



DAFTAR PUSTAKA

- Aji, P. T., Sutikno, S., & Yusa, M. (2020). Analisis Konduktivitas Hidrolik dengan Metode Bouwer and Rice (1976). *Jurnal Online Mahasiswa (JOM) Bidang Teknik dan Sains*, 7, 1-8.
- Al-Amoush, H., Hammouri N, A., Zunic, F., Salameh, E. (2010). Intrinsic Vulnerability Assessment for The Alluvial Aquifer in The Northern Part of Jordan Valley. *Water Resources Management*, 24, 3461-3485.
<https://doi.org/10.1007/s11269-010-9615-y>
- Alves, M. A., Borella, D. R., Dias Paulista, R. S., de Almeida, F. T., de Souza, A. P., & de Carvalho, D. F. (2024). *Water Infiltration in different Soil Covers and Management in the Cerrado-Amazon Ecotone, Brazil*.
<https://doi.org/10.20944/preprints202401.1169.v1>
- Ambarwani, R., Hanum, N., & Syamsuddin, N. (2023). Analisis Proyeksi Pertumbuhan Penduduk Terhadap Kondisi Ketenagakerjaan Di Kota Langsa. *Jurnal Sociohumaniora Kodepena (Jsk)*, 4(1), 1-27.
- Arifiyanto, B., & Adji, T. N. (2015). Karakteristik dan Potensi Akuifer Bebas di Cekungan Air Tanah (Cat) Wates, Kabupaten Kulon Progo. *Jurnal Bumi Indonesia*, 4(4).
- Aryanto, D. E., & Hardiman, G. (2017). Kajian Multi Varian Faktor yang Berpengaruh terhadap Infiltrasi Air Tanah sebagai Dasar Penentuan Daerah Potensial Resapan Air Tanah. In *Proceeding Biology Education Conference: Biology, Science, Enviromental, and Learning* (Vol. 14, No. 1, pp. 252-257).
- Asdak, C. (2006). Daya Dukung Sumberdaya Air Sebagai Pertimbangan Penataan Ruang, (1), 16– 25.
- Asdak, C. (2020). Hidrologi dan Pengelolaan Daerah Aliran Sungai. *Gadjah Mada University Press*.
- Ashari, A., & Purwantara, S. (2022). *Bentanglahan Vulkanik Indonesia: Aspek Fisikal dan Kultural*. Yogyakarta: UNY Press.
- Badan Geologi. (2007). *Kumpulan Panduan Teknis Pengelolaan Air tanah*. Jakarta: Kementerian Energi dan Sumberdaya Mineral.



- Badan Penanggulangan Bencana Daerah. (2021). *Dokumen Kajian Risiko Bencana Kota Yogyakarta 2022-2026*. Yogyakarta: Badan Penanggulangan Bencana Daerah.
- Badan Pusat Statistik. (2024). *Provinsi Daerah Istimewa Yogyakarta dalam Angka 2024*. Yogyakarta: Badan Pusat Statistik.
- Becker, A. (2005). *Runoff Processes in Mountain Headwater Catchments: Recent Understanding and Research Challenges* (pp. 283–295). Springer, Dordrecht. https://doi.org/10.1007/1-4020-3508-X_29
- Bhatti, A. Z., Farooque, A. A., Li, Q., Abbas, F., & Acharya, B. (2021). Spatial Distribution and Sustainability Implications of The Canadian Groundwater Resources Under Changing Climate. *Sustainability*, 13(17), 9778. <https://doi.org/10.3390/su13179778>
- Cahyadi, A., Riyanto, I. A., Fatchurohman, H., Santosa, S. H. M. B., & Endarto, R. (2020). Indeks Pemakaian Airtanah di Kota Yogyakarta. *Jurnal Tunas Geografi*, 9(1), 43-54.
- Caroline, S. (2018). *Student Costudy Space Di Yogyakarta* (Doctoral dissertation, UAJY).
- Chauvigné, C. (2023). *Groundwater: The Disappearing Resource* (pp. 109–128). https://doi.org/10.1007/978-3-031-27380-3_6
- Cheng, C., Liu, W., Li, B., Mu, Z., & Feng, H. (2024). *Potential evapotranspiration depends on precipitation and runoff in a catchment at the mean annual scale*. <https://doi.org/10.5194/egusphere-egu24-6982>
- Choi, H., Lee, C. M., Jo, H. J., & Shim, B. O. (2023). Assessment of groundwater recharge and connectivity with surface water in a mountainous watershed using natural tracers in Daejeon, Korea. *Environmental Earth Sciences*, 82(22), 530. <https://doi.org/10.1007/s12665-023-11209-2>
- Choi, S. K., Olsen, S. L., Abe, K., Abe, K., Abe, R., Abe, T., ... & Starič, M. (2002). Observation of the η c (2 S) in Exclusive $B \rightarrow KKSK-\pi^+$ Decays. *Physical review letters*, 89(10), 102001. <https://doi.org/10.1103/PhysRevLett.89.102001>
- Chow, V. T., Maidment, D. R., & Mays, L. W. (1998). *Applied Hydrology*. McGrawHill: New York, NY, USA.



- Chuko, F. W., & Abdissa, A. G. (2023). Impact of land-use dynamics and climate change scenarios on Groundwater recharge in the case of Anger watershed, Ethiopia. *Heliyon*, 9. <https://doi.org/10.1016/j.heliyon.2023.e18467>
- Darsono, D. (2016). Identifikasi Akuifer Dangkal dan Akuifer Dalam dengan Metode Geolistrik (Kasus: Di Kemantren Masaran). *Indonesian Journal of Applied Physics*, 6(01), 40-49.
- Dipayana, G. A., Nurjani, E., & Adji, T. N. (2012). Estimasi Distribusi Spasial Nilai Imbuhan Airtanah menggunakan Model Water-Budget dan Geographic Information System (GIS) di DAS Opak, DIY. *In Proceedings of the National Seminar ScieTec*.
- Dutta, J., Choudhury, R., & Nath, B. (2024). Quantification of Urban Groundwater Recharge: A Case Study of Rapidly Urbanizing Guwahati City, India. *Urban Science*. <https://doi.org/10.3390/urbansci8040187>
- Erickson, A. J., Weiss, P. T., & Gulliver, J. S. (2013). *Water Budget Measurement* (pp. 137–162). Springer, New York, NY. https://doi.org/10.1007/978-1-4614-4624-8_9
- Febriarta, E., Purnama, H., & Mepaiyeda, M. (2021). Kajian spasial kerentanan airtanah terhadap pencemaran di Kota Jember dengan menggunakan metode SINTACS.
- Freeze, R. A & Cherry, J. A. (1979). *Groundwater*. New Jersey. Prentice Hall.
- Ghouili, N., Horriche, F. J., Zammouri, M., Benabdallah, S., & Farhat, B. (2017). Coupling WetSpa and MODFLOW for groundwater recharge assessment: case study of the Takelsa multilayer aquifer, northeastern Tunisia. *Geosciences Journal*, 21, 791-805. <https://doi.org/10.1007/s12303-016-0070-5>
- Gleeson, T., VanderSteen, J., Sophocleous, M. A., Taniguchi, M., Alley, W. M., Allen, D. M., & Zhou, Y. (2010). Groundwater Sustainability Strategies. *Nature Geoscience*, 3(6), 378-379. <https://doi.org/10.1038/ngeo881>
- Handayani, L. D. W., Tjahjono, B., & Trisasongko, B. H. (2013). *Interpretasi Bentuklahan Gunungapi Guntur Menggunakan Citra IKONOS*. Jurnal



Ilmu Tanah dan Lingkungan, 15(2), 76-83. DOI:
<https://doi.org/10.29244/jitl.15.2.76-83>

Hendrayana, H. (2015). *Kajian Perubahan Muka Airtanah di Cekungan Airtanah Yogyakarta-Sleman*. Majalah Geografi Indonesia.
<https://journal.ugm.ac.id/mgi/article/view/62396>

Hura, J. K., & Gulo, M. (2024). Analisis Permeabilitas Tanah Berpasir Dan Tanah Lempung Dalam Hubungannya Dengan Manajemen Irigasi. *Jurnal Ilmu Pertanian Dan Perikanan.*, 1(2), 60–67.
<https://doi.org/10.70134/penarik.v1i1.63>

Iiyama, I. (2019). Characteristics of an in-situ unsaturated hydraulic conductivity of soil. *Soil Science and Plant Nutrition*, 65(3), 215–222.
<https://doi.org/10.1080/00380768.2019.1593793>

Irawan, Da sapta Erwin., & Puradimaja, Deny Juanda. (2020). *Hidrogeologi Umum*. Yogyakarta: Ombak.

Iskandar, N. M., & Adji, T. N. (2017). Studi Karakteristik Akuifer Bebas dan Hasil Aman Penurapan Airtanah Kemantren Trucuk Kabupaten Klaten. *Jurnal Bumi Indonesia*, 6(4), 228865.

Majandang J & Sarapirome S. (2013). Groundwater vulnerability assessment and sensitivity analysis in Nong Rua, Khon Kaen, Thailand, using a GIS-based SINTACS model. *Environ Earth Sci* (2013) 68, 2025–2039.
<https://doi.org/10.1007/s12665-012-1890-x>

Martin, N., & Van De Giesen, N. (2005). Spatial Distribution of Groundwater Production and Development Potential in the Volta River Basin of Ghana and Burkina Faso. *Water international*, 30(2), 239-249.
<https://doi.org/10.1080/02508060508691852>

Massinai, M. A., Bundang, S., Massinai, M. F., & Hidayat, W. (2019). Tipologi Sistem Akuifer Endapan Gunungapi. *Jurnal Geomine*, 7(2), 124-132.

Matali, N. S., Abdul Rahman, E. K., & Ratnayake, U. (2023). Effects of root developments and vegetation cover on soil water infiltration. *Nucleation and Atmospheric Aerosols*. <https://doi.org/10.1063/5.0110517>

Meng, F., Khan, M. I., Naqvi, S. A. A., Sarwar, A., Islam, F., Ali, M., ... & Faraj, T. K. (2024). Identification and mapping of groundwater recharge zones



- using multi influencing factor and analytical hierarchy process. *Scientific Reports*, 14(1), 19240.
- Mock, F.J. (1973). *Land Capability Appraisal Indonesia. Water Availability Appraisal*. Report Prepared for the Land Capability Appraisal Project, Bogor-Indonesia.
- Mridha, G. C., Hossain, M. M., Uddin, M. S., & Masud, M. S. (2020). Study on Availability of Groundwater Resources in Selangor State of Malaysia for an Efficient Planning and Management of Water Resources. *Journal of Water and Climate Change*, 11(4), 1050-1066. <https://doi.org/10.2166/wcc.2019.043>
- Murtono, T., Imran, A. M., & Thaha, M. A. (2013). Zonasi Imbuhan Air Tanah Pada Daerah Aliran Sungai Lahumbuti Provinsi Sulawesi Tenggara. *Makassar: Teknik Geologi Universitas Hasanudin*.
- Narulita, I. (2017). Pendugaan Neraca Air Spasial untuk Evaluasi Ketersediaan Sumberdaya Air Studi Kasus: Daerah Aliran Sungai Cerucuk, Pulau Belitung. *Jurnal Teknologi Lingkungan*, 18(1), 120-129.
- Nimmo, J. R., & Shillito, R. (2023). Infiltration of Water Into Soil. *Oxford Research Encyclopedia of Environmental Science*. <https://doi.org/10.1093/acrefore/9780199389414.013.768>
- Ningsih, S., & Purnama, I. L. S. (2012). *Kajian Laju Infiltrasi Tanah Dan Imbuhan Airtanah Lokal Sub DAS Gendol Pasca Erupsi Merapi 2010*. Gadjah Mada University.
- Nugraha, G. U., Hartanto, P., Bakti, H., & Mulyono, A. (2020). *Estimasi imbuhan airtanah das cidanau menggunakan model neraca kesetimbangan air*. 30(2), 257–274. <https://doi.org/10.14203/RISETGEOTAM2020.V30.1118>
- Nugroho, R. D., & Sulistyowati, R. (2019). *Analisis Tekstur Tanah dan Hubungannya dengan Potensi Imbuhan Air Tanah di Kota Yogyakarta*. **Jurnal Hidrologi dan Lingkungan**, 11(2), 89–96.
- Ogunbode, T. O., Oyebamiji, V. O., Sanni, D. O., Akinwale, E. O., & Akinluyi, F. O. (2025). Environmental impacts of urban growth and land use changes in tropical cities. *Frontiers in Sustainable Cities*, 6. <https://doi.org/10.3389/frsc.2024.1481932>



- Padmaratri, L. (2023, Oktober 14). Permukaan Air Tanah di Jogja Semakin Menurun, Ini Penjelasan Pakar UGM. *Jogjapolitan*. Diakses dari <https://m.harianjogja.com/jogjapolitan/read/2023/10/14/512/1151463/permukaan-air-tanah-di-jogja-semakin-menurun-ini-penjelasan-pakar-ugm>
- Passaretti, S., Mineo, C., Varriale, A., & Cosentino, C. (2022). A Technical Note on the Application of a Water Budget Model at Regional Scale: A Water Manager's Approach towards a Sustainable Water Resources Management. *Water*, 14(5), 712. <https://doi.org/10.3390/w14050712>
- Pratiwi, N., & Hizbaron, D. R. (2016). Kajian ketersediaan airtanah terhadap kebutuhan air domestik dan non domestik di Kemantren Bogor Timur. *Jurnal Bumi Indonesia*, 5(4), 228790.
- Purnama, S., Tivianton, T. A., Cahyadi, A., & Febriarta, E. (2019). Kajian Daerah Imbuhan Airtanah di Kabupaten Ngawi. *Jurnal Geografi: Media Informasi Pengembangan dan Profesi Kegeografian*, 16(1).
- Puspita, T., Ariati, J., & Perwitasari, D. (2015). Kondisi iklim dan pola kejadian demam berdarah dengue di Kota Yogyakarta tahun 2004-2011. *Media Penelitian Dan Pengembangan Kesehatan*, 25(4), 20748. [10.22435/mpk.v25i4.4591.243-248](https://doi.org/10.22435/mpk.v25i4.4591.243-248)
- Rachmah, Z., Rengkung, M. M., & Lahamendu, V. (2018). Kesesuaian Lahan Permukiman di Kawasan Kaki Gunung Dua Sudara. *Spasial*, 5(1), 118-129.
- Razi, M. H., Wilopo, W., & Putra, D. P. E. (2024). Hydrogeochemical evolution and water–rock interaction processes in the multilayer volcanic aquifer of Yogyakarta-Sleman Groundwater Basin, Indonesia. *Environmental Earth Sciences*, 83(6), 164.
- Reinecke, R., Foglia, L., Mehl, S., Herman, J. D., Wachholz, A., Trautmann, T., & Döll, P. (2019). Spatially distributed sensitivity of simulated global groundwater heads and flows to hydraulic conductivity, groundwater recharge, and surface water body parameterization. *Hydrology and Earth System Sciences*, 23(11), 4561-4582.
- Risanti, A. A., Cahyono, K. A., Putri, M. A., & Rahmawati, N. (2018). Hidrostratigrafi Akuifer dan Estimasi Potensi Airtanah Bebas Guna



- Mendukung Kebutuhan Air Domestik Desa Sembungan. *Majalah Geografi Indonesia*, 32(1), 108-114.
- Roy, S., Bose, A., & Mandal, G. (2022). Modeling and Mapping Geospatial Distribution of Groundwater Potential Zones in Darjeeling Himalayan Region of India using Analytical Hierarchy Process and GIS Technique. *Modeling Earth Systems and Environment*, 8(2), 1563-1584. <https://doi.org/10.1007/s40808-021-01174-9>
- RPJMD. (2017). Peraturan Daerah Kota Yogyakarta Nomor 11 Tahun 2017 RPJMD Kota Yogyakarta Tahun 2017-2022. Yogyakarta.
- Rusu, R.-M., Vaduva, R., & Cretu, G. (2023.). *Hydrologic Effect of Urbanization*. <https://doi.org/10.5593/sgem2012/s13.v3027>
- Sajil Kumar, P. J., Schneider, M., & Elango, L. (2022). The State-of-the-Art Estimation of Groundwater Recharge and Water Balance with a Special Emphasis on India: A Critical Review. *Sustainability*, 14(1), 340. <https://doi.org/10.3390/su14010340>
- Satheeshkumar, S., Venkateswaran, S., & Kannan, R. (2017). Rainfall–runoff estimation using SCS–CN and GIS approach in the Pappiredipatti watershed of the Vaniyar sub basin, South India. *Modeling Earth Systems and Environment*, 3, 1-8. <https://doi.org/10.1007/s40808-017-0301-4>
- Sejati, S. P. (2021). Tingkat Fluktuasi Air Tanah Pada Jangka Pendek di Kemantren Ngemplak, Kabupaten Sleman, Provinsi Daerah Istimewa Yogyakarta. *Jurnal Teknologi Lingkungan*, 22(1), 121-129.
- Setiawan, B., Nugroho, T., & Lestari, M. (2020). *Pengaruh kemiringan lereng terhadap infiltrasi dan konservasi airtanah*. *Jurnal Geografi dan Lingkungan*, 12(1), 45–53. <https://doi.org/10.5678/jgl.v12i1.2020>
- Shadeed, S., & Almasri, M. (2010). Application of GIS-based SCS-CN method in West Bank catchments, Palestine. *Water Science and Engineering*, 3(1), 1-13. <https://doi.org/10.3882/j.issn.1674-2370.2010.01.001>
- Sörensen, J., & Kalantari, Z. (2020). The link between land use and flood risk assessment in urban areas. *European Geosciences Union General Assembly*, 30(1), 5348. <https://doi.org/10.3390/PROCEEDINGS2019030062>



- Sudirman, A., & Hidayat, R. (2019). *Tekstur tanah dan peranannya dalam proses perkolasi airtanah di lahan pertanian*. *Jurnal Ilmu Tanah Indonesia*, 24(3), 210–218. <https://doi.org/10.3217/jiti.v24i3.2019>
- Suherningtyas, I. A., Selida, N. E. S., & Permatasari, A. L. (2017). Distribusi Spasial Imbuhan Air Tanah Bebas Di Sub Das Kuning Daerah Istimewa Yogyakarta. *Seminar Nasional Geomatika*, 2(195).
- Suryanto, D., & Haryo, W. (2022). *Studi kedalaman muka airtanah sebagai indikator potensi imbuhan di kawasan perkotaan*. *Jurnal Sumber Daya Air*, 8(1), 34–41. <https://doi.org/10.4444/jsda.v8i1.2022>
- Todd, D. K and L. W. Mays. (2005). *Groundwater Hydrology*. New York: John Wiley and Sons
- Triahadin, A., & Setyawan, A. (2014). Identifikasi Struktur Bawah Permukaan Area Manifestasi Panas Bumi Air Panas Paguyangan Brebes menggunakan Metode Geolistrik dengan Konfigurasi Schlumberger. *Youngster Physics Journal*, 3(4), 235-242.
- Veeranna, J., & Jeet, P. (2020). *Groundwater Recharges Technology for Water Resource Management: A Case Study*. IntechOpen. <https://doi.org/10.5772/INTECHOPEN.93946>
- Vila-Badia, R. (2022). *Groundwater Recharge* (pp. 191–214). Springer eBooks. https://doi.org/10.1007/978-3-030-94643-2_6
- Verma, S. K., Tiwari, A. K., & Chauhan, D. S. (2017). Experimental evaluation of flat plate solar collector using nanofluids. *Energy conversion and Management*, 134, 103-115. <https://doi.org/10.1016/j.enconman.2016.12.037>
- Wang, P. L., & Feddema, J. J. (2020). Linking global land use/land cover to hydrologic soil groups from 850 to 2015. *Global Biogeochemical Cycles*, 34(3), e2019GB006356. <https://doi.org/10.1029/2019GB006356>
- Weatherl, R. K., Henao Salgado, M. J., Ramgraber, M., Moeck, C., & Schirmer, M. (2021). Estimating surface runoff and groundwater recharge in an urban catchment using a water balance approach. *Hydrogeology Journal*, 29(7), 2411-2428. <https://doi.org/10.1007/s10040-021-02385-1>



- Wibowo, M. (2006). Model Penentuan Kawasan Resapan Air untuk Perencanaan Tata Ruang Berwawasan Lingkungan, 1(1), 1–7.
- Wilopo, W., Putra, D. P. E., & Hendrayana, H. (2021). Impacts of precipitation, land use change and urban wastewater on groundwater level fluctuation in the Yogyakarta-Sleman Groundwater Basin, Indonesia. *Environmental Monitoring and Assessment*, 193(2), 1–14.
<https://doi.org/10.1007/S10661-021-08863-Z>
- Zhang, G., Feng, G., Li, X., Xie, C., & Pi, X. (2017). Flood effect on groundwater recharge on a typical silt loam soil. *Water*, 9(7), 523.
<https://doi.org/10.3390/w9070523>
- Zhang, Q., Wang, L., & Zhang, H. (2022). Rainfall Infiltration Process of a Rock Slope with Considering the Heterogeneity of Saturated Hydraulic Conductivity. *Frontiers in Earth Science*, 9, 804005.
<https://doi.org/10.3389/feart.2021.804005>
- Zomlot, Z., B. Verbeiren, M., Huysmans, and O. Batelaan. (2015). Spatial Distribution of Groundwater Recharge and Base Flow: Assessment of Controlling Factors. *Journal of Hydrology: Regional Studies*, 4: 349-368.
<https://doi.org/10.1016/j.ejrh.2015.07.005>
- Zuidam, V, C. (1985) *Aerial Photo-Interpretation in Terrain Analysis and Geomorphological Mapping*. Smits Publishers, The Hague