Curriculum Vitae

Name:	S. Contreras López (PhD.)
First Name:	Sergio
Date of Birth:	11 January 1979
Nationality:	Spanish
Main Disciplines:	Dryland Ecohydrology, Remote Sensing, Drought Early Warning and Management, Drought innovations, Water-related Ecosystem Services
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Pen profile

Sergio Contreras, PhD is a senior ecohydrologist/environmental scientist with over 20 years of career spanning scientific-research (2002-2013) and consultancy (2013-ongoing). His expertise encompasses two primary areas: (a) assessment and evaluation of water resources and water-related risks through the integration of simulation models with Earth Observation and satellite-based technologies; and (b) applied research on drought indicators and science, including the development of early warning systems with monitoring and impact-based forecasting capabilities, as well as the evaluation of adaptive frameworks and resilient solutions to prevent and mitigate impacts on agroecosystems and water resource systems. Dr. Contreras is particularly driven by a deep interest in understanding how water stress shapes the WEFE nexus. His career bridges scientific research and practical applications, enabling informed decision-making for stakeholders. He has designed and implemented critical tools such as early warning systems and drought management instruments to support climate resilience efforts. Since joining FutureWater in 2013, Dr. Contreras has led and coordinated the technical development and implementation of InfoSequia, an advanced drought early warning service that integrates monitoring and seasonal impact-based forecasting capabilities. InfoSequia has been deployed in diverse regions, including countries in South America, Europe, Africa and Asia. He has also played a pivotal role in numerous EU-funded innovation projects and mentoring schemes addressing drought-related challenges. A prolific contributor to his field, Dr. Contreras has authored or co-authored over 100 scientific and technical publications. His international experience includes research engagements at prestigious institutions such as the Centre for Water Research at the University of Western Australia, the Institute of Applied Mathematics of San Luis in Argentina, and the Bureau of Economic Geology in the USA. Dr. Contreras currently leads his work from FutureWater's office in Spain.

Educational Background

2003 – 2005	PhD Universidad de Almería, Facultad de Ciencias Experimentales, Universidad de Almería Thesis: Spatial distribution of annual water balance in semiarid mountainous regions: Case study of the Sierra de Gador (Almería, SE Spain)
2002 - 2003	MASt Earth Surface Dynamics, Faculty of Experimental Sciences, Universidad de Almeria Subjects: groundwater and environment, recharge in semiarid regions.
1997 - 2001	BSc Environmental Sciences, Universidad de Almeria, España.

Professional Experience

2013 - present	Senior consultant-researcher; Ecohydrologist - Expert in Water and Drought Science Management. FutureWater, Cartagena, Spain.
2010 - 2013	Postdoctoral Researcher (Juan de la Cierva Fellow), Centro de Edafología y Biología Aplicada del Segura – Consejo Superior de Investigaciones Científicas. Murcia, Spain.
2009 - 2010	Postdoctoral Fellow – Visiting Scientist, Bureau of Economic Geology – The University of Texas at Austin. Texas, EEUU.
2007 - 2008	Postdoctoral Fellow, Instituto de Matemática Aplicada de San Luis - Universidad Nacional de San Luis & CONICET. San Luis, Argentina.
2006 - 2007	Hired Researcher, Estación Experimental de Zonas Áridas (Consejo Superior de Investigaciones Científicas). Almeria, Spain.
2002 - 2006	Predoctoral Fellow, Estación Experimental de Zonas Áridas (Consejo Superior de Investigaciones Científicas). Almeria, Spain.

Overseas Professional Experience

As non-resident: Australia, Argentina, United States, Colombia, Perú

Selection of Most Relevant Assignments and Projects

2025 - 2026	Drought Forecasting Model for Somalia/Somaliland. Client: World Food Programme.
2024 - 2027	MegaWat: Megadroughts in the water towers of Europe – from process understanding to strategies for management and adaptation. Client: Water4All Partnership (JTC2022, funded by Horizon Europe Programme).
2022 – 2023	AWS Impact Accelerator - Catchment Assessment in the berry agroecosystem of Huelva (SW Spain). Client: Alliance for Water Stewardship (AWS Impact Accelerator Programme).
2022 – 2026	SOS-Water: Water Resources System Safe Operating Space in a Changing Climate and Society. Client: European Commission (RIA project, Horizon programme)
2022 – 2026	MAGDA: Meteorological Assimilation from Galileo and Drones for Agriculture. Client: European Commission (IA project, Horizon-EUSPA programme)
2022	Hydrological modelling and evaluation of recharge patterns of the Campo de Cartagena Quaternary aquifer by using satellite data. Analysis of temporal and spatial patterns in the last century (1950-2020). Client: Spanish Geological Survey - CSIC (consultancy contract)
2020 - 2024	InfoSequia-4CAST: Forecasting and Quantifying Risks of Crop and Water Supply Failures using Machine Learning and Remote Sensing. Client: European Space Agency (ESA) (Incubed Programme).
2020 - 2021	Robust Decision Making for Land Use Planning in the Panama Canal River Basin. Client: InterAmerican Development Bank.
2020 – 2023	G3P: Development of a Global Gravity-based Groundwater Product. Client: European Commission (RIA project, H2020 Programme)
2019 – 2020	Satellite-based monitoring of the health status of grasslands at the Alagón Valley (Spain). Client: Ambienta Ing.
2018 – 2022	TWIGA: Transforming Weather Water data into value-added Information services for sustainable Growth in Africa. Client: European Commission (RIA project, H2020 Programme).

2017 – 2019	HERramienta para el MANejo integral del Agua (HERMANA). Client: Funding source: Netherland Enterprise Agency (RVO) (Partners for Water project, WWSD scheme)
2017	Hydrogeological modelling of groundwater discharge to the Mar Menor lagoon. Client: CCRR Arco Sur–Mar Menor (consultancy contract).
2016 - 2020	BRIGAID: Bridging the Gap for Innovations in Disaster Resilience. Client: European Commission (IA project, H2020 Programme).
2015 - 2019	IMproving PRedictions and management of hydrological Extremes (IMPREX). Client: European Commission (RIA project, H2020 Programme)
2014 - 2015	Accounting System for the Segura river and Transfer (ASSET). Client: Directorate-General for the Environment - European Commission.
2013 - 2016	The GEISEQ project: a toolbox for the surveillance and the efficient management of droughts. Client: Spanish Ministry of Economy and Innovation (Torres-Quevedo grant)
2010-2014	SIRRIMED: Sustainable use of irrigation water in the Mediterranean Region. Client: European Commission (Collaborative project, FP7 Programme)
2007 - 2011	Land use change in the Rio de la Plata Basin: linking biophysical and human factors to predicts trends, assess impacts, and support viable land-use strategies for the future. Client: Interamerican Institute for Global Change Research (CRN programme).
2007 - 2008	Groundwater-fed woodlands in the deserts of Argentina: Understanding their vulnerability to agricultural development. Client: National Geographic Society (RG).

Selection of Technical Reports and Other Publications

SCOPUS Author ID: 18036692400; ORCID Research: https://orcid.org/0000-0003-3991-8241
Google Scholar Profile, h-factor: 20 (total of cites: 1285)

Item	Total of documents
Book and book chapters	11
Scientific articles in peer-reviewed journals	27
Technical reports and Teaching documents	25
Contributions in congresses and conferences	50

Book and book chapters

[11] García-Aróstegui, Jiménez-Martínez, J., Baudron, P., Hunink, J.E., **Contreras, S.**, Candela, L., 2016. Las aguas subterráneas en el Campo de Cartagena-Mar Menor. En V.M. León y J.M. Bellido (Eds.) *Mar Menor: una laguna singular y sensible. Evaluación científica de su estado*. Instituto Español de Oceanografía, Madrid. ISBN: 978-84-95877-55-0.

[10] Alcón, F., Martínez-Paz, J.M., **Contreras, S.**, Navarro-Pay, N., 2015. *Caracterización y evaluación de preferencias de desarrollo de los principales espacios naturales del Grupo de Acción Local Campoder*. Asociación para el desarrollo Rural CAMPODER, Murcia. ISBN: 978-84-96396-74-6.

[9] **Contreras, S.**, Hunink, J., 2015. Drought effects on rainfed agriculture using standardized indices: A case study in SE Spain. In Andreu et al. (eds) *Droughts: Research and Science-Policy Interfacing*, 65-70. CRC Press (Taylor and Francis Group), London. ISBN: 978-1-138-02779-4.

[8] **Contreras, S.**, Alcaraz-Segura, D., Scanlon, B., Jobbagy, E.G., 2013. Detecting ecosytem reliance on groundwater based on satellite-derived greenness anomaly and temporal dynamics. In D. Alcaraz-Segura, C.M. Di Bella, J.V. Straschnoy (eds.) *Earth observation of ecosystem services*. Chapter 13, 283-302. CRC Press – Francis & Taylor. Boca Raton. ISBN: 978-14-665058-8-9.

[7] Alcalá, F.J., Solé-Benet, A., Cantón, Y., Ribeiro, L., **Contreras, S.**, Were, A., Serrano-Ortiz, P., Puigdefábregas, J., Domingo, F., 2011. Evaluación de la recarga difusa y concentrada en macizos carbonatados mediante técnicas físicas y de trazadores: Resultados obtenidos en Sierra de Gádor

(Sureste de España). En M.C. Cabrera, L.J. Lambán, M. Manzano, M. Valverde (eds.) *Cuatro décadas de investigación y formación en aguas subterráneas. Libro homenaje al profesor Emilio Custodio*, 307-317. Asociación Internacional de Hidrogeólogos - Grupo Español, Zaragoza (Spain). ISBN: 978-84-938046-1-9.

[6] García, M., Domingo, F., **Contreras, S.**, Puigdefábregas, J., 2009. Mapping land degradation risk: potential of non-evaporative fraction using Aster and MODIS data. En A. Röder, J. Hill (eds.) *Recent advances in remote sensing and geoinformation processing for land degradation assessment*, Cap. 17: 261-279. ISPRS Book Series, CRC Press (Taylor and Francis Group), London. ISBN: 978-0-415-39769-8.

[5] **Contreras, S.**, 2006. *Distribución espacial del balance hídrico anual en regiones montañosas semiáridas. Aplicación en Sierra de Gádor (Almería)*. Tesis Doctoral (edición electrónica). Servicio de Publicaciones de la Universidad de Almería, Almería. ISBN: 978-84-8240-822-4.

[4] **Contreras, S.**, 2002. Los regadíos intensivos del Campo de Dalías (Almería). En J. Martínez Fernández, M.A. Esteve Selma (coords.) A*gua, regadío y sostenibilidad en el Sudeste ibérico*, 151-191.**,** Ed. Bakeaz, Bilbao. ISBN: 978-84-88949-50-9.

[3] Martínez Fernández, J., Esteve Selma, M.A., **Contreras, S.**, Bru Ronda, C., 2002. Hacia una mayor sostenibilidad de los regadíos intensivos del Sudeste ibérico. En J. Martínez Fernández, M.A. Esteve Selma (coords.) A*gua, regadío y sostenibilidad en el Sudeste ibérico*, 219-226. Ed. Bakeaz, Bilbao. ISBN: 978-84-88949-50-9.

[2] **Contreras, S.**, 2002. Apuntes sobre el modelo agrícola almeriense y nuevos enfoques al problema del agua. En S. Contreras, M. Piquer, J. Cabello (coords.) *Agricultura, Agua y Sostenibilidad en la provincia de Almería*, 11-28. Asoc. Posidonia y Junta de Andalucía, Almería. ISBN: 978-84-607-4163-3.

[1] **Contreras, S.**, Piquer, M., Cabello, J. (coords.), 2002. *Agricultura, Agua y Sostenibilidad en la provincia de Almería*, Asoc. Posidonia y Junta de Andalucía. ISBN: 978-84-607-4163-3. 285 pp.

Scientific articles in peer-reviewed journals

[27] Lagasio, M. et al., 2025. Integrating Advanced Sensor Technologies for Enhanced Agricultural Weather Forecasts and Irrigation Advisories: The MAGDA Project Approach. *Remote Sensing* 17(11), 1855. https://doi.org/10.3390/rs17111855

[26] Eekhout, J.P.C., Delsman, I., Baartman, J.E.M., van Eupen, M., van Haren, C., **Contreras, S.**, Martínez-López, J., de Vente, J., 2024. How future changes in irrigation water supply and demand affect water security in a Mediterranean catchment. *Agricultural Water Management* 297, 108818. https://doi.org/10.1016/j.agwat.2024.108818

[25] Simons, G., Droogers, P., **Contreras, S.**, Sieber, J., Bastiaanssen, W., 2020. Virtual Tracers to Detect Sources of Water and Track Water Reuse across a River Basin. *Water* 12(8), 2315. https://doi.org/10.3390/w12082315

[24] Hunink, J.E., Simons, G., Suárez-Almiñana, S., Solera, A., Andreu, J., Giuliani, M., Zamberletti, P., Grillakis, M., Koutroulis, A., Tsanis, I., Shasfoort, F., **Contreras, S.**, Ercin, E., Bastiaanssen, W., 2019. A simplified water accounting procedure to assess climate change impact on water resources for agriculture accross diferent European river basins. *Water* 11, 1976. https://doi.org/10.3390/w11101976

[23] Alcolea, A., **Contreras, S.**, Hunink, J.E., García-Aróstegui, J.L., Jiménez-Martínez, J., 2019. Hydrogeological modelling for the watershed management of the Mar Menor coastal lagoon (Spain). *Science of the Total Environment* 663, 901-914. https://doi.org/10.1016/j.scitotenv.2019.01.375

[22] García-León, D., **Contreras, S.**, Hunink, J.E., 2019. Comparison of meteorological and satellite-based drought indices as yield predictors of Spanish cereals. *Agricultural Water Management* 213, 388-396. https://doi.org/10.1016/j.agwat.2018.10.030.

[21] Luna, L., Miralles, I., Lázaro, R., **Contreras, S.**, Solé-Benet, A., 2017. Effect of soil properties and hydrologic characteristics on plants in a restored calcareous quarry under a transitional arid to semiarid climate. *Ecohydrology* 11, e1896. http://dx.doi.org/10.1002/eco.1896.

[20] Hunink, J.E., Eekhout, J.P.C., de Vente, J., **Contreras, S.**, Droogers, P., Baille, A., 2017. Hydrological modelling using satellite-based crop coefficients: A comparison of methods at the basin scale. *Remote Sensing* 9, 174; http://dx.doi.org/10.3390/rs9020174.

[19] Romero-Trigueros, C., Nortes, P.A., Alarcón, J.J., Hunink, J.E., Parra, M., **Contreras, S.**, Droogers, P., Nicolás, E., 2016. The effects of saline reclaimed water combined with a deficit irrigation strategy on Citrus physiology as assessed by UAV remote sensing. *Agricultural Water Management* 183, 60-69; http://dx.doi.org/10.1016/j.agwat.2016.09.014.

[18] Jiménez-Martínez, J., García-Aróstegui, J.L., Hunink, J.E., **Contreras, S.**, Baudron, P., Candela, L., 2016. The role of groundwater in highly human-modified hydrosystems: A review of impacts and mitigation options in the Campo de Cartagena-Mar Menor coastal plain (SE Spain). *Environmental Reviews* 24, 377-392; http://dx.doi.org/10.1139/er-2015-0089.

[17] Cantón, Y., Rodríguez-Caballero, E., **Contreras, S.**, Villagarcía, L., Li, X.Y., Solé-Benet, A., Domingo, F., 2016. Vertical and lateral soil moisture patterns on a mediterranean karst hillslope. *Journal of Hydrology and Hydromechanics* 64, 209-2019; http://dx.doi.org/10.1515/johh-2016-0030.

[16] Hunink, J.E., **Contreras, S.**, Soto-García, M., Martín-Gorriz, B., Martínez-Alvarez, V., Baille, A., 2015. Estimating groundwater use patterns of perennial and seasonal crops in a Mediterranean irrigation scheme, using remote sensing. *Agricultural Water Management* 162, 47-56; http://dx.doi.org/10.1016/j.agwat.2015.08.003.

[15] Timmermans, W., et al., 2015. An overview of the Regional Experiments For Land-atmosphere Exchanges (REFLEX) 2012 Campaign. *Acta Geophysica* 63, 1465-1484; http://dx.doi.org/10.2478/s11600-014-0254-1.

[14] **Contreras, S.**, Cutillas, P., Santoni, C.S., Romero-Trigueros, C., Pedrero, F., Alarcón, J.J., 2014. Effects of reclaimed waters on spectral properties and leaf traits of Citrus orchards. *Water Environment Research* 86, 2242-2250; http://dx.doi.org/10.2175/106143014X14062131178637.

[13] **Contreras, S.**, Santoni, C.S., Jobbagy, E.G., 2013. Abrupt watercourse formation in a semiarid sedimentary landscape of central Argentina: The roles of forest clearing, rainfall variability, and seismic activity. *Ecohydrology* 6, 794-805; http://dx.doi.org/10.1002/eco.1302.

[12] Moreno-Gutierrez, C., Battipaglia, G., Cherebuni, P., Saurer, M., Nicolás, E., **Contreras, S.**, Querejeta, J.I., 2012. Stand structure modulates the long-term vulnerability of *Pinus halepensis* to climatic drought in a semiarid Mediterranean ecosystem. *Plant, Cell and Environment* 35, 1026-1039; http://dx.doi.org/10.1111/j.1365-3040.2011.02469.x.

[11] Li, X-Y., **Contreras, S.**, Solé-Benet, A., Cantón, Y., Domingo, F., Lázaro, R., Lin, H., Van Wesemael, B., Puigdefábregas, J., 2011. Controls of infiltration-runoff processes in Mediterranean karst rangelands in SE Spain. *Catena* 86, 98-109; http://dx.doi.org/10.1016/j.catena.2011.03.003.

[10] **Contreras, S.**, Jobbagy, E.G., Villagra, P.E., Nosetto, M.D., Puigdefábregas, J., 2011. Remote sensing estimates of supplementary water consumption by arid ecosystems of central Argentina. *Journal of Hydrology* 397, 10-22; http://dx.doi.org/10.1016/j.jhydrol.2010.11.014.

[9] Alcalá, F.J., Cantón, Y., **Contreras, S.**, Were, A., Serrano-Ortiz, P., Puigdefábregas, J., Solé-Benet, A., Custodio, E., Domingo, F., 2011. Diffuse and concentrated recharge evaluation using physical and tracer techniques: Results from a semiarid carbonate massif aquifer in southeastern Spain. *Environmental Earth Sciences* 62, 541-557; http://dx.doi.org/10.1007/s12665-010-0546-y.

[8] Santoni, C.S., Jobbagy, E.G., **Contreras, S.**, 2010. Vadose zone transport in dry forests of central Argentina: The role of land use. *Water Resources Research* 46, W10541. http://dx.doi.org/10.1029/2009WR008784.

[7] García, M., Oyonarte, C., Villagarcía, L., **Contreras, S.**, Domingo, F., Puigdefábregas, J., 2008. Monitoring land degradation using ASTER data: the non-evaporative fraction as an indicator of ecosystem function. *Remote Sensing of Environment* 112, 3469-3738; http://dx.doi.org/10.1016/j.rse.2008.05.011.

[6] **Contreras, S.**, Cantón, Y., Solé-Benet, A., 2008. Sieving crusts and macrofaunal activity control soil water repellency in semiarid environments: evidences from SE Spain. *Geoderma* 145, 252-258; http://dx.doi.org/10.1016/j.geoderma.2008.03.019.

[5] Li, X.Y., **Contreras, S.**, Solé-Benet, A., 2008. Unsaturated hydraulic conductivity in limestone dolines: influence of vegetation and rock fragments. *Geoderma* 145, 288-294; http://dx.doi.org/10.1016/j.geoderma.2008.03.018.

[4] **Contreras, S.**, Boer, M.M., Alcalá, F.J., Domingo, F., García, M., Pulido-Bosch, A., Puigdefábregas, J., 2008. An ecohydrological modelling approach for assessing long-term recharge rates in semiarid karstic landscapes. *Journal of Hydrology* 351, 42-57; http://dx.doi.org/10.1016/j.jhydrol.2007.11.039.

[3] Li, X.Y., **Contreras, S.**, Solé-Benet, A., 2007. Spatial distribution of rock fragments in dolines: a case study in a semiarid Mediterranean mountain-range (Sierra de Gádor, SE Spain). *Catena* 70, 366-374; http://dx.doi.org/10.1016/j.catena.2006.11.003.

[2] García, M., Villagarcía, L., **Contreras, S.**, Domingo, F., Puigdefábregas, J., 2007. Comparision of three models estimating water deficit using reflective and thermal data from ASTER. *Sensors* 7, 860-883; http://dx.doi.org/10.3390/s7060860.

[1] **Contreras, S.**, Solé-Benet, A., 2003. Hidrofobia en suelos mediterráneos semiáridos: implicaciones hidrológicas para una pequeña cuenca experimental en el SE ibérico. *Revista Cuaternario y Geomorfología*, 17: 29-45.

Technical Reports and Teaching documents

[25] **Contreras, S.**, Fernández-Rodríguez, A., de Klerk, M., 2025. Irrigation Advisory Results Validation. Deliverable 6.3 MAGDA project.

[24] **Contreras, S.**, Bea, M., Hunink, J.E., 2024. Hydrological assessment, risk analysis and farming opportunities in the Doñana ecosystem and coast of Huelva (Spain): AWS Catchment Status Report. FutureWater Report 253.

[23] Fernández-Rodríguez, A., **Contreras, S.**, Simons, G.W.H., 2024. Satellite-based Water Productivity of dominant croplands in the Jucar River Basin (Spain) by local implementation of WaPOR algorithm. FutureWater Report 250.

[22] **Contreras, S.**, Simons, G.W.H., Fernández-Rodríguez, A., 2024. Towards an operational satellite-based Drought Early Warning and Forecasting System for quantifying risks of crop and water supply failures – ESA-Incubed Project Final Report (FREP) - FutureWater Report 249.

[21] **Contreras, S.**, García-Aróstegui, J.L., Robles-Arenas, V., Hunink, J.E., 2023. Historical and recent patterns of groundwater recharge in the Campo de Cartagena Quaternary aquifer by combining hydrological modelling and satellite data. AQUIFER Project (SOE4/P1/E1045).

[20] IDOM-FutureWater, 2022. Foresight: Trends and Scenarios of Water availability in the Panama Canal hydrological basin. Technical note IDB-TN-02326. Inter-American Development Bank (in Spanish)

[19] Faassen, K., C. Nolet, **S. Contreras**. 2020. Internship Report: Determining the dryness index and evaporative fraction for satellite and drone images. FutureWater Report 125.

[18] **Contreras, S.**, Nolet, C., Simons, G.W.H., 2020. Monitor Ecopraderas: Seguimiento del estado de las praderas de la Vega del Alagón mediante indicadores de satélite. FutureWater Report 212.

[17] Hamed, R., De Tomas, A., **Contreras, S.**, Hunink, J.E. 2019. Seasonal Hydrological Forecasting for the Segura River Basin, Spain. FutureWater Report 197.

[16] **Contreras, S.**, Hunink, J.E., 2019. *InfoSequia Testing Development Report*. BRIGAID Project Internal Report.

[15] **Contreras, S.**, 2019. *Detection and coverage estimation of on-farm reservoirs and ponds in Mediterranean irrigated regions using orthophotos and pixel classification techniques*. FutureWater Report 186, 20 pp.

[14] Taner M.Ü., Hunink, J.E., **Contreras, S.**, Hijar, A., Hamed, R., Morales, D., Wasti, A., Ray, P. 2019. El Marco del Árbol de Decisión: Aplicación a la Cuenca de Chancay-Lambayeque, Perú. Informe final. Deltares, FutureWater, INSIDEO and University of Cincinnati for World Bank.

[13] **Contreras, S.**, Faneca, M., Hunink, J.E., Werner, M., 2019. *Uso conjunto de aguas superficiales y subterráneas en el Valle del Cauca. Examen preliminar*. Deltares y FutureWater for the Corporación Autónoma Regional del Valle del Cauca, 48 pp.

[12] Hunink, J.E., Eekhout, J.P.C., de Vente, J., **Contreras, S.**, Simons, G.W.H., 2019. *Satellite-based altimetry data for hydrological assessments: two case studies*. FutureWater Report 194, 37 pp.

[11] **Contreras, S.**, Alcolea, A., Jiménez-Martínez, J., Hunink, J.E., 2017. *Cuantificación de la descarga subterránea al Mar Menor mediante modelización hidrogeológica del acuífero superficial Cuaternario*. FutureWater Report 176, 91 pp.

[10] **Contreras, S.**, Hunink, J.E., Baille, A., 2017. *Water and carbon fluxes in irrigated citrus orchards assessed from satellite data*. FutureWater Report 174, 58 pp.

[9] Hunink, J.E., **Contreras, S.**, Simons, G., Droogers, P., 2017. *Hydrological evaluation and ecosystem valuation of the Lukanga swamps*. FutureWater Report 167, 76 pp.

[8] Hunink, J.E., Terink, W., **Contreras, S.**, Droogers, P., 2015. *Scoping assessment of erosion levels for the Mahale region, Lake Tanganyika, Tanzania*. FutureWater Report 148, 47 pp.

[7] Hunink, J.E**., Contreras, S.**, Droogers, P., 2015. *Hydrological pre-feasibility assessment for the Romuku hydropower plant Central Sulawesi, Indonesia*. FutureWater Report 141, 38 pp.

[6] **Contreras, S.,** Hunink, J., 2015. *Water accounting at the basin scale: water use and supply (2000-2010) in the Segura River Basin using the SEEA framework*. FutureWater Report 138, 49 pp + 4 annexes.

[5] **Contreras, S.**, Hunink, J.E., Baille, A., 2014. *Building a Watershed Information System for the Campo de Cartagena basin (Spain) integrating hydrological modeling and remote sensing*. FutureWater Report 125, 59 pp.

[4] Santoni, C.S., **Contreras, S.**, 2013. Impactos extremos en la hidrogeomorfología de cuencas semiáridas: Efectos de la deforestación y el cambio climático en el centro de Argentina. En García-Galiano, S.G. (Ed.) *Cambio climático e hidrología: desde la ciencia a la práctica en gestión hídrica y manejo del suelo*, 31-46. Universidad Politécnica de Cartagena, Cartagena (España). ISBN: 978-84-616-5700-1.

[3] **Contreras, S.**, Hunink, J., Lutz, A., Droogers, P., Immerzeel, W., 2013. Impactos del cambio climático en grandes cuencas montañosas: simulación hidrológica y estrategias de adaptación en la cuenca del Mar de Aral (Asia Central). En García-Galiano, S.G. (Ed.) *Cambio climático e hidrología: desde la ciencia a la práctica en gestión hídrica y manejo del suelo*, 97-112. Universidad Politécnica de Cartagena, Cartagena (España). ISBN: 978-84-616-5700-1.

[2] Puigdefábregas, J., del Barrio, G., Boer, M., Cánton, Y., **Contreras, S.**, Domingo, F., Gónima, L., Lázaro, R., Moro, M.J., Solé-Benet, A., Villagarcía, L., 2004. *Inducción de la Recarga de Acuíferos en Zonas Semiáridas. Localización de áreas susceptibles de actuación. Último avance. Parte II.* Instituto del Agua de Andalucía - Junta de Andalucía.

[1] **Contreras, S.**, 2003. *Evaluación de la distribución espacial del drenaje en la Sierra de Gádor (Almería)*. Tesis de Tercer Ciclo. Departamento de Hidrogeología y Química Analítica, Universidad de Almería. 85 pp.

Language Skills

Spanish:	Mother tongue
English:	Fluent in writing and speech

Computer Skills

GIS/Remote Sensing:	QGIS, PcRaster, ArcGIS, Idrisi, Earth Engine
Simulation & System Analysis:	SPHY, SWAT, HEC-RAS, Iber, HYDRUS, WEAP, AQUATOOL
Programming:	Python, R
MS-Office:	Advanced

Scientific peer-review activity

Journals: Agricultural Water Management, Arid Land Research and Management, Environmental Earth Sciences, Global Change Biology, Hydrological Processes, Hydrology and Earth System Sciences, Journal of Arid Environments, Journal of Environmental Management, Journal of Hydrology, Journal of Hydrology - Regional Studies, Remote Sensing, Revista de la Facultad de Ciencias Agrarias de la Universidad Nacional de Cuyo, Soil Science Society of America Journal, Waste Management, Water Resources Research

Project assessment/evaluation and monitoring activities

Institutions/Agencies: National Agency for the Promotion of Science and Technology of Argentina (ANPCYT), Research Foundation Flanders (FWO), Spanish Agency of Evaluation and Prospective (AEI-ANEP), Research Promotion Foundation of Cyprus (RPF)
- Member of the EUREKA expert network

Miscellanea

- Alliance for Water Stewardship (https://a4ws.org) – Credentialed Specialist (since 2023).
- Participation as consultant expert in workshops, roundtables and innovation-project meetings (e.g. Multi-Actor Lab of Mar Menor organized by the H2020 COASTAL project, CAJAMAR-INNOVA, and VEGA-RENHACE Regional Plan organized by Regional Government of Valencia-Spain)