

CURRICULUM VITAE OF KAREN JODAS

Profession:	Environmental Management and Compliance Consultant; Environmental Assessment Practitioner. Professional Natural Scientist: Environmental Science since 1999.
Specialisation:	Strategic environmental assessment and advice; development of plans and guidelines; environmental compliance advise and monitoring; Environmental Impact Assessment; environmental management; project management and co-ordination of environmental projects; peer review; policy, strategy and guideline formulation; renewable energy projects; water resources management.

VOCATIONAL EXPERIENCE

Provide technical input for projects in the environmental management field, specialising in strategic evaluation, Environmental Impact Assessment studies, environmental management plans, programmes and guidelines, integrated environmental management, environmental compliance monitoring; peer review of EIA reports and processes, strategy and guideline development, and public participation. Key focus on overall Project Management, integration of environmental studies and environmental processes into larger engineering-based projects, strategic assessment, and the identification of environmental management solutions and mitigation/risk minimising measures.

Excellent working knowledge of environmental legislation, strategies, guidelines and policies. Compilation of the reports for environmental studies are in accordance with the all relevant environmental legislation under the National Environmental Management Act. Due consideration of Equator Principles and compliance with IFC performance standards is now a part of all projects.

SKILLS BASE AND CORE COMPETENCIES

Provide technical input for projects in the environmental management field, specialising in strategic evaluation, Environmental Impact Assessment studies, environmental management plans, programmes and guidelines, integrated environmental management, environmental compliance monitoring; peer review of EIA reports and processes, strategy and guideline development, and public participation. Key focus on overall Project Management, integration of environmental studies and environmental processes into larger engineering-based projects, strategic assessment, and the identification of environmental management solutions and mitigation/risk minimising measures.

Excellent working knowledge of environmental legislation, strategies, guidelines and policies. Compilation of the reports for environmental studies are in accordance with the all relevant environmental legislation under the National Environmental Management Act. Due consideration of Equator Principles and compliance with IFC performance standards is now a part of all projects.

SKILLS BASE AND CORE COMPETENCIES

- Twenty years (20) of experience in the environmental management, impact assessment and compliance fields
- Eighteen (18) years of experience in Project Management - Project management of large environmental assessment and management projects
- Strategic and compliance advise for all aspects of environmental assessment and management
- External and peer review of environmental assessment and compliance reporting as well as EIA processes
- Working knowledge of environmental planning policies, regulatory frameworks and legislation

- Input and review of Environmental Management Plans and Programmes, including Invasive Species Monitoring, Control and Eradication Plans
- Identification and assessment of potential environmental impacts and benefits
- Development of practical and achievable mitigation measures and management plans and evaluation of risk to project execution
- Experienced in environmental compliance advise, monitoring and reporting for construction projects
- Compilation and review of the reports in accordance with all relevant environmental legislation
- Public participation/involvement and stakeholder consultation
- Environmental strategy, policy and guidelines development
- Experienced in assessments for both linear developments and nodal developments
- Key experience in the assessment of impacts associated with renewable energy projects
- Wide range of experience for public and private sector projects
- Experienced consultant in projects in Sub-Saharan Africa.

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B.Sc Earth Sciences, majoring in Geography and Zoology, Rhodes University, Grahamstown, 1993
- B.Sc Honours in Geography (in Environmental Water Management), Rhodes University, Grahamstown, 1994. Major subjects included Water Resources Management, Streams Ecology, Fluvial Geomorphology and Geographic Information Systems.
- M.Sc in Geography (Geomorphology), Rhodes University, Grahamstown, 1996

Short Courses:

- Environmental and Social Risk Management (ESRM), International Finance Corporation, 2018
- Integrated Water Resource Management, the National Water Act, and Water Use Authorisations, CSBSS, 2017
- WindFarmer Wind Farm Design course, Garrad Hassan, 2009
- Environmental Law Course, Aldo Leopold Institute, 2002
- Water Quality Management, Potchefstroom University, 1998

Professional Society Affiliations:

- Registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist: Environmental Science (400106/99)
- Registered with the International Associated for Impact Assessment South Africa (IAIAsa): 5888

Other Relevant Skills:

- Xtrack Extreme – Advanced Off-Road Driving Course (2003)

EMPLOYMENT

Date	Company	Roles and Responsibilities
2006 - Current:	Savannah Environmental (Pty) Ltd	Director <i>Independent specialist environmental consultant, Environmental Assessment Practitioner (EAP) and advisor</i>
1997 – 2005:	Bohlweki Environmental (Pty) Ltd	Associate <i>Environmental Management Unit: Manager; Principle Environmental Scientist focussing on Environmental Management and Project Management</i>

PROJECT EXPERIENCE

Experience includes projects associated with electricity generation and transmission, wastewater treatment facilities, mining and prospecting activities, property development, and national roads, as well as strategy and guidelines development.

RENEWABLE POWER GENERATION PROJECTS: PHOTOVOLTAIC SOLAR ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Aggeneys PV Plant, Northern Cape	Solar Capital	Project Manager & EAP
Blackwood PV SEF, Free State	VentuSA Energy	Project Manager & EAP
Bloemsmond PV 1 & PV 2 SEF's, Northern Cape	Atlantic Energy Partners	Project Manager & EAP
Bosjesmansberg PV SEF, Northern Cape	Networx	Project Manager & EAP
Boundary PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Buffels PV 1 & PV 2 SEF's, North West	Kabi Energy	Project Manager & EAP
De Aar PV SEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
De Aar PV Solar Energy Plant, Northern Cape	Solar Capital	Project Manager & EAP
Gihon & Kison PV SEF's, Limpopo	Networx	Project Manager & EAP
Gunstfontein PV SEF, Northern Cape	Networx / Prana Energy	Project Manager & EAP
Harmony Eland, Nyala & Tshepong PV SEF's, Free State	BEEEntropie Renewable Innovation	Project Manager & EAP
Hibernia SEF, North West	EA Energy	Project Manager & EAP
Iziko PV SEF, Mpumalanga	VentuSA Energy	Project Manager & EAP
Kabi Kimberley PV Facility at DeBeers, Northern Cape	Kabi Solar	Project Manager & EAP
Karoo Renewables PV SEF, Northern Cape	SARGE	Project Manager & EAP
Kheis Phase 1, 2 & 3 PV SEF, Northern Cape	GeStamp Solar	Project Manager & EAP
Klipgat PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Loeriesfontein/Helios PV SEF, Northern Cape	Solar Capital	Project Manager & EAP
Naauwpoort PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Orkney PV SEF, North West	Genesis Eco-Energy	Project Manager & EAP
Pofadder SEF, Northern Cape	Mainstream Renewable	Project Manager & EAP
Prieska North PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Prieska PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Ritchie PV SEF, Northern Cape	Solar Capital	Project Manager & EAP
San Solar PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
Sirius (Tungston Lodge) PV Solar Plants (x2, Northern Cape)	Aurora Power Solutions	Project Manager & EAP
Sol Invictus x4 PV Developments, Northern Cape	Building Energy	Project Manager & EAP
Solar Plant at Kathu (Wincanton), Northern Cape	REISA	Project Manager & EAP
Solar Plant at Sishen (Wincanton), Northern Cape	VentuSA Energy	Project Manager & EAP
Solar Plant at Sishen (Wincanton), Northern Cape	VentuSA Energy	Project Manager & EAP
SolarReserve Kotulo Tsatsi PV1 SEF, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
SolarReserve Kotulo Tsatsi PV2 Facility, Northern Cape province	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
Stormberg Solar PV SEF, Eastern Cape	Networx / Prana Energy	Project Manager & EAP
Tewa Isitha (Grootdrink/Albany) PV SEF, Northern Cape	Africoast Engineers	Project Manager & EAP

Project Name & Location	Client Name	Role
Tiger Kloof PV SEF near Vryburg, North West	Kabi Energy	Project Manager & EAP
Tiger Solar PV SEF, Northern Cape	Kabi Energy	Project Manager & EAP
Vaalkop and Witkop PV SEF's, North West	Kabi Solar	Project Manager & EAP
Wagnbietjiespan PV SEF, Free State	VentuSA	Project Manager & EAP
Wolmaransstad Municipality PV SEF, North West	BlueWave	Project Manager & EAP
Woodhouse PV 1 & PV 2 SEF's, North West	Genesis Eco-Energy	Project Manager & EAP
Zuurwater PV SEF's (x4), Northern Cape	Solafrica / BlueWave	Project Manager & EAP
Three PV SEF facilities in Lichtenburg, North West	Atlantic Energy Partners	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Amandla Welanga & Dida PV SEF's near Noupoot, Northern Cape	Terra Solar	Project Manager & EAP
Carolusberg PV SEF, Northern Cape	Ilio Energy (SARGE)	Project Manager & EAP
Gosforth Park and Kynoch Rooftop PV SEF's Northern Cape	Building Energy	Project Manager & EAP
Hennenman PV SEF, Free State	BlueWave	Project Manager & EAP
Hibernia PV SEF near Lichtenburg, North West	EA Energy	Project Manager & EAP
Inkulukelo PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Kabi Kimberley PV SEF, Northern Cape	Kabi Energy	Project Manager & EAP
Kokerboom & Boabab PV Solar Energy Plants, Northern Cape	Brax Energy	Project Manager & EAP
Middelburg PV SEF, Mpumalanga	African Clean Energy Developments (ACED)	Project Manager & EAP
Nigramoep PV Solar Energy Plant, Northern Cape	SARGE	Project Manager & EAP
Noupoot (Kleinfontein and Toitdale) CPV, Northern Cape	Terra Power	Project Manager & EAP
O'Kiep 1 PV Solar Energy Plant, Northern Cape	Ilio Energy (SARGE)	Project Manager & EAP
O'Kiep 2 PV Solar Energy Plant, Northern Cape	BluePort Trade 118 (SARGE)	Project Manager & EAP
O'Kiep 3 PV Solar Energy Plant, Northern Cape	Ilio Energy (SARGE)	Project Manager & EAP
Rodicon PV SEF, Mpumalanga	VentuSA Energy	
Slurry PV SEF, North West	PPC	Project Manager & EAP
Small projects for PV SEF's, North West	BlueWave	Project Manager & EAP
Son Sitrus Rooftop PV Installation, Eastern Cape	Building Energy	Project Manager & EAP
Tollie PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
x2 Southern Farms PV Solar Energy Plants, Northern Cape	Southern Farms	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Allemands, Wonderheuwel, Damfontein & Dida PV SEF's, Northern Cape	Terra Solar	Project Manager & EAP
Amandla Welang, Gillmer & Inkululeko PV SEF's, Northern Cape	GeoSolar/ TerraSolar	Project Manager & EAP
Blouputs PV, Onseepkans PV, Hoogelegen PV & Boegoeberg PV projects, Northern Cape	Engineering Development Industrial Projects (EDIP)	Project Manager & EAP
Bobididi PV SEF, Limpopo	Root 60Four Energy	Project Manager & EAP
Boshof-Les Marais / Buitenfontein SEF, Free State	Bluewave Capital	Project Manager & EAP
Bosjesmansberg PV SEF, Northern Cape	Networx	Project Manager & EAP

Project Name & Location	Client Name	Role
Class 2 & Class 3 Road Networks in the vicinity of the proposed Tambo Springs Freight Hub, Gauteng	SMEC South Africa (on behalf of Gauteng Department of Roads & Transport)	Project Manager & EAP
Hibernia SEF, North West	EA Energy	Project Manager & EAP
Lephalale PV SEF, Limpopo	Exxaro	Project Manager & EAP
Prieska PV SEF, Northern Cape	Terra Solar	Project Manager & EAP
Proposed Solar Project near Hotazel, Northern Cape province	ABO Wind	Project Manager & EAP
Proposed Solar Project near Beaufort West, Western Cape	ABO Wind	Project Manager & EAP
Proposed Solar Project near Lichtenburg, North West province	ABO Wind	Project Manager & EAP
PV SEF's (x15) for the projects for the REIPP small scale BID, Nationwide	Building Energy	Project Manager & EAP
Senekal 1 & 2, Pongola & Newcastle PV SEF's, Kwa-Zulu-Natal	Building Energy	Project Manager & EAP
Small scale PV SEF project - 2nd Stage One	Bluewave Capital	Project Manager & EAP
Small scale PV SEF project - 2nd Stage One	Building Energy	Project Manager & EAP
Stella Helpmekaar SEF, North West	Bluewave Capital	Project Manager & EAP
Wolmaransstad Municipality SEF, North West	Bluewave Capital	Project Manager & EAP
Solar Project near Beaufort West, Western Cape	ABO Wind	Project Manager & EAP
Solar Project near Lichtenburg, Western Cape	ABO Wind	Project Manager & EAP
Solar Project near Hotazel, Western Cape	ABO Wind	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Contraction of the De Aar & Prieska PV Facilities, Northern Cape	GeStamp	Project Manager
ECO for the Construction of the Kathu PV Facility, Northern Cape	REISA / Building Energy	Project Manager

Compliance Advice and ESAP Reporting

Project Name & Location	Client Name	Role
ACWA Power SolarReserve Redstone Solar Plant, Northern Cape	SolarReserve	Environmental Advisor
Bokpoort PV SEF, Northern Cape	Solafrica	Environmental Advisor
Boshof PV SEF, Free State	BlueWave	Environmental Advisor
Hennenman PV SEF, Free State	BlueWave	Environmental Advisor
Kathu II SEF, Northern Cape	Building Energy	Environmental Advisor
Kathu PV SEF, Northern Cape	Building Energy / REISA	Environmental Advisor
Prieska PV SEF, Northern Cape	VentuSA	Environmental Advisor
San Solar SEF, Northern Cape	VentuSA / Acciona	Environmental Advisor
Sishen PV SEF Phase 1, Northern Cape	Aveng / Acciona	Environmental Advisor
Wolmaransstad Municipality Solar PV SEF, North West	BlueWave	Environmental Advisor
ESAP reporting for the operation phase of the Mulilo Solar PV De Aar and Mililo Solar PV Prieska	Mulilo and X-Elio	Environmental Advisor

Due Diligence Reporting

Project Name & Location	Client Name	Role
Kabi Kimberley PV Plant, Northern Cape	Enertis Solar	Environmental Advisor

Project Name & Location	Client Name	Role
Sishen Solar Farm, Northern Cape	Acciona (Windfall 59 Properties)	Environmental Advisor
Vaal River Solar 1 PV plant, North West	Enertis Solar	Environmental Advisor

Environmental Permitting & Water Use License (WUL) Applications

Project Name & Location	Client Name	Role
Permitting for the Kathu PV SEF, Northern Cape	Abengoa Solar	Project Manager & EAP
S53 application for Kabi Kimberley De Beers PV Plant, Northern Cape	Kabi Energy	Project Manager & EAP
S53 application for the Blackwood PV SEF, Free State	VentuSA Energy	Project Manager & EAP
S53 application for the Boundary PV SEF, Northern Cape	VentuSA Energy	Project Manager & EAP
S53 application for Vaalkop & Witkop PV SEF's, North West	Kabi Energy	Project Manager & EAP
S53 applications for various projects (Amandla Welang, Didar, Inkululeko, Kleinfontein, Klip Gat, Naau Poort, Toitdale & Tollie PV SEF's), Northern Cape	Terra Solar	Project Manager & EAP
WUL application for the Woodhouse PV1 & PV2 SEF's, North West	Genesis Eco-Energy	Project Manager & EAP

RENEWABLE POWER GENERATION PROJECTS: CONCENTRATED SOLAR FACILITIES (CSP)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
De Aar CSP Energy facility, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Khi Solar One CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Noupoort CSP facility, Northern Cape	Cresco	Project Manager & EAP
Paulputs CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Pofadder & Upington CSP facilities, Northern Cape	Abengoa Solar	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP facility, Northern Cape province	SolarReserve	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP1 facility, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP2 facility, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
SolarReserve Kotulo Tsatsi CSP3 facility, Northern Cape	Kotulo Tsatsi Energy and SolarReserve South Africa	Project Manager & EAP
Upington 2 CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Upington 3 CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Xina Solar One CSP facility, Northern Cape	Abengoa Solar	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
KaXu Solar One facility, Northern Cape	Abengoa Solar	Project Manager
Khi Solar One facility, Northern Cape	Abengoa Solar	Project Manager
Xina Solar One facility, Northern Cape	Abengoa Solar	Project Manager

Screening Studies

Project Name & Location	Client Name	Role
Site Identification Tool for Proposed CSP Projects, Limpopo	Exxaro	Environmental Advisor

Compliance Advice and ESAP reporting

Project Name & Location	Client Name	Role
Kaxu Solar One CSP facility, Northern Cape	Abengoa Solar	Environmental Advisor
Khi Solar One CSP facility, Northern Cape	Abengoa Solar	Environmental Advisor
SolarReserve Kotulo Tsatsi CSP facility, Northern Cape province	SolarReserve	Environmental Advisor
Xina One CSP facility, Northern Cape	Abengoa Solar	Environmental Advisor

RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
ABs WEF near Indwe, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Amakhala Emoyeni WEF, Eastern Cape	Windlab Developments	Project Manager & EAP
Amatole (2 phases) WEF, Eastern Cape	Genesis ECO-Energy	Project Manager & EAP
Boulders Wind Farm, Western Cape	IPD Power	Project Manager & EAP
Britannia Bay WEF, Western Cape	Terra Power Solutions	Project Manager & EAP
Castle WEF in De Aar, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Cookhouse WEF, Eastern Cape	African Clean Energy Developments (ACED) & Tertia Waters	Project Manager & EAP
Deep River Wind Energy Facility, Eastern Cape	VentuSA Energy	Project Manager & EAP
Dorper Phase 1 WEF, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Elliot WEF, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Garob WEF, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Gouda WEF, Western Cape	VentuSA Energy	Project Manager & EAP
Great Karoo WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Gunstfontein WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Happy Valley WEF, Eastern Cape	REISA	Project Manager & EAP
Hidden Valley WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Hopefield WEF, Western Cape	Umoya Energy	Project Manager & EAP
Karoo Renewable Energy Facility, Northern & Western Cape	SARGE	Project Manager & EAP
Karreebosch Wind Farm (Roggeveld Phase 2), Northern Cape & Western Cape	G7 Renewable Energies	Project Manager & EAP
Karusa Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Klipheuwel / Dassiesfontein WEF, Western Cape	BioTherm Energy	Project Manager & EAP
Nojoli WEF, Eastern Cape	African Clean Energy Developments	Project Manager & EAP
Nxuba WEF, Eastern Cape	African Clean Energy Developments	Project Manager & EAP
Olifants River WEF, Western Cape	SARGE	Project Manager & EAP

Project Name & Location	Client Name	Role
Oyster Bay WEF, Eastern Cape	RES	Environmental Advisor
Pofadder x3 WEF's, Northern Cape	Mainstream Renewable	Project Manager & EAP
Project Blue WEF, Northern Cape	Windy World	Project Manager & EAP
Rheboksfontein WEF, Western Cape	Moyeng Energy	Project Manager & EAP
Riverbank WEF near Wesley, Eastern Cape	Just Energy	Project Manager & EAP
Sere WEF, Western Cape	Eskom Generation	Project Manager & EAP
Soetwater Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Springfontein WEF, Northern Cape	Mainstream Renewable	Project Manager & EAP
Stormberg WEF, Eastern Cape	Networx / Prana Energy	Project Manager & EAP
Suurplaat WEF, Western & Northern Cape	Moyneg Energy	Project Manager & EAP
Uiekraal WEF, Western Cape	Crenergol	Project Manager & EAP
West Coast One WEF, Western Cape	Moyeng Energy	Project Manager & EAP
West Coast WEF, Western Cape	Exxaro	Project Manager & EAP
Zen WEF near Gouda, Western Cape	VentuSA Energy	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Britannia Bay Wind Monitoring Mast, Western Cape	Terra Power Solutions	Project Manager & EAP
Caledon, Worcester & Tulbach Wind Monitoring Masts, Western Cape	SAGIT	Project Manager & EAP
Deep River Wind monitoring Mast, Eastern Cape	VentuSA Energy	Project Manager & EAP
Denhami Wind Farm, Western Cape	Richard Young	Project Manager & EAP
Dorper, Abs & Dobos Wind Monitoring Masts, Eastern Cape	Rainmaker Energy	Project Manager & EAP
Hopefield Wind Monitoring Mast, Western Cape	Umoya Energy	Project Manager & EAP
Klawer Wind Energy Facility, Western Cape	Vendiwell	Project Manager & EAP
Klipheuwel / Dassiesfontein Wind Monitoring Mast, Western Cape	BioTherm Energy	Project Manager & EAP
Riverbank Wind Monitoring Mast, Eastern Cape	Just Energy	Project Manager & EAP
Wind Monitoring Masts near Suurplaat, Western Cape	Investec Bank	Project Manager & EAP
Wind Monitoring Masts on the West Coast & Darling, Western Cape	Investec Bank	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Cookhouse WEF, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
De Aar WEF, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Developments within identified areas in the Overberg, Western Cape	BioTherm Energy	Project Manager & EAP
Hopefield WEF, Western Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Juno WEF, Western Cape	AMDA Developments	Project Manager & EAP
Lambert's Bat WEF, Western Cape	Vaayu Energy SA	Project Manager & EAP
Prospect Sites for various WEF's	Thabo Consulting (on behalf of Eskom Holdings)	Project Manager & EAP
Struis Baai area WEF, Western Cape	Richards Young	Project Manager & EAP
Suurplaat WEF, Western Cape	Investec Bank	Project Manager & EAP
Theewaterskloof Municipality WEF, Western Cape	Theewaterskloof Municipality	Project Manager & EAP

Project Name & Location	Client Name	Role
WEF's on x2 site on the West Coast, Western Cape	Investec Bank	Project Manager & EAP
Various WEF's in the Western Cape	Department of Environmental Affairs & Development Planning (DEA&DP)	Project Manager & EAP
Van Reenens WEF, Kwa-Zulu Natal & Free State	4GREEN Development Africa	Project Manager & EAP
WEF Development within the Sandveld area, Western Cape	Kovacs Investments (Nick Prium)	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Construction of the Dorper Phase 1 WEF, Eastern Cape	Rainmaker Energy	Project Manager
ECO for the Construction of the Gouda Wind Farm, Western Cape	Blue Falcon Trading	Project Manager
EO for the Construction of the Dassiesklip WEF, Western Cape	Group Five	Project Manager

Compliance Advice & ESAP Reporting

Project Name & Location	Client Name	Role
Amakhala Emoyeni WEF, Eastern Cape	Windlab Developments	Environmental Advisor
Cookhouse II WEF, Eastern Cape	African Clean Energy Developments	Environmental Advisor
Cookhouse WEF, Eastern Cape	African Clean Energy Developments	Environmental Advisor
Dorper Phase 1 WEF, Eastern Cape	Rainmaker Energy	Environmental Advisor
Garob WEF, Northern Cape	Juwi Renewable Energies	Environmental Advisor
Gouda WEF, Western Cape	Aveng / Acciona	Environmental Advisor
Happy Valley WEF, Eastern Cape	VentuSA Energy / EDPR	Environmental Advisor
Hidden Valley WEF, Northern Cape	African Clean Energy Developments (ACED)	Environmental Advisor
Hopefield WEF, Western Cape	Umoya Energy	Environmental Advisor
Karusa Wind Farm, Northern Cape	African Clean Energy Development	Environmental Advisor
Loperberg WEF, Eastern Cape	Rainmaker Energy	Environmental Advisor
Nobelsfontein WEF, Northern Cape	Coria / SARGE	Environmental Advisor
Nojoli WEF, Eastern Cape	African Clean Energy Developments (ACED)	Environmental Advisor
Nxuba WEF, Eastern Cape	African Clean Energy Developments	Environmental Advisor
Oyster Bay WEF, Eastern Cape	RES	Environmental Advisor
Riverbank Wind WEF, Eastern Cape	InnoWind	Environmental Advisor
Roggeveld Phase 1 WEF, Northern Cape	Building Energy	Environmental Advisor
Soetwater Wind Farm, Northern Cape	African Clean Energy Development	Environmental Advisor
Springfontein WEF, Northern Cape	Mainstream Renewable	Environmental Advisor
Zen WEF, Western Cape	VentuSA Energy	Environmental Advisor

Due Diligence Reporting

Project Name & Location	Client Name	Role
Gouda WEF, Western Cape	Blue Falcon Trading	Environmental Advisor

Project Name & Location	Client Name	Role
Loeriesfontein, Khobab & Noupoort WEF's, Northern Cape	Actis	Environmental Advisor
Roggeveld Wind Farm, Northern Cape	Building Energy	Environmental Advisor

Environmental Permitting & WUL Applications

Project Name & Location	Client Name	Role
Permitting for the Cookhouse WEF, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Permitting for the Karusa Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Permitting for the Sere WEF, Western Cape	Eskom	Project Manager & EAP
Permitting for the Soetwater Wind Farm, Northern Cape	African Clean Energy Development	Project Manager & EAP
Permitting Riverbank WEF, Eastern Cape	Electrawinds	Project Manager & EAP
S24G for the Klipheuwel / Dassiesfontein WEF, Western Cape		Project Manager & EAP
S53 application for the Nxuba Wind Farm, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
S53 Application for the Zen WEF, Western Cape	VentuSA Energy	Project Manager & EAP
WUL application for the Oyster Bay WEF, Eastern Cape	RES	Project Manager & EAP

CONVENTIONAL POWER GENERATION PROJECTS (COAL)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
H2 Energy Power Station, Mpumalanga	H2 Energy	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Coal fired power station in the Bethal area, Mpumalanga	ISS Global	Project Manager & EAP
Indwe Power Station, Eastern Cape	IPSA	Project Manager & EAP
IPP Base Load Power Station Development in Lephalale, Limpopo	Exxaro	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ISO 14001:2015 Audit for the Hendrina Power Station, Mpumalanga	Eskom Holdings	Project Manager

CONVENTIONAL POWER GENERATION PROJECTS (GAS)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Ankerlig OCGT to CCGT Conversion project & the Transmission Power Line between Ankerlig and the Omega Substation, Western Cape	Eskom Generation	Project Manager & EAP
Gourikwa OCGT to CCGT Conversion project & the Transmission Power Line between Gourikwa and the Proteus Substation, Western Cape	Eskom Generation	Project Manager & EAP

Neopak Combined Heat and Power (CHP) Plant, Rosslyn, Gauteng	Neopak	Project Manager & EAP
Richards Bay Combined Cycle Gas Turbine (CCGT) Power Plant, Kwa-Zulu Natal	Eskom	Project Manager & EAP

Screening Studies

Project Name & Location	Client Name	Role
Environmental Analysis for gas transmission pipelines in the Clayville, Nigel, and Wadeville areas, Gauteng	Eskom Holdings	Project Manager

GRID INFRASTRUCTURE PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Kyalami/Midrand Substation and 3 Transmission Lines, Gauteng	Eskom Transmission	Project Manager & EAP
Steelpoort Integration Project, Limpopo	Eskom Transmission	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
Amakhala Emoyeni Power Line & Kopleegte Substation, Eastern Cape	Cennergi	Project Manager & EAP
Bon Espirange Substation & Overhead Power Line for the Roggeveld Wind Farm, Northern Cape	Building Energy (G7 Renewable Energies)	Project Manager & EAP
Castle WEF Powerline, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Cuprum-Burchell; Burchell-Mooidraai Power Line, Northern Cape	Eskom	Project Manager & EAP
Expansion of the Komsberg Main Transmission Substation, Northern Cape	Enel Green Power	Project Manager & EAP
Garob-Kronos Power Line, Northern Cape	Juwi Renewable Energies	Project Manager & EAP
Golden Valley Dx-Poseidon Power Line Substation & Golden Valley-Kopleegte Power Line, Eastern Cape	BioTherm Energy	Project Manager & EAP
Gunstfontein Switching Station, Power Line & Ancillary Infrastructure, Northern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Ilanga Lethemba-Hydra, Northern Cape	Solar Capital	Project Manager & EAP
Iziduli Emoyeni WEF on-site substation, Power Line & Switching station, Access Roads & Watercourse Crossings, Eastern Cape	Windlab	Project Manager & EAP
Khai-Ma WEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Korana WEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Korana SEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Nobelsfontein WEF Power Line & Substation, Northern Cape	Coria / SARGE	Project Manager & EAP
Nojoli WEF Substation & Power Line Grid Connection, Eastern Cape	African Clean Energy Developments (ACED)	Project Manager & EAP
Olifantshoek Substation & Powerline, Northern Cape	Eskom Holdings	Project Manager & EAP
Poortjies WEF Power Line, Northern Cape	Mainstream Renewable	Project Manager & EAP
Power Line & Substation for the Blackwood WEF, Northern Cape	VentuSA Energy	Project Manager & EAP

Power Line & Substation for the Khobab WEF in Loeriesfontein, Northern Cape	Mainstream Renewable	Project Manager & EAP
Power Line Connecting the Sishen SEF to the Ferrum MTS-UMTU Klip Kop Power Line, Northern Cape	Acciona (Windfall 59 Properties)	Project Manager & EAP
Power Line for the Grid Connection of the 2 SEF's near Kath and Dibeng, Northern Cape	VentuSA Energy	Project Manager & EAP
Power Line for the Rhebokfontein WEF, Western Cape	Moyeng Energy	Project Manager & EAP
Power Line from Aggeneys Solar One to Aggeneis MTS Substation, Northern Cape	BlueWave	Project Manager & EAP
Re-alignment of 3 Eskom Power Line Servitudes within the Hopefield WEF, Western Cape	Umoya Energy	Project Manager & EAP
Re-alignment of the Power Line & Watercourse Crossings for the Loeriesfontein 2 WEF, Northern Cape	Mainstream Renewable	Project Manager & EAP
Re-alignment of the Power Line from Loeriesfontein 1 WEF to the Helios Substation, Northern Cape	Mainstream Renewable	Project Manager & EAP
Re-alignment of the Power Line from Loeriesfontein 3 WEF to the Helios Substation, Northern Cape	Mainstream Renewable	Project Manager & EAP
Substation for the Aggeneys PV SEF, Northern Cape	BioTherm Energy	Project Manager & EAP
Substation, Power Line & Watercourse Crossings for the Springfontein WEF, Free State	Mainstream Renewable	Project Manager & EAP
Wesley-Peddie (Riverbank Phase 2) Power Line for the Uncedo Lwethu WEF, Eastern Cape	Just Energy	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
EO for the construction of the Neptune-Vuyani Transmission Line, Western Cape	Trans-Africa Projects on behalf of Eskom	Project Manager

INFRASTRUCTURE DEVELOPMENT PROJECTS (BRIDGES, PIPELINES, ROADS, WATER RESOURCES, STORAGE, ETC)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Afguns Road Realignment Project, Limpopo	Eskom Holdings	Project Manager & EAP
Expansion of the existing Welgedacht Water Care Works, Gauteng	ERWAT	Project Manager & EAP
Industrial Metals Cluster, Northern Cape	Northern Cape Department of Economic Development and Tourism	Project Manager & EAP
Modification of the existing Hartebeestfontein Water Care Works, Gauteng	ERWAT	Project Manager & EAP

Basic Assessments

Project Name & Location	Client Name	Role
New Raw Water Reservoir & Pipeline for the Medupi Power Station, Limpopo	Eskom Holdings	Project Manager & EAP
Msenge Emoyeni WEF Watercourse Crossings, Eastern Cape	Windlab	Project Manager & EAP
Dilokong Transport Facility, Limpopo	South African National Roads Agency Limited (SANRAL)	Project Manager & EAP
Neopak Water Treatment Plant, Gauteng	Neopak	Project Manager & EAP

Project Name & Location	Client Name	Role
Realignment of MR73 Road for the Construction of the Paulputs CSP Facility, Northern Cape	Abengoa Solar	Project Manager & EAP
Biomass Storage Area in Support of the Mkuze Biomass Power Station, KwaZulu-Natal	Building Energy	Project Manager & EAP
Wastewater Dam & Pipeline in Support of the Mkuze Biomass Power Station, Kwa-Zulu Natal	Building Energy	Project Manager & EAP
Watercourse Crossings for the Klaver Wind Energy Facility, Western Cape	Vendiwell	Project Manager & EAP

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
ECO for the Construction of the Tiffindell Ski Resort, Eastern Cape	Tiffindell Ski	ECO
ECO for the Distribution centre & warehouse at Lords View Industrial Estate, Gauteng	Oliver & Partners	Project Manager
ECO for the Upgrade of the Waterval Wastewater Treatment Works, Gauteng	BCP Palace (on behalf of ERWAT)	Project Manager

Compliance Advice and reporting

Project Name & Location	Client Name	Role
Mkuze Biomass Plant, Kwa-Zulu Natal	Building Energy	Environmental Advisor
Tiffindell Ski, Eastern Cape	Tiffindell Ski	Environmental Advisor

Environmental Permitting & WUL Applications

Project Name & Location	Client Name	Role
Permitting, S53 & WULA for the Mkuze Biomass Plant, Kwa-Zulu Natal	Building Energy	Project Manager & EAP
WULA for the Visserhok Waste Tyre Depot, Western Cape	REDISA	Project Manager & EAP
WULA for the Witbank Waste Tyre Depot, Mpumalanga	REDISA	Project Manager & EAP

MINING

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Compliance Audit for the Palesa Coal Mine WML, Mpumalanga province	HCI Coal	Project Manager
Compliance Audit Waste Use Licene for the Mbali Coal Mine, Mpumalanga province	HCI Coal	Project Manager

ENVIRONMENTAL MANAGEMENT TOOLS

Project Name & Location	Client Name	Role
Review the effectiveness *& efficiency of the environmental impact management (EIA) system in South Africa, and formulate an environmental impact management strategy and action plan	National Department of Environmental Affairs	Environmental Advisor
Drafting a Position Paper: Project Financing and Environmental Risk Management (considering IFC	Standard Bank Group	Environmental Advisor



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

(For official use only)

File Reference Number:

NEAS Reference Number:

Date Received:

DEA/EIA/

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Allepad PV One, 100MW photovoltaic (PV) solar energy generation facility and associated infrastructure near Upington, Northern Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP Company Name:	Savannah Environmental (Pty) Ltd		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 2	Percentage Procurement recognition 125%
EAP name:	Karen Jodas		
EAP Qualifications:	» M.Sc in Geography (Geomorphology), Rhodes University, Grahamstown (1996) » B.Sc Honours in Geography, Rhodes University, Grahamstown (1994) » B.Sc in Earth Sciences, Rhodes University, Grahamstown (1993)		
Professional affiliation/registration:	Professional Natural Scientist (Pr.Sci.Nat): Environmental Scientist (400106/99)		
Physical address:	082 655 1935		
Postal address:	086 684 0547		
Postal code:	2157	Cell:	
Telephone:	011 656 3237	Fax:	
E-mail:	karen@savannahsa.com		

The appointed EAP must meet the requirements of Regulation 13 of GN R982 of 04 December 2014, as amended.

2. DECLARATION BY THE EAP

I, Karen Jodas, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 13 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- ~~I have a vested interest in the proposed activity proceeding, such vested interest being:~~

K. Jodas

Signature of the Environmental Assessment Practitioner

Savannah Environmental
Name of Company:

10/10/18
Date

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Karen Jodas, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

Signature of the Environmental Assessment Practitioner

Savannah Environmental
Name of Company

10/10/18
Date

R. Small

Signature of the Commissioner of Oaths

11/10/2018
Date

Details of EAP, Declaration and Undertaking Under Oath

CERTIFIED A TRUE COPY
ROBERTO SMALL
MAKGAHLELA MASHABA ATTORNEYS
BUILDING BLOCK A, GROUND FLOOR
WOODLANDS DRIVE OFFICE PARK
R/WOODLANDS & WESTERN SERVICE
RD, WOODMEAD, SANDTON
COMMISSIONER OF OATHS EX
OFFICIO
PRACTISING ATTORNEY R.S.A.

CURRICULUM VITAE OF SHAUN TAYLOR

Profession :	Environmental and Permitting Lead Consultant
Specialisation:	Environmental Impact Assessments; Strategic Environmental Assessments; Environmental permitting compliance, advice & assurance; Water Use Licenses; Project Management; Wetland Assessments.
Work Experience:	Eleven (11) years' experience in the environmental field

OCATIONAL EXPERIENCE

Shaun's highest qualification is a Master of Science Degree in Aquatic Health. Shaun has an in-depth understanding of environmental and water related South African legislation. Applicable legislation includes the National Environmental Management Act, 1998 (Act No. 107 of 1998), the Environmental Impact Assessment (EIA) Regulations (2006, 2010 and 2014, as amended) and the National Water Act, 1998 (Act No. 36 of 1998). Over and above a number of other projects, Shaun has successfully conducted and obtained environmental approvals for numerous renewable energy (wind and solar) developments as well as for infrastructure (roads, water pipeline and power line) related projects. Shaun has excellent experience in dealing with the entire environmental authorization (EA) process from beginning to end i.e. submission of applications, undertaking Environmental Impact Assessments and Basic Assessments (BAs), conducting EA amendments, extension applications and compiling Draft and Final Environmental Management Programmes (EMPrs). Shaun is well acquainted and experienced in dealing with the key provincial and national environmental authorities, other organs of state as well as any other key stakeholders.

Within the water field, Shaun has completed numerous water use license applications (WULAs), General Authorisations (GAs), Risk Assessments and WULA compliance monitoring for various developments. Shaun is also specialised in wetland ecology and operates as a wetland specialist. Shaun has undertaken and completed numerous wetland and riparian assessments for renewable energy, linear projects as well as site specific projects. Shaun has also undertaken a wetland offset plan and several wetland rehabilitation plans for various developments.

SKILLS BASE AND CORE COMPETENCIES

- Environmental Project Management
- Environmental Impact Assessments and Basic Assessments
- Environmental Management Programmes
- Environmental Compliance Monitoring
- Environmental Amendments
- Strategic Environmental Assessments
- Environmental Management
- Public and Stakeholder Engagement
- Water Use License Applications
- General Authorisations

- Risk Assessment Matrix
- Wetland Delineation, Functional and Impact Assessments
- Geographic Information Systems (GIS)

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- M.Sc. Aquatic Health, University of Johannesburg, Johannesburg (2011)
- B.Sc (Hons) Geography and Environmental Studies, University of Witwatersrand, Johannesburg (2010)
- B.A Geography and Environmental Science, Monash University, Johannesburg (2008)

Short Courses:

- National Training and Development Buffer Zone Workshop, Eco-pulse (2015)
- Integrated Water Resources Management (IWRM), the National Water Act (NWA), and Water Use Authorisations, focusing on Water Use License Applications – Procedures, Guidelines, Integrated Water and Waste Management Plan (IWWMP), Carin Bosman Sustainable Solutions (2014)
- Grass identification short course, Bushveld Eco Services (2010)
- Wildflower identification short course, Bushveld Eco Services (2010)
- Veld management short course, Bushveld Eco Services (2010)
- Short course and certification in Wetland Delineation and Rehabilitation Training Course from the School of Continuing Education, University of Pretoria (2008)

Professional Society Affiliations:

- Member of the South African Wetland Society (SAWS) (Current)
- Registration pending with the South African Council for Natural Scientific Professions as a Professional Natural Scientist: Environmental Scientist (Current)

Other Relevant Skills:

- Project Management Course, SiVEST (2017)

EMPLOYMENT

Date	Company	Roles and Responsibilities
June 2018 - Current:	Savannah Environmental (Pty) Ltd	Environmental and Permitting Lead Consultant <i>Tasks include: undertaking strategic environmental assessments, environmental impact assessments, basic assessments, environmental management programmes (EMPrs), environmental amendments, environmental screening and due diligence assessments, water use license applications, wetland assessments and rehabilitation plans. Ensuring environmental compliance on permitting processes. Client liaison and relationship management.</i>
November 2010 – May 2018	SiVEST South Africa (Pty) Ltd	Environmental Scientist <i>Tasks included: conducting environmental impact assessments, basic assessments and water use license application processes, undertaking amendment and exemption</i>

Date	Company	Roles and Responsibilities
		<i>applications, general project management, report writing, marketing and proposal writing, client liaison and relationship management, invoicing, conducting specialist riparian/wetland delineation and functional assessments, environmental and water related compliance monitoring and auditing.</i>
October 2009 – March 2010	<i>Envirokey cc</i>	Junior Environmental Consultant and GIS support <i>Tasks included: being responsible for managing basic assessments, report writing, conducting specialist wetland assessments, auditing procedures and GIS mapping.</i>
August 2007 – September 2009	Holgate Meyer and Associates Environmental Management Services	Junior Environmental Consultant <i>Tasks included: being responsible for managing basic assessments, report writing, conducting specialist wetland assessments, environmental auditing procedures and GIS mapping.</i>

PROJECT EXPERIENCE

Project experience includes environmental approvals for numerous renewable energy (wind and solar) developments as well as for infrastructure (roads, water pipeline and power line) related projects. Within the water field, project experience includes numerous water use license applications, general authorisations, risk assessments and compliance monitoring for various developments. In terms of wetland assessments, project experience includes numerous wetland and riparian delineation, functional and impact assessments for renewable energy, linear projects and site-specific projects. The wetland experience also includes a wetland offset plan and several wetland rehabilitation plans (various types of developments).

RENEWABLE POWER GENERATION PROJECTS: SOLAR ENERGY FACILITIES

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
<i>Loeriesfontein Photovoltaic (PV) Plant, Northern Cape Province</i>	<i>Mainstream Renewable Power South Africa</i>	<i>Environmental consultant, public participation, wetland specialist</i>
<i>Renosterberg PV Plant near De Aar, Northern Cape Province</i>	<i>Renosterberg Wind Energy Corporation (RWEC) & Industrial Development Corporation (IDC) of South Africa</i>	<i>Environmental consultant, public participation, wetland specialist</i>
<i>Droogfontein II - 70MW Solar Photovoltaic Power Plant near Kimberley, Northern Cape Province</i>	<i>Mainstream Renewable Power South Africa</i>	<i>Environmental consultant, wetland specialist</i>
<i>Construction of a Concentrated PV/ PV Plant in De Aar, Northern Cape</i>	<i>Mainstream Renewable Power South Africa</i>	<i>Environmental consultant, wetland specialist</i>

Basic Assessments

Project Name & Location	Client Name	Role
Proposed development of a 19MW Photovoltaic Solar Power Plant near Kimberley, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Environmental consultant, public participation, wetland specialist
Proposed development of a 19MW Photovoltaic Solar Power Plant near Danielskuil, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Environmental consultant, public participation, wetland specialist
Loeriesfontein 70MW PV Plant, Northern Cape Province	Biotherm Energy	Environmental consultant
Droogfontein II - 70MW Solar Photovoltaic Power Plant near Kimberley, Northern Cape Province	SunEdison	Project leader, environmental consultant

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Integrated Water Use License Application for the Construction of a Concentrated PV/ PV Plant in De Aar, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, wetland specialist
Proposed Construction of the De Wildt Solar Photovoltaic Power Plant, General Authorisation and Risk Assessment, Gauteng Province	SunEdison	Project leader, environmental consultant, wetland specialist
Loeriesfontein Photovoltaic (PV) Plant Vegetation Permits, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant
Droogfontein II 70MW Solar Photovoltaic Power Plant near Kimberley Vegetation Permits, Northern Cape Province	SunEdison	Environmental consultant

RENEWABLE POWER GENERATION PROJECTS: WIND ENERGY FACILITIES**Environmental Impact Assessments and Environmental Management Programmes**

Project Name & Location	Client Name	Role
Noupoort Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant & public participation
Loeriesfontein Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, public participation, wetland specialist
Khobab Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, public participation, wetland specialist
Renosterberg Wind Farm near De Aar, Northern Cape Province	Renosterberg Wind Energy Corporation (RWECC) & Industrial Development Corporation (IDC) of South Africa	Environmental consultant, public participation, wetland specialist
Ithemba Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, public participation, wetland specialist
Harte Beeste Leegte Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, public participation, wetland specialist

Gras Koppies Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, public participation, wetland specialist
Xhal Boom Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, public participation, wetland specialist

Screening Studies

Project Name & Location	Client Name	Role
Environmental Constraints Analysis Report for the establishment of four Wind Farms in the Northern and Eastern Cape Provinces	Mainstream Renewable Power South Africa	Environmental consultant, wetland specialist

Compliance Advice and ESAP reporting

Project Name & Location	Client Name	Role
Noupoort Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental advisor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Water Use License for the Dwarsrug Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, wetland specialist
Water Use License for the Victoria West Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant, wetland specialist
Khobab Wind Farm Vegetation Permits, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant
Loeriesfontein Wind Farm Vegetation Permits, Northern Cape Province	Mainstream Renewable Power South Africa	Environmental consultant

RENEWABLE POWER GENERATION PROJECTS: CONCENTRATED SOLAR FACILITIES (CSP)

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Integrated Water Use License Application for the Construction of a CPV/ PV Plant in De Aar, Northern Cape Province of South Africa	Mainstream Renewable Power South Africa	Environmental consultant, wetland specialist
Water Use License for the Rooipunt Concentrated Solar Power Project, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Environmental consultant, wetland specialist
Water Use License for the Limestone Concentrated Solar Power Project, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Environmental consultant, wetland specialist

CONVENTIONAL POWER GENERATION PROJECTS (COAL)

Basic Assessments

Project Name & Location	Client Name	Role
Proposed Installation of a 500m ³ Bulk Storage Fuel Oil Tank at Grootvlei Power Station, Mpumalanga Province	Eskom Generation	Environmental consultant, wetland specialist

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Water Use License Compliance Auditing for Grootvlei Power Station, Mpumalanga Province, South Africa	Eskom Generation	Project leader, environmental auditor, wetland specialist
Kusile Power Station Armcor Water Use License Compliance Audit, Mpumalanga Province	Eskom Generation	Project leader, environmental auditor, wetland specialist
Kusile Power Station Ash Dump Water Use License Compliance Audit, Mpumalanga Province	Eskom Generation	Project leader, environmental auditor, wetland specialist
Kusile Power Station Pollution Dams Water Use License Compliance Audit, Mpumalanga Province	Eskom Generation	Project leader, environmental auditor, wetland specialist
Kusile Power Station Stream Diversion and Water Pipeline Crossings Water Use License Compliance Audit, Mpumalanga Province	Eskom Generation	Project leader, environmental auditor, wetland specialist
Kusile Power Station Geotechnical Water Use License Compliance Audit, Mpumalanga Province	Eskom Generation	Project leader, environmental auditor, wetland specialist

GRID INFRASTRUCTURE PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Mookodi Integration Project Environmental Impact Assessment, North West Province	Eskom Distribution	Environmental consultant, wetland specialist
Eskom Thyspunt Nuclear Integration Project – Transmission and Substation Infrastructure (Northern and Southern Corridor), Eastern Cape Province	Eskom Transmission	Environmental consultant, wetland specialist

Basic Assessments

Project Name & Location	Client Name	Role
Frankfort Strengthening Project: 88kV Power Line from Heilbron (via Frankfort) to Villiers, Free State Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist
Wilger 132kV Overhead Distribution Power Line, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Project leader, environmental consultant, wetland specialist
Limestone 1 – 132kV Overhead Distribution Power Line, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Environmental consultant, wetland specialist
Limestone 2 – 132kV Overhead Distribution Power Line, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Environmental consultant, wetland specialist
Proposed Tweespruit to Welroux Power Line and Substations, Free State Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist
Proposed Construction of a 132kV Power Line and Associated Infrastructure for the evacuation of power from the proposed 200MW Concentrated	SolarReserve South Africa (Pty) Ltd	Project leader, environmental consultant, wetland specialist

Solar Power (CSP) Plant on the Farm Rooipunt Number 617 near Upington, Northern Cape Province		
Loeriesfontein 132kV Power Line, Northern Cape Province	Biotherm Energy	Project leader, environmental consultant, wetland specialist
Proposed Construction of a 132kV Power Line and Associated Infrastructure for the evacuation of power from the Kalkaar Concentrating Solar Thermal Power Project on the Remainder of Portion 1 of the Farm Kalkaar 389 near Jacobsdal, Free State and Northern Cape Provinces	SolarReserve South Africa (Pty) Ltd	Project leader, environmental consultant, wetland specialist
Droogfontein II – 132kV power line and substation near Kimberley, Northern Cape Province	SunEdison	Project leader, environmental consultant
Mookodi Integration Project II – 132kV Power Line, Havelock Loop-in/Loop-out, Ganyesa Substation, North West Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Environmental Compliance Auditing for the Nigel Substation to Jameson Park (Inland Terminal 2) 88kV power lines	Eskom Distribution	Environmental auditor
Ga-rankuwa 11kV Underground Power Cable Water Use License Compliance Audit, Gauteng Province	Eskom Distribution	Project leader, environmental auditor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Water Use License / General Authorisation for Ga-rankuwa Substation, Gauteng Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist
Water Use License / General Authorisation for Klevebank to Dalkieth 88kV Power Line, Gauteng Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist
Water Use License Application for the Frankfort Strengthening Project: 88kV Power Line from Heilbron (via Frankfort) to Villiers, Free State Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist
Water Use License / General Authorisation Proposed Tweespruit to Welroux Power Line and Substations, Free State Province	Eskom Distribution	Project leader, environmental consultant, wetland specialist

MINING SECTOR PROJECTS

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Karowe Diamond Mine Environmental Management Plan Review and Update, Boteti District, Botswana	Karowe Diamond Mine	Environmental consultant

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Post-rehabilitation Assessment of Three Wetland Crossing Sites for the Re-working of a Tailings Dam Project near Stilfontein, North West Province	Chemwes (Pty) Ltd	Environmental auditor

TRANSPORT SECTOR PROJECTS**Basic Assessments**

Project Name & Location	Client Name	Role
Polokwane Integrated Rapid Public Transport Network, Limpopo Province	City of Polokwane	Environmental consultant, wetland specialist

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Transnet Rail Water Use License Compliance Audit, Northern Cape Province	Hatch-Goba / Transnet	Environmental auditor

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Water Use Licensing for the Polokwane Integrated Rapid Public Transport Network, Limpopo Province	City of Polokwane	Environmental consultant, wetland specialist
General Authorisation for the proposed eThekweni Integrated Rapid Public Transport Network (IRPTN) - BRT Phase 1: Route C1A, General Authorisation and Risk Assessment, Kwa-Zulu Natal Province	Nako Iliso	Environmental consultant, wetland specialist

INFRASTRUCTURE DEVELOPMENT PROJECTS (BRIDGES, PIPELINES, ROADS, WATER RESOURCES, STORAGE, ETC)**Basic Assessments**

Project Name & Location	Client Name	Role
Sir Lowry's Pass River Flood Alleviation Project, Western Cape Province	City of Cape Town	Environmental consultant

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Wetland Post-rehabilitation Assessment of the Inland New Multi-Purpose Pipeline in the Mpumalanga and Gauteng Provinces	Transnet SOC Ltd	Wetland specialist

HOUSING AND URBAN PROJECTS**Screening Studies**

Project Name & Location	Client Name	Role
Social Housing Projects in Sasolburg and Secunda, Gauteng Province	Provincial Department of Human Settlements	Environmental consultant, wetland specialist

INDUSTRIAL PROJECTS

Basic Assessments

Project Name & Location	Client Name	Role
SPAR Distribution Centre, Port Elizabeth, Eastern Cape Province	SPAR Group Ltd	Project leader, environmental consultant, wetland specialist

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Environmental Compliance Auditing for the Meadow Feeds Standerton Broiler Feed Mill, Mpumalanga Province	Meadow Feeds	Environmental consultant, wetland specialist

Environmental Permitting, S53, Water Use Licence (WUL), Waste Management Licence (WML) & Other Applications

Project Name & Location	Client Name	Role
Water Use License for the SPAR Distribution Centre, Port Elizabeth, Eastern Cape Province	SPAR Group Ltd	Project leader, environmental consultant, wetland specialist
Water Use License for the Proposed Tissue Manufacturing Capacity at the Kliprivier Operations Base, General Authorisation and Risk Assessment, Gauteng Province	Twinsaver Group	Project leader, environmental consultant, wetland specialist

ENVIRONMENTAL MANAGEMENT TOOLS

Strategic Environmental Assessments

Project Name & Location	Client Name	Role
Molemole Local Municipality Strategic Environmental Assessment, Limpopo Province	Capricorn District Municipality	Environmental consultant, wetland specialist
Blouberg Local Municipality Strategic Environmental Assessment, Limpopo Province	Capricorn District Municipality	Environmental consultant, wetland specialist

SPECIALIST STUDIES

Wetland and Riparian Delineation, Functional and Impact Assessments

Project Name & Location	Client Name	Role
Surface Water Assessment for the Construction of a Wind Farm in Prieska, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Construction of a Wind Farm in Loeriesfontein, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Construction of a 132KV Distribution Line from the Kudu Substation to Dorstfontein Substation in Mpumalanga Province	Eskom Distribution	Wetland specialist
EIA for the Thyspunt Transmission Lines Integration Project: Surface Water Impact Assessment Report – EIA – Northern Corridor: Eastern Cape Province	Eskom Transmission	Wetland specialist
EIA for the Thyspunt Transmission Lines Integration Project: Surface Water Impact Assessment Report – EIA – Southern Corridor: Eastern Cape Province	Eskom Transmission	Wetland specialist

Surface Water Assessment for the Construction of a CSP and a CPV/ PV Plant in De Aar, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Environmental Management Framework for the Mogale City Local Municipality Surface Water Report – Desired State Report: Gauteng Province	Mogale City	Wetland specialist
Surface Water Assessment for the Proposed Township Development on the Remainder of Portion 27 of the Farm Middelburg and Townsland 287 JS, Mpumalanga Province	Steve Tshwete Local Municipality	Wetland specialist
Surface Water Assessment for the Construction of a CSP and a CPV/ PV Plant in De Aar, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Construction of a CSP and a CPV/ PV Plant in Kimberley, Northern Cape Province, South Africa	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Westrand Strengthening Project from Westgate Substation to Hera Substation and Westgate Substation Extension, Gauteng Province	Eskom Distribution	Wetland specialist
Mookodi Integration Project 2 Basic Assessment Surface Water Impact Assessment, North West Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Construction of a Gabion Structure at Waterval Substation in the Midrand Area, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Single 400kV Power Line from Borutho to Nzhlele, North West Province	Eskom Transmission	Wetland specialist
Surface Water Assessment for the Proposed Construction of an 88kv Power Line at Palmridge in the Ekurhuleni Metropolitan Municipality, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 19MW Photovoltaic Solar Power Plant near Danielskuil, Northern Cape Province	SolarReserve South Africa (Pty) Ltd	Wetland specialist
Surface Water Assessment for the Proposed Rebuilding of an 88kV Power Line from Henneman Substation to Serfontein Substation near Kroonstad, Free State Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Deconstruction and Construction of an 11kV Power Line near Delmas, Mpumalanga Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Solar Photovoltaic Power Plant near De Aar, Northern Cape Province, South Africa	Renosterberg Wind Energy Corporation (RWEC) & Industrial Development Corporation (IDC) of South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Wind Farm near De Aar, Northern Cape Province	Renosterberg Wind Energy Corporation (RWEC) & Industrial Development	Wetland specialist

	Corporation (IDC) of South Africa	
Surface Water Assessment for the Proposed Construction of a Low-Cost Housing Development in the Soutpan area of Tshwane, Gauteng Province	Makole Property Development	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 132kV Power Line near Kimberley, Northern Cape Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Extension of Delmas Substation and Associated Power Lines, Mpumalanga Province, South Africa	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Substation in the Midrand area of Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Construction of an 88kV Power Line at Lochvaal Kudu in the Emfuleni Municipality, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed construction of an 88kV Power Line from Klevebank Substation to Dalkeith Substation, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of an 88kV Power Line from Heilbron Substation to Villiers Substation, Free State Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 132kV Power Line, Substation and the Extension of Homestead Substation Associated with the 75MW Concentrating Photovoltaic (CPV) / Photovoltaic (PV) Plant (PV 3) on the Farm Droogfontein in Kimberley, Northern Cape Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Moddershaft Underground to Overhead Cable Replacement of an 11kV Power Line from Moddershaft Substation to a Minisub near Anzac, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of an 11kV Underground Power Cable from Civic Centre to Zola Substation, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Substation on Portion 265 Randjesfontein 405-JR, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Mathibestad Danhauser 33kV Power Line Network, North West Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Mathibestad-Danhauser Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Mothutlung North Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Mothutlung South Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist

Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Nonyane Madidi North Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Nonyane Swartdam Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Rebuild of a Section of the Existing 33kV Pelly Klipdrift Network, Gauteng and North West Provinces	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Zonderwater Kraal Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Hammanskraal Lusthof Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of a Section of the Existing 33kV Klipgat Circle Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Re-build of Sections of the Existing 33kV Erasmus Aviva Power Line Network, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of an 11kV Underground Power Cable at the Ga-Rankuwa Substation, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Mamatwan Manganese Mine, Northern Cape Province	Groundwater Consulting Services (Pty) Ltd	Wetland specialist
Surface Water Assessment for the Dwarsrug Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Manzimtoti Sewer Line Project, Kwa-Zulu Natal Province	Environmental Planning and Design cc	Wetland specialist
Surface Water Assessment for the Compensation Flats Development, Kwa-Zulu Natal Province	Tongaat Hulett	Wetland specialist
Surface Water Assessment for the Tinley Manor South Road Development, Kwa-Zulu Natal Province	Tongaat Hulett	Wetland specialist
Surface Water Assessment for the Ntuzuma Sewer Line Project, Kwa-Zulu Natal Province	Environmental Planning and Design cc	Wetland specialist
Surface Water Assessment for the Esphiva Sewer Line Project, Kwa-Zulu Natal Province	Environmental Planning and Design cc	Wetland specialist
Frankfort 132kV Power Line Wetland Walk-down Assessment, Free State Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Esphiva Water Pipeline near Ulundi, KwaZulu-Natal Province	Environmental Planning and Design cc	Wetland specialist
Surface Water Assessment for the Grootvlei Power Station, Mpumalanga Province	Eskom Generation	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Embangweni and Bhekabantu Irrigation Schemes, KwaZulu-Natal Province	Nzingwe Consultancy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Nondabuya and Khwehle	Nzingwe Consultancy	Wetland specialist

Primary Agriculture Schemes, KwaZulu-Natal Province		
Surface Water Assessment for the Proposed Expansion of the Makhathini Irrigation Scheme, KwaZulu-Natal Province	Nzingwe Consultancy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Mbaliyezwe Irrigation Schemes, KwaZulu-Natal Province	Nzingwe Consultancy	Wetland specialist
Surface Water Assessment for the Proposed Mixed Use Development on the Remainder of Portion 27 of the Farm Middelburg Town and Townlands 287 JS, Steve Tshwete Local Municipality in the Mpumalanga Province	Steve Tshwete Local Municipality	Wetland specialist
Surface Water Assessment for the Proposed Construction of Two Power Lines and Two Substations for the Mainstream Wind Facilities near Beaufort West, Western Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed eThekweni Integrated Rapid Transport Network (IRPTN) – Bus Rapid Transport (BRT) Phase 1: Route C1A, KwaZulu-Natal Province	Nako Iliso	Wetland specialist
Surface Water Assessment for the Proposed Coal Railway Siding at the Welbedacht Marshalling Yard and associated Milder Road Upgrade near Springs, Gauteng Province	Canyon Coal	Wetland specialist
Surface Water Assessment for the Proposed Development of a 22kV Medium Voltage Power Line in Mofofutso, North West Province	Eskom Distribution	Wetland specialist
Wetland Walk-down Assessment for the Mookodi Integration Power Line Project, North West Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Coal Loading Facility within the existing Bronkhorstspuit Railway Siding near Bronkhorstspuit, Gauteng Province	Canyon Coal	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Two 75MW Tlisitseng Solar Photovoltaic Energy Facilities near Lichtenburg, North West Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Two 75MW Sendawo Solar Photovoltaic Energy Facilities near Lichtenburg, North West Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Sendawo Solar Substation and associated 400kV Power Line near Lichtenburg, North West Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Helena 1, 2 & 3 Photovoltaic Energy Facilities near Copperton, Northern Cape Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 70MW Photovoltaic Facility and	Mainstream Renewable Power South Africa	Wetland specialist

132kV Power Line near Loeriesfontein, Northern Cape Province		
Surface Water Assessment for the Proposed Expansion of the Tissue Manufacturing Capacity at the Kliprivier Operations Base, Gauteng Province	Twinsaver Group	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Eureka West 140MW Wind Farm near Copperton, Northern Cape Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Eureka East 140MW Wind Farm near Copperton, Northern Cape Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Eureka 132kV Power Line near Copperton, Northern Cape Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Aletta 140MW Wind Farm near Copperton, Northern Cape Province	Biotherm Energy	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Ithemba Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Harte Beeste Leegte Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Gras Koppies Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Xha! Boom Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Expansion of the Mountain Valley "A" Grade Chicken Abattoir on the Remainder of Subdivision of Portion 17 (of 16) of the Farm Leeuw Poort 1120 FT, KwaZulu-Natal Province	Shangoni Management Services (Pty) Ltd	Wetland specialist
Surface Water Assessment for the Proposed Construction of a Linking Station, Power Lines and Substations for the Mainstream Wind Energy Facilities near Beaufort West, Western Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction 132kV Power Lines and a Substation for Tsakane Ext 10 and 22, Gauteng Province	Eskom Distribution	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Harte Beeste Leegte Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Ithemba Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Gras Koppies Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist

Surface Water Assessment for the Proposed Construction of the Xha! Boom Wind Farm, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Construction of the SPAR Distribution Centre, Port Elizabeth, Eastern Cape Province	SPAR Group Ltd	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 140MW Wind Farm and Associated Infrastructure near Hutchison, Northern Cape Province	Mainstream Renewable Power South Africa	Wetland specialist
Surface Water Assessment for the Proposed Maintenance of the Water Pipeline in Parys, Ngwathe Local Municipality, Free State Province	Gedezar Consulting	Wetland specialist
Surface Water Assessment for the Proposed Construction of the Rietkuil Coal Railway Siding near Bronkhorstspuit, Gauteng Province	Canyon Coal	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 75MW Solar Photovoltaic Power Plant near Dennilton, Limpopo Province	Nokukhanya Energy (Pty) Ltd	Wetland specialist
Surface Water Assessment for the Proposed Construction of a 9.9 MW Solar Photovoltaic (PV) Energy Facility on the Farm Wildebeestkuil near Leeudoringstad, North West Province	Leeudoringstad Solar Plant (Pty) Ltd	Wetland specialist
Surface Water Assessment for the Proposed Construction of up to a 5MW Solar Photovoltaic (PV) Energy Facility on Portion 37 of the Farm Leeuwbosch No. 44 near Leeudoringstad, North West Province	Leeudoringstad Solar Plant (Pty) Ltd	Wetland specialist
Surface Water Assessment for the Proposed Construction of the De Wildt Solar Photovoltaic Power Plant, Gauteng Province	SunEdison	Wetland specialist

Wetland and Riparian Rehabilitation Plans

Project Name & Location	Client Name	Role
Wetland and River Rehabilitation Plan for the Fourways 22kV Feeder Cable, Gauteng Province	Eskom Distribution	Wetland specialist
Wetland and Riparian Rehabilitation Plan for the Proposed eThekweni Integrated Rapid Transport Network (IRPTN) – Bus Rapid Transport (BRT) Phase 1: Route C1A, KwaZulu-Natal Province	eThekweni Metropolitan Municipality	Wetland specialist
Wetland Rehabilitation Plan for the Delmas Pedestrian Bridge, Mpumalanga Province	Canyon Coal	Wetland specialist
Wetland Remediation Plan for the Graspan Colliery Extension on the Remaining Extent of Portion 31 on the Farm Elandspruit 291 JS, Mpumalanga Province	GIBB	Wetland specialist

Wetland Offset Plans

Project Name & Location	Client Name	Role
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*Wetland Offset Plan for the Proposed Construction
of the SPAR Distribution Centre, Port Elizabeth,
Eastern Cape Province*

SPAR Group Ltd

Wetland specialist



Performance Standards & Equator Principles)		
EMP for the Phase 1 of the Elitheni Coal Mine Project, Eastern Cape	Elitheni Coal	Environmental Advisor
Gap Analysis of Environmental Management Systems (EMS) with ISO 14001:2004	Venture Diversified Products	Environmental Advisor
Development of Provincial Guidelines for 4x4 routes	Western Cape Department of Environmental Affairs & Development Planning	Environmental Advisor
Permitting Study on the Status of Renewable Energy Projects in South Africa	E.ON	Environmental Advisor
Practical review of EGI SEA	CSIR	Environmental Advisor
Development & Implementation of the Environmental Management Systems (EMS) with ISO 14001:2004 for the UBS Office in Sandton, Gauteng	UBS AG	Environmental Advisor
Resource & Efficiency Plans for the operation phase of the Mulilo Solar PV De Aar and Mililo Solar PV Prieska	Mulilo and X-Elio	Environmental Advisor

TRAINING

Project Name & Location	Client Name	Role
Hendrina Power Station Environmental Law Training	Eskom Holding	Project Manager
Radar Training for NCC Biologists	EchoTracks	Project Manager

CURRICULUM VITAE OF NICOLENE VENTER

Profession :	Public Participation and Social Consultant
Specialisation:	Public participation process; stakeholder engagement; facilitation (workshops, focus group and public meetings; public open days; steering committees); monitoring and evaluation of public participation and stakeholder engagement processes
Work Experience:	21 years' experience as a Public Participation Practitioner and Stakeholder Consultant

VOCATIONAL EXPERIENCE

Over the past 21 years Nicolene established herself as an experienced and well recognised public participation practitioner, facilitator and strategic reviewer of public participation processes. She has experience in managing public participation projects and awareness creation programmes. Her experience includes designing and managing countrywide public participation and awareness creation projects, managing multi-project schedules, budgets and achieving project goals. She has successfully undertaken several public participation processes for EIA, BA and WULA projects. The EIA and BA process include linear projects such as the NMPP, Eskom Transmission and Distribution power lines as well as site specific developments such as renewable energy projects i.e. solar, photo voltaic and wind farms. She also successfully managed stakeholder engagement projects which were required to be in line with the Equator Principles.

SKILLS BASE AND CORE COMPETENCIES

- Project Management
- Public Participation, Stakeholder Engagement and Awareness Creation
- Public Speaking and Presentation Skills
- Facilitation (workshops, focus group meetings, public meetings, public open days, working groups and committees)
- Social Assessments (Stakeholder Analysis / Stakeholder Mapping)
- Monitoring and Evaluation of Public Participation and Stakeholder Engagement Processes
- Community Liaison
- IFC Performance Standards
- Equator Principles
- Minute taking, issues mapping, report writing and quality control

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- Higher Secretarial Certificate, Pretoria Technicon (1970)

Short Courses:

- Techniques for Effective Public Participation, International Association for Public Participation (IAP2) (2008)
- Foundations of Public Participation (Planning and Communication for Effective Public Participation, IAP2 (2009)
- Certificate in Public Relations, Public Relation Institute of South Africa (Damelin Management School (1989)

Professional Society Affiliations:

- Board Member of International Association for Public Participation (IAP2): Southern Africa

EMPLOYMENT

Date	Company	Roles and Responsibilities
2016 – Current	Independent Consultant Imaginative Africa (Pty) Ltd	<p>Consulting to various Environmental Assessment Practitioners for Public Participation and Stakeholder Engagements: <i>Tasks include: Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</i></p> <p><i>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved</i></p> <p><u>Clients:</u> <i>SiVEST Environmental, Savannah Environmental, Baagi Environmental; Royal Haskoning DHV (previously SSI)</i></p>
2013 - 2016	Senior Public Participation Practitioner Zitholele Consulting	<p>Project Manager <i>Project managed public participation process for EIA/BA/WULA/EAL projects. Manages two Public Participation Administrators. Public Participation</i></p>

Date	Company	Roles and Responsibilities
		tasks as outlined as above and including financial management of public participation processes.
2011 - 2013	Independent Consultant Imaginative Africa (Pty) Ltd	<p>Consulting to various Environmental Assessment Practitioners for Public Participation and Stakeholder Engagements: Tasks include: Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</p> <p>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved</p> <p><u>Clients:</u> Bohlweki Environmental, Bemani Sustainability (Pty) Ltd; Naledzi Environmental</p>
2007 – 2011	Unit Manager: Public Participation Practitioner SiVEST SA (Pty) Ltd	<p>Unit Manager Project managed public participation process for EIA/BA projects. Manages two Junior Public Participation Practitioners. Public Participation tasks as outlined as above and including financial management of public participation processes.</p>
2005 – 2006	Independent Consultant Imaginative Africa (Pty) Ltd	<p>Public Participation and Stakeholder Engagement Practitioner. Tasks include: Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, Tribal Chiefs, affected landowners, etc.</p> <p>Managing interaction between Stakeholders and Team Members, liaising with National, Provincial and Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical</p>

Date	Company	Roles and Responsibilities
		information communicated to and consultation with all level of stakeholders involved. <u>Clients:</u> Manyaka-Greyling-Meiring (previously Greyling Liaison and currently Golder Associates)
2004 – 2005	Personal Assistant National Intelligence Agency	Responsibilities: Upkeep of diary; Review and ensure Submissions are compliant to Regulations; Travel arrangements (domestic & international); Compilation of travel reports
1997 - 2004	Independent Consultant Imaginative Africa (Pty) Ltd	Public Participation Practitioner. Tasks include: Drafting of a Public Participation Plan with key deliverable dates and methodology to be followed, Background Information Document, Letters to Stakeholders and Interested and/or Affected Parties (I&APs) inclusive of key project deliverables and responses to questions / concerns raised; Stakeholder identification; facilitating stakeholder workshops, focus group and public meetings; conduct one-on-one consultation with Community Leaders, affected landowners, etc. Managing interaction between Stakeholders and Team Members, liaising with National, Provincial Local Authorities, managing community consultation and communications in project affected areas, attend to the level of technical information communicated to and consultation with all level of stakeholders involved. <u>Clients:</u> Greyling Liaison (currently Golder Associates); Bembani Sustainability (Pty) Ltd; Lidwala Environmental; Naledzi Environmental

PROJECT EXPERIENCE

Renewable Power Generation Projects: Solar Energy Facilities

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Trisitseng PV, Substations & Power Lines, Lichtenburg, North West Province	BioTherm Energy (Pty) Ltd EAP: SiVEST	Public Participation, Landowner and Community Consultation
Sendawo PVs, Substations & Power Lines, Vryburg, North West Province		
Helena Solar 1, 2 and 3 PVs, Copperton, Northern Cape Province		
Farm Spes Bona 23552 Solar PV Plants, Bloemfontein, Free State Province	Surya Power (Pty) Ltd EAP: SiVEST	Public Participation, Landowner and

		Community Consultation
De Aar Solar Energy Facility, De Aar, Northern Cape Province	South Africa Mainstream Renewable Power Developments (Pty) Ltd EAP: SiVEST	Public Participation, Landowner and Community Consultation
Droogfontein Solar Energy Facility, Kimberley, Northern Cape Province		
Kaalspruit Solar Energy Facility, Loeriesfontein, Northern Cape Province		
Platsjambok East PV, Prieska, Northern Cape Province		
Renosterburg PV, De Aar, Northern Cape Province	Renosterberg Wind Energy Company (Pty) Ltd EAP: SiVEST	Public Participation, Landowner and Community Consultation
19MW Solar Power Plant on Farm 198 (Stypklip), Danielskuil, Northern Cape Province	Solar Reserve South Africa (Pty) Ltd EAP: SiVEST	Public Participation, Landowner and Community Consultation

Renewable Power Generation Projects: Wind Energy Facilities

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Aletta Wind Farm, Copperton, Northern Cape Province	BioTherm Energy (Pty) Ltd EAP: SiVEST	Public Participation
Eureka Wind Farm, Copperton, Northern Cape Province		
Loeriesfontein Wind Farm, Loeriesfontein, Northern Cape Province	South Africa Mainstream Renewable Power Developments (Pty) Ltd EAP: SiVEST	Public Participation
Droogfontein Wind Farm, Loeriesfontein, Northern Cape Province		
Four Leeuwberg Wind Farms, Loeriesfontein, Northern Cape Province		
Noupoort Wind Farm, Noupoort, Northern Cape Province		
Mierdam PV & Wind Farm, Prieska, Northern Cape Province		
Platsjambok West Wind Farm & PV, Prieska, Northern Cape Province		

Renewable Power Generation Projects: Concentrated Solar Facilities (CSP)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Upington Concentrating Solar Plant and associated Infrastructures	Eskom Holdings SOC Ltd EAP: Bohlweki Environmental	Public Participation

Grid Infrastructure Projects

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
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Pluto-Mahikeng Main Transmission Substation and 400kV Power Line (Carletonville to Mahikeng), Gauteng and North West Provinces	Eskom Holdings SOC Ltd Baagi Environmental	
Thyspunt Transmission Lines Integration Project, Eastern Cape Province	Eskom Holdings SOC Ltd EAP: SiVEST	Public Participation, Landowner and Community Consultation
Westrand Strengthening Project, Gauteng Province		Public Participation,
Mookodi Integration Project, North-West Province		
Transnet Coallink, Mpumalanga and KwaZulu-Natal Provinces		
Delarey-Kopela-Phahameng Distribution power line and newly proposed Substations, North-West Province		Public Participation, Landowner and Community Consultation
Invubu-Theta 400kV Eskom Transmission Power Line, KwaZulu-Natal Province	Eskom Holding SOC Ltd EAP: Bemani Environmental	Community Consultation

Basic Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Melkhout-Kudu-Grassridge 132kV Power Line Project (project not submitted to DEA), Eastern Cape Province	Eskom Holdings SOC Ltd EAP: SiVEST	Public Participation, Landowner and Community Consultation
Tweespruit-Welroux-Driedorp-Wepener 132Kv Power Line, Free State Province		Public Participation, Landowner and Community Consultation
Kuruman 132Kv Power Line Upgrade, Northern Cape Province	Eskom Holdings SOC Ltd EAP: Zitholele	Public Participation, Landowner and Community Consultation
Vaalbank 132Kv Power Line, Free State Province		Public Participation, Landowner and Community Consultation
Pongola-Candover-Golela 132kV Power Line (Impact Phase), KwaZulu-Natal Province		Public Participation, Landowner and Community Consultation
Ndumo-Geziza 132kV Power Line, KwaZulu-Natal Province		Public Participation, Landowner and Community Consultation
		Public Participation, Landowner and Community Consultation

Power Generation Sector Projects

Project Name & Location	Client Name	Role
Medupi Flue Gas Desulphurisation Project (up to completion of Scoping Phase), Limpopo Province	Eskom Holdings SOC Ltd EAP: Zitholele Consulting	Public Participation, Landowner and Community Consultation
Kendal 30-year Ash Disposal Facility, Mpumalanga Province		
Kusile 60-year Ash Disposal Facility		
Camden Power Station Ash Disposal Facility, Mpumalanga Province		
Tutuka Fabric Filter Retrofit and Dust Handling Plant Projects, Mpumalanga Province	Eskom Holdings SOC Ltd Lidwala Environmental	Public Participation, Landowner and Community Consultation

Eskom's Majuba and Tutuka Ash Dump Expansion, Mpumalanga Province		Public Participation, Landowner and Community Consultation
Hendrina Ash Dam Expansion, Mpumalanga Province		Public Participation, Landowner and Community Consultation

Basic Assessments

Project Name & Location	Client Name	Role
Proposed Realignment of the Bulshoek Dam Weir near Klawer and the Doring River Weir near Clanwilliam, Western Cape Province	Applicant: Dept of Water and Sanitation EAP: Zitholele	Public Participation

Environmental Authorisation Amendments

Project Name & Location	Client Name	Role
Proposed Beaufort West 280MW Wind Farm into two 140MW Trakas and Beaufort West Wind Farms, Western Cape Province	South Africa Mainstream Renewable Power Developments (Pty) Ltd EAP: SIVEST	Public Participation

Infrastructure Development Projects (bridges, pipelines, roads, etc)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Transnet's New Multi-Products Pipeline	Transnet DEAP: Bohlweki Environmental	Public Participation

Screening Studies

Project Name & Location	Client Name	Role
Environmental Screening Study for potential power line alternatives from Humansdorp to Port Elizabeth, Eastern Cape Province	Nelson Mandela Bay Municipality EAP: SIVEST	Social Assessment

Mining Sector

Environmental Impact Assessment and Environmental Management Programme

Project Name & Location	Client Name	Role
Koffiefontein Slimes Dam	Petra Diamond Mines EAP: Zitholele	Public Participation
Baobab Project: Ethenol Plant, Chimbanje, Middle Sabie, Zimbabwe	Applicant: Green Fuel (Private) Limited EAP: SIVEST	Public Participation & Community Consultation
BHP Billiton Energy Coal SA's Middelburg Water Treatment Plant, Mpumalanga Province	BHP Billiton Group EAP: Jones & Wagener	Public Participation

Facilitation

Project Name & Location	Client Name	Meeting Type
<i>Bloemfontein Strengthening Project</i>	<i>Eskom Holdings SOC Ltd EAP: Baagi Environmental</i>	<i>Public Meetings</i>
<i>Moidraai-Smitkloof 132kV Power Line and Substation, Northern Cape Province</i>	<i>Eskom Holdings SOC Ltd EAP: SSI</i>	<i>Focus Group Meetings</i>
<i>Thabametsi IPP Power Station, Limpopo Province</i>	<i>Thabametsi Power Company Proprietary Limited EAP: Savannah Environmental</i>	<i>Focus Group Meeting & Public Meeting</i>
<i>Aggeneis-Oranjemond 400kV Eskom Transmission Power Line, Northern Cape Province</i>	<i>Eskom Holdings SOC Ltd EAP: Savannah Environmental</i>	<i>Focus Group Meetings & Public Meetings</i>
<i>Ariadne-Eros 400kV/132kV Multi-Circuit Transmission Power Line (Public Meetings)</i>	<i>Eskom Holdings SOC Ltd EAP: ACER Africa</i>	<i>Public Meetings</i>
<i>Majuba-Venus 765kV Transmission Power Lines</i>		<i>Public Meetings</i>
<i>SmancorCR Chemical Plant (Public Meeting)</i>	<i>Samancor Chrome (Pty) Ltd EAP: Environmental Science Associates</i>	<i>Public Meeting</i>

Stakeholder Engagement

Project Name & Location	Client Name	Role
<i>Determination, Review and Implementation of the Reserve in the Olifants/Letaba System</i>	<i>Department of Water and Sanitation Golder Associates</i>	<i>Secretarial Services</i>
<i>Orange River Bulk Water Supply System</i>		
<i>Levuvu-Letaba Resources Quality Objectives</i>		

Short CV/Summary of Expertise – Simon Todd

 <p>3Foxes Biodiversity Solutions ECOLOGICAL SPECIALIST SERVICES Assessment/Management/Research</p>	<p>Simon Todd Pr.Sci.Nat Director & Principle Scientist C: 082 3326502 O: 021 782 0377 Simon.Todd@3foxes.co.za 60 Forrest Way Glencairn 7975</p>	<p>Ecological Solutions for People & the Environment</p>
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Simon Todd is Director and principal scientist at 3Foxes Biodiversity Solutions Pty Ltd (Reg. 2016/467883/07) and has over 20 years of experience in biodiversity measurement, management and assessment. He has provided specialist ecological input on more than 200 different developments distributed widely across the country, but with a focus on the three Cape provinces. This includes input on the Wind and Solar SEA (REDZ) as well as the Eskom Grid Infrastructure (EGI) SEA and Karoo Shale Gas SEA. He is on the National Vegetation Map Committee as representative of the Nama and Succulent Karoo Biomes. Simon Todd is a recognised ecological expert and is a past chairman and current deputy chair of the Arid-Zone Ecology Forum. Simon Todd is registered with the South African Council for Natural Scientific Professions (No. 400425/11).

Abbreviated CV:

- Profession: Independent Ecological Consultant - Pr.Sci.Nat 400425/11
- Specialisation: Plant & Animal Ecology
- Years of Experience: 20 Years

Skills & Primary Competencies

- Research & description of ecological patterns & processes in Nama Karoo, Succulent Karoo, Thicket, Arid Grassland, Fynbos and Savannah Ecosystems.
- Ecological Impacts of land use on biodiversity
- Vegetation surveys & degradation assessment & mapping
- Long-term vegetation monitoring
- Faunal surveys & assessment.
- GIS & remote sensing

Tertiary Education:

- 1992-1994 – BSc (Botany & Zoology), University of Cape Town
- 1995 – BSc Hons, Cum Laude (Zoology) University of Natal
- 1996-1997- MSc, Cum Laude (Conservation Biology) University of Cape Town

Employment History

- 2010-Present – Self-employed as consultant and sole proprietor of Simon Todd Consulting, which provides ecological specialist services for conservation, research, management and development projects. This has recently been upgraded to a fully registered and compliant company, 3Foxes Biodiversity Solutions.
- 2007-Present – Senior Scientist (Associate) – Plant Conservation Unit, Department of Botany, University of Cape Town.
- 2004-2007 – Senior Scientist (Contract) – Plant Conservation Unit, Department of Botany, University of Cape Town
- 2000-2004 – Specialist Scientist (Contract) - South African National Biodiversity Institute
- 1997 – 1999 – Research Scientist (Contract) – South African National Biodiversity Institute

General Experience & Expertise

- Conducted a large number of fauna and flora specialist assessments distributed widely across South Africa. Projects have ranged in extent from <50 ha to more than 50 000 ha.
- Widely-recognized arid ecology specialist. Published numerous peer-reviewed scientific publications based on various ecological studies across the country. Past chairman of the Arid Zone Ecology Forum and current executive committee member.
- Extensive experience in the field and exceptional level of technical expertise, particularly with regards to GIS capabilities which is essential with regards to producing high-quality sensitivity maps for use in the design of final project layouts.
- Strong research background which has proved invaluable when working on several ecologically sensitive and potentially controversial sites containing some of the most threatened fauna in South Africa.
- Published numerous research reports as well as two book chapters and a large number of papers in leading scientific journals dealing primarily with human impacts on the vegetation and ecology of the arid and semi-arid parts of South Africa.
- Maintain several long-term vegetation monitoring projects distributed across Namaqualand and the karoo.
- Guest lecturer at two universities and have also served as an external examiner.
- Reviewed papers for more than 10 international ecological journals.
- Past chairman and current committee member of the Arid Zone Ecological Forum.
- SACNASP registered as a Professional Natural Scientist, (Ecology) No. 400425/11.

A selection of recent work is as follows:

Specialist Assessments:

Strategic Environmental Assessments

Co-Author. Chapter 7 - Biodiversity & Ecosystems - Shale Gas SEA. CSIR 2016.

Co-Author. Chapter 1 Scenarios and Activities – Shale Gas SEA. CSIR 2016.
Co-Author – Ecological Chapter – Wind and Solar SEA. CSIR 2014.
Co-Author – Ecological Chapter – Eskom Grid Infrastructure SEA. CSIR 2015.
Contributor – Ecological & Conservation components to SKA SEA. CSIR 2017.

Specialist Fauna and Flora Assessments:

Electrical Transmission Infrastructure

Vryheid Grid Strengthening Project, near Swellendam. Nsovo Environmental Consultants. 2016.
Juno-Gromis 400kV Power Line. Ecological Walk-Through study for EMPr. Nsovo Environmental Consultants. 2017.
Proposed Weskusfleur Substation at Koeberg. Lidwala Consulting Engineers. 2015.
Proposed Juno-Aurora 765kV Power Line in the Western Cape: Fauna & Flora Specialist Report for Impact Assessment. Nzumbulolo Heritage Solutions 2015.
The proposed Mookodi Integration Phase 2 132kV Power Lines and Ganyesa Substation near Vryburg, North West Province: Fauna & Flora Specialist Basic Assessment Report. Sivist 2014.
Basic Assessment Process for the Proposed Construction of the Transnet 7km 50 kV Power Line from Eskom Juno Substation to the proposed new Transnet Juno Traction Feeder Substation. Nsovo Environmental Consulting. 2014.
Basic Assessment Process for the Proposed Construction of the Transnet 5km 50 kV Power Line from Eskom Aries Substation to the proposed new Transnet Aries Traction Feeder Substation. Nsovo Environmental Consulting. 2014.
Basic Assessment Process for the Proposed Construction of the Transnet 15km 50 kV Power Line from Eskom Helios Substation to the proposed new Transnet Helios Traction Feeder Substation. Nsovo Environmental Consulting. 2014.
Burchell-Caprum-Mooidraai 132kV Power Line - Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2014.
Proposed Re-Alignment Of The Koeberg – Ankerlig VPower Line: Fauna & Flora Specialist Report For Basic Assessment. Savannah Environmental 2014.
Grid Connection for Redstone Solar Thermal Energy Plant- Redstone Solar Thermal to Olien Mts: Fauna & Flora Specialist Basic Assessment Report. SiVest 2014.
Grid Connection for Mainstream South Africa Perdekraal Wind Energy Facility. Fauna & Flora Specialist Report for Basic Assessment. ERM 2014.
Karoshoek Grid Integration Infrastructure. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.
Garob to Kronos Power Line - Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.
Loeriesfontein Wind Energy Facility – Substation & Grid Connection. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Gouda Wind Energy Facility – Grid Connection. Walk-Through of Overhead Power Line - Gouda WEF to Eskom Windmill Substation. Specialist Report for Savannah Environmental. 2012.

Proposed Kappa-Omega 765 kV Transmission Line. Fauna, Flora & Ecology Walk-Through Report. Specialist Report for ACER Africa. 2013.

Infrastructure & Mining Developments:

Environmental Impact Assessment for the Proposed Putsberg Open Cast Mine Near Pofadder, Northern Cape. Fauna & Flora Specialist Report for EIA. Ecopartners 2013.

Proposed Establishment of the Gamsberg Zinc Mine, Concentrator Plant and Associated Infrastructure near the Town of Aggeneys, Northern Cape. Fauna & Flora Specialist Report For ESIA. ERM 2013.

Pella Water Board – Infrastructure Upgrade. Fauna & Flora Specialist Report for Basic Assessment. Environmental Resources Management 2012.

Transnet Manganese Ore Line Upgrade. Fauna & Flora Specialist Report for Basic Assessment. Environmental Resources Management 2012.

Proposed Vryburg Wastewater Treatment Works: Terrestrial Fauna & Flora Specialist Study for Basic Assessment. Endemic Vision 2013.

Proposed Mamatwane Compilation Yard, Northern Cape: Fauna & Flora Specialist Report for Impact Assessment. Environmental Resources Management 2013.

Rare Earth Separation Plant Near Vredendal, Western Cape Province. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Proposed Mocke Poultry Farm: Fauna & Flora Specialist Report for Basic Assessment. Enviroworks 2015.

Basic Assessment for proposed Neotel Fibre Optic Cable Route 1 from George to Oudtshoorn. Fauna & Flora Specialist Report for Basic Assessment. Enviroworks 2015.

Basic Assessment for proposed Neotel Route 2 Fibre Optic Cables from Prince Albert Road to Oudtshoorn via the N12. Enviroworks 2015.

Basic Assessment for proposed Neotel Route 3 Fibre Optic Cables from Oudtshoorn to George via R328 and R102. Enviroworks 2015.

Basic Assessment for proposed Neotel Route 4 Fibre Optic Cables from Laingsburg to Oudtshoorn via Ladismith along the R323 and R62. Enviroworks 2015.

Improvements to the Ou Kaapse Weg / Silvermine Road Intersection. Specialist Faunal Study For Basic Assessment. Khula Environmental Consultants, 2012.

Upgrading of Tourism Facilities at Goegap Nature Reserve. Specialist Ecological Assessment. Van Zyl Environmental Consultants. 2012.

Plant Sweeps on Portion 2 of the Farm Demaneng 546, Kuruman District, Northern Cape Province for SA Manganese. 2011.

Solar Energy Developments:

Sol Invictus PV-1-4 Power Plants, near Aggeneys. Fauna and Flora Assessment. Savannah Environmental 2016.

Illanga Karoshoek CSP 1-5 near Upington. Fauna and Flora Assessment. Savannah Environmental 2016.

Mogobe, Legoko & Kathu 75MW Solar PV Plants, near Kathu, Northern Cape. Fauna and Flora Assessment. Cape EAPrac. 2015.

Environmental Impact Assessment for the Proposed Wolmarransstad Solar Energy Facility North West Province. Fauna & Flora Specialist Report for EIA. Savannah Environmental 2015

Environmental Impact Assessment for the proposed Humansrus Solar PV Energy Facility 1 Near Copperton, Northern Cape: Fauna & Flora Specialist Report for EIA. CapeEAPrac 2015.

Environmental Impact Assessment for the proposed Humansrus Solar PV Energy Facility 2 Near Copperton, Northern Cape: Fauna & Flora Specialist Report for EIA. CapeEAPrac 2015.

Environmental Impact Assessment for the proposed Dyasonsklip Solar Energy Facility 1 Near Upington, Northern Cape: Fauna & Flora Specialist Report for EIA. CapeEAPrac 2015.

Environmental Impact Assessment for the proposed Postmasburg Solar PV Energy Facility 2 and Associated Grid Connection Infrastructure, Postmasburg, Northern Cape. Fauna & Flora Specialist Report for EIA. CapeEAPrac 2015.

Environmental Impact Assessment for the proposed Joram Solar Vryheid PV Project, Northern Cape. Fauna & Flora Specialist Report for EIA. CapeEAPrac 2015.

Environmental Impact Assessment for the proposed Richtersveld Solar Farm and Associated Grid Connection Infrastructure. Fauna & Flora Specialist Report for EIA. CapeEAPrac 2015.

Environmental Impact Assessment for the Proposed Re Capital 3 Solar Energy Facility and Associated Grid Connection Infrastructure, Dyason's Klip, Northern Cape. Fauna & Flora Specialist Report for EIA. CapeEAPrac 2013.

Environmental Impact Assessment for the Proposed Richtersveld Solar Farm and Associated Grid Connection Infrastructure. Fauna & Flora Specialist Report for EIA. CapeEAPrac 2014.

Environmental Impact Assessment for the Proposed Bosjesmansberg Solar Energy Facility East of Copperton, Northern Cape Province. Fauna & Flora Specialist Report for EIA. Savannah Environmental 2013.

Specialist Vegetation Assessment for EIA. The Proposed Commercial Concentrated Solar Power Tower Facility and Concentrated Photovoltaic Facility at Van Roois Vley Near Upington. WSP 2012.

Proposed Les Marais \ Buitenfontein 5MW Solar Energy Facility in the Free State: Terrestrial Fauna & Flora Specialist Study for Basic Assessment. Savannah Environmental 2013.

Proposed Stella Helpmekaar Solar Energy Facility in the North West Province: Terrestrial Fauna & Flora Specialist Study for Basic Assessment. Savannah Environmental 2013.

Proposed Wolmaransstad Municipality 5MW Solar Energy Facility in the North West Province: Terrestrial Fauna & Flora Specialist Study for Basic Assessment. Savannah Environmental 2013.

Proposed Heuningspruit PV1 and PV2 Solar Energy Facilities Near Koppies, Free State Province: Terrestrial Fauna & Flora Specialist Study for Basic Assessment. Savannah Environmental 2013.

Proposed Hibernia PV Solar Energy Facility near Lichtenburg: Terrestrial Fauna & Flora Specialist Study For Basic Assessment. Savannah Environmental 2013.

Proposed Steynsrus PV1 And PV2 Solar Energy Facilities: Terrestrial Fauna & Flora Specialist Study for Basic Assessment. Savannah Environmental 2013.

Proposed Photovoltaic Solar Energy Facility on Konkoonsies, Northern Cape: Fauna & Flora Specialist Report for Impact Assessment. EScience Associates 2012.

Proposed Padrooi 13 Photovoltaic Solar Energy Facility, Northern Cape: Fauna & Flora Specialist Report for Impact Assessment. EScience Associates 2012.

Adams Photovoltaic Solar Energy Facility, Northern Cape: Fauna & Flora Specialist Report for Impact Assessment. EScience Associates 2012.

Proposed Photovoltaic Solar Energy Facility on Klein Swart Bast, Northern Cape: Fauna & Flora Specialist Report for Impact Assessment. EScience Associates 2012.

Proposed Khoi-Sun Solar Facility. Fauna & Flora Specialist Report for Impact Assessment. Cape EAPrac 2012.

Suurwater 62, Boesmanland 75mw Solar Farm, Aggeneys. Fauna & Flora Specialist Report for Impact Assessment. Cape EAPrac 2012.

Karoshhoek Solar Valley Development, Upington: Fauna & Flora Specialist Impact Assessment Report. Savannah Environmental. 2012.

O’Kiep 3 PV Solar Energy Facility on a Site In O’kiep Near Springbok, Northern Cape Province. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Photovoltaic Solar Energy Facility on Voëlklip, South of Springbok. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Namaqua Photovoltaic Solar Energy Facility on a Site North of Kamieskroon. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Inca Graafwater Photovoltaic Solar Energy Facility, Graafwater, Western Cape Province. Faunal Ecology Specialist Report for Impact Assessment. Savannah Environmental 2012.

Aberdeen Solar Facility. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Venetia Solar Facility. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Southern Cross Solar Energy Facility: Southern Farm 425. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Tutwa Solar Energy Facility: Portion 4 of Narries 7. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Valleydora Photovoltaic Solar Power Plant, Free State. Fauna & Flora Specialist Report. CSIR, 2012.

Reddersburg Solar Facility - Fauna & Flora Specialist Assessment. CSIR, 2012.

Melkvei Photovoltaic Solar Power Plant. Fauna & Flora Specialist Report for Basic Assessment. Specialist report for ERM. 2012.

Ruinte Photovoltaic Solar Power Plant. Fauna & Flora Specialist Report for Basic Assessment. Specialist report for ERM. 2012.

Genoegsaam Solar Park. Fauna & Flora Specialist Report for Basic Assessment. Specialist report for ERM. 2012.

Genoegsaam Solar Park. Fauna & Flora Specialist EIA Report. Specialist report for ERM. 2012.

Graspan Solar Facility. Fauna & Flora Specialist Report for Impact Assessment. Specialist report for ERM. 2012.

Olyven Kolk Solar Power Plant, Northern Cape: Botanical and Faunal Specialist Assessment. Specialist Report for Environmental Resources Management (ERM). 2011.

Skuitdrift Solar Facility. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Cape EAPrac. 2012.

Beaufort West Solar Facility, Erf 7388 - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Khoi-Sun Solar Facility. Fauna & Flora Specialist Scoping Report. Specialist Report for Cape EAPrac. 2012.

Boesmanland Solar Farm. Fauna & Flora Specialist Scoping Study. Specialist Report for Cape EAPrac. 2012.

Bitterfontein Solar Plant - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Wind Farm Developments:

Environmental Impact Assessment for the Proposed Komsberg East and Komsberg West Wind Farms and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment Report. Arcus 2014.

Proposed Rietkloof Wind Farm and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment Report. EOH 2016.

Proposed Brandvallei Wind Farm and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment Report. EOH 2016.

Proposed Gunstfontein Wind Farm and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Impact Assessment Report. Savannah Environmental 2016.

Mainstream South Africa Dwarsrug Wind Energy Facility: Fauna & Flora Specialist Impact Assessment Report. Sivist 2014.

Proposed Spitskop Wind Energy Facility near Cookhouse: Fauna & Flora Specialist Study for Impact Assessment. Savannah Environmental 2013.

Environmental Impact Assessment for the Proposed Roggeveld Wind Energy Facility and Associated Grid Connection Infrastructure: Fauna & Flora Specialist Report for EIA. Savannah Environmental 2013.

Proposed Mainstream South Africa Springfontein Wind Energy Facility: Terrestrial Fauna & Flora Specialist Study for EIA. Savannah Environmental 2012.

Environmental Impact Assessment for the Establishment of the Wolseley Wind Farm, Western Cape Province. Fauna & Flora Specialist Report. Arcus Gibb 2012.

Proposed Eskom 300MW Kleinsee Wind Energy Facility. Fauna Specialist Report For Impact Assessment. Savannah Environmental 2012.

Proposed Inca Energy Swellendam Wind Energy Facility: Fauna Specialist Report For Impact Assessment. Savannah Environmental 2012.

Proposed Hartebeest Wind Energy Facility: Fauna & Flora Specialist EIA Report For Impact Assessment. Savannah Environmental 2016.

Terrestrial Ecology Specialist Study for the Proposed Establishment of a Renewable Energy Facility near Sutherland, Western and Northern Cape Provinces. Environmental Resources Management (ERM) 2011.

Roggeveld Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management (ERM). 2011.

Zen Wind Energy Facility. Fauna & Flora Specialist Impact Assessment Report. Savannah Environmental. 2012.

Proposed Project Blue Wind and Solar Energy Facility, Near Kleinsee. Fauna Specialist Report For Impact Assessment. Savannah Environmental 2012.

Garob Wind Farm: Fauna & Flora Specialist Report for Impact Assessment. Savannah Environmental 2012.

Loeriesfontein Wind Energy Facility – Substation & Grid Connection. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Noblesfontein Wind Energy Facility, Victoria West. Ecological Walk-Through Report. Savannah Environmental 2012.

Gouda Wind Energy Facility. Fauna And Flora Walk Through Report. Savannah Environmental 2012.

Klawer Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Lambert's Bay Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Richtersveld Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management (ERM). 2011.

Witberg Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management (ERM). 2011.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Allepad PV One, 100MW photovoltaic (PV) solar energy generation facility and associated infrastructure near Upington, Northern Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	3Foxes Biodiversity Solutions			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition	100%
Specialist name:	Simon Todd			
Specialist Qualifications:	MSc (Cons. Biol.)			
Professional affiliation/registration:	SACNASP Pr.Sci.Nat 400425/11			
Physical address:	60 Forrest Way, Glencairn			
Postal address:	60 Forrest Way, Glencairn			
Postal code:	7975	Cell:	0823326502	
Telephone:	021 7820377	Fax:		
E-mail:	Simon.Todd@3foxes.co.za			

2. DECLARATION BY THE SPECIALIST

I, Simon Todd, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the Specialist

3Foxes Biodiversity Solutions

Name of Company:

11 October 2018

Date

Details of Specialist, Declaration and Undertaking Under Oath

CURRICULUM VITAE: D G Paterson

SURNAME: PATERSON
FIRST NAME(S): David Garry
KNOWN AS: Garry
DATE OF BIRTH: 25-08-1959 in Bellshill, Scotland
NATIONALITY: South African
I.D. No.: 5908255258088
LANGUAGE PROFICIENCY: English, Afrikaans (both fluent), French (poor)
MARITAL STATUS: Married, one son

ADDRESS: ARC-Institute for Soil, Climate and Water
Private Bag X79
Pretoria 0001
Republic of South Africa

TEL.: 012 310 2601(w)
012 333 0829 (h)
083 556 2458 (cell)
FAX: 012 323 1157

E-MAIL ADDRESS: garry@arc.agric.za

ACADEMIC QUALIFICATIONS:

- Matriculated: 1976, Dalziel High School, Motherwell, Scotland
- BSc (Hons) Geography, 1980, University of Strathclyde, Glasgow, Scotland
- MSc (Soil Science) *cum laude*, 1998, University of Pretoria
- PhD (Soil Science), 2014, University of Pretoria

PROFESSIONAL CAREER:

- 1981-1987: Soil Scientist: Soil and Irrigation Research Institute, Pretoria
- 1987-1992: Senior Soil Scientist: Soil and Irrigation Research Institute, Pretoria
- 1992-2017: Senior Soil Scientist: ARC-Soil, Climate & Water, Pretoria
- 2017- : Research Team Manager (Soil Science): ARC-Soil, Climate & Water

FIELDS OF SPECIALITY AND COMPETENCE:

- Soil classification and mapping
- Soil interpretations
- Soil conservation, including biotextiles
- Soil rehabilitation (especially coal mine soils)
- Soil survey project management
- Environmental assessment and land evaluation
- Soil survey and land capability course presentation
- Ground penetrating radar

PUBLICATIONS (see attached list):

- Fifteen refereed articles
- Nine Congress papers/posters
- Two book chapter contributions
- S.A. Soil Classification (1991 and 2018 editions) (*Member of working group*)
- Five 1:250 000 Land Type Maps
- Three Land Type Memoirs
- More than 250 soil survey reports and/or maps

COURSES COMPLETED:

- Course in Project Management (University of Stellenbosch)
- Course in Junior Personnel Management (Dept of Agriculture)
- Course in Handling of Grievances and Complaints (Dept of Agriculture)
- Course in Marketing (ARC-ISCW)
- Course in National Qualifications Framework Assessment, ARC-CO
- Training Course in Ground Penetrating Radar (GSSI, USA)
- Introduction to ArcGIS 8, GIMS, 2004

PROFESSIONAL STATUS:

- Registered Natural Scientist: Soil Science (SA National Council for Natural Scientific Professions) – registration number 400463/04
- Member of South African Soil Classification Working Group, 1990-present
- Convenor of South African Soil Classification Working Group, 2013-2015
- Member of Soil Science Society of South Africa (1982-present)
- President of Soil Science Society of South Africa (2005-2007)
- Member of South African Soil Survey Organisation (2000-present)
- Council Member of South African Soil Survey Organisation (2002-2003)
- Member of International Erosion Control Association
- Scientific Referee, S.A. Journal for Plant and Soil
- External Examiner: University of Pretoria, University of Witwatersrand, University of Venda, University of the Free State

AWARDS:

Best article on Soil Science, South African Journal for Plant and Soil, 2011

MISCELLANEOUS:

- Editor, Soil Science Society newsletter, 1993-present
- Member, Clapham High School (Pretoria) Governing Body, 1998-2002
- Member, Northern Gauteng Football Referee's Association, 2000-2002
- Committee Member, Rosslyn Golf Club (Club Champion 2002 and 2007)

INTERESTS:

Sport, especially golf and soccer; wildlife; reading; music

PUBLICATIONS LIST:

Refereed Articles:

BÜHMANN, C., KIRSTEN, W.F.A., PATERSON, D.G. & SOBCZYK, M.E., 1993. Pedogenic differences between two adjacent basalt-derived profiles. 1. Textural and chemical characteristics. *S. Afr. J. Plant & Soil*, 10: 155-161

BÜHMANN, C., KIRSTEN, W.F.A., PATERSON, D.G. & SOBCZYK, M.E., 1994. Pedogenic differences between two adjacent basalt-derived profiles. 2. Mineralogical characteristics. *S. Afr. J. Plant & Soil*, 11: 5-11

PATERSON, D.G. & LAKER, M.C., 1999. Using ground penetrating radar to investigate spoil layers in rehabilitated mine soils. *S. Afr. J. Plant & Soil*, 16:131-134.

PATERSON, D.G., BÜHMANN, C., PIENAAR, G.M.E. & BARNARD, R.O., 2011. Beneficial effects of palm geotextiles on inter-rill erosion in South African soils and mine dam tailings: a rainfall simulator study. *S. Afr. J. Plant & Soil*, 28: 181-189.

PATERSON, D.G. & BARNARD, R.O., 2011. Beneficial effect of palm geotextiles on inter-rill erosion in South African soils. *S. Afr. J. Plant & Soil*, 28: 190-197.

BHATTACHARYA, R., FULLEN, M.A., BOOTH, C.A., KERTESZ, A., TOTH, A., SZALAI, Z., JAKAB, G., KOZMA, K., JANKAUSKAS, B., JANKAUSKIENE, G., BÜHMANN, C., PATERSON, D.G., MULIBANA, N.E., NELL, J.P., VAN DER MERWE, G.M.E., GUERRA, A.J.T., MENDONCA, J.K.S., GUERRA, T.T., SATHLER, R., BEZERRA, J.F.R., PERES, S.M., ZHENG YI, LI YONGMEI, TANG LI, PANOMTARANICHAGUL, M., PEUKRAI, S., THU, D.C., CUONG, T.H., TOAN, T.T., 2011. Effectiveness of biological geotextiles for soil and water conservation in different agro-environments. *Land Degradation and Development*, 22: 495-504.

FULLEN, M.A., SUBEDI, M., BOOTH, C.A., SARSBY, R.W., DAVIES, K., BHATTACHARYA, R., KUGAN, R., LUCKHURST, D.A., CHAN, K., BLACK, A.W., TOWNROW, D., JAMES, T., POESEN, J., SMETS, T., KERTESZ, A., TOTH, A., SZALAI, Z., JAKAB, G., JANKAUSKAS, B., JANKAUSKIENE, G., BÜHMANN, C., PATERSON, D.G., MULIBANA, N.E., NELL, J.P., VAN DER MERWE, G.M.E., GUERRA, A.J.T., MENDONCA, J.K.S., GUERRA, T.T., SATHLER, R., BEZERRA, J.F.R., PERES, S.M., ZHENG YI, LI YONGMEI, TANG LI, PANOMTARANICHAGUL, M., PEUKRAI, S., THU, D.C., CUONG, T.H., TOAN, T.T., JONSYN-ELLIS, F., SYLVA, J.T., COLE, A., MULHOLLAND, B., DERALOVE, M., CORKILL, C. & TOMLINSON, P., 2011. Utilising biological geotextiles: introduction to the Borassus Project and global perspectives. *Land Degradation and Development*, 22: 453-462.

SMETS, T., POESEN, J., BHATTACHARYA, R., FULLEN, M.A., SUBEDI, M., BOOTH, C.A., KERTESZ, A., SZALAI, Z., TOTH, A., JANKAUSKAS, B., JANKAUSKIENE, G., GUERRA, A.J.T., BEZERRA, J.F.R., ZHENG YI, PANOMTARANICHAGUL, M., BÜHMANN, C. & PATERSON, D.G., 2011. Evaluation of biological geotextiles for reducing runoff and soil loss under various environmental conditions using laboratory and field data. *Land Degradation and Development*, 22: 480-494.

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NETHONONDA, L.O., ODHIAMBO, J.J.O. & PATERSON, D.G., 2012. Assessment of spatial variability of selected soil chemical properties in a communal irrigation scheme under resource-poor farming conditions in Vhembe District of Limpopo Province, South Africa. *African J. Agric. Res.* 7 (39), 5445-5492.

NETHONONDA, L.O., ODHIAMBO, J.J.O. & PATERSON, D.G., 2013. Spatial variability of soil penetrability and distribution of compacted layer as affected by long-term ploughing at shallow depth in Rambuda irrigation scheme in Vhembe district, South Africa. *Bulgarian Journal of Agricultural Science*, 19 (2): 248-254.

SUBEDI, M., FULLEN, M.A., BOOTH, C.A., THU, D.C., CUONG, T.H, TOAN, T.T., JONSYN-ELLIS, F., COLE, A., GUERRA, A.J.T., BEZERRA, J.F.R., YI. Z., LI, T., BÜHMANN, C. & PATERSON, D.G., 2012. Contribution of biogeotextiles to soil conservation and socio-economic development. *Outlook on Agriculture*, 41(3).

PATERSON, D.G., SMITH. H.J. & VAN GREUNEN, A., 2013. Evaluation of soil conservation measures on a highly erodible soil in the Free State province, South Africa. *S. Afr. J. Plant & Soil*, 30: 213-217.

PATERSON, D.G., TURNER, D.P., WIESE, L.D., VAN ZIJL, G.M., CLARKE, C.E. & VAN TOL, J., 2015. Spatial soil information in South Africa – situational analysis, limitations and challenges. *S. Afr. J. Science* 111 (5/6). Art. #2014-0178, 7 pages. <http://dx.doi.org/10.17159/sajs.2015/20140178>.

PATERSON, D.G., MUSHIA, N.M. & MKULA, S.D., 2018. Effects of stockpiling on selected properties of opencast coalmine soils. *S. Afr. J. Plant & Soil*, 35. <https://doi.org/10.1080/02571862.2018.1493161>

Books:

PATERSON, D.G. & MUSHIA, N.M., 2012. Chapter 32. Soil databases in Africa. *In: Handbook of Soil Science: Resource Management and Environmental Impacts (2nd Edn)*. Eds. P.M. Huang, Y Li & M.E. Sumner. CRC Press, Boca Raton FL.

ZGŁOBICKI, W., POESEN, J., DANIELS, M., DEL MONTE, M. GUERRA, A.J.T., JOSHI, V., PATERSON, D.G., SHELLBERG, J., SOLÉ-BENET, A. & ZHENG'AN SU, 2018. Chapter 9. Geotouristic value of Badlands. *In: Badland dynamics in the context of global change*. Eds. E. Nadal-Romero, J.F. Martinez-Murillo, N.J. Kuhn. Elsevier, Amsterdam.

SOIL CLASSIFICATION WORKING GROUP*, 1991. Soil classification. A taxonomic system for South Africa. ARC-Institute for Soil, Climate & Water, Pretoria.

SOIL CLASSIFICATION WORKING GROUP*, 2018. Soil classification. A natural and anthropogenic system for South Africa. ARC-Institute for Soil, Climate & Water, Pretoria

* Co-author as member of Working Group

Theses:

PATERSON, D.G., 1998. The use of ground penetrating radar to investigate subsurface features in selected South African soils. Unpublished MSc Thesis, University of Pretoria.

PATERSON, D.G., 2014. The use of palm leaf mats in soil erosion control. Unpublished PhD Thesis, University of Pretoria.

Congress Papers:

PATERSON, D.G., 1987. The relationship between geology and soil type in the northern Kruger National Park. 14th Congress of the Soil Science Society of S.A. Nelspruit, 14-17 July 1987.

PATERSON, D.G., 1990. A study of black and red clay soils on basalt in the northern Kruger National Park. 16th Congress of the Soil Science Society of S.A. Pretoria, 9-12 July 1990.

PATERSON, D.G., 1992. The potential of ground penetrating radar as an aid to soil investigation. 17th Congress of the Soil Science Society of S.A. Stellenbosch, 28-30 January 1992.

PATERSON, D.G., 1995. The complex soil mantle of South Africa. ARC Wise Land Use Symposium, Pretoria, 26-27 October 1995

PATERSON, D.G. & LAKER, M.C., 1998. Locating subsoil features with ground penetrating radar. 21st Congress of the Soil Science Society of S.A. Alpine Heath, 20-22 January 1998.

PATERSON, D.G., 2000. Mapping rehabilitated coal mine soils in South Africa using ground penetrating radar. Eighth International Conference on Ground Penetrating Radar, Gold Coast, Australia, 23-26 May 2000.

PATERSON, D.G. & VAN DER WALT, M., 2003. The soils of South Africa from the Land Type Survey. 24th Congress of the Soil Science Society of S.A., Stellenbosch, 20-24 January 2003.

PATERSON, D.G., 2015. Geotextiles – applications for soil conservation. Congress of the Soil Science Society of S.A., George, 19-22 January 2015.

Land Type Maps:

PATERSON, D.G., 1990. 1:250 000 scale land type map 2230 Messina. Dept. Agriculture, Pretoria.

PATERSON, D.G. & HAARHOFF, D., 1989. 1:250 000 scale land type map 2326 Ellisras. Dept. Agriculture, Pretoria.

PATERSON, D.G., PLATH, B.L. & SMITH, H.W., 1987. 1:250 000 scale land type map 2428 Nylstroom. Dept. Agriculture, Pretoria.

PATERSON, D.G. & ROSS, P.G., 1989. 1:250 000 scale land type map 2330 Tzaneen. Dept. Agriculture, Pretoria.

PLATH, B.L. & PATERSON, D.G., 1987. 1:250 000 scale land type map 2426 Thabazimbi. Dept. Agriculture, Pretoria.

Land Type Memoirs:

PATERSON, D.G., PLATH, B.L. & SMITH, H.W., 1988. Field Investigation. In: *Land types of the maps 2426 Thabazimbi & 2428 Nylstroom. Mem. Agric. Nat. Res. S. Afr.* No. 10. Dept. Agriculture, Pretoria.

PATERSON, D.G., SCHOEMAN, J.L., TURNER, D.P., GEERS, B.C. & ROSS, P.G., 1989. Field Investigation. In: *Land types of the maps 2330 Tzaneen & 2430 Pilgrim's Rest. Mem. Agric. Nat. Res. S. Afr.* No. 12. Dept. Agriculture, Pretoria.

PATERSON, D.G., 1999. 1:250 000 land type survey of the former Ciskei (Unpublished). ISCW Report GW/A/99/24.

Also:

PATERSON, D.G., 1992. Ground penetrating radar applications in USA and South Africa. Report on an official study tour to USA, 13-29 July, 1991. ISCW Report GW/A/92/8.

PATERSON, D.G., 2000. Report on official overseas visit to GPR2000 Conference, Broadbeach, Australia, 23-26 May, 2000. ISCW Report GW/A/2000/40.

Plus: numerous ARC-ISCW Reports on soil surveys, soil interpretations, environmental impact assessments, soil suitability studies.



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Allepad PV One, 100 MW photovoltaic (PV) solar energy generation facility and associated infrastructure near Upington, Northern Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	Agricultural Research Council-Soil, Climate and Water			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 6	Percentage Procurement recognition	Unknown
Specialist name:	DG Paterson			
Specialist Qualifications:	PhD (Soil Science)			
Professional affiliation/registration:	SACNASP Registration (Soil Science): 400463/04			
Physical address:	600 Belvedere Street, Arcadia, Pretoria 0083			
Postal address:	Private Bag X79, Pretoria			
Postal code:	0001	Cell:	083 556 2458	
Telephone:	012 310 2601	Fax:	012 323 1157	
E-mail:	garry@arc.agric.za			

2. DECLARATION BY THE SPECIALIST

I, DG Paterson, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the Specialist

ARC-Soil, Climate and Water

Name of Company:

11th October 2018

Date

Details of Specialist, Declaration and Undertaking Under Oath

CURRICULUM VITAE

Jenna Lavin

Tel: 083 619 0854 (c)

E-mail address: jenna.lavin@gmail.com

ID number: 8512050014089

Address: 7 Carey Street, Woodstock, cape Town

EDUCATION:

Tertiary

- 2014 M.Phil in Conservation of the Built Environment (University of Cape Town)
- Not completed as of 2017
- 2011 Continued Professional Development Course in Urban Conservation
Management (University of Cape Town) Part I and Part II
- 2010 M.Sc. with Distinction in Archaeology (University of Cape Town)
Title: *Palaeoecology of the KBS member of the Koobi Fora Formation: Implications for
Pleistocene Hominin Behaviour.*
- 2007 B.Sc. Honours in Archaeology (University of Cape Town)
Title: *The Lost Tribes of the Peninsula: An Investigation into the historical distribution of
Chacma baboons (*Papio ursinus*) at the Cape Peninsula, South Africa.*
Koobi Fora Field School, Rutgers University (U.S.A.)/ National Museums of Kenya
- 2006 B.Sc. Archaeology (University of Cape Town)
B.Sc. Environmental and Geographic Science (University of Cape Town)

Secondary

- 1999-2003 Rustenburg High School for Girls
Firsts in English, Afrikaans, Mathematics HG, Biology HG, History HG, Entrepreneurship.

EMPLOYMENT HISTORY:

PROFESSIONAL DEVELOPMENT

Environmental and Heritage Management:

- **Director: Heritage for CTS heritage and member of OpenHeritage NPC.**

July 2016 to present

I am a member of the senior management of the company. I am responsible for project management and quality control on all of our heritage-related projects. I provide specialist heritage expertise when required and assist with the drafting of management plans, impact assessments and other specialist reports. I liaise with clients, authorities and other specialists to ensure the highest quality product from CTS Heritage. I manage the budgets and financial compliance for all our projects and for the business in general. In addition, I manage a specialist team of two archaeologists. We have recently been involved in developing the online map for the National Resistance and Liberation Heritage Route with DAC.

Through OpenHeritage, I have been intimately involved with the development, and successful implementation of, of a digital heritage objects management system for the National Museum in Kenya as well as Tristan da Cunha.

- **Assistant Director for Policy, Research and Planning at Heritage Western Cape (HWC).**

August 2014 to June 2016

As a member of the management structure of HWC, I was responsible for the drafting of new heritage related policy, the grading and declaration of Provincial Heritage Sites, the development of Conservation Management Plans, facilitating the development of inventories of heritage resources through local authorities as well as managing the development of the Western Cape's Heritage Information Management System (HIMS). I was also responsible for managing the project to nominate the Modern Human Origins proposed World Heritage Site.

I performed the role of Acting Deputy Director for HWC from April to December 2015, including financial management responsibilities, problem solving and the training of new staff.

- **Heritage Officer for Palaeontology and for the Mpumalanga Province at the South African Heritage Resources Agency (SAHRA).**

January 2013 to June 2014

Responsibilities include managing palaeontological permit applications in terms of Section 35 of the NHRA and development applications in terms of Section 38 of the NHRA. Projects included the development of a National Palaeotechnic Report identifying significant palaeontological deposits throughout SA, as well as developing professional relationships between SAHRA and the Palaeontological Society of South Africa (PSSA) and the Geological Society of South Africa (GSSA). During this time, I was part of the team that developed the digitised National Palaeontological Sensitivity Map, the first of its kind in the world.

- **Heritage Officer for Archaeology, Palaeontology and Meteorites at Heritage Western Cape (HWC).**

September 2010 to December 2012

HWC is a Public Entity that forms part of the Heritage Resource Management Component of the Provincial Governments' Department of Cultural Affairs and Sport (DCAS). Projects included the declaration of Pinnacle Point and the West Coast Fossil Park as Provincial Heritage Sites (PHSs), the management of the development of the Baboon Point PHS Conservation Management Plan as well as an educational outreach program as part of the DCAS MOD Centre Project.

- **Heritage Officer for the Archaeology, Palaeontology and Meteorites Unit of the South African Heritage Resources Agency (SAHRA) as part of a three month contract.**

January 2010 to March 2010

- **Environmental Control Officer, Amathemba Environmental Management Consulting**

Part time: 2007 to 2009

Field Work Experience:

- 2008-2009 Field Assistant, Dr. D. Braun, Elandsfontein Excavation Locality, University of Cape Town (UCT)
Field Assistant, Dr. D. Braun, Koobi Fora Research Project (Kenya), Rutgers University, New Jersey
- 2006 Field Assistant, Damiana Ravasi (PhD), Zoology Department, University of Cape Town.
- 2005 Research Assistant, Dr. Becky Ackerman, Archaeology Department, University of Cape Town
- 2004 Field Assistant, Prestwich Place Excavation Locality, Archaeology Contracts Office, UCT

Teaching Positions:

- 2017 Guest Lecturer, South African Heritage Legislation, George Washington University Heritage Management Field School
- 2016 Guest Lecturer, South African Heritage Legislation, Archaeology Honours Course, University of Cape Town
- 2015 Guest Lecturer, South African Heritage Legislation, Archaeology Honours Course, University of Cape Town
- 2014 Guest Lecturer, South African Heritage Legislation, Archaeology Honours Course, University of Cape Town
- 2013 Guest Lecturer, South African Heritage Legislation, Archaeology Honours Course, University of Cape Town
- 2010 Teaching Assistant, Langebaanweg Field School, Arizona State University
- 2009 Demonstrator, Archaeology in Practice, University of Cape Town (AGE3013H)
Demonstrator, Introduction to Geography, Earth and Environmental Science, University of Cape Town (GEO1009F)
Teaching Assistant, Koobi Fora Field School (Kenya), Rutgers University, New Jersey
Lecturer, Introduction to Geography, Earth and Environmental Science: Supplementary Course, University of Cape Town (EGS1004S)
- 2008 Demonstrator, Elandsfontein Honours Field School, University of Cape Town (AGE4000W)
Demonstrator, Introduction to Geography, Earth and Environmental Science, University of Cape Town (ERT1000F)
Demonstrator, Elandsfontein Honours Field School, University of Cape Town (AGE4000W)
Teaching Assistant, Koobi Fora Field School (Kenya), Rutgers University, New Jersey

Conferences and Papers

- 2017 ASAPA, Pretoria, RSA: *“Using Heritage Data to Guide Responsible Development: Tools to ensure high quality recording of heritage sites”*
ICAHM, Bagomoyo, Tanzania: *“OpenHeritage: Development and implementation of national heritage management systems - Lessons from South Africa, Namibia and Kenya”*
- 2016 ICAHM, Salalah, Oman: *“Straight to the (Baboon) Point: A look at the Conservation of Archaeological Landscapes in South Africa using Baboon Point as a Case Study”*
- 2015 Leakey Foundation, Sonoma County, San Francisco, USA: *““Straight to the (Baboon) Point: A look at the Conservation of Archaeological Landscapes in South Africa using Baboon Point as a Case Study”*
- 2012 PSSA, Johannesburg, RSA: *“SAHRIS Palaeosensitivity Map - Methodology and Implementation”*

Other

In 2013 I was asked to join the panel of judges for the Ministerial awards for Heritage in the Western Cape. From 2013 to July 2014, I was a member of the Heritage Western Cape Archaeology, Palaeontology and Meteorites Committee and I currently sit on the Heritage Western Cape Inventories, Gradings and Interpretations Committee.

In November 2013, I was awarded a bursary from the Department of Arts and Culture to complete a Masters in Philosophy in Conservation of the Built Environment through the UCT Faculty of Engineering and the Built Environment in 2014 and 2015. I was in the process of finalising this degree in 2017, however the arrival of my son has temporarily halted my progress.

I am a paid up member of the Association for Southern African Professional Archaeologists (ASAPA), the Association of Professional Heritage Practitioners (APHP) and I have been a member of the Executive Council of APHP since 2014.

In June 2017, I was selected as Chair of APHP. I am a member of the Palaeontological Society of South Africa (PSSA) and ICOMOS South Africa, for which I am Vice-President of the Board. I am also a member of the International Committee for Archaeological Heritage Management (ICAHM), a committee of UNESCO.

I am an active participant in a not-for-profit company called OpenHeritage which is dedicated to opening access to heritage resources through digital innovation. To this end, we have been involved in a number of projects including Wikipedea Training with Africa Centre, the development and implementation of a Collections Management System for the National Museums of Kenya and the development of a digital Inventory of the Vernacular Architecture of the Eastern Cape.

Referees

Mary Leslie

mleslie.za@gmail.com

082 733 2611

Janette Deacon

janette@conjunction.co.za

082 491 5067

Laura Robinson

ctht@hertage.org.za

083 463 4765

Andrew Hall

waitabout191@gmail.com

(Currently based in Oman)

Wendy Black

wblack@iziko.org.za

021 481 3883

PROJECT	PROJECT DESCRIPTION	DURATION
SKA Scoping Project	Provision of Heritage Specialist Assessment Services for SKA Scoping Phase	09/2015 - 09/2016
National Liberation & Khoisan Heritage Routes	Development of online mapping interface to promote national liberation and Khoisan heritage routes	02/2017 - present
Western Cape Coastal Access Strategy	Heritage statements describing changing utilisation of Western Cape coast through time	01/2016 - 02/2017
Robben Island PV Facility	Heritage survey, Heritage Impact Assessment, monitoring, mapping, report writing	01/2016 - 02/2017
Stawelklip Rock Art Conservation Management Plan	Site documentation, stakeholder consultation, CMP compilation, development of signage	10/2015 - 01/2016
Phillipskop Rock Art Conservation Management Plan	Site documentation, stakeholder consultation, CMP compilation, development of signage	04/2016 - 08/2016
Cape Winelands Heritage Inventory	Data processing, heritage management and mapping services	08/2016 - 09/2017

CTS Heritage Impact Assessments

HIA Title	Date Completed
HIA: Brakke Kuyl Sand Mine	05/12/2016
HIA: Gouritz Abalone Farm	28/10/2016
HIA: Malmesbury Granite Quarry	28/11/2016
HIA: Expansion of Jacobsbaai Abalone Farm	26/08/2016
HIA: Mutsho Power Project near Makhado	02/02/2017
HIA: Vanrhynsdorp Prospecting	06/03/2017
HIA: Spitskop Power Lines	02/03/2007
Desktop HIA Namakwa Prospecting	21/06/2017
HIA: San Miguel Citrus	26/04/2017
HIA : Ash River Hydro	In process
HIA: 22kv Powerlines Eastern Cape	22/08/2017
HIA: Langa Telecommunications Mast	18/08/2017
HIA: Ouwerv HF Radar Wave Monitoring Antennae	In process



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Allepad PV One, 100MW photovoltaic (PV) solar energy generation facility and associated infrastructure near Uptington, Northern Cape Province

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4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	CTS Heritage		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	4	Percentage Procurement recognition
Specialist name:	Jenna Lavin		
Specialist Qualifications:	MSc Archaeology, MPhil Conservation of BE (incomplete)		
Professional affiliation/registration:	ASAPA, APHP		
Physical address:	34 Harries Street, Plumstead		
Postal address:	34 Harries Street, Plumstead		
Postal code:	7801	Cell:	083 619 0854
Telephone:	087 073 5739	Fax:	
E-mail:	Jenna.lavin@ctsheritage.com		

2. DECLARATION BY THE SPECIALIST

I, Jenna Lavin, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the Specialist

CTS Heritage

Name of Company:

10 October 2018

Date

Details of Specialist, Declaration and Undertaking Under Oath

Lourens du Plessis

Professional GISc Practitioner



Personal Information:

- Date of Birth: 1969-11-13
- Marital Status: Married
- Nationality: South African
- Contact no: 082 922 9019
- Email: lou.dp@outlook.com

Years of Industry Experience

- 28 years'

Countries of Experience

- South Africa; Lesotho; Swaziland; Mozambique; Botswana; Zimbabwe; Namibia; Angola; Guinea; Ghana; Uganda

Qualifications and Memberships

- BA (University of Pretoria) Geography and Anthropology (Majors), 1993
- Professional Geo-Information Sciences (GISc) Practitioner registered with the South African Geomatics Council (SAGC). Membership no. PGP0147
- Member: GISSA

Key Skills and Competencies

- Arc/Info and ArcGIS
- Arcview
- QGIS
- Postflight Terra 3D
- PlanetGIS
- Vistapro
- Various GIS support applications
- Microsoft (Word/Excel/Access)

Professional Overview

Lourens provides professional Geographical Information Systems (GIS) services to a wide range of clients that require the processing, analysis and presentation of geospatial data. His overarching function is the application of GIS in environmental management and planning, impact assessments and spatial modelling, but his services often extend to a much broader range of business sectors. These include the application of GIS in:

- Agriculture
- Bulk service providers and utilities
- The renewable energy sector
- Electricity generation and distribution
- Mining and exploration
- Urban and rural development planning
- Conservation and tourism
- Strategic integrated planning
- Environmental education and social awareness
- Engineering, transport and infrastructure development

Lourens has a multi-disciplinary approach to projects and therefore specialises in creating synergy between planning professionals and project specialists (regardless of the type of project) in order to provide uniform, quality spatial data products, solutions and services.

Experience and expertise

- Data sourcing and acquisition
- Data capture and processing
- Data evaluation, conversion and transfer
- Geodatabase development/implementation/maintenance
- System design and development
- Spatial analysis/modelling (visibility, slope, aspect, etc.)
- Digital terrain modeling
- Terrain evaluation and site screening
- Image processing and analysis
- Impact assessment and impact management
- Environmental management
- GIS-based decision support systems development
- Project management and report writing
- Map production, display, queries and reporting
- Environmental sciences expertise
- Process development
- Visual impact assessment
- GPS fieldwork and aerial surveys
- Drone data processing

Project Experience

General projects *(A brief description of some prominent and relevant projects)*

GIS mapping and database for Black Eagle habitats and flight patterns in the Karoo National Park

Environmental planning and development control schemes for the Drakensberg Babangibone, Cathkin Peak and Garden Castle development nodes

Goukou River (Stilbaai) Environmental Structure Plan

Conservation and open space proposals for the Umhlanga Forest

Grootvlei mine water pumping operation (Blesbokspruit sub-catchment)

GIS services for the Saldanha steel plant

ENPAT Provincial (1:250,000 scale GIS decision support systems) based on an inventory of environmental and socio-economic geographic data

- ENPAT Northern Province (Limpopo Province)
- ENPAT Mpumalanga
- ENPAT North-West

ENPAT Metropolitan (1:50,000 scale GIS decision support systems) containing environmental and socio-economic geographic data that were evaluated for conservation opportunities, development constraints and agricultural constraints

- ENPAT Gauteng
- ENPAT Cape Town
- ENPAT Durban Functional Region (DFR)
- ENPAT Bloemfontein/Botshabello
- ENPAT Port Elizabeth

ENPAT National (1:1,000,000 scale GIS decision support system) and ENPAT publication

Environmental Management Frameworks (EMF). Frameworks of spatially represented information connected to environmental management parameters designed to aid in the pro-active identification of potential conflict between development proposals and critical and/or sensitive environments

- EMF Northern Province (Limpopo Province)
- EMF Mpumalanga
- EMF North-West

Spatial Development Initiatives (SDI). The fast tracking of the EMF concept for priority SDI's

- Lubombo Corridor SDI
- Coega Industrial Development Zone (IDZ)
- Wild Coast SDI
- West Coast Investment Initiative

Sigma colliery: North-West strip operation

Development masterplan for the Tswaing Crater Museum

Conservation plan for the Rietvlei Nature Reserve

GIS services for the planning and management of the Chobe National Park (Botswana)

GIS services for an environmental overview of South Africa

Demarcation/delineation of regions in South Africa

Orange-Vaal (ORVAAL) transfer scheme - Caledon cascades scheme

ENPAT Provincial (1:250,000 scale GIS decision support systems) based on an inventory of environmental and socio-economic geographic data

- ENPAT Eastern Cape
- ENPAT Free State
- ENPAT Kwa-Zulu Natal

Environmental Management Frameworks (EMF). Frameworks of spatially represented information connected to environmental management parameters designed to aid in the pro-active identification of potential conflict between development proposals and critical and/or sensitive environments

- EMF Eastern Cape
- EMF Free State
- EMF Kwa-Zulu Natal

Hennops River EMF (environmental inventory and management proposals in Centurion)

The Important Bird Areas (IBA) of South Africa map and database

Centurion Metropolitan Substructure Environmental Management Framework (EMF)

Alexandra renewal project EMF

Carbon Sinks and Sequestration - Eastern Cape Wild Coast. Information maps for the "Carbon Sinks - A Rehabilitation Option for South Africa's Natural Environment" report

Prince Edward and Marion Islands. Maps for the World Heritage Site (WHS) bid document

Theewaterskloof and Genadendal - Integrated spatial data management system

Gauteng Communication Network Strategy (GAUCONS). Environmental zones for the control of the construction of telecommunication structures

Gauteng Industries Buffer Zones. The mapping of industrial and mining activities, the creation of buffer control zones and the development of a GIS-based decision support system for the Gauteng Province

Limpopo National Park (LNP) Mozambique. Base maps for fieldwork and planning

Schmidtsdrift Environmental Management Program Report (EMPR)

Loch Vaal Environmental Management Framework (EMF)

Rustenburg - Strategic Environmental Assessment (SEA). The creation of environmental control zones, a GIS-based decision support system and information poster

Faerie Glen Nature Reserve Strategic Environmental Assessment (SEA)

Willow Quarries - Environmental Impact Assessment (EIA). Modeling of mining expansion plan and the potential impact on Golden Mole habitats

Ekurhuleni Metropolitan Municipality (EMM) Environmental Management Framework (EMF)

Limpopo - State of the Environment Report (SoER)

Windhoek (Namibia) - Environmental Structure Plan (ESP)

Gauteng Supplementation and Implementation of EIA Regulations Project (EIA SIP)

Siyanda District Municipality Environmental Management Framework (EMF)

Olifants and Letaba River Catchments Environmental Management Framework (EMF)

Barberton Nature Reserve environmental sensitivity mapping and land use zoning plan

Regional Strategic Environmental Assessments (Regional Assessments)

Regional assessment for the Eskom Wind Energy Facility (Sere) in the Western Cape

Regional assessments for the Eskom Wind Integration Project (WIP)

- Area 1: West Coast (Saldanha to Garies)
- Area 2: Overberg Region
- Area 3: Beaufort West region
- Area 4: Eastern Cape (Tsitsikamma to Port Elizabeth)
- Area 5: Northern Cape (Hondeklipbaai to Port Nolloth)

Sandveld wind energy Regional Assessment

West Coast National Park (Saldanha area) Regional Assessment

Regional Assessment for the Theewaterskloof Municipal area

Brand-se-Baai (Exxaro) wind energy regional assessment

Overberg (BioTherm) wind energy regional assessments

- Area 1: Gordons Bay to Pearly Beach
- Area 2: Napier RA (Agulhas NP/Swellendal region)

Suurplaat/Sutherland (Investec Wind Energy Development) Regional Assessment

Waterberg (Limpopo) Concentrating Solar Power (CSP) Regional Assessment (Exxaro)

Western Cape Province Regional SEA for Wind Energy facility developments

ISS Global Mining Regional SEA for Power Station Developments in Mpumalanga Province

Northern Cape Province Regional SEA for Wind Energy facility developments

Etc. *(a comprehensive list of general projects can be provided upon request)*

Visual Impact Assessments (VIA), viewshed analyses and visual assessments

Some recent or current projects include:

- Coal strip mining in Zimbabwe viewshed analyses
- Viewshed analyses and sensitivity mapping for telecommunication masts in the northern provinces (Limpopo, Mpumalanga and North-West)
- Siemens 3rd license cellular communications infrastructure EIAs. Viewshed analyses and sensitivity mapping for over 4,000 telecommunication mast sites in all major metropolitan areas of South Africa.
- CSIR high mast viewshed analysis and sensitivity mapping
- Atlantis Open Cycle Gas Turbine power station VIA
- Kynoch Gypsum Tailings dam extension VIA
- N1 Western Bypass Shell service station VIA
- Coega regional hazardous waste processing facility VIA
- Robinson Deep landfill extension VIA
- Hazardous waste blending platform VIA
- Mercury-Ferrum-Garona transmission line integration VIA
- Matimba B (Medupi) coal-fired power station VIA
- Concentrating Solar Power (CSP) plant in Upington VIA
- Zeus to Mercury transmission line (comparative viewshed analyses)
- Mmamabula (Botswana) transmission line and power station viewshed analyses
- Petronet new multi-products pipeline VIA
- Wind energy facility (Sere) in the Western Cape province VIA
- Ankerlig power station conversion and transmission line VIA
- Gourikwa power station conversion and transmission line VIA
- Kyalami strengthening project VIA
- Steelpoort integration project VIA
- Medupi reservoir and telecommunication mast VIA
- VIA's for Basic Assessment Reports (wind monitoring masts)
 - Cookhouse, Hopefield, Amakhala, Caledon, Worcester, Tulbach, Overberg, Britannia Bay, Brand-se-Baai, Deep River, Happy Valley, River Bank, Uiekraal, Beaufort West, Laingsburg, Rhebokfontein, Suurplaat and West Coast
- Cookhouse wind energy facility VIA
- Hopefield wind energy facility VIA
- Mokopane Integration Project VIA
- Cradle of Humankind World Heritage Site (WHS) viewshed protection zone, visual character assessment and visual zonation plan
- Indwe wind energy facility VIA
- Amakhala wind energy facility VIA
- Boontjieskraal wind energy facility VIA
- Britannia Bay wind energy facility VIA
- Brand-se-Baai wind energy facility VIA
- Upington and Pofadder solar thermal facilities VIAs

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- Dorper wind energy facility VIA
 - Flagging Trees wind energy facility VIA
 - Rheboksfontein, Suurplaat and West Coast wind energy facilities VIAs
 - Riverbank wind energy facility VIA
 - Waterberg photovoltaic plant VIA
 - Eskom wind intergration projects VIAs
 - Welgedacht water care works VIA
 - Aberdeen wind energy facility
 - Aggeneis-Oranjemund power line intergration
 - Project Blue wind energy facility
 - Inca De Aar solar energy facility
 - Aced De Aar solar energy facility
 - Exxaro Lephale solar energy facility
 - Happy Valley wind energy facility
 - Hendrina power station ash dam extension
 - Hidden Valley wind energy facility
 - Kakamas photovoltaic plant
 - Karoo renewable energy facility
 - Ilanga (Karoskraal) solar thermal power plant
 - Keimoes photovoltaic plants (Sonnenberg, Ofir and Geelkop)
 - Kimberley photovoltaic solar plant
 - Kleinbegin photovoltaic plant
 - Kleinzee wind energy facility
 - Koingnaas wind energy facility
 - Oyster Bay wind energy facility
 - Ilanga Lethemba (Paardevelei) PV solar energy facility
 - Upington photovoltaic solar facility
 - Ramphela (Ritchie) PV solar energy facility
 - Ruukie (Mpumalanga) coal fired power station
 - Saldanha Steel wind energy facility
 - Spitskop wind energy facility
 - Tsitsikamma community wind energy facility
 - Uyekraal wind energy facility
 - Veldrift and Saldanha wind energy facilities
 - Vredendal photovoltaic solar energy facility
 - Wag'nBiekiespan solar energy facility
 - Walker Bay wind energy facility
 - Etc. *(a comprehensive list can be provided upon request)*

Professional History

4/2017: Professional GISc Practitioner (sole proprietor/self employed)

1/2016 – 3/2017: SMEC South Africa, Pretoria – Technical Specialist

11/1999 – 12/2015: MetroGIS (Pty) Ltd, Pretoria – Director

10/1997 – 10/1999: GISBS (GIS Business Solutions - Q Data Consulting) – Project Manager

4/1990 - 9/1997: GisLAB CC (GIS Laboratory - University of Pretoria) – Member / Project Manager

Courses & Conferences attended

1997 ESRI International User Conference – United States of America

Publications & Papers presented

Name: Gateway to Kruger Map and Guide

Authors: Andy Tinker Photography

Publisher: ATP Publishing

Date: 2010

Name: Kruger National Park Map and Photographic Guide

Authors: Andy Tinker Photography

Publisher: ATP Publishing

Date: 2007

Name: Lowveld and Kruger Guide

Authors: High Branching Team

Publisher: Jacana Media (Pty) Ltd

Date: 2004

Name: Heights to Homes to Oceans (H2O) Water Wise information poster

Authors: Rand Water

Publisher: Rand Water

Date: 2004

Name: Garden Route - Still Bay to Storms River (Discover the Magic)

Authors: Jacana

Publisher: Jacana Media (Pty) Ltd

Date: 2003

Name: KwaZulu-Natal - A celebration of biodiversity

Authors: Jacana

Publisher: Jacana Media (Pty) Ltd

Date: 2001

Name: Pilanesberg Official Map and Park Guide

Authors: North-West Parks & Tourism Board and Jacana

Publisher: Jacana Media (Pty) Ltd

Date: 2001

Name: ESRI Map Book (Volume 13)

Authors: Various

Publisher: Environmental Systems Research Institute (ESRI)

Date: 1998

Name: Environmental Potential Atlas for South Africa

Authors: W. van Riet, J. van Rensburg, P. Claassen, L. du Plessis and T. van Viegen

Publisher: J.L. van Schaik

Date: 1997

Award: Best South African Environmental Technical Paper
Awarded for: National Environmental Potential Atlas (ENPAT National)
Awarded by: Environmental Planning Professions Interdisciplinary Committee (EPPIC)
Date: 1995

Award: Map Gallery Most Analytical Competition - 3rd Place
Awarded for: Environmental Potential Atlas for South Africa
Awarded by: Environmental Systems Research Institute (ESRI)
Date: 1997 International ESRI User Conference

Award: Best Cartographic Map Gallery Competition - 3rd Place
Awarded for: Environmental Potential Atlas for South Africa (Publication)
Awarded by: Environmental Systems Research Institute (ESRI)
Date: 1998 International ESRI User Conference

Award: QDC Performance Award
Awarded for: ENPAT Development
Awarded by: Q Data Consulting
Date: 1998

Award: Best South African Environmental Technical Paper
Awarded for: Environmental Potential Atlas for South Africa (Publication)
Awarded by: Environmental Planning Professions Interdisciplinary Committee (EPPIC)
Date: 1998

Language Skills

Mother Tongue:	Afrikaans		
Languages	Speak	Read	Write
English	Good	Good	Good
Afrikaans	Good	Good	Good



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

File Reference Number:	(For official use only)
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Allepad PV One, 100MW photovoltaic (PV) solar energy generation facility and associated infrastructure near Upington, Northern Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	Lourens du Plessis t/a LOGIS		
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Exempt	Percentage Procurement recognition
Specialist name:	Lourens du Plessis		
Specialist Qualifications:	BA		
Professional affiliation/registration:	Professional GISc Practitioner (PGP0147) registered with the South African Geomatics Council (SAGC)		
Physical address:	531A Witogje Str. Die Wilgers, Pretoria		
Postal address:	PO Box 384, La Montagne		
Postal code:	0184	Cell:	082 922 9019
Telephone:		Fax:	
E-mail:	lourens@logis.co.za		

2. DECLARATION BY THE SPECIALIST

I, Lourens du Plessis, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the Specialist

Lourens du Plessis t/a LOGIS

Name of Company:

2018/10/10

Date

CURRICULUM VITAE OF SARAH WATSON

Profession:	Environmental Consultant
Specialisation:	Environmental Impact Assessment, Environmental Management, Environmental Compliance and Due Diligence, and Compilation of Reports for projects in the infrastructure sector.
Work Experience:	Eight (8) years in the environmental field

VOCATIONAL EXPERIENCE

Sarah has a Bachelor of Social Science (B.Soc.Sci.) Honours Degree in Geography and Environmental Management from the University of KwaZulu-Natal (UKZN), and eight (8) years of experience as an Environmental Consultant in the field of Environmental Impact Assessment and Environmental Management. She has experience working on a range of projects, specifically within the telecommunications; residential; industrial; bulk infrastructure; rural development; and energy sectors.

SKILLS BASE AND CORE COMPETENCIES

- Environmental Assessment
- Environmental Management
- Environmental Compliance Monitoring
- Geographic Information System (GIS)
- Stakeholder Engagement

EDUCATION AND PROFESSIONAL STATUS

Degrees:

- B.Soc.Sci. Honours in Geography and Environmental Management, University of KwaZulu-Natal, 2007
- B.Soc.Sci. Geography and Environmental Management, University of KwaZulu-Natal, 2006

Short Courses:

- Environmental and Social Risk Management (ESRM), International Finance Corporation (IFC), 2018

Professional Society Affiliations:

- Member of the South African affiliate of the International Association for Impact Assessment (IAIASa)
- Member of the Society of South African Geographers (SSAG).

EMPLOYMENT

Date	Company	Roles and Responsibilities
October 2016 – Current	Savannah Environmental (Pty) Ltd	Environmental Consultant <i>Tasks included: Executing Environmental Impact Assessment (EIA) processes, GIS Work, Environmental Screening, Environmental Due Diligence, Social Impact Assessment and Environmental Management and auditing.</i>
December 2013 – December 2014	Golder Associates Africa (Pty) Ltd	Environmental Consultant <i>Tasks included: Executing Environmental Impact Assessment (EIA) and Basic Assessment (BA) processes, and GIS work.</i>
January 2011 – November 2013	Scientific and Industrial Research (CSIR)	Environmental Consultant <i>Tasks included: Executing Environmental Impact Assessment (EIA) and Basic Assessment (BA) processes, GIS work, Public Participation and Stakeholder Engagement, Social Impact Assessment, Environmental Screening, and Environmental Management.</i>
April 2008 – December 2010	K2M Environmental (Pty) Ltd	Environmental Consultant <i>Tasks included: Executing Basic Assessment (BA) processes, GIS work, Public Participation and Stakeholder Engagement, Preliminary Environmental Screening, and Environmental Management and auditing.</i>

PROJECT EXPERIENCE

Renewable Power Generation Projects: Solar Energy Facilities

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
<i>Lichtenburg 1, a PV facility and associated infrastructure proposed on a site near Lichtenburg, in the North West Province</i>	<i>ABO Wind Lichtenburg 1 PV (Pty) Ltd</i>	<i>Environmental, GIS and Social Consultant (Scoping Phase)</i>
<i>Lichtenburg 2, a PV facility and associated infrastructure proposed on a site near Lichtenburg, in the North West Province</i>	<i>ABO Wind Lichtenburg 2 PV (Pty) Ltd</i>	<i>Environmental, GIS and Social Consultant (Scoping Phase)</i>
<i>Lichtenburg 3, a PV facility and associated infrastructure proposed on a site near Lichtenburg, in the North West Province</i>	<i>ABO Wind Lichtenburg 3 PV (Pty) Ltd</i>	<i>Environmental, GIS and Social Consultant (Scoping Phase)</i>
<i>Combined EIA for the Betelgeuse PV Solar Projects 1, 2, 3 and 4; between Murraysburg and Victoria West, Western Cape Province.</i>	<i>Aurora Power Solutions (Pty) Ltd</i>	<i>Environmental, GIS and Public Participation Consultant (Scoping Phase)</i>
<i>EIA for the 75 MW Glen Thorne PV Solar Facility, near Bloemfontein, Free State Province.</i>	<i>SolaireDirect</i>	<i>Author of the draft Scoping Report (SR)</i>

Basic Assessments

Project Name & Location	Client Name	Role
BA for the PV Power Project on Kennilworth Farm, Northern Cape.	Biotherm Energy	Author of the draft Basic Assessment Report (BAR)

Screening Studies

Project Name & Location	Client Name	Role
Environmental Site Screening Assessment For Solar PV Energy Facilities proposed at Salima, Lilongwe and Golomoti, Central Region, Malawi.	H1 Holdings (Pty) Ltd	Environmental and GIS Consultant

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
2017 Annual Environmental Compliance Evaluation with the Equator Principles and Environmental and Social Action Plan for the Mulilo Solar PV De Aar Photovoltaic Solar Energy Facility, Northern Cape Province	Mulilo Renewable Energy Solar PV De Aar (Pty) Ltd	Auditor
2017 Annual Environmental Compliance Evaluation with the Equator Principles and Environmental and Social Action Plan for the Mulilo Solar PV Prieska Photovoltaic Solar Energy Facility, Northern Cape Province	Mulilo Renewable Energy Solar PV Prieska (Pty) Ltd	Auditor
Biannual Environmental Compliance Audit of the Konkoonsies 10MW Photovoltaic (PV) Solar Energy Facility near Pofadder, Northern Cape Province	Limarco 77(Pty) Ltd	Auditor
Biannual Environmental Compliance Audit of the Aries 10MW Photovoltaic (PV) Solar Energy Facility near Kenhardt, Northern Cape Province	Sevenstones 159 (Pty) Ltd	Auditor
Final Environmental Compliance Audit for the Xina Solar One Thermal Plant, near Pofadder, Northern Cape Province	Xina Solar One RF (Pty) Ltd	Auditor

Renewable Power Generation Projects: Wind Energy Facilities

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
Combined EIA for the Ishwati Emoyeni Wind Energy Facility and associated Eskom Grid Connection Infrastructure, near Murraysburg, Western Cape Province.	Windlab Developments South Africa (Pty) Ltd (WDSA)	Environmental, GIS, and Public Participation Consultant (Scoping Phase)
EIA for the proposed Universal Wind Energy Project in the Coega IDZ, Eastern Cape Province.	Universal Wind	Environmental Consultant

Screening Studies

Project Name & Location	Client Name	Role
Pre-Feasibility Desktop Screening and Consideration of Single Turbine Wind Sites Near Victoria West, Northern Cape Province.	Philco Green Energy (Pty) Ltd	Environmental and GIS Consultant
Environmental Screening Study (ESS) of Sites being Investigated for Potential Wind Energy Projects, in	Confidential	Environmental and GIS Consultant

Project Name & Location	Client Name	Role
the Northern Cape, Eastern Cape, Western Cape; and KwaZulu-Natal Provinces.		

Due Diligence Reporting

Project Name & Location	Client Name	Role
Environmental Compliance Checklists for the Roggeveld Wind Farm in the Northern and Western Cape Province.	Roggeveld Wind Power (Pty) Ltd	Environmental Consultant
Environmental and Social Compliance Report: Evaluation of Compliance with the Equator Principles (EPs), International Finance Corporation (IFC) Performance Standards (PSs) and Environmental and Social Action Plan (ESAP) for the Amakhala Emoyeni Wind Energy Facility	Amakhala Emoyeni RE Project 1 (RF) (Pty) Ltd	Environmental Consultant
Environmental and Social Due Diligence Report for the Roggeveld Wind Farm in the Northern and Western Cape Province.	Building Energy South Africa (Pty) Ltd	Environmental Consultant

Renewable Power Generation Projects: Hydroelectric Energy Facilities

Due Diligence Reporting

Project Name & Location	Client Name	Role
Environmental Compliance Checklists for the Kruisvallei Hydroelectric Power Generation Scheme, Free State Province	Zevobuzz (Pty) Ltd	Environmental Consultant

Conventional Power Generation Projects (Coal)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
H2 Energy Power Station and associated infrastructure near KwaMhlanga, Mpumalanga Province.	H2 Clean Energy (Pty) Ltd	Environmental and GIS Consultant
Mutsho Power Project and Associated Infrastructure on a site near Makhado (Louis Trichardt), Limpopo Province.	Mutsho Power (Pty) Ltd	Environmental and GIS Consultant

Screening Studies

Project Name & Location	Client Name	Role
Environmental Site Screening Assessment for a new coal-fired power station near Makhado (Louis Trichardt), Limpopo Province.	Confidential	Environmental and GIS Consultant

Mining Sector Projects

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
ESIA for a proposed Iron Ore Mine near Melmoth, Northern KwaZulu-Natal.	Jindal Mining (Pty) Ltd	Environmental Consultant (Scoping Phase)

ESIA for a proposed Iron Ore Processing Site near Melmoth, KwaZulu-Natal Province.	Jindal Processing (Pty) Ltd	Environmental Consultant (Scoping Phase)
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Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Independent External Compliance audit of Palesa Mine's Integrated Water Use License (IWUL), near KwaMhlanga, Mpumalanga Province	HCI Coal	Auditor
Independent External Compliance audit of Palesa Mine's Waste Management License (WML), near KwaMhlanga, Mpumalanga Province	HCI Coal	Auditor
Independent External Compliance audit of Mbali Mine's Integrated Water Use License (IWUL), near Ogies, Mpumalanga Province	HCI Coal	Auditor

Infrastructure Development Projects (bridges, pipelines, roads, etc.)

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
EIA for the proposed Vopak-Reatile Terminal Richards Bay Bulk Liquid Storage and Handling Facility, Richards Bay, KwaZulu-Natal Province.	Vopak South Africa Developments (Pty) Ltd.	Environmental Consultant (Scoping Phase)
EIA for a proposed Common User Marine Servitude and Pipelines	Coega Development Corporation (CDC)	Environmental Consultant (Scoping Phase)

Basic Assessments

Project Name & Location	Client Name	Role
BA for site clearing and site preparation activities on Lots 4 and 5 of Portion 3 of Erf 11478 in the South Dunes Precinct of the Port of Richards Bay, KwaZulu-Natal Province.	Vopak South Africa Developments (Pty) Ltd.	Environmental Consultant
BA for the proposed Hlabisa Bulk Water Supply Scheme, Hlabisa, KwaZulu-Natal Province.	Mhlathuze Water	Environmental, GIS and Public Participation Consultant
BA for the proposed construction of a Bulk Sewage Rising Main, City of uMhlathuze, KwaZulu-Natal Province.	City of uMhlathuze Local Municipality.	Environmental, GIS and Public Participation Consultant
BA for the proposed Rita Light Industrial Park Development, near Camperdown, KwaZulu-Natal Province.	Daisy Wheel Investments (Pty) Ltd	Environmental, GIS and Public Participation Consultant
BA for the development of a Light Industrial Park on Portion 10 of the Farm Balgowrie, Camperdown, KwaZulu-Natal.	Daisy Wheel Investments (Pty) Ltd	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Richards Bay, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station at Felixton, near Empangeni, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant

Project Name & Location	Client Name	Role
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Ballito, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Howick, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Richmond, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station in Durban, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Kokstad, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Richmond, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Mkondeni, Pietermaritzburg, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station in Pietermaritzburg, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station in Bulwer, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Camperdown, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Underberg, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station in Cowies Hill, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station in Phoenix, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Kokstad, Eastern Cape Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Vulindlela, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant
BA for the construction of a MTN Telecommunication Mast and associated Base Station near Mpendle, KwaZulu-Natal Province.	BSO International on behalf of MTN	Environmental, GIS and Public Participation Consultant

Project Name & Location	Client Name	Role
BA for the construction of a MultiChoice Water Tower Transmission Installations and associated Base Stations in Isipingo, KwaZulu-Natal Province	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of a MultiChoice Water Tower Transmission Installations and associated Base Stations in Umlazi, KwaZulu-Natal Province	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of a MultiChoice Rooftop Transmission Installation and associated Base Station in Reservoir Hills, KwaZulu-Natal Province.	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of a MultiChoice Rooftop Transmission Installation and associated Base Station in Wentworth, KwaZulu-Natal Province.	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of a MultiChoice Rooftop Transmission Installation and associated Base Station in Queensburgh, KwaZulu-Natal Province.	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of a MultiChoice Rooftop Transmission Installation and associated Base Station at the University of KwaZulu-Natal (UKZN), KwaZulu-Natal Province.	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of a MultiChoice Rooftop Transmission Installation and associated Base Station in Amanzimtoti, KwaZulu-Natal Province.	BSO International on behalf of MultiChoice	Environmental, GIS and Public Participation Consultant
BA for the construction of an iBurst Telecommunication Mast and associated Base Station in Kloof, KwaZulu-Natal Province	BSO International on behalf of iBurst	Environmental, GIS and Public Participation Consultant

Screening Studies

Project Name & Location	Client Name	Role
Consideration of environmental authorisation, licensing and permitting requirements for gas transmission pipelines in the Clayville, Nigel, and Wadeville areas, Ekurhuleni Metropolitan Municipality, Gauteng	Energy Group	Environmental Consultant
ESS for the proposed Development of Pier 1 Phase 2 Container Terminal in the Port of Durban, KwaZulu-Natal Province.	Transnet Capital Projects (TCP).	Environmental Consultant and co-author

Environmental Compliance, Auditing and ECO

Project Name & Location	Client Name	Role
Construction of a New Distribution Centre and Warehouse on Erf 5539 and 5540 (Chloorkop X74), Lords View Industrial Park, Gauteng Province	Olivier & Partners on behalf of ARB Holdings (Pty) Ltd	Environmental Control Officer (ECO)
Gap Analysis of Venture Diversified Product (VDP) Rosslyn Facility's EMS, in Rosslyn, Gauteng Province	Venture Diversified Product (VDP) Rosslyn	Auditor
Construction of the Hlabisa Bulk Water Supply Scheme, in Hlabisa, KwaZulu-Natal Province	Mhlathuze Water	Environmental Control Officer (ECO)

Training

Project Name & Location	Client Name	Role
Capacity Building Workshop on Amended Environmental Impact Assessment Regulations and Associated Legislation, Durban, KwaZulu-Natal	Transnet	Assistant Environmental Consultant and Researcher

Housing and Urban Projects

Environmental Impact Assessments and Environmental Management Programmes

Project Name & Location	Client Name	Role
EMP for the Makhasaneni Rural Subsidised Housing Development, in Mthonjaneni (Ward 5), KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Mthonjaneni Local Municipality, and the KwaZulu-Natal Department of Housing.	Environmental and GIS Consultant
EMP for the Ntembisweni Rural Subsidised Housing Development in the Ntembisweni Traditional Authority Area near Greytown, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Umvoti Local Municipality, and the KwaZulu-Natal Department of Housing.	Environmental and GIS Consultant
EMP for the Sikhonyane Rural Subsidised Housing Development, in the Sikhonyane Traditional Authority area, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Mandeni Local Municipality, and the KwaZulu-Natal Department of Housing.	Environmental and GIS Consultant
EMP for the Umzumbe Cluster A Rural Subsidised Housing Development, near Umzumbe, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Umzumbe Local Municipality, and the KwaZulu-Natal Department of Housing.	Environmental and GIS Consultant
EMP for the Applebosch Rural Subsidised Housing Development near Ndwedwe, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Msunduzi Local Municipality, and the KwaZulu-Natal Department of Housing.	Environmental and GIS Consultant

Basic Assessments

Project Name & Location	Client Name	Role
BA for the proposed Loch-Sloy Rural Subsidised Housing Development, near Estcourt, KwaZulu-Natal Province.	Imbabazane Local Municipality	Environmental, GIS and Public Participation Consultant
BA for the proposed "Living in THE PARK" Residential Development, near Albert Falls, KwaZulu-Natal Province.	J.H.K Developers	Environmental, GIS and Public Participation Consultant
BA for the proposed Residential Development on the Remainder of Erf 215, Prince's Grant, KwaZulu-Natal Province.	Princes Grant	Environmental, GIS and Public Participation Consultant
BA for the proposed Greenmeadow Lane Retirement Village, KwaZulu-Natal Province.	Rodney Blake Jolly on behalf of Georgies Avenue Investments (Pty) Ltd	Environmental, GIS and Public Participation Consultant

Screening Studies

Project Name & Location	Client Name	Role
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, in the Ntembisweni Traditional Authority area near Greytown, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Umvoti Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, in the Mkhwanazi Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the City of uMhlathuze Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at Makhasaneni in Ward 5 of the Mthonjaneni Local Municipality, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Mthonjaneni Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at the Sikhonyane Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Mandeni Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, near Ndwedwe, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Msunduzi Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at Nxamalala Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Impendle Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at KwaDolo Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Msinga Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at Ndlangubo Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the uMlalazi Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>

Project Name & Location	Client Name	Role
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at the Embo Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Maphumulo Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for a Rural Subsidised Housing Development, at Mthandeni Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Maphumulo Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>
<i>Preliminary Environmental Assessment for the Highflats Slum Clearance Housing Project near Ixopo, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Ubuhlebezwe Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>Environmental and GIS Consultant</i>

Environmental Permitting & WUL Applications

Project Name & Location	Client Name	Role
<i>Application for Planning Consent for the proposed Kwamavundla Rural Subsidised Housing Development in the Kwamavundla Traditional Authority area, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Hibiscus Coast Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>GIS Consultant and assistant Environmental Consultant</i>
<i>Application for Planning Consent for the proposed Ngolokodo Rural Subsidised Housing Development, near Nquthu KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Ubuhlebezwe Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>GIS Consultant and assistant Environmental Consultant</i>
<i>Application for Planning Consent for the proposed Mdletshe Traditional Authority Rural Subsidised Housing Development, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Hlabisa Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>GIS Consultant and assistant Environmental Consultant</i>
<i>Application for Planning Consent for the proposed Makhasaneni Rural Subsidised Housing Development, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Mthonjaneni Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>GIS Consultant and assistant Environmental Consultant</i>
<i>Application for Planning Consent for the proposed Njomelwane Rural Subsidised Housing Development, KwaZulu-Natal Province.</i>	<i>Stedone Developments and Bigen Africa on behalf of the Ntambanana Local Municipality, and the KwaZulu-Natal Department of Housing.</i>	<i>GIS Consultant and assistant Environmental Consultant</i>

Project Name & Location	Client Name	Role
Application for Planning Consent for the proposed Umzumbe Cluster A Rural Subsidised Housing Development, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Umzumbe Local Municipality, and the KwaZulu-Natal Department of Housing.	GIS Consultant and assistant Environmental Consultant
Application for Planning Consent for the proposed Ntanzu Rural Subsidised Housing Development, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Nongoma Local Municipality, and the KwaZulu-Natal Department of Housing.	GIS Consultant and assistant Environmental Consultant
Application for Planning Consent for the proposed Abakwahlabisa Rural Subsidised Housing Development, KwaZulu-Natal Province.	Stedone Developments and Bigen Africa on behalf of the Hlabisa Local Municipality, and the KwaZulu-Natal Department of Housing.	GIS Consultant and assistant Environmental Consultant

Environmental Management Tools

Screening Studies

Project Name & Location	Client Name	Role
Umzinyathi District Municipality's Strategic Environmental Assessment (July 2009).	Umzinyathi District Municipality	Assistant GIS Consultant

Specialist Studies

Social Impact Assessments

Project Name & Location	Client Name	Role
Social Impact Assessment in support of the Environmental Impact Assessment for Allepad PV One	ILEnergy Development (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Allepad PV Two	ILEnergy Development (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Allepad PV Three	ILEnergy Development (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Allepad PV Four	ILEnergy Development (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Hyperion Solar Development 1	Hyperion Solar Development 1 (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Hyperion Solar Development 2	Hyperion Solar Development 2 (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Hyperion Solar Development 3	Hyperion Solar Development 3 (Pty) Ltd	Social Consultant
Social Impact Assessment in support of the Environmental Impact Assessment for Hyperion Solar Development 4	Hyperion Solar Development 4 (Pty) Ltd	Social Consultant

<i>Social Impact Assessment in support of the Environmental Impact Assessment for Lichtenburg 1</i>	<i>ABO Wind Lichtenburg 1 PV (Pty) Ltd</i>	<i>Social Consultant</i>
<i>Social Impact Assessment in support of the Environmental Impact Assessment for Lichtenburg 2</i>	<i>ABO Wind Lichtenburg 2 PV (Pty) Ltd</i>	<i>Social Consultant</i>
<i>Social Impact Assessment in support of the Environmental Impact Assessment for Lichtenburg 3</i>	<i>ABO Wind Lichtenburg 3 PV (Pty) Ltd</i>	<i>Social Consultant</i>
<i>Social Impact Assessment in support of the Environmental Impact Assessment for Hotazel Solar</i>	<i>ABO Wind Hotazel PV (Pty) Ltd</i>	<i>Social Consultant</i>
<i>Social Impact Assessment in support of the Basic Assessment for the Kruisvallei Hydroelectric Power Generation Scheme, Free State Province</i>	<i>Zevobuzz (Pty) Ltd</i>	<i>Social Consultant</i>
<i>Review and update of Social Assessment for the Lake Management Plan for Lake Mzingazi, Richards Bay, KwaZulu-Natal Province</i>	<i>City of uMhlathuze</i>	<i>Social Consultant</i>



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

PROJECT TITLE

Allepad PV Four, 100MW photovoltaic (PV) solar energy generation facility and associated infrastructure near Upington, Northern Cape Province

Kindly note the following:

1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at <https://www.environment.gov.za/documents/forms>.
3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House
473 Steve Biko Road
Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
Email: EIAAdmin@environment.gov.za

1. SPECIALIST INFORMATION

Specialist Company Name:	Savannah Environmental (Pty) Ltd			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	Level 2	Percentage Procurement recognition	125%
Specialist name:	Sarah Watson			
Specialist Qualifications:	» B.Soc.Sci Honours in Geography and Environmental Management (2007) » B.Soc.Sci in Geography and Environmental Management (2006)			
Professional affiliation/registration:	N/A			
Physical address:	First Floor, Block 2, 5 Woodlands Drive Office Park Woodlands Drive, Woodmead			
Postal address:	P.O. Box 148 Sunninghill			
Postal code:	2157	Cell:	074 417 9694	
Telephone:	011 656 3237	Fax:	086 684 0547	
E-mail:	sarah@savannahsa.com			

2. DECLARATION BY THE SPECIALIST

I, Sarah Watson, declare that –

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.


Signature of the Specialist

Savannah Environmental (Pty) Ltd
Name of Company:

10-10-2018
Date