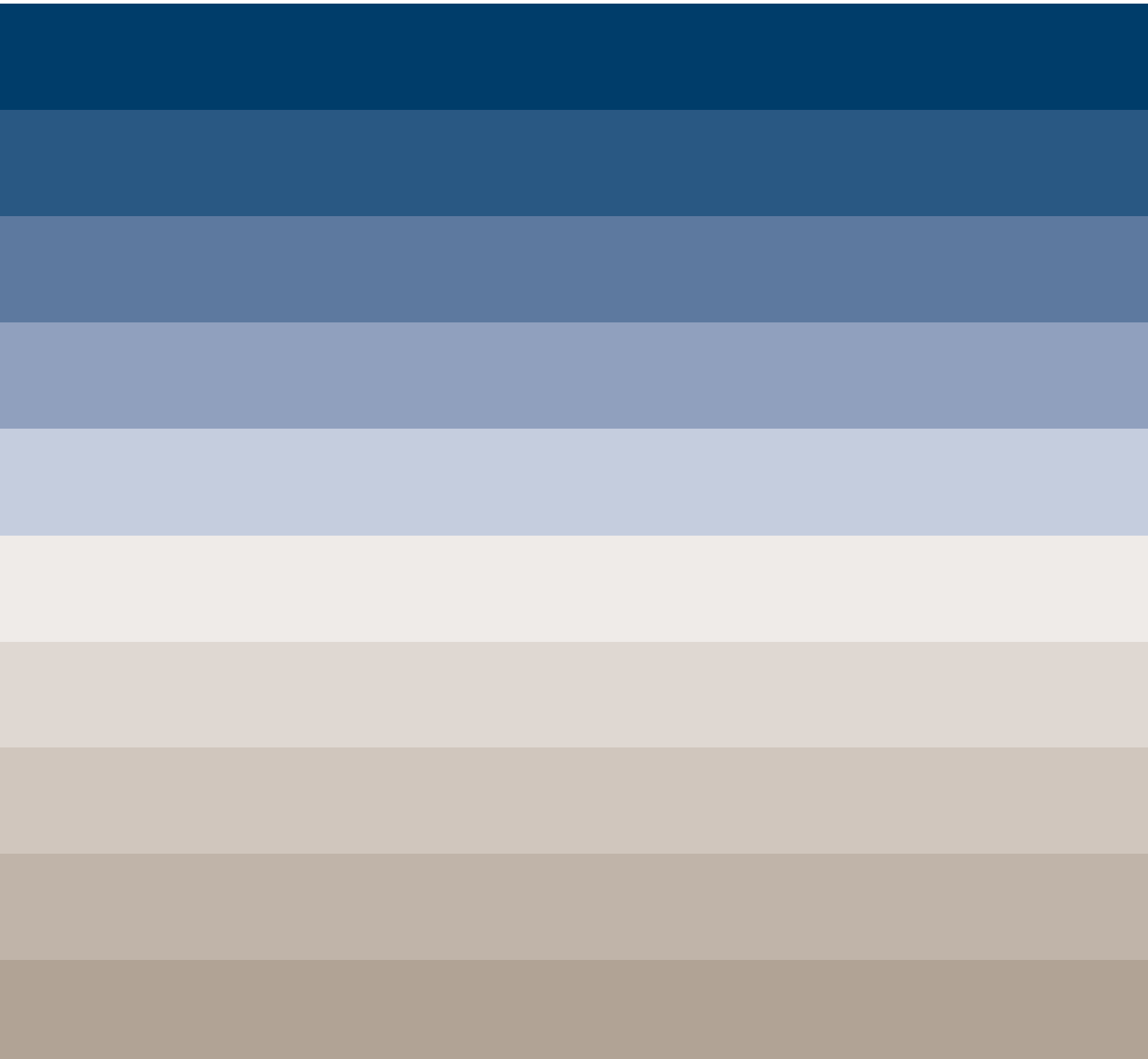




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LIST OF PRESENTATIONS & PUBLICATIONS



Umvoto's staff have had the pleasure of attending several local and international conferences. These conferences have extended our perspective on groundwater research and at times, provided an important global context to the projects the team works on.

2020

United Nations Science-Policy-Business Forum Second Global Session (UNEP)
Drilling and Testing Workshop: Setting the Standard. IAH-SA
Integrated Urban Water Management (UCT Future Water)
Geoethics and Groundwater Management International Congress (IAH/IAPG/ISEP)
1st Habitable Planet "Perspectives on Global Change" Conference

2019

MAR Workshop, IAH-SA
10TH Biennial International Symposium on Managed Aquifer Recharge (ISMAR)
2nd SADC-GMI Groundwater Conference (SADC-GMI)
16th GWD Groundwater Conference
United Nations Science-Policy-Business Forum Second Global Session (UNEP)
Fourth Session of the United Nations Environment Assembly (UNEP)
Royal Geographical Society Annual International Conference
European Geosciences Union General Assembly 2019
Prosopis Working Group Meeting
Inaugural annual meeting of the WWQA, Ispra Italy (UNEP)

2018

Geocongress 2018 (GSSA)
Groundwater and Drought Symposium (GSSA-Groundwater Division)
World Water Quality Assessment Inception Workshop (UNEP-GEMS/Water-WMO)
Institute of Municipal Engineering of Southern Africa Conference 2018
GISSA Western Cape Members event
OpenIX 2018, Innovation Hub

2017

15th Groundwater Division Conference (GSSA-Groundwater Division)
European Geosciences Union, General Assembly
IAH Congress Dubrovnik

Papers presented

Andersen, M., Aureli, A., Blake, D., Boving, T., Chambel, A., Delaire, C., Dottridge, J., Duerr, H., Hartog, N., Jawitz, J., Kebede Gurmessa, S., Klingbeil, R., Kreamer, D., Kukuric, N., Lapworth, D., Liu, J., Lytton, L., Misstear, B., Ouedraogo, I., Podgorski, J., Poulin, C., Qadir, M., Riemann, K., Ruz Vargas, C., Scrinzi, L., Simmons, C., Smedley, P., Villholth, K. and Wagner, F. (2020). Groundwater quality within the World Water Quality Assessment and its relevance for the SADC Region. 3rd Southern African Development Community-Groundwater Management Institute Groundwater Conference, Johannesburg (online), South Africa, November 2020.

Atkins, F., Flügel T., Hugman, R and Anderson, P. (2019). A water budget analysis of conjunctive surface and sub-surface waters: An urban metabolism approach to drought response in Cape Town, South Africa. European Geosciences Union General Assembly 2019, Vienna, Austria. 1 – 12 April 2019.

Blake, D. (2017). Western Cape water puzzles. Constantia Valley Garden Club Monthly Meeting, Cape Town, South Africa, August 2017.

Blake, D. (2018). Groundwater, and the hydrogeology of the Rondebosch Common. Friends of the Rondebosch Common Members' Meeting, Cape Town, South Africa, October 2018.

Blake, D. (2018). Steenbras geology and hydrogeology. Kogelberg Biosphere Reserve Company Meeting, Kleinmond, South Africa, October 2018.

Blake, D. (2019). Groundwater development of the Table Mountain Group Aquifers as part of the City of Cape Town's New Water Programme. Botanical Society of South Africa Kogelberg Branch Meeting, Betty's Bay, South Africa, March 2019.

Blake, D. (2019). Groundwater in the southwestern Cape – hydrogeology and development of various primary sand, secondary fractured and basement aquifers within the region. University of the Third Age (U3A) Cape Town Natural Science Group Meeting, Tokai Estate, South Africa, May 2019.

Blake, D. (2020). Hydrogeology of the greater Hermanus region. Presentation to Whale Coast Conservation Public Meeting, Hermanus, South Africa, February 2020.

Blake, D. and Hartnady, C. J. H. (2019). Proposed seismo-geodetic monitoring network for the Steenbras Wellfield (City of Cape Town). Council for Geoscience 1969 and 1809 Earthquake Anniversary Commemoration as Disaster Risk Reduction Contribution, Cape Town, South Africa, December 2019.

Blake, D., Hartnady, C. J. H., Hay, E. R. and Holmes, J. C. (2017). Groundwater irrigation of Kalk Bay-St James Public Green Spaces. Kalk Bay and St James Residents' and Ratepayers' Association Annual General Meeting, Cape Town, South Africa, May 2017.

Blake, D., Hartnady, C. J. H., Hay, E. R. and Riemann, K. (2020). Geoethics of bulk groundwater abstraction in an ecologically sensitive area – Steenbras Wellfield (Cape Town). Geoethics & Groundwater Management International Congress, Porto (online), Portugal, May 2020.

Blake, D., Kremer, H., Hay, R., Christ, K., McGibbon, D. and Towers, L. (2019). Cape Town's major aquifer Systems as a use case study for the Global Water Quality Assessment. 2nd Southern African Development Community-Groundwater Management Institute Groundwater Conference, Johannesburg, South Africa, September 2019.

Blake, D., Riemann, K. and Rademan, Z. (2020). Groundwater exploration and development of the Table Mountain Group Aquifers as part of the City of Cape Town's New Water Programme. IAH-SA Workshop 2020 – Groundwater: Setting the Standards – Borehole Drilling, Pumping Tests and Monitoring, Stellenbosch, South Africa, November 2020.

Blake, D., Riemann, K., Jack, S. O., Botha, F. S., Weidemann, R. V., Wise, E. A. and Mndaweni, S. (2017). Groundwater resource assessment of the Malmani Subgroup dolomites within the Olifants River Water Supply Scheme. 15th South African Groundwater Division Conference, Stellenbosch, South Africa, 2017.

Blake, D., Riemann, K., Lee, P., Jack, S. O. and Munnik, M. (2018). Long-term groundwater abstraction and monitoring at Hermanus and Stanford (Overstrand Local Municipality). Groundwater Division Western Cape Symposium: Groundwater and Drought, Cape Town, South Africa, November 2018.

Blake, D., Riemann, K., Rademan, Z. and Geldenhuys, P. (2019). Groundwater development of the Table Mountain Group Aquifers as part of the City of Cape Town's New Water Programme. 16th South African Groundwater Division Conference, Port Elizabeth, South Africa, October 2019.

Flügel, T. (2018). The role of geospatial data in managing the groundwater resource of the Cape Flats Aquifer. Environmental and Water Science Honours Presentation, University of the Western Cape, 20 September 2018.

Flügel, T. (2018). The role of geospatial data in managing the groundwater resource of the Cape Flats

Papers presented...

Aquifer. GISSA Western Cape Members event, 19 July 2018.

Flügel, T. and Kuhudzai, A. (2018). Novel Applications for Earth Observation Data: Using EO data to solve problems of environmental degradation threatening water and food security in a major coastal city. OpenIX 2018, Innovation Hub, Pretoria, 26 January 2018.

Flügel, T., Atkins, F. and Hugman R. (2019). Towards urban water resilience: A case study of drought response in Cape Town, South Africa. Royal Geographical Society Annual International Conference, London, United Kingdom. 2 – 30 August 2019,

Hartnady, C. J. H., Hartnady, M. I. H., Wise, E. A., Blake, D., McGibbon, D. C. and Hay, E. R. (2017). Litho-tectonic mapping of the North Afar region from Sentinel-2A multispectral imagery and ALOS AW3D30 digital elevation data: Controls on Danakil-Nubia plate motion between the Erta'Ale ridge and the Gulf of Zula. European Geosciences Union General Assembly, Vienna, Austria, 2017.

Hartnady, C. J. H., Hay, E. R., Riemann, K., Blake, D. and Holmes, J. C. (2018). Table Mountain Group aquifers as a long-term resilience buffer against drought and climate change in the Western Cape, South Africa. Geocongress 2018, Johannesburg, South Africa, 2018.

Hartnady, C., Hartnady, M., Wise, E.A., Blake, D., McGibbon, D., and Hay E.R. (2017). Litho-tectonic mapping of the North Afar region from Sentinel-2A multispectral imagery and ALOS AW3D30 digital elevation data: Controls on Danakil-Nubia plate motion between the Erta'Ale ridge and the Gulf of Zula, European Geosciences Union, General Assembly, 23-28 April 2017, Vienna, Austria

Hartnady, C., Wise, E.A., Hartnady, M., Olianti, C., and Hay E.R. (2017) Using Sentinel-2A multispectral imagery to explore for deep groundwater resources in the Ceres-Tankwa Karoo, Western Cape, South Africa: Significance for the 'water-energy(-food) nexus' in an arid region European Geosciences Union, General Assembly, 23-28 April 2017, Vienna, Austria

Hay, E. R., Hartnady, C. J. H., Hugman, R., Atkins, F., van Ryneveld, M., Wise, E., McGibbon, D. C., and Holmes, J. (2018). Cape Flats Aquifer: 3D geometry and revised hydrostratigraphy based on geomorphological process-domain understanding, new drilling and modelling results. Geocongress 2018, Johannesburg, South Africa, 2018.

Hay, R., Holmes, J., Atkins, F., Coetzee, A., Hugman, R., Flügel, T., Snyman, A. and de Jager, R (2018). Opportunity in crisis: An interdisciplinary, 'Learn By Doing' approach to resource management of the Cape Flats Aquifer. Institute of Municipal Engineering of Southern Africa Conference 2018, Port Elizabeth, South Africa. 31 October – 02 November 2018.

McGibbon, D. C., Blake, D., Riemann, K., Petschnig, P. and Towers, L. C. (2017). Hydrochemical analysis of groundwater within the Danakil Depression, northern Ethiopia. 15th South African Groundwater Division Conference, Stellenbosch, South Africa, 2017.

McGibbon, D. C., Hugman, R., Towers, L. C., Riemann, K., Hay, E. R. and Hartnady, C. J. H. (2020). Long-term planning during emergency response – a no-regrets approach and long-term vision for the development of the Cape Flats Aquifer (Cape Town). Geoethics & Groundwater Management International Congress, Porto (online), Portugal, May 2020.

McGibbon, D. C.; Hugman, R.; Towers, L. T.; Hartnady, C. H. J.; Hay, E. R.; Riemann, K. (2019). Emergency response to drought – the City of Cape Town's groundwater abstraction and MAR scheme (South Africa). ISMAR 10 International Symposium on Managed Aquifer Recharge, Madrid, Spain, May 2019.

McGibbon, D., Hartnady, C. H. J., Blake, D., Riemann, K., Hay, E. R. and Towers, L. C. (2017). Hydrochemical analysis of groundwater in the Danakil Depression, Northern Ethiopia. 15th South African Groundwater Division Conference, Stellenbosch, South Africa, 2017.

McGibbon, D., Hugman, R., Riemann, K., Hartnady, C. H. J. and Hay, E. R. (2018). Cape Flats Aquifer: New insights from drilling, monitoring and modelling. Groundwater Division Western Cape Symposium: Groundwater and Drought, Cape Town, South Africa, November 2018.

McGibbon, D., Hugman, R., Towers, L. C., Hartnady, C. H. J., Hay, E. R. and Riemann, K. (2019). Emergency response to drought – the City of Cape Town's groundwater abstraction and MAR scheme (South Africa). 16th South African Groundwater Division Conference, Port Elizabeth, South Africa, October 2019.

McGibbon, D.C. and Towers, L. C. (2020). Groundwater and the City. UCT Future Water – Integrated Urban Water Management, Cape Town (online), South Africa, July 2020

McGibbon, D.C. and Towers, L. C. (2020). Groundwater exploration & development: Drilling Techniques and challenges in the Cape Flats and Atlantis Aquifers. IAH-SA Workshop 2020 – Groundwater: Setting the Standards – Borehole Drilling, Pumping Tests and Monitoring, Stellenbosch, South Africa, November 2020

Papers presented...

McGibbon, D.C., Hugman, R., Riemann, K. and Towers, L. C. (2019). MAR Workshop Cape Flats Aquifer. IAHS-SA Workshop 2019 – MAR Workshop, Stellenbosch, South Africa, April 2019

Molzen, G. M., Hay, E. R., McGibbon, D. C. and Blake, D. (2017). Groundwater augmentation for housing estate water supply, implementation and legal use. 15th South African Groundwater Division Conference, Stellenbosch, South Africa, 2017.

Riemann, K., Botha, F., Blake, D. and Mndaweni, S. (2019). Feasibility and implementation plan for groundwater resource development of the Malmani Subgroup dolomites within the Olifants River Water Supply System. 16th South African Groundwater Division Conference, Port Elizabeth, South Africa, 2019.

Towers, L.C. and Hugman, R. (2020). Cycles of uncertainty – an exploration of 40 years of the Atlantis Managed Aquifer Recharge Scheme through a geo-ethical lens. Geoethics & Groundwater Management International Congress, Porto (online), Portugal, May 2020.

Towers, L.C., and Hay E.R. (2018). The Atlantis Water Resource Management Scheme – Lessons in Resilience and Demonstration that “resource management is people management”. Geocongress 2018, Johannesburg, South Africa, 2018.

Towers, L.C., McGibbon, D.C., Geldenhuys, P., Hugman, R., Singh, S., Riemann, K., Harding, G., Whitehead, B., Maree, W. (2019). Influence of aquifer heterogeneity on borehole design, test pump results and interpretations of the primary Cape Flats and Atlantis Aquifers of the Western Cape, South Africa. 15th South African Groundwater Division Conference, Port Elizabeth, South Africa, October 2019.

Towers, L.C., McGibbon, D.C., Hartnady, C.J.H. and Riemann, K. (2017). Pump Test Analysis of Primary Alluvial Aquifers and the Influence of Rift Related Faults in the Danakil Depression, Northern Ethiopia. 15th South African Groundwater Division Conference, Stellenbosch, South Africa, 2017.

Towers, L.C., Riemann, K., Weitz, J. and Hugman, R. (2019). The Atlantis Water Resource Management Scheme – resource management is people management. ISMAR 10 International Symposium on Managed Aquifer Recharge, Madrid, Spain, May 2019.

Van Den Berg, E. (2019). Mapping and monitoring vegetation. Sendero Launch, 16 October 2019

Van Den Berg, E. (2019). *Prosopis* Past and Present. Prosopis Working Group Meeting, Kimberley, 19 February, 2019.

Wise, E. (2018). Morphometric Analysis: CFA surface & basal topography. QGIS User Group Meeting (Cape Town), 10 May 2018

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