

Curriculum Vitae: Jonathan Rawlins

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| Nationality | South African |
| Education | <p>MSc. Water Science, Policy and Management (with distinction) University of Oxford (2016-2017) United Kingdom</p> <ul style="list-style-type: none"> • UK Commonwealth Scholarship: University of Oxford (2016/2017) • Environmental Change Institute Sustainability Leadership Certificate (2017) <p>MSc. Environmental Economics (research dissertation) Rhodes University (2015-2016) South Africa</p> <p>BSc. (Hons). Environmental Water Management (with distinction) Rhodes University (2014) South Africa</p> <p>BSc. Majors: Environmental Science, Economics & Geography (with distinction) Rhodes University (2011-2013) South Africa</p> |
| Short Courses | <p>Unlocking Investment and Finance in Emerging Markets and Developing Economies (EMDEs) – World Bank Group Open Learning Campus (2019)* https://bit.ly/3126K5e</p> <p>Climate Risk Informed Decision Analysis (CRIDA) – UNESCO IHP (2019) https://bit.ly/2tdVBio</p> <p>International Water Law - University of Geneva (2018) https://bit.ly/2Z4Fd1i</p> <p>Water Resources Management and Policy - University of Geneva (2018) https://bit.ly/1oyUK6U</p> <p>Water: Addressing the Global Crisis (2019) - SDG Academy https://bit.ly/2HS8reo</p> <p>Remote Sensing for Freshwater Habitats – NASA ARSET (2019) https://go.nasa.gov/2Op9jKs</p> |
| Software Competency | <ul style="list-style-type: none"> • Microsoft Office Package • ArcGIS / QGIS • International Futures (IFs) Model • EDraw • NVivo |
| Languages | English (fluent), Afrikaans (working proficiency) |
| Professional Affiliations | <ul style="list-style-type: none"> • Contributing Author: IPCC 6th Assessment Report (AR6) on Africa - Ecosystems Based Adaptation • Expert Reviewer: IPCC 6th Assessment Report (AR6) • Allan Gray Orbis Foundation Candidate Fellow Mentor • Occasional Reviewer for Journal of Sustainable Cities and Societies • Alliance for Global Water Adaptation (AGWA) • Oxford Water Network • International Water Association • South African Young Water Professionals / Water Institute of Southern Africa • Adaptation Network |



Employment record

| <i>Period</i> | <i>Employer, Position and Location</i> | <i>Summary of Role and Activities Performed</i> |
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| August 2019 - present | Project Manager: Natural Resources OneWorld Sustainable Investments Cape Town, South Africa | My role as a consultant involves a variety of technical advisory and project management activities in the broad field of sustainable development, with the key focus areas being climate change and natural resources management. Cross-cutting technical engagement ranges from economic, social, policy and governance analyses to natural and climate sciences. Primary activities include project coordination and management, technical advisory, primary and secondary research and data analysis, report writing, client liaison and stakeholder engagement and consultation. Other key responsibilities include business development, proposal writing, training and capacity building workshops, managing associates, workshop facilitation, report production and presentation of results to decision-makers. |
| 2017 – August 2019 | Technical Adviser OneWorld Sustainable Investments Cape Town, South Africa | Introductory training for management consulting, client engagement, technical analysis tools and business development. Lead a key project focused on assisting a local business to develop an international marketing strategy for its products, with a particular focus on developing nations. |
| February - May 2017 | Management Consultant The Student Consultancy University of Oxford, United Kingdom | Student tutor and boarding house oversight, rugby and cricket coaching and student mentorship. Conducted community engagement and educational development activities in low-income areas of Grahamstown. |
| 2015 - 2016 | Student Tutor and Sports Coach St Andrew's College Grahamstown, South Africa | Academic tutor and demonstrator for geographical sciences, economics and environmental sciences. Lead and facilitated practical sessions, assessed essays and projects and provided direct technical support to undergraduate students. |
| 2014 | Academic Tutor and Demonstrator Rhodes University Grahamstown, South Africa | Intern level introductory training with various business units and consultancy. Compiled and managed stakeholder databases and conducted policy analysis relate to best-practice environmental impact assessment legislation in Africa. |
| January - February 2013 | Intern: Environmental Consulting Environmental Resources Management (ERM) Cape Town, South Africa | Managed the students of College House Residence, facilitated workshops and team building exercises, provided social support and facilitated various community engagement and development activities on behalf of the College. |
| 2012 | College House Sub-Warden Rhodes University Grahamstown, South Africa | Managed the wilderness camp and staff, conducted game drives and guided nature walks with clients, managed clients and engaged with park authorities on conservation management and development issues. Engaged with local communities relating to human-animal conflict in the reserve, facilitated conservation awareness-building activities. |
| 2010 | Field Guide and Game Ranger Machampane Wilderness Camp Limpopo Transfrontier Park, Mozambique | |



Relevant Professional Experience

- July 2019 – August 2020 Green Climate Fund (GCF)
Technical Advisory Services on the Piloting of Activities for the Preparation of GCF Country Programmes and Related Processes
- Project Manager, Technical Adviser**
- As part of a consortium with Oxford Policy Management (OPM), Navigant and Primex, OneWorld has been contracted as the Africa-lead to support GCF programming across select countries in Africa. Currently focusing on the seven countries of Mozambique, Cameroon, Seychelles, Mauritius, Kenya, Uganda and Tunisia, the project is aimed at building capacity and supporting country programming for GCF projects. Specifically, this is focused on improving bankability of GCF project proposals, strengthening the climate change rationale through climate change risk and vulnerability assessments, assessing economic risks of climate change, conducting policy analyses and finance gap assessments, and engaging with national and multi-lateral institutions to facilitate cooperation and maximise investment opportunities.
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- November 2019 – February 2020 Green Climate Fund (GCF)
Capacity needs assessment in the areas of Environmental and Social Safeguards, Gender Equality and Indigenous Peoples
- Environmental and Social Safeguards Adviser**
- Currently providing support to the GCF Secretariat in achieving its commitment to providing technical support and continuing to develop the technical competencies of Accredited Entities (AEs) and GCF staff. This support is targeted towards ensuring that the GCF requirements, which include the Environmental and Social Safeguards (ESS) policy, Gender Policy and Indigenous Peoples Policy, are fulfilled and maintained throughout the duration of a project lifecycle (from preparation through to implementation). For this assignment, the training needs assessment will inform recommendations for the GCF on how to improve and build capacity within AEs and amongst GCF staff. These recommendations will feed into the development of a training program by the GCF, which will be the primary focus in contributing to the overall technical capacity development of the Fund. The current assignment will therefore lay the groundwork for this upcoming capacity building phase.
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- April 2018 – present French Development Agency (AFD) / City of Cape Town
Climate Change Hazard, Vulnerability and Risk Assessment Study for the City of Cape Town
- Project Manager, Technical Adviser and Research Analyst**
- The aim of this study is to assess the nature and spatial location of hazards, vulnerabilities, and risks in Cape Town, given current climate change projections, to enable the City to make decisions not only on new investments, but also on how it should potentially adjust existing projects to improve water and climate resilience. Activities include: desktop review, data analysis, participatory analysis and stakeholder engagement in workshops and interviews, cross-validation process, support development of GIS risk and vulnerability assessment, and identify and assess economic impact of adaptation options (with a focus on water resources management). Identification of priority actions and investment projects. Development of a climate investment plan. Presentation and validation of findings with project members from the City and stakeholders.
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- January 2019 – August 2019 Southern African Development Community (SADC) and Global Water Partnership Southern Africa (GWP-SA)
Mid-term Review: Implementation of the Southern African Development Community Regional Strategic Action Plan on Integrated Water Resources Development and Management (2016-2020)
- Project Manager, Technical Adviser**
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The aim of this project is to conduct an independent review of implementation of the SADC RSAP IV with a focus on providing recommendations for the development of the next iteration (RSAP V, 2020-2024). The review is framed around the climate-water-ecosystem-development nexus and how well-suited current adaptation responses are to regional and local challenges. Activities include: conducting detailed literature and document reviews, extensive interviews and focus group discussions with key regional and national stakeholders. These activities provide the basis for assessing the implementation progress, appraising various modes of delivery and evaluating the sustainability of RSAP interventions. Findings are being validated and verified through participatory analysis with the regional Water Resources Technical Committee to begin mainstreaming priority climate-responsive recommendations.

January 2019 – Ministry of National Development Planning and Pilot Programme for Climate Resilience (PPCR), Zambia.

April 2019
Developing Guidelines for Screening Climate Change in Sectoral Policies, Plans and Strategies

Technical Adviser and Researcher

Provide technical Advisory and research support for the development of guidelines and tools for screening climate change in sectoral policies, plans and strategies. Undertaking a situational analysis on sector policies, plans and strategies to inform the development of screening guidelines and assessment tools. Focus group discussions and sector workshops will be undertaken to test and validate the tool and guidelines. A user guide and training manual will be developed to conduct a Training of Trainers workshop to train end-users to be able to further train people on how to apply the guidelines throughout Zambia.

November
2018 – March
2019
Western Cape Government, South Africa

Evaluation of the Impact and Implementation of the Western Cape Climate Change Response Strategy (WCCCRS)

Technical Adviser and Researcher

Provide technical Advisory and research support for the evaluation of WCCCRS. Activities include the continuous co-development of a theory of change (ToC) and technical assessment framework, initially based on thorough literature and document reviews as well as a high-level benchmarking exercise. Key-informant interviews and focus group discussions will be facilitated to further co-develop the ToC, as well as providing data to evaluate the design and implementation of WCCCRS. Key technical contributions are focused on the water sector and how the response to climate change can be improved, noting the severity of the recent drought. Ultimately, a final co-developed and validated ToC will be developed to inform the future iteration of the strategy and the key entry points for building resilience in the Western Cape Province.

October 2018 – Swiss Agency for Development and Cooperation (SDC)

January 2019
Water Diplomacy and Governance of Key Transboundary Hotspots – Salween Component

Technical Adviser and Backstopping Researcher

Determine and outline appropriate and suitable entry points for water cooperation in the Salween River Basin and advise SDC in its specific role in bringing stakeholders together and coordinating different approaches in accordance with the demands of the respective national governments. Cross-examination of various water governance and management proposals for the Salween Basin to determine potential synergies, overlaps and antagonistic relationships. Review and advise on technical aspects of proposals to build cooperation in the basin. Assess key risks of development in the basin and associated costs of inaction. Stakeholder engagement assessment to advise SDC on their role in building cooperation through hydro-diplomacy.



February 2018 – October 2018
Zambian Ministry of National Development Planning / World Bank
Climate Change Risk and Vulnerability Assessment in Luapula, Muchinga, Northern and Western Provinces

Project Manager, Technical Adviser and Research Analyst

Socioeconomic assessment, surface and groundwater resource assessment and climate risk and vulnerability assessment in order to identify responsive and feasible investments in climate resilience, enhanced water resource management and improved disaster risk reduction. Conducted and provided technical Advisory on desktop review, data analysis, participatory analysis and stakeholder engagement in workshops and interviews, cross-validation processes, GIS risk and vulnerability assessment, district risk profiles and opportunity assessments. Identification of priority actions and investment projects, technical risk and vulnerability assessment communication. Development of concept notes for prioritised actions based on district/provincial prioritisation and hotspot analysis. Coordination and facilitation of workshops for the various districts to review identified gaps. Development of a climate resilience training manual and undertaking of a Training of the Trainers workshop. Development of validated climate investment solutions. Presentation and validation of findings with stakeholders and client team.

January 2018 – June 2018
Department of Planning, Monitoring & Evaluation, Government of South Africa; in partnership with Sustainable Energy Africa (SEA)

Developing Models and Pathways for a Low-carbon Economy and Climate-resilient Society

Scenarios Modeller and Technical Adviser

Modelled numerous development scenarios using International Futures Model for Global Forecasting software. Models focused on hypothetical development pathways specific to low-carbon development priorities and improving climate change resilience, modelled scenarios include water, energy, agriculture, employment and other socio-economic indicators. The project will assist in giving effect to the proposals contained in the Chapter Five of South Africa's National Development Plan. The focus is on facilitated consensus-building processes which will be underpinned and backed up by conversation/demand driven information/broad research and scenarios, as this evolves through the social partner dialogues.

September 2017- January 2018
Zambian National Climate Change Secretariat (NCCS) / World Bank
Landscape Vulnerability Risk Assessment Baseline

Project Coordinator, Technical Adviser and Research Analyst

Conducted desktop research, data analysis, in depth stakeholder engagement, workshop facilitation, GIS support and overall project management and coordination. The project aimed to strengthen the adaptive capacity of rural communities to better respond to existing climate variability and the longer-term impacts of climate change in the Zambian Luapula, Northern and Muchinga Provinces. In association with Habitat INFO, OneWorld conducted a Risk and Vulnerability (R&V) baseline assessment that considers exposure, sensitivity and adaptive capacity dimensions. This model is developed around key water resource, biodiversity and agricultural vulnerabilities to provide administrative district level vulnerability hotspots. These outputs feed into the development of the decision-support tool, capacity building and priority adaption recommendations.

Zambian National Climate Change Secretariat (NCCS) / World Bank
Landscape Vulnerability Decision Support Tool

Project Coordinator, Technical Adviser and Research Analyst

Conducted desktop research, data analysis, in depth stakeholder engagement, workshop facilitation and overall project management and coordination. The project aims to strengthen the adaptive capacity of rural communities to better respond to existing climate



variability and the longer-term impacts of climate change in the Zambian Luapula, Northern and Muchinga Provinces. OneWorld developed a decision support tool for policy-makers and planners to assist with landscape level investments to decrease climate change vulnerability, with a particular focus on sustainable water resource and environmental management. Building off of the R&V baseline assessment, this project involves identifying priority policy and adaptation options to reduce climate vulnerability, as well as strengthening the capacity of local and national level development planners to respond to climate change risks.

September 2017 – August 2018 Permanent Okavango River Basin Water Commission (OKACOM)
Discussion Paper & Recommendations on the Permanent Okavango River Basin Agreement (Angola, Botswana, Namibia)

Research Analyst and Backstopping

With the objective of furthering transboundary water cooperation in the Cubango-Okavango River Basin (CORB), OKACOM commissioned a OneWorld team to review the 1994 Permanent Okavango River Basin Agreement, and produce a Discussion Paper with its findings. The review analysed the consistency of the Agreement in guiding the scope of work and extending transboundary water cooperation in the CORB. The review thus aimed to support and inform local, national and regional decision making in the CORB, within a transboundary legal framework. In 2018, OKACOM commissioned an update to the Discussion Paper to incorporate further thinking that evolved from the initial paper and provide strategic recommendations in terms of the Agreement, towards protection and development of the Basin's resources.

September 2017 - ENSafrica / Zambezi Watercourse Commission (ZAMCOM)
December 2017 ZAMCOM Water Law Equivalence Assessment

Research Analyst

Conducted data analysis and review and desktop research related to water resource management and climate change laws and policies of riparian countries in the Zambezi River Basin (ZRB). To ensure equitable, fair and sustainable use of ZRB water resources, ZAMCOM requires best practice guidelines for achieving a harmonisation of the policies, legislation and agreements between the eight riparian countries. The project includes formulation of a model to assess the equivalence of key relevant national legislation, a legislation gap analysis and an options paper recommending potential measures for ZAMCOM.

January 2014- September 2017 Dissertation Research
This process involved qualitative and quantitative data analysis, facilitation of workshops, focus groups, interviews and discussions.

University of Oxford, School of Geography and the Environment

MSc Water Science, Policy and Management Dissertation:

The political economy of water reallocation: a case study of the Berg Water Management Area, South Africa.

Rhodes University, Department of Economics and Economic History

MSc Environmental Economics Dissertation:

Assessing the suitability of causal loop diagrams to assess the value chains of aquatic ecosystem services: a case study of the Baviaanskloof, South Africa

Rhodes University, Department of Geography

BScHons Environmental Water Management Dissertation:



An investigation of the hydro-sediment dynamics of a tidal meander complex: Kariega Estuary, Eastern Cape, South Africa.

Selected Publications, Research Papers and Technical Reports

- (Forthcoming) Kalaba, F., Rawlins, J. and Petrie, B. 2019. Climate change adaptation through livelihood diversification: Opportunities and challenges from Zambia. TBC.
- (Forthcoming) Rawlins, J., Petrie, B., Gerhard, M. and Filipova, A. 2019. Towards Cooperative Transboundary Environmental Management in SADC: Politics and Harmonisation. TBC.
- Petrie, B., Rawlins, J., Chapman, A., Nicks, S. and Monteith, S. 2019. Climate Change Resilience Investment Manual. Elaboration of a “Climate Change Hazard, Vulnerability and Risk Assessment” Study to the benefit of the City of Cape Town. OneWorld Sustainable Investments. Cape Town, South Africa.
- Rawlins, J. 2019. Political Economy of Water Reallocation in South Africa: Insights from the Western Cape Water Crisis. *Water Security*, 6:100029.
- De Wit, M., Rawlins, J., Piggot, R. and Petrie, B. 2019. Economic Risk Analysis Report. Elaboration of a “Climate Change Hazard, Vulnerability and Risk Assessment” Study to the benefit of the City of Cape Town. OneWorld Sustainable Investments. Cape Town, South Africa.
- Garrick, D., Chautard, A. and Rawlins, J. 2019. Allocating Water. In: *Water Science Management and Policy*. John Wiley & Sons: London.
- Petrie, B., Rawlins, J., Perkins, D., Lumbroso, D. and Chapman, A. 2018. Climate Change Risk and Vulnerability Assessment in Luapula, Muchinga, Northern and Western Provinces. OneWorld Sustainable Investments. Cape Town, South Africa.
- Petrie, B., Rawlins, J., Perkins, D., Wroblewski, T., Kalaba, F. and Lumbroso, D. 2018. Climate Change Risk and Vulnerability Assessment in Luapula, Muchinga, Northern and Western Provinces: Training Manual. OneWorld Sustainable Investments. Cape Town, South Africa.
- Rawlins, J., De Lange, W. and Fraser, G. 2018. An ecosystem service value chain analysis framework: a conceptual paper. *Ecological Economics*, 147:84-95.
- Petrie, B., Rawlins, J., Tsilik, P., Chapman, A. and Kalaba, J. 2018. Landscape Vulnerability Decision Support Framework. Transforming Landscapes for Resilience and Development in Northern and Southern Zambia (TRALARD-Zam). OneWorld Sustainable Investments. Cape Town, South Africa.
- De Lange, W., Rawlins, J. and Fraser, G. 2017. Assessing Aquatic Ecosystem Services Value Chains and Markets in South Africa: Some Case Studies. Water Research Commission (WRC) Report: No. 2341/17.
- Rawlins, J. and Garrick, D. 2017. The Political Economy of Water Reallocation: A case study of the Berg Water Management Area, South Africa. MSc Thesis: School of Geography and the Environment, The University of Oxford, United Kingdom.
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Rawlins, J. 2016. Exploring the suitability of causal loop diagrams to assess the value chains of aquatic ecosystem services: a case study of the Baviaanskloof, South Africa. MSc Thesis: Department of Economics and Economic History, Rhodes University, South Africa.

Rawlins, J. 2014. An investigation of the tidal asymmetry and hydro-sediment dynamics of a tidal meander complex: Kariega Estuary, Eastern Cape, South Africa. BSc Honours Thesis: Department of Geography, Rhodes University.

Conference Presentations and Attendance

Rawlins, J., Filipova, A. and Petrie, B. 2019. Migration and water security: policy preparedness in the SADC region. Water (in)security, migration, and regional integration: Is there a nexus? Seminar. Co-convened by FAO, Water Research Commission (WRC), ODI. World Water Week 2019, Stockholm, Sweden.

Rawlins, J. 2019. Governing water (re)allocation in South Africa: Insights from a crisis. Water governance with and for all: Is it working? Seminar. Co-convened by GWP, UNDP and University of Pennsylvania. World Water Week 2019, Stockholm, Sweden.

Rawlins, J., Petrie, B., Gerhard, M. and Filipova, A. 2018. Towards Cooperative Transboundary Environmental Management in SADC: Politics and Harmonisation. Political Drivers for Sustainable Ecosystems Seminar. Co-convened by SIWI, SIPRI, World Bank and PSI. World Water Week 2018, Stockholm, Sweden.

Discussion Panellist: Share, Conserve, Develop! How do we do it all in Transboundary Basins? Co-convened by IUCN, IWMI, CI, Forest Trends and WfWP. World Water Week 2018, Stockholm, Sweden.

Adaptation Futures: 5th International Climate Change Adaptation Conference. Cape Town, South Africa.

Global Water Summit 2016. The Nature Conservancy. Columbia University, New York, USA.

Rawlins, J. De Lange, W. and Fraser, G. 2015. Exploring the suitability of causal loop diagrams to assess the value chains of aquatic ecosystem services: a case study of the Baviaanskloof, South Africa. The 8th ESP World Conference, Stellenbosch, South Africa.

Rawlins, J. 2014. An investigation of the hydro-sediment dynamics of a tidal meander complex: Kariega Estuary, Eastern Cape, South Africa. Society of South African Geographers 10th Biennial Conference, East London, South Africa.

