



Professional Registrations:

- (SANCOR) South African Network for Coastal and Oceanographic Research.
- (SACNASP) South African Council for Natural Scientific Professions

Occupation:

- Senior Environmental Scientist

Specialisation:

- Environmental and Social Impact Assessments
- Strategic Environmental Assessments
- Aquatic Ecological Assessments
- Project Management and GIS

Education:

- Ph.D., Zoology, 2012
Nelson Mandela Metropolitan University
- M.Sc., Zoology, 2003
University of Port Elizabeth
- B.Sc. Hons, Zoology, 2001
University of Port Elizabeth
- B.Sc., Zoology and Botany, 2000
University of PE

Dr. Mathys Vosloo

KEY EXPERIENCE

Dr. Mathys Vosloo is a well-qualified and technically proficient environmental and natural scientist with 10 years scientific research experience and more than 7 years environmental management and consulting experience. His experience include Environmental Impact Assessments (EIAs) and the development of Environmental Management Programmes during environmental assessments of construction projects, environmental compliance monitoring and reporting, and Environmental Control Officer (ECO) services for construction projects. Recent experience includes project management and execution of large waste related projects, such as the application for development of Ash Disposal Facilities, and large linear projects such as the management EIA process for the implementation of extensive power lines for renewable projects. Mathys also has substantial experience in Geographical Information Systems (GIS), creating and analysing digital terrain models, runoff and stream flow analysis, stormwater design and map-making for projects in Africa. Further experience include the development and completion of State Of the Environment Reporting (SOER), Strategic Environmental Assessments (SEA) and feasibility studies. Mathys' experience in natural science include aquatic ecological assessments, project management and sample collection in several west, south and east coast estuaries, experience in ecosystem and ecological modelling, including the impact of recreational and subsistence fishing on several Eastern Cape estuaries, and ecosystem analysis of two estuaries in the former Transkei area.

PROJECT EXPERIENCE

Ecological research

- Ecological analysis of the functioning and assessment of nutrient fluxes in the Mngazi and Mngazana estuaries in the Eastern Cape using the LOICZ biogeochemical modelling approach, and Ecopath with Ecosim. PhD thesis, Nelson Mandela Metropolitan University, 2004 – 2011.
- Ecological analysis of the functioning Sundays, Swartkops, Kromme, and Gamtoos estuaries using Ecopath with Ecosim, and assessment of the impact of recreational fishing on these ecosystems. MSc dissertation, University of Port Elizabeth, 2002 – 2003.

PROJECT EXPERIENCE (continued)

- Collecting subtidal macrozoobenthic and hyperbenthic invertebrates, zooplankton, microzooplankton, meiofauna at Mngazi and Mngazana River estuaries. Specialised field ecologist, 2002 – 2006, R 4 million
- Assisting in preparation and balancing of ecosystem carbon flow models of the Sylt Ecosystem, Germany. Assistant ecosystem modeller, 2002, R 250 000.
- Collecting subtidal macrozoobenthos, hyperbenthos and zooplankton in Rooiels, Palmiet, Heuningnes, Breede, Klein Brak and Kaaimans River estuaries, Western Cape. Specialised field ecologist, 2002, R 400 000.
- Collecting intertidal invertebrates in Kabeljous, Gamtoos, Swartkops, Sundays and Kariga River estuaries, Eastern Cape. Specialised field ecologist, 2002, R 150 000.
- Berg River Baseline Monitoring Program (UCT). Collecting subtidal macrozoobenthos, 2003 – 2004, R 350 000.
- Hyperbenthos and zooplankton sampling in Berg River estuary, 2005 – 2006, R 150 000
- Kromme and Seekoei Estuary Catchment Reserve Study. Contracted sampling for Department of Water Affairs and Forestry (DWAF). Specialised field ecologist, 2004 – 2005, R 200 000
- Collecting subtidal macrozoobenthos, hyperbenthos and zooplankton in Olifants River estuary for the Olifants River Reserve Determination study, Western Cape. Specialised field ecologist, Contracted sampling for CSIR Stellenbosch (Environmentek), 2005, R 300 000.

Nematology:

- Analyses and identification of nematode collected samples from the Mngazi Estuary in the Eastern Cape (former Transkei), South Africa, University of Ghent, Belgium – Nelson Mandela Metropolitan University exchange programme, 2006

Environmental Impact Assessments (EIA) and Basic Assessments (BA):

- EIA, WML and WULA for the 60 year ash disposal facility for the Kusile Power Station, Mpumalanga, 2012 – present, R 7 million.
- EIA, WML and WULA for the 30 year ash disposal facility for the Kendal Power Station, Mpumalanga, 2013 – present, R 4.5 million.
- EIA, WULA and EMPr for the proposed Solar CSP Integration Project near Upington, Northern Cape, 2012 – present, R 5 million.
- 3 x BAs for the proposed prevention of water ingress into previously mined out areas in the Witwatersrand Mining Basin (canalisation of 3 streams), Gauteng, 2013 – 2014, R 700 000.
- BA for the proposed new Vaalbank Switching Station, two 88 kV powerlines and associated infrastructures, Freestate, 2013 – 2014, R 380 000.
- The rehabilitation of the Kouga Dam wall and associated mining activities (BA), 2012, R 250 000.
- Maintenance and management interventions undertaken by the City of Cape Town in its surface stormwater systems, 2012 (BA), 2012, R 1.5 million.
- The installation of 132kV transmission lines from Melkhout to Dieprivier, including the construction of a new substation at Dieprivier, Cacadu District, 2012 (BA), 2012, R 100 000.
- The installation of 132kV transmission lines from Dieprivier to Kareedouw, including the extension of the existing substation at Kareedouw, Cacadu District, 2012 (BA), 2012, R 100 000.
- The installation of 132kV transmission lines from Melkhout to Patensie, including the construction of a new substation at Patensie, Cacadu District, 2012 (BA), 2012, R 100 000.

- Kouga 300 MW wind farm, Kouga Local Municipality, 2009 – 2011 (EIA), R 350 000.
- Motherwell NU 31 housing development, NMBM, 2009 – 2011 (EIA), R 270 000.
- The extension of McAdam Street from Worraker to Mangold Street, NMBM, 2010 (BA), R 60 000.
- Bethelsdorp Phase 3 social housing development, NMBM, 2008 (EIA), R 230 000.
- Beacon maritime navigational structure upgrading, NMBM, 2008 (BA), R 60 000.
- Moffet Dam breach remedial works, Kouga Local Municipality, 2008 (BA), R 60 000.
- Pollok Beach light mast installation, NMBM, 2008 (BA), R 50 000.
- Humewood Road re-alignment along the S-bend section, NMBM, 2008 (BA), R 60 000.
- Jagersfontein farm 432 commercial production of chicken and operation of an abattoir, Kouga Local Municipality, 2007 (BA), R 40 000.
- Tarring of roads in Zwide, NMBM, 2007 (BA), R 55 000.
- Construction and extension of McAdam Street, NMBM, 2007 (BA), R 40 000.
- Repair and reconstruction of water retaining structures at Tyger Bay EIA NMBM, 2007 (BA), R 60 000.
- Erf 306 Lorraine Infill development, NMBM, 2007 (BA), R 40 000.
- Tarring of roads in Sherwood, NMBM, 2007 (BA), R 40 000.
- Tarring of Ntsele, Mkutuka, Nanto and Vabaza Streets in Zwide, NMBM, 2007 (BA), R 40 000.
- Pollok Beach, Summerstrand, parking lot relocation, NMBM, 2007 (BA), R 50 000.
- Tarring of Dube, Grootboom and Luzipho Streets in Uitenhage, NMBM, 2007 (BA), R 40 000.
- Port Elizabeth International Convention Centre Rapid site assessment, NMBM, 2007, R 150 000.
- Sardinia Bay car park relocation site assessment, NMBM, 2007, R 80 000.

Environmental Control Officer (ECO) appointments and services:

- Installation of bulk storm water infrastructure in Motherwell NU29 and 30, NMBM, 2010 – 2011.
- Implementation of an artificial wetland at the Motherwell stormwater canal outlet structure, Swartkops River, NMBM, 2009 – 2010.
- Realignment of the S-bend section of Humewood Road in Humewood, NMBM, 2009 – 2010.
- Paapenkuis Main Sewer Augmentation in Port Elizabeth NMBM, 2009 – 2010.
- Upgrading of Devon and Fairley Roads in Port Elizabeth, NMBM, 2008.
- Construction of stormwater detention ponds and upgrading of stormwater infrastructure in Kwazakhele, Phase 3, NMBM, 2008 – 2009.
- Construction of Mavuso Road in Kwazakhele, NMBM, 2007 – 2008.

Environmental impact assessments exemption applications:

- Motherwell/Coega outfall canal upgrade, NMBM, 2007.
- Erf 17, Lorraine, infill development, NMBM, 2007.
- Korsten Modal Interchange Upgrade, NMBM, 2007

State of the environment reporting (SOER):

- NMBM State of the Environment Report, 2009 – 2010, R 350 000.
- Hessequa Local Municipality State of the Environment Summary Report, 2008, R 200 000.

Strategic environmental assessments (SEA):

- North End Coastline redevelopment SEA, NMBM, 2008, R 250 000.

Integrated storm water management:

- Coega IDZ Eastern Sector Integrated Stormwater Management Plan, CDC, 2009 – 2010, R 350 000.

GIS mapping and projects:

- Catchment delineation and stream calculation for the Mnthatha River System, GIBB Durban, 2012.
- Environmental Screening for the PRASA passenger rail and shunting yard proposed sites in Cape Town, Gauteng and Durban, PRASA, 2011-2012.
- NMBM Assistance to the poor (ATTP) and schools leakages repairs and flow limiters installation, NMBM, 2010 – 2012.
- Nelson Mandela Bay and Cradock low cost housing rectification audits. Management of incoming and outgoing GIS data and GIS mapping, Provincial Department of Housing, 2010 – 2011.
- Port Harcourt City Open Space System Plan, Government of Nigeria, 2009.
- Coega IDZ Eastern Sector Integrated Stormwater Management Plan, Coega Development Corporation, 2009 – 2011.
- Nelson Mandela Metropolitan Municipality SOER flood plain and spatial analysis, NMBM, 2009 – 2010.
- Kouga Local Municipality wind farm development EIA, RedCap Developments, 2009 – 2010.
- Motherwell NU 31 housing development EIA, NMBM, 2009 – 2010.
- Bethelsdorp Phase 3 social housing development EIA, NMBM, 2008 – 2009.
- OR Tambo District Municipality water conservation and demand management, OR Tambo District Municipality, 2008.
- Hessequa Local Municipality SOER, Hessequa Local Municipality, 2008.
- The Greater Port Harcourt City Development Plan, Government of Nigeria, 2008 – 2009.
- Eden District Municipality SOER, Eden District Municipality, 2008.
- Jeffreys Bay Marina Martinique catchment and flood attenuation analysis, Kouga Local Municipality, 2008.
- Mzimkhulu River catchment and flood attenuation analysis, Umzimkhulu Municipality, 2008.
- Port Elizabeth Paapenkuis River catchment and flood attenuation analysis, NMBM, 2008.
- SANRAL outdoor advertising opportunities in the Eastern Cape, SANRAL, 2007.
- Coega Integrated Stormwater Plan, Coega Development Corporation, 2007.
- NMMM 2010 World Cup pedestrian Bridges: Sheya Khulati, NMBM, 2007.
- Uitenhage Stormwater Master Plan, NMBM, 2007.

Project data management services:

- NMBM Assistance to the poor (ATTP) and schools leakages repairs and flow limiters installation database management, NMBM, 2010 – 2012, R 4 million.

PAPERS, PUBLICATIONS, PRESENTATIONS AND PROFESSIONAL SOCIETIES

PAPERS, PUBLICATIONS

1. Vosloo, M.C. 2012. Network analysis of trophic linkages in two sub-tropical estuaries along the south-east coast of South Africa. PhD thesis, Nelson Mandela Metropolitan University.
2. Vosloo, M.C. 2009. Marine and estuarine meiofauna: Contribution to the National Marine Ecosystem Diagnostic Analysis. Agulhas and Somali Current Large Marine Ecosystems.
3. Vosloo, M C and Hendricks, M G J *In Prep*. Marine and estuarine nematodes in southern Africa, Book Chapter. In Plant nematology in Southern Africa. Mc Donald, Fourie, De Waele, Spaul (Eds).
4. Vosloo, M.C. 2004. A comparative assessment of the impact of recreational and subsistence fishing on selected Eastern Cape estuarine ecosystems using the Ecopath modelling approach. MSc Dissertation, University of Port Elizabeth, Port Elizabeth.

PROFESSIONAL SOCIETIES

1. South African Network for Coastal and Oceanographic Research (SANCOR)
2. Registered member of South African Council for Natural Scientific Professions, (SACNASP)

EMPLOYMENT RECORD

2013 - Present	Zitholele Consulting	Senior Environmental Consultant
2012	GIBB Engineering and Science	Senior Environmental Scientist
2007 – 2011	GIBB Engineering and Science	Environmental Scientist
2008 – 2011	Nelson Mandela Metropolitan University	Postgraduate (part-time) Student
2005 – 2007	Nelson Mandela Metropolitan University	Full time Postgraduate (PhD) Student
2001 - 2003	University of Port Elizabeth	Full time postgraduate (MSc) student
2006	University of Ghent, Belgium	Exchange Ecologist
2002 - 2006	University of Port Elizabeth	Specialized Field Ecologist