Kato, Tasuku. (2021). A Review of SWAT Model Application in Africa. *Water*. 13. 1313. doi: 10.3390/w13091313.
- Allan, A., Soltani, A., Abdi, M. H., & Zarei, M. (2022). Driving Forces behind Land Use and Land Cover Change: A Systematic and Bibliometric Review. *Land*, 11(8), 1222. <https://doi.org/10.3390/land11081222>
- Al-Rubkhi, A.N.M. (2017). Land Use Change Analysis and Modelling Using Open Source (QGIS) Case Study: Boaser Wilayah. *Disertation*. Department of Geography Sultan Qaboos University Oman
- Ansar, M., Suryadi, F. X., & Hidayat, Y. (2020). *Pengelolaan daerah aliran sungai di Indonesia: Pendekatan terpadu dan tantangan kelembagaan*. UMM Press.
- Arnold, J. G., Srinivasan, R., Muttiah, R. S., & Williams, J. R. (2012). *Soil and Water Assessment Tool: User Manual Version 2012*. Texas Water Resources Institute.
- Arsyad, Sinatala. (2010). *Konservasi Tanah dan Air Edisi II*. IPB Press: Bogor
- Asdak, Chay. (2002). *Hidrologi dan Pengelolaan Daerah Aliran Sungai*. Gadjah Mada University Press: Yogyakarta
- Aurilia M.F., Santoso, D.H., & Sungkowo, A. (2021). Determination of Zoning Recharge Area and Spring Conservation in the Upstream Sub-Basin of the Jali River, Gebang District, Purworejo Regency, Central Java Province. *J. Presipitasi*, Vol 18 No 1: 10-20

- Baghel, S., Kothari, M.K., & Tripathi, M.P. (2024). Spatiotemporal LULC change detection and future prediction for the Mand catchment using MOLUSCE tool. *Environ Earth Sci* 83, 66. <https://doi.org/10.1007/s12665-023-11381-5>
- Bailey, R.T., Bieger, K., Arnold, J.G., Bosch, D.D. (2020). A New Physically-Based Spatially-Distributed Groundwater Flow Module for SWAT+. *Hydrology* 2020, 7, 75. <https://doi.org/10.3390/hydrology7040075>
- Bao, H., Wang, C., Han, L., Wu, S., Lou, L., Xu, B., & Liu, Y. (2020). Resources and Environmental Pressure, Carrying Capacity, And Governance: A Case Study of Yangtze River Economic Belt. *Sustainability*, 12(4), 1576. <https://doi.org/10.3390/su12041576>
- Belay, H., Melesse, A. M., & Tegegne, G. (2024). Scenario-Based Land Use and Land Cover Change Detection and Prediction Using the Cellular Automata–Markov Model in the Gumara Watershed, Upper Blue Nile Basin, Ethiopia. *Land*, 13(3), 396. <https://doi.org/10.3390/land13030396>
- Bieger, K., Arnold, J.G., Rathjens, H., White, M.J., Bosch, D.D., Allen, P.M., Volk, M., Srinivasan, R. (2017). Introduction to SWAT+, a Completely Restructured Version of the Soil and Water Assessment Tool. *JAWRA Journal of the American Water Resources Association*, 53, 115–130.
- Bouwer, H. (2002). Artificial recharge of groundwater: hydrogeology and engineering. *Hydrogeology Journal* 10, 121–142. <https://doi.org/10.1007/s10040-001-0182-4>
- Bramantio, B., Hizbaron, D. R., & Khakhim, N. (2024). Prediction of the future landuse and land cover changes in the Parangtritis sand dune : a spatio temporal analysis using QGIS MOLUSCE. *IOP Conference Series: Earth Environmental Science* 1313, 012014. <https://doi.org/10.1088/1755-1315/1313/1/012014>
- Bressiani, D. A., Gassman, P. W., Fernandes, J. G., Garbossa, L. H. P., Srinivasan, R., Bonumá, N. B., & Mendiando, E. M. (2015). Review of Soil and Water Assessment Tool (SWAT) applications in Brazil: Challenges and prospects. *International Journal of Agricultural and Biological Engineering*, 8(3), 9–35. <https://doi.org/10.3965/j.ijabe.20150803.1765>
- Bruijnzeel, L. A. (2004). Hydrological functions of tropical forests. *Ecosystems & Environment*, 104(1), 185–228. <https://doi.org/10.1016/j.agee.2004.01.015>
- Calder, I. R. (2005). Blue revolution: Integrated land and water resource management. *Earthscan*.
- Chen, L., Yu, L., Yin, J., & Xi, M. (2023). Impact of Population Density on Spatial Differences in the Economic Growth of Urban Agglomerations: The Case of Guanzhong Plain Urban Agglomeration, China. *Sustainability*, 15(19), 14601. <https://doi.org/10.3390/su151914601>

- Christanto, N. (2022). Modelling Hydrological Processes in Humid Tropical Watershed using SWAT: A Case Study in Central Java Watershed, Indonesia. *Disertasi*. Universitas Gadjah Mada.
- Christanto, N., Setiawan, M. A., Nurkholis, A., Istikhomah, S., Anajib, D. W., & Purnomo, A. D. (2019). Rainfall-Runoff and Sediment Yield Modelling in Volcanic catchment using SWAT, a Case Study in Opak Watershed. *IOP Conference Series: Earth and Environmental Science*, 256 (1). <https://doi.org/10.1088/1755-1315/256/1/012015>
- Chu, D. (2020). *Land-Use Change Scenario* (pp. 117–132). Springer, Singapore. [https://doi.org/10.1007/978-981-13-7580-4\\_6](https://doi.org/10.1007/978-981-13-7580-4_6)
- Daldjoeni, N. (2020). *Geografi Manusia*. Penerbit Ombak: Yogyakarta
- Dwivedi, S., Kothari, M., Singh, P.K., Chhipa, B.G., dan Gupta, T. (2024). SWAT model applications in hydrology: A Systematic review. *International Journal of Advanced Biochemistry Research* 2024; SP-8 (7): 603-607
- Fadhlinayah & Hajar, Siti. (2024). Dampak Kebijakan Tata Ruang Terhadap Pengelolaan Lingkungan Hidup di Gayo Lues. *Jurnal Ilmu Sosial dan Ilmu Politik Malikussaleh (JSPM)*. 5(2). Hal. 144-155. DOI.10.29103/jspm.v5i2.16979
- FAO. (1976). A Framework for Land Evaluation. *FAO Soil Bulletin*:52
- FAO. (2016). Forests and water: International momentum and action. Food and Agriculture Organization of the United Nations.
- Fariz, R., Nurhidayati, T., Damayanti, N.E., Safitri, H., & Elvita. (2020). Komparasi model cellular automata dalam memprediksi perubahan lahan sawah di Kabupaten Purworejo. *Jukung (Jurnal Teknik Lingkungan)*, 6. [10.20527/jukung.v6i2.9259](https://doi.org/10.20527/jukung.v6i2.9259).
- Fei, Xm., Yan, Hx., Tao, T. (2021). Integrated rainfall-runoff process with shallow water model by mass varied smoothed particle hydrodynamics: Infiltration effect implementation. *J Hydrodyn* 33, 1190–1201 <https://doi.org/10.1007/s42241-021-0098-5>
- Fitrianingsih, E. (2017). Tinjauan terhadap Alih Fungsi Tanah Pertanian ke non Pertanian (permukiman) di Kecamatan Tomoni Kabupaten Luwu Timur. *Skripsi*. Fakultas Hukum Universitas Hasanudin: Makassar
- Fohrer, N. Haverkamp, S., Eckhardt, K., Frede, H.G. (2001). Hydrologis Response to Land Use Changes on the Catchment Scale. *Physics and Chemistry of the Earth*, 26 (7), 577-582. [https://doi.org/10.1016/S1464-1909\(01\)00052-1](https://doi.org/10.1016/S1464-1909(01)00052-1).
- Gari, S. R., Newton, A., & Icely, J. D. (2015). A review of the application and evolution of the DPSIR framework with an emphasis on coastal, marine and social–ecological systems. *Ocean & Coastal Management*, 103, 63–77. <https://doi.org/10.1016/j.ocecoaman.2014.11.013>

- George, N.J., Agbasi, O.E., Umoh, J.A., Ekanem, A.M., Ejepu, J.S., Thomas, J.E., & Udoinyang, I.E. (2022). Contribution of electrical prospecting and spatiotemporal variations to groundwater potential in coastal hydro-sand beds: a case study of Akwa Ibom State, Southern Nigeria. *Acta Geophysica*, 71 (5), 2339-2357. <https://doi.org/10.1007/s11600-022-00994-2>.Perub
- Gholamzadeh, F., Elmi, M. R., Talebi, A., Mokhtari, M. H., & Shojaei, S. (2020). *Temporal-Spatial Simulation of Landscape Variations Using Combined Model of Markov Chain and Automated Cell*. 70(2), 45–53. <https://doi.org/10.1007/S42489-020-00037-0>
- Hardanto, A., Mustofa, A., dan Ardiansyah. 2023. Water Recharge Variability Across Serayu Watershed Using Soil Water Assessment Tool (SWAT). *Proceeding ICMA-SURE. The 5th International Conference on Multidisciplinary Approaches for Sustainable Rural Development*, 2 (1), 205. <https://doi.org/10.20884/2.prociema.2023.2.1.8425>
- He, J. J., Cai, Q. H., & Wu, N. (2016). Response of baseflow to climate change and human activities in a typical river basin, China. *Environmental Earth Sciences*, 75, 1–12. <https://doi.org/10.1007/s12665-015-4813-y>
- Hengl, T., Mendes de Jesus, J. S., Heuvelink, G. B. M., Ruiperez Gonzalez, M., Kilibarda, M., Blagotic, A., Wei, S., Wright, M. N., Geng, X., Bauer-Marschallinger, B., Guevara, M. A., Vargas, R., MacMillan, R. A., Batjes, N. H., Leenaars, J. G. B., Carvalho Ribeiro, E. D., Wheeler, I., Mantel, S., & Kempen, B. (2017). SoilGrids250m: Global gridded soil information based on machine learning. *PLoS ONE*, 12(2), Article e0169748. <https://doi.org/10.1371/journal.pone.0169748>
- Hermawan, A., & Prasetyo, B. (2024). Kalibrasi model SWAT pada DAS tropis menggunakan pendekatan sensitivitas parameter. *Jurnal Teknik Hidraulik Indonesia*, 12(1), 45–56.
- Hernández-Marín, M.A., Ortiz-Gómez, R., Zavala, M. et al. Hydrological simulation using the SWAT model in a semi-arid region in the southern part of Zacatecas, Mexico. *Environ Earth Sci* 83, 540 (2024). <https://doi.org/10.1007/s12665-024-11837-2>
- Hersi, N.A.M., Mulungu, D.M.M., & Nobert, J. (2023). Groundwater recharge estimation under changing climate and land use scenarios in a data-scarce Bahi (Manyoni) catchment in Internal Drainage Basin (IDB), Tanzania using Soil and Water Assessment Tool (SWAT). *Groundwater for Sustainable Development*, 22, 100957. <https://doi.org/10.1016/j.gsd.2023.100957>
- Huscroft, J., Gleeson, T., Hartmann, J., & Börker, J. (2018). Compiling and mapping global permeability of the unconsolidated and consolidated Earth: GLobal HYdrogeology MaPS 2.0 (GLHYMPS 2.0). *Geophysical Research Letters*, 45, 1897–1904. <https://doi.org/10.1002/2017GL075860>

- Indraswari, Rheinandia. (2022). Pengaruh Perubahan Penggunaan Lahan Tahun 2010 dan 2020 terhadap Jasa Ekosistem Mata Air sebagai Penyediaan Air Bersih di Kota Batu Provinsi Jawa Timur. *Thesis*. Sekolah Pascasarjana UGM: Yogyakarta
- Iskandar, B., Kurnia, A. A., Jauhari, A., & Zannah, F. (2024). Modeling Land Cover Change Using MOLUSCE in Kahayan Tengah Forest Management Unit, Kalimantan Tengah. *Jurnal Sylva Lestari : Journal of Sustainable Forest*. <https://doi.org/10.23960/jsl.v12i2.865>
- Jeitany, J., Nussbaum, M., Pacetti, T., Schröder, B., & Caporali, E. (2024). Landscape metrics as predictors of water-related ecosystem services: Insights from hydrological modeling and data-based approaches applied on the Arno River Basin, Italy. *Science of the Total Environment*, 954, Article 176567. <https://doi.org/10.1016/j.scitotenv.2024.176567>
- Kardhana, D., & Sari, N. P. (2024). Evaluasi parameter hidrologi SWAT pada DAS Majalaya. *Jurnal Rekayasa Sipil dan Lingkungan*, 18(2), 101–110.
- Kilimandan, E. U., Killa, Y. M., & Jawang, U. P. (2024). Kajian sifat kimia dan fisika tanah pada beberapa penggunaan lahan di desa Laimeta, kecamatan Kambata Mapambuhang, kabupaten Sumba Timur. *AGRILAND Jurnal Ilmu Pertanian*, 12(1), 1-9
- Klanreungsang, Baromasak, Nilsonthi, & Piyawadee. (2024). Urban Land Use Changes Simulation with CA-ANN Model: A Case Study of Mae Sot District, Tak Province, Thailand. *International Journal of Geoinformatics*. 20. 69-81. <https://doi.org/10.52939/ijg.v20i6.3339>
- Kosasih, D., Saleh, M.B., Prasetyo, L.B. (2019). Interpretasi Visual dan Digital untuk Klasifikasi Tutupan Lahan di Kabupaten Kuningan Jawa Barat. *Jurnal Ilmu Pertanian* Vol 24 (2): 101-108 doi: 10.18343/jipi.24.2.101
- Kumar, R., Merwade, V., & Kinter, J. L. (2023). Challenges in hydrological model calibration and validation due to data limitations: A review. *Environmental Modelling & Software*, 160, 105536. <https://doi.org/10.1016/j.envsoft.2023.105536>
- Kumar, T., & Jhariya, D. C. (2017). Identification of rainwater harvesting sites using SCS-CN methodology, remote sensing and Geographical Information System techniques. *Geocarto International*, 32(12), 1–22. <https://doi.org/10.1080/10106049.2016.1213772>
- Kusumadewi. (2015). Kajian Kerusakan Lingkungan pada Biodiversitas Vegetasi di Daerah Resapan Mataair Beji dan Ngeri di Kecamatan nglipar Kabupaten Gunungkidul. *Tesis*. MPL UGM: Yogyakarta
- Kusumawardhani, N. P. (2020). Analysis of water carrying capacity for regional planning development in Malang Regency. *Journal of Architecture and Urbanism Research*, 3(2), 145–158. <https://doi.org/10.31289/jaur.v3i2.3331>

- Levintal, E., Kniffin, M. L., Ganot, Y., Marwaha, N., Murphy, N. P., & Dahlke, H. E. (2022). Agricultural managed aquifer recharge (Ag-MAR)—a method for sustainable groundwater management: A review. *Critical Reviews in Environmental Science and Technology*, 53(3), 291–314. <https://doi.org/10.1080/10643389.2022.2050160>
- Li, B., Wu, Q., Zhang, W., & Liu, Z. (2020). Water resources security evaluation model based on grey relational analysis and analytic network process: a case study of Guizhou Province. *J. Water Process Eng.* 37, 101429, doi:10.1016/j.jwpe.2020.101429
- Li, H., Cai, Y., Min, M., Zhao, Z., & Si, B. (2024). To Investigate the Impact of Land Use Change on the Potential Groundwater Recharge on Hillslope With Deep Loess Deposits. *Land Degradation & Development*. <https://doi.org/10.1002/ldr.5364>
- Lin, Y.-P., Chu, H. J., Wu, C.-F., & Verburg, P. H. (2011). Predictive ability of logistic regression, auto-logistic regression and neural network models in empirical land-use change modeling—a case study. *International Journal of Geographical Information Science*, 25(1), 65–87. <https://doi.org/10.1080/13658811003752332>
- Liu, Q., Li R., Yang, N., & Gao, M. (2021). Estimation of Regional Groundwater Resources Carrying Capacity in Yangtze River Economic Belt. *E3S Web of Conferences* 245, 02007. <https://doi.org/10.1051/e3sconf/202124502007>
- Malem, Z.Z. (2019). Potensi Dampak Rencana Tata Ruang Wilayah Terhadap Daya Dukung Lingkungan Berbasis Jasa Ekosistem di Kabupaten Magelang Provinsi Jawa Tengah. *Thesis*. Fakultas Geografi UGM: Yogyakarta
- Mandel, G., & Sudadi. (1985). *Peta hidrogeologi Indonesia: Lembar XI (Semarang & Magelang)* (Skala 1:250.000). Direktorat Geologi Tata Lingkungan.
- Markovich, K.H., Manning, A.H., Condon, L.E., & McIntosh, J.C., (2019). Mountain-block recharge: a review of current understanding. *Water Resour. Res.* 55, 8278–8304. <https://doi.org/10.1029/2019WR025676>.
- Meadows, D. H., Meadows, D. L., & Randers, J. (1993). *Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future*. Chelsea Green Publishing Company.
- MEA. 2005. *Ecosystems and Human Well-Being Synthesis in Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment*. Doi: 10.5822/978-1-61091-484-0\_1
- Meles, M.B., Bradford, S., Casillas-Trasvina, A., Chen, L., Osterman, G., Hatch, T., Ajami, H., Crompton, O., Levers, L., Kisekka, I. (2024). Uncovering the gaps in managed aquifer recharge for sustainable groundwater management: A focus on hillslopes and mountains. *Journal of Hydrology*, 639, 131615. <https://doi.org/10.1016/j.jhydrol.2024.131615>.

- Mendoza, P. A., Buytaert, W., & Zulkafli, Z. (2021). Regionalization and uncertainty of SWAT hydrological model parameters in tropical catchments. *Hydrological Processes*, 35(3), e14052. <https://doi.org/10.1002/hyp.14052>
- Mohammad-Hosseinpour, A., & Molina, J.-L. (2022). Improving the Sustainability of Urban Water Management through Innovative Groundwater Recharge System (GRS). *Sustainability*, 14(10), 5990. <https://doi.org/10.3390/su14105990>
- Mohseni, B., Shahedi, K., Habibnejhad-Roshan, M., & Darzi-Naftchali, A. (2022). Improving groundwater sustainability *through* conservation strategies in a critical-prohibited coastal plain. *Physics and Chemistry of The Earth*, 127, 103176. <https://doi.org/10.1016/j.pce.2022.103176>
- Moriasi, D. N., Arnold, J. G., Van Liew, M. W., Bingner, R. L., Harmel, R. D., & Veith, T. L. (2007). Model evaluation guidelines for systematic quantification of accuracy in watershed simulations. *Transactions of the ASABE*, 50(3), 885–900. <https://doi.org/10.13031/2013.23153>
- Moriasi, D. N., Gitau, M. W., Pai, N., & Daggupati, P. (2015). Hydrologic and water quality models: Performance measures and evaluation criteria. *Transactions of the ASABE*, 58(6), 1609–1618. <https://doi.org/10.13031/trans.58.11075>
- Mubea, K., Ngigi, T., & Mundia, C. (2010). Assessing application of markov chain analysis in predicting land cover change: a case study of nakuru municipality. *JAGST Vol 12 (2)*
- Muhammad, R., Zhang, W., Abbas, Z., Guo, F., & Gwiazdzinski, L. (2022). Spatiotemporal Change Analysis and Prediction of Future Land Use and Land Cover Changes Using QGIS MOLUSCE Plugin and Remote Sensing Big Data: A Case Study of Linyi, China. *Land*, 11(3), 419.
- Muhammad, R., Zhang, W., Abbas, Z., Chu, H., & Rogers, D. (2024). Water resource security evaluation and barrier analysis in Henan Province utilizing the DPSIR framework. *Frontiers in Environmental Science*, 12, Article 1354175. <https://doi.org/10.3389/fenvs.2024.1354175>
- Muta'ali, Lutfi. (2019). *Daya Dukung dan Daya Tampung Lingkungan Hidup Berbasis Jasa Ekosistem untuk Perencanaan Lingkungan Hidup*. Badan Penerbit Fakultas Geografi UGM: Yogyakarta
- Nahumury, F.E. (2021). Kajian Daya Dukung dan Daya Tampung Lingkungan Daerah Tangkapan Air Waduk di Pulau Batam untuk Mendukung Jasa Ekosistem Penyediaan Air Bersih. *Thesis*. Sekolah Pasccasarjana UGM: Yogyakarta
- Naima A.M., Hersi, D., Mulungu, M.M., Nobert, J. (2023). Groundwater recharge estimation under changing climate and land use scenarios in a data-scarce Bahi (Manyoni) catchment in Internal Drainage Basin (IDB), Tanzania using Soil and Water Assessment Tool (SWAT), *Groundwater for*

- Sustainable Development*, 22, 100957. <https://doi.org/10.1016/j.gsd.2023.100957>.
- Neitsch, S. L., Arnold, J. G., Kiniry, J. R., & Williams, J. R. (2011). *Soil and Water Assessment Tool Theoretical Documentation Verison 2009*. Agricultural Research Service US.
- Nugraheni, A.N. (2013). Analisis Kerentanan dan Bahaya Banjir Sungai Elo di Kelurahan Wates Kecamatan Magelang Utara Kota Magelang menggunakan Sistem Informasi Geografis. *Geo-educasia* Hal 420-438
- Nurrochman, A. (2018). *Dampak perubahan tutupan lahan terhadap sistem hidrologi di Jakarta*. Universitas Indonesia.
- Odoh, B.I., dan Nwokeabia, C.N. (2024). Impact of Land Use and Land Cover Changes on Groundwater Dynamics in Selected Local Government Areas of anambre State Nigeria. *International Journal of Earth Sciences Knowledge and Applications*, 6(2), 131-142.
- Pannekoek, A. J. (1949). *Outline of the geomorphology of Java*. E.J. Brill.
- Patrício, J., Elliott, M., Mazik, K., Papadopoulou, K. N., & Smith, C. J. (2016). DPSIR—Two decades of trying to develop a unifying framework for marine environmental management? *Frontiers in Marine Science*, 3, 177. <https://doi.org/10.3389/fmars.2016.00177>
- Pawitan, H. (2002). *Flood Hydrology and an Integrated Approach to Remedy the Jakarta Floods*. Paper presented at the International Conference on Urban Hydrology for the 21st Century, the Humid Tropics Hydrology and Water Resources Center for Southeast Asia and Pacific (HTC Kuala Lumpur) of the Department of Irrigation and Drainage Malaysia in Collaboration with UNESCO and IAHSO, 14-18 October 2002. Kuala Lumpur, Malaysia.
- Pemerintah Kabupaten Magelang. (2021). *Rencana Tata Ruang Wilayah Kabupaten Magelang Tahun 2021-2041*. Sekretariat Daerah Kabupaten Magelang.
- Pradana, I., Prasaningtyas, A., & Ariyaningsih, A. (2023). Analisis DPSIR Untuk Mengetahui Dampak Lingkungan Yang Ditimbulkan Dari Pengembangan Kawasan Industri Kariangau. *Ruang*, 9(1), 24–33. <https://doi.org/10.14710/ruang.9.1.24-33>
- Prasetya, A.P.D., dan Hadibasyir, H.Z. (2024). *Prediksi Spasial Perkembangan Lahan Terbangun di Kota Magelang Tahun 2031 menggunakan Algoritma CA-Markov*. Universitas Muhammadiyah Surakarta
- Rafiei Emam, A., Kappas, M., Linh, N. H. K., & Renchin, T. (2017). Hydrological Modeling and Runoff Mitigation in an Ungauged Basin of Central Vietnam Using SWAT Model. *Hydrology*, 4(1), 16. <https://doi.org/10.3390/hydrology4010016>

- Rahayu, S., Pramudito, A., & Nugroho, H. (2020). Teknologi sumur resapan untuk peningkatan infiltrasi di kawasan urban. *Jurnal Teknik Lingkungan*, 26(2), 89–98.
- Ramadan, Gian Felix. (2021). Identifikasi Pola Spasial Pertumbuhan Fisik Kota Menggunakan Data Penginderaan Jauh di Kota Purwokerto. *Skripsi*. Fakultas Geografi UGM: Yogyakarta
- Ramadhan, Gian Felix G.F., dan Hidayati, I.N. (2022). Prediction and Simulation of Land Use and Land Cover Changes Using Open Source QGIS (A Case Study of Purwokerto, Central Java, Indonesia). *Indonesian Journal of Geography* Vol 54 No 3 <https://doi.org/10.22146/ijg.68702>
- Ramadhani, E. (2021). Kajian Pengaruh Perubahan Penggunaan Lahan terhadap Limpasan Menggunakan Multidata Iklim Satelit di Sub DAS Samin. *Thesis*. Fakultas Geografi UGM: Yogyakarta
- Rangarajan, S. dan Kamaraj, M. (2022). Predicting the Future Land Use and Land Cover Changes for Bhavani Basin, Tamil Nadu, India, using QGIS MOLUSCE Plugin. *Environmetnal Science and Pollution Research* 1-12
- Ridwan, F., Ardiansyah, M., & Gandasasmita, K. (2017). Pemodelan perubahan penutupan/penggunaan lahan dengan pendekatan artificial neural network dan logistic regression (studi kasus: das citarum, jawa barat). 1(1), 30–36. <https://journal.ipb.ac.id/index.php/btanah/article/download/17688/12662>
- Ritohardoyo, Su. (2013). *Penggunaan dan Tata Guna Lahan*. Penerbit Ombak: Yogyakarta
- Romadhona, A.B.W. (2015). Analisis Erosi pada Skenario Tata Guna Lahan menggunakan Metode USLE dan MUSLE (Studi Kasus Sub DAS Elo). *Skripsi*. Universitas Gadjah Mada: Yogyakarta
- Sadath, P. V. R., Elango, L., Kartheeshwari, M. R., & Keerthan, L. (2023). Forecasting land use/cover changes and their influence on groundwater recharge in Chennai, India: Recommendations for sustainable urban development. *Urban Water Journal*. <https://doi.org/10.1080/1573062x.2023.2258858>
- Safitri, D., Putra, F.F., dan Marini, Arita. (2020). *Ekolabel dan Pendidikan Lingkungan Hidup*. PT Pustaka Mandiri: Jakarta
- Sahoo, S., & Pan, S. (2024). Assessing of LULC and Climate Change in Kolkata Urban Agglomeration Using MOLUSCE Model. *Springer Nature*. [https://doi.org/10.1007/978-3-031-38004-4\\_2](https://doi.org/10.1007/978-3-031-38004-4_2)
- Sallata, M Kudeng. (2015). Konservasi dan Pengelolaan Sumberdaya Air berdasarkan Keberadaannya sebagai Sumber Daya Alam. *Buletin Eboni*. Vol 12 No 1 Hal 75-86
- Santosa, L.W., dan Adji, T.N. (2014). *Karakteristik Akuifer dan Potensi Air Tanah Graben Bantul*. Gadjah Mada University Press: Yogyakarta

- Santoso, S.B., dan Anna, A.N. (2002). Integrasi Teknik Penginderaan Jauh dan Sistem Informasi Geografi untuk Menduga Debit Puncak Menggunakan karakteristik Lingkungan Fisik DAS di Wilayah Sub DAS Elo, Jawa Tengah. *Forum Geografi* Vol 16 No 1 2002: 92-104
- Setiawan, B. (2000). *Prinsip-Prinsip dan Kebijakan Pengelolaan Lingkungan Hidup di Indonesia*. Bahan Ajar Mata Kuliah Strategi Pengelolaan Lingkungan Magister Pengelolaan Lingkungan. Sekolah Pascasarjana UGM: Yogyakarta
- Setiawan, B., & Suryadi, F. X. (2019). Revegetasi teknis untuk pemulihan fungsi hidrologis lahan kritis. *Jurnal Konservasi Tanah dan Air*, 7(1), 45–53.
- Seyhan, Ersin. (1990). *Dasar-Dasar Hidrologi*. Yogyakarta: Gadjah Mada University Press
- Shen, Q., Zhang, Y., Yan, Y., Dong, H., & Lei, W. (2025). Experimental Study on Infiltration Characteristics of Shallow Rainwater in Expansive Soil Slopes at Different Gradients. *Water*, 17(5), 642. <https://doi.org/10.3390/w17050642>
- Song, X., & Frostell, B. (2012). The DPSIR Framework and a Pressure-Oriented Water Quality Monitoring Approach to Ecological River Restoration. *Water*, 4(3), 670-682. <https://doi.org/10.3390/w4030670>
- Suardika, I. K. (2002). *Dampak perubahan penggunaan lahan terhadap parameter hidrologi di Kota Denpasar* [Tesis, Program Pascasarjana Institut Pertanian Bogor].
- Subkhannur. (2005). Kajian Aliran Rendah DAS Progo. *Tesis*. Teknik Sipil UGM: Yogyakarta
- Sudia, L.B., Kahirun, Zulkarnain & Albasri. (2020). Analisis Sebaran Jasa Ekosistem Penyediaan Pangan dan Air di Daerah Karst (Studi Kasus Kabupaten Buton Tengah). *BioWallacea : Jurnal Penelitian Biologi (Journal of Biological Research)*, 7, 1043. [10.33772/biowallacea.v7i1.11041](https://doi.org/10.33772/biowallacea.v7i1.11041).
- Sufyan, M., Martelli, G., Teatini, P., Cherubini, C., dan Goi, D. (2023). Managed Aquifer Recharge for Sustainable Groundwater Management: New Developments, Challenges, and Future Prospects. *Water*, 16, 3216. <https://doi.org/10.3390/w16223216>
- Sukamto, R. (1975). *Peta geologi lembar Magelang dan Semarang, Jawa* (Skala 1:100.000). Pusat Penelitian dan Pengembangan Geologi.
- Sulistiani, Santikayasa, I.P., Taufik, M., dan Lubis, R.F. (2024). Analisis Multitemporal Pengaruh Perubahan Penggunaan Lahan terhadap Klasifikasi Resapan Air Tanah di Kota Surakarta. *Jurnal Geografi Indonesia* Vol 38 No 1 <https://doi.org/10.22146/mgi.89966>
- Sulle, B.A.C., Sunaryo, D.K., Yulianandha, A. (2023). Identification of Groundwater Potential Using Geographic Information Systems and Remote

- Sensing (Case Study: Mojokerto Regency). *Journal of Marine-Earth Science Technology* Volume 4 pp 33-38. DOI: 10.12962/j27745449.v4i1.700
- Sunardi, Tata. (1999). Evaluasi Sarana dan Prasarana Pelayanan Sosial dan Ekonomi pada Satuan Wilayah Pengembangan di Kabupaten Magelang. *Skripsi*. Fakultas Geografi UGM: Yogyakarta
- Suryanarayana, T., Gigar, A.G., Sisay, B.M. (2022). Application of Water Balance and SWAT Model for Groundwater Recharge Estimation: Beressa Watershed, Central Ethiopian Plateau, Ethiopia. *OSR Journal of Applied Geology and Geophysics (IOSR-JAGG)*, Volume 10, Issue 6 Ser. I (Nov. – Dec. 2022), PP 66-92
- Susilo, B. (2011). Pemodelan spasial probabilistik integrasi Markov Chain dan Cellular Automata untuk kajian perubahan penggunaan lahan skala regional di Provinsi Daerah Istimewa Yogyakarta. *Jurnal Geografi Gea*, 11(2).
- Syahbuddin, H. (2021). Pengaruh Perubahan Penggunaan Lahan terhadap Degradasi Tanah di DAS Citarum Hulu, *Jurnal Tanah dan Iklim*. 45. 101-112. doi: 10.24815/jti.v45i2.21045
- Taryana, D. (2016). *Pengaruh Formasi Geologi terhadap Potensi Mata Air di Kota Baru*. Jurusan Pendidikan Geografi No 2 Hal 09 - 19
- Tata Sunardi. (1999). Evaluasi Sarana Prasarna Pelayanan Sosial dan Ekonomi pada Satuan Wilayah Pengembangan di Kabupaten Magelang. *Skripsi*. Universitas Gadjah Mada: Yogyakarta
- Thadi, S. S. S., Gudikandhula, K., & Jakkula, V. R. (2024). Monitoring and prediction of land use land cover changes using MOLUSCE plugin in QGIS: A case study of Hyderabad city, India. *Geodesy and Geodynamics*, 15(2), 145–158. <https://doi.org/10.1016/j.geog.2023.07.004>
- Thanden,R.E., dkk (1996). *Peta Geologi Lembar Magelang dan Semarang, Jawa*. Pusat Studi Geologi.
- Trespalacio, G.M., & Anastacio, N.J.C. (2023). Effects of land use and land cover on Soil-Water Infiltration: A Literature Review and Bibliometric Analysis. *Journal of Ecosystem Science and Eco-Governance*, 5(2): 45-53. <https://doi.org/10.54610/jeseg.v5i2.77>
- Tuo, Y., Duan, Z., Disse, M., & Chiogna, G. (2016). Evaluation of precipitation input for SWAT modeling in Alpine catchment: A case study in the Adige river basin (Italy). *Science of The Total Environment*, 573, 66–82. <https://doi.org/10.1016/j.scitotenv.2016.08.034>
- Vafaei, S., Karim, M. M., Soltanian, S., & Rasooli, S. (2021). Simulating the Expansion of Built-Up Areas using the Models of Logistic Regression, Artificial Neural Network, and Geo-Mod in Marivan City, Iran. *Journal of The Indian Society of Remote Sensing*, 49(5), 1081–1090. <https://doi.org/10.1007/S12524-020-01297-Z>

- Verstappen, H. T. (1983). *Applied geomorphology: Geomorphological surveys for environmental development*. Elsevier Science.
- Wahyunto, M.Z. (2001). Studi Perubahan Lahan di Sub DAS Citarik Jawa Barat dan DAS Kaligarang Jawa Tengah. *Prodising Seminar Nasional Multifungsi Lahan Sawah* Hal 39-40. Bogor 1 Mei 2001.
- Wajdi, Rafiqul. (2021). *Daya Dukung dan Daya Tampung Lingkungan Hidup berbasis Jasa Ekosistem di Kawasan Cekungan Bandung*. FTSP Series 2 Seminar Nasional dan Diseminasi Tugas Akhir 2021 : 904 – 915
- Wang, H., Gao, J., Li, X., Wang, H., & Zhang, Y. (2014). Effects of Soil and Water Conservation Measures on Groundwater Levels and Recharge. *Water*, 6(12), 3783–3806. <https://doi.org/10.3390/W6123783>
- Welde, K., dan Gebremariam, B. (2017). Effect of Land Use Land Cover Dynamics on Hydrological Response of Watershed: Case Study of Tekeze Dam Watershed, Northern Ethiopia. *International Soil and Water Conservation Research* 5 (1), 1-16
- Wibowo, M. (2006). Model Penentuan Kawasan Resapan Air untuk Perencanaan Tata Ruang Berwawasan Lingkungan. *Jurnal Hidrosfer* Vol1 No 1 Hal 1-7
- Woldearegay, K., Grum, B., Hessel, R., van Steenberg, F., Fleskens, L., Yazew, E., Tamene, L., Mekonnen, K., Reda, T., & Haftu, M. (2023). Watershed management, groundwater recharge and drought resilience: An integrated approach to adapt to rainfall variability in northern Ethiopia. *International Soil and Water Conservation Research*. <https://doi.org/10.1016/j.iswcr.2023.08.009>
- Yang, J.L., Zhang, G.L. Water infiltration in urban soils and its effects on the quantity and quality of runoff. *J Soils Sediments* 11, 751–761 (2011). <https://doi.org/10.1007/s11368-011-0356-1>
- Yimer, E.A., Bailey, R.T., Piepers, L.L., Nossent, J. & Van Griensven, A. (2023) Improved Representation of Groundwater Surface Water Interactions Using SWAT+gwflowand Modifications to the gwflow Module. *Water* 2023, 15, 3249. <https://doi.org/10.3390/w1518324>
- Zefri & Ma'mun, H. (2022). Optimalisasi penerapan rencana tata ruang wilayah dalam penanganan pemanfaatan ruang kawasan resapan air (Studi Kasus: Kawasan Resapan Air Kabupaten Ciamis). *Jurnal Darma Agung*. 30. 229. 10.46930/ojsuda.v30i2.1668.
- Zhang, L., Walker, G.R., Dawes, W.R. (2002). Water Balance Modelling: Concepts and Applications. *Regional Water and Soil Assessment for Managing Sustainable Agriculture in China and Australia*. (84) 31-47.
- Zhao, M., Li, J., Zhang, Y., Han, Y., and Jinhai, W. (2023). Water cycle health assessment based on combined weight and hook trapezoid fuzzy TOPSIS model: a case study of nine provinces in the Yellow River basin, China. *Ecol. Indic.* 147, 109977. doi:10.1016/J.ECOLIND.2023.109977

Zhao, N., Gao, F., Ma, K., Teng, Y., Wan, H., & Wang, J. (2025). The Spatio-Temporal Impact of Land Use Changes on Runoff in the Yiluo River Basin Based on the SWAT and PLUS Model. *Water*, 17(10), 1516. <https://doi.org/10.3390/w17101516>

**Peraturan dan Perundangan:**

- Perlindungan dan Pengelolaan Lingkungan Hidup, UU No 32 Tahun 2009
- Penyusunan Rencana Umum RHL DAS dan Rencana Tahunan Rehabilitasi Hutan dan Lahan, Peraturan Menteri LHK Nomor 10 Tahun 2022
- RTRW Provinsi Jawa Tengah Tahun 2009-2029, Peraturan Daerah Provinsi Jawa Tengah Nomor 6 Tahun 2010
- RTRW Kabupaten Magelang Tahun 2024-2044, Peraturan Daerah Kabupaten Magelang Nomor 7 Tahun 2024