# **Mathys Vosloo**



Name of firm	Zitholele Consulting		
Profession	Senior Environmental Scientist		
Specialisation	Environmental and Social Impact Assessment , Strategic Environmental Assessments, Aquatic Ecological Assessments, Project management and GIS		
No. of years with firm	1 month		
Nationality	South African, ID No. 780314 5044 087		
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 6 years environmental management and consulting experience. Substantial experience in Environmental Impact Assessments (EIAs) and Environmental. Management Programmes during environmental assessments of the impacts of construction projects. Substantial experience in environmental compliance monitoring and reporting, and Environmental Control Officer (ECO) services for construction projects. Substantial experience in Geographical Information Systems (GIS), creating and analysing digital terrain models, runoff and stream flow analysis, stormwater design and map-making in Africa. Experience in the development and completion of strategic assessment projects such as State Of the Environment Reporting (SOER), Strategic Environmental Assessments (SEA) and feasibility studies. Substantial experience in aquatic ecological assessments, project management and sample collection in several west, south and east coast estuaries. Substantial experience in ecosystem and ecological modelling, including the impact of recreational and subsistence fishing on several Eastern Cape estuaries, and ecosystem analysis of estuaries in the former Transkei area. Experience in identification and analysis of estuarine micro- and macro- invertebrates including nematodes and other meiofaunal groups.		
Professional Registrations	South African Network of Coastal and Oceanographic Research (SANCOR)		
	South African Council for Natural Scientific Professions (SACNASP).		
Other Affiliations	<ul> <li>Professional registration, SACNASP, Pr.Sci.Nat 400136/12 2012</li> <li>Environmental Law Short Course, Rhodes University, Grahamstowr 2011</li> </ul>		
	• Project Leader Course, GIBB Engineering and Science, Por Elizabeth 2010		
	Environmental Impact Assessment Short Course, Rhodes University, Grahamstown 2008		
	Granamstown 2000		
Education	Ph.D., Zoology Nelson Mandela Metropolitan 2012 University		



	B.Sc. (Honours), Zoology B.Sc., Zoology and Botany	
Employment Record		
Employment Record		
2013 - Present	Zitholele Consulting	Environmental Consultant
2011 – 2012	GIBB Engineering and Science	Senior Environmental Scientist
2007 – 2010	GIBB Engineering and Science	Environmental Scientist
2004 – 2011	Nelson Mandela Metropolitan	Postgraduate (part-time) Student
2001-2003	University of Port Elizabeth	Full time postgraduate student
2006	University of Ghent, Belgium	Exchange Ecologist
2002-2006	University of Port Elizabeth	Specialized Field Ecologist

# **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.

Collecting subtidal macrozoobenthic and hyperbenthic invertebrates, zooplankton, microzooplankton, meiofauna at Mngazi and Mngazana River estuaries. Specialised field ecologist, 2002 – 2006.

Assisting in preparation and balancing of ecosystem carbon flow models of the Sylt Ecosystem, Germany. Assistant ecosystem modeller, 2002.

Collecting subtidal macrozoobenthos, hyperbenthos and zooplankton in Rooiels, Palmiet, Heuningnes, Breede, Klein Brak and Kaaimans River estuaries, Western Cape. Specialised field ecologist, 2002.

Collecting intertidal invertebrates in Kabeljous, Gamtoos, Swartkops, Sundays and Kariga River estuaries, Eastern Cape. Specialised field ecologist, 2002.

Berg River Baseline Monitoring Program (UCT). Collecting subtidal macrozoobenthos,

hyperbenthos and zooplankton in Berg River estuary, Western Cape. Specialised field ecologist and Excursion leader. University of Port Elizabeth and Anchor Environmental Consultants (UCT), 2005 – 2006.

Kromme and Seekoei Estuary Catchment Reserve Study. Contracted sampling for Department of Water Affairs and Forestry (DWAF). Specialised field ecologist, 2004 – 2005.

Collecting subtidal macrozoobenthos, hyperbenthos and zooplankton in Olifants River estuary, Western Cape. Specialised field ecologist, Contracted sampling for CSIR Stellenbosch (Environmentek), 2005

#### 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):

- The rehabilitation of the Kouga Dam wall and associated mining activities (BA).
- Maintenance and management interventions undertaken by the City of Cape Town in its surface stormwater systems, 2012 (BA).
- The installation of 132kV transmission lines from Melkhout to Dieprivier, including the construction of a new substation at Dieprivier, Cacadu District, 2012 (BA).
- The installation of 132kV transmission lines from Dieprivier to Kareedouw, including the extension of the existing substation at Kareedouw, Cacadu District, 2012 (BA).
- The installation of 132kV transmission lines from Melkhout to Patensie, including the construction of a new substation at Patensie, Cacadu District, 2012 (BA).
- Kouga 300 MW wind farm, Kouga Local Municipality, 2009 2011 (EIA).
- Motherwell NU 31 housing development, NMBM, 2009 2011 (EIA).
- The extension of McAdam Street from Worraker to Mangold Street, NMBM, 2010 (BA).
- Bethelsdorp Phase 3 social housing development, NMBM, 2008 (EIA).
- Beacon maritime navigational structure upgrading, NMBM, 2008 (BA).
- Moffet Dam breach remedial works, Kouga Local Municipality, 2008 (BA).
- Pollok Beach light mast installation, NMBM, 2008 (BA).
- Humewood Road re-alignment along the S-bend section, NMBM, 2008 (BA).
- Jagersfontein farm 432 commercial production of chicken and operation of an abattoir, Kouga Local Municipality, 2007 (BA).
- Tarring of roads in Zwide, NMBM, 2007 (BA).
- Construction and extension of McAdam Street, NMBM, 2007 (BA).
- Repair and reconstruction of water retaining structures at Tyger Bay EIA NMBM, 2007 (BA).
- Erf 306 Lorraine Infill development, NMBM, 2007 (BA).
- Tarring of roads in Sherwood, NMBM, 2007 (BA).
- Tarring of Ntsele, Mkutuka, Nanto and Vabaza Streets in Zwide, NMBM, 2007 (BA).
- Pollok Beach, Summerstrand, parking lot relocation, NMBM, 2007 (BA).
- Tarring of Dube, Grootboom and Luzipho Streets in Uitenhage, NMBM, 2007 (BA).
- Port Elizabeth International Convention Centre Rapid site assessment, NMBM, 2007
- Sardinia Bay car park relocation site assessment, NMBM, 2007.

# 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.
- Paapenkuils 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.
- Hessequa Local Municipality State of the Environment Summary Report, 2008.

#### Strategic environmental assessments (SEA):

• North End Coastline redevelopment SEA, NMBM, 2008.

#### Integrated storm water management:

• Coega IDZ Eastern Sector Integrated Stormwater Management Plan, CDC, 2009 – 2010.

# 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 Paapenkuils 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.

# **Computer literacy:**

- Microsoft Windows 7, Office 2007/2010, Microsoft Project
- PREP and BST (GIBB financial and time management software)
- Manifold/ArcGIS (ESRI) GIS software, Google Earth/Sketch Up
- Ecopath with Ecosim ecosystem simulation software/LOICZ biogeochemical modelling software
- Statistica biostatistical software

#### Papers, publications and presentations

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

Vosloo, M.C. 2009. Marine and estuarine meiofauna: Contribution to the National Marine

Ecosystem Diagnostic Analysis. Agulhas and Somali Current Large Marine Ecosystems

(ASCLME) Project: Marine Ecosystem Diagnostic Analysis (MEDA).

Vosloo, M C and Hendricks, M G J 2009. Marine and estuarine nematodes in southern Africa, Book Chapter. In Plant nematology in Southern Africa. Mc Donald, Fourie, De Waele, Spaull (Eds). In Review, 2009. 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.

