

APPENDIX A – DATASETS USED IN THE P-LCP

FEATURES	DATASET	DATA TYPE	DATE	DATA SOURCE / CUSTODIAN	COMMENT	GIS VIEWER
Agricultural Fields	LP_fields_030507_II.shp	Vector	2007	AGIS		Yes
Conservation Farms	all_conservation_farm_accurate.shp	Vector		SANBI	Data records limited - not representative of whole province	
Conservation Features	Cons_Features.shp	Vector	2011	MetroGIS	Composite dataset	
Species: Birds, Plants, Reptiles				SANBI / MetroGIS	Point data (SANBI) referenced on surrogate data, e.g. steep slopes, ridges, vegetation (grasslands), geology (dolomite)	
Vegetation			2006	SANBI		
High Yield Quaternary Catchments				DWA		
Nylsvley - Modimolle corridor			2011	MetroGIS		
Contours	20m_contours.shp	Vector		Chief Directorate: Surveys & Mapping	Used to compile shaded relief map	
Critical Biodiversity Areas (C-Plan)	Cplan_Union3.shp	Vector	2011	MetroGIS, Environomics, 4Life Promotions	Compiled from Marxan process. Protected Areas incorporated	Yes
Development Pressure						
Mining rights	Mining_Rights_all.shp	Vector	2010	MetroGIS		
5km Buffer around built-up areas	Builtup_Final_Buffer_5km.shp	Vector	2011	MetroGIS		
Eco Region	vegm2006_Limpopo	Vector	2006	SANBI	Utilise field name [BIOREGION]	Yes
Ecological Corridors	EcologicalCorridors2.shp	Vector	2011	MetroGIS		Yes
Farm Portions	farm_portion.shp	Vector		Land-Surveyor Genl		Yes
High Yield Catchments	Quaternary_Catchments_High_Yield.shp	Vector		DWA	Top 10% to be used for high yield interpretation	Yes
Landcover	landcover1.shp	Vector	2000	SCIR / DWA / ARC-ISCW	Built-up areas updated in places by MetroGIS	
Limpopo Province Boundary	Limpopo.shp	Vector		S.A. Demarcation Board		
Planning Area	Planning_Area.shp	Vector	2009	MetroGIS	Remaining area after deleted transformed areas in province	
Planning Units	Planning_Units.shp	Vector	2010	MetroGIS	Compiled as described in report	

Plant and animal species	all_species_point_accurate.shp	Vector		SANBI		
Plant Centres	centresplants_wgs.shp	Vector		SANBI		
Plantations	landcover1.shp	Vector		SCIR / DWA / ARC-ISCW	Thematic data can be extracted from the landcover.shp file	
Private Nature Reserves	Private_Nat_Reservesshp	Vector		LEDET	Polygons overlap each other	
Process Features					Integrated dataset incorporating overlaps	
River Buffers	rivers.shp	Vector		SANBI		
Dolomite	Dolomite.shp	Vector	2011	MetroGIS		
Ridges & Escarpment	Ridges & Steep slopes					
Endemism	Endemism_Limpopo.shp	Vector		DEA	Clipped with Limpopo provincial boundary	
Important Catchments	Important_Catchments_Limpopo1.shp	Vector	2010	CSIR	Clipped with Limpopo provincial boundary	
Proclaimed National Parks	ProcNatParksOutl_Aug2009.shp	Vector		DEA		
Proclaimed Provincial Nature Reserves	Nature_Reserves.shp	Vector		LEDET		
Protected Areas	protected_areas.shp	Vector		SANBI		
National Parks	Nat_Parks_Limpopo	Vector	2011	DEA	Clipped with Limpopo provincial boundary	
NPAES protected area expansion priorities outside reserves	NPAES_Limpopo.shp	Vector	2010	DEA	Clipped with Limpopo provincial boundary	
World Heritage Sites (core area)	World_Heritage_Limpopo.shp	Vector	2010	DEA	Clipped with Limpopo provincial boundary	
Provincial & local reserves	Provincial_Local Reserves_Limpopo.shp	Vector	2010	DEA	Clipped with Limpopo provincial boundary	
Forest Wilderness Area	Forest_Wilderness_Area_Limpopo.shp	Vector	2010	DAFF	Clipped with Limpopo provincial boundary	
Indigenous Forests	Indigenous_Forests_Limpopo.shp	Vector	2010	DAFF	Clipped with Limpopo provincial boundary	
Ramsar Sites	Ramsar_Limpopo.shp	Vector	2010	DEA	Clipped with Limpopo provincial boundary	
Waterberg Biosphere Reserve	WBR_ProposedZones_20101103.shp	Vector	2010	DEA		
Unproclaimed / Undeclared Provincial Nature Reserves	UndeclaredReserves_DEA2010_Limpopo_A lbers.shp	Vector	2010	DEA	Clipped with Limpopo provincial boundary	

Protected Area Status	Protected_Areas_20110502_Albers.shp	Vector		MetroGIS	Integrated set of all protected areas	
Province Boudaries	Province_New_Geo.shp	Vector		S.A. Demarcation Board		
Quaternary Catchments	Quaternary_Catchments1.shp	Vector		DWA		
Railway Lines	railway.shp	Vector		Chief Directorate: Surveys & Mapping		
Ridges	Ridges.shp	Vector		LEDET / MetroGIS	Created from LEDET Escarpment.shp	
River Conservation Status	river_cons_status_dd_Clip.shp	Vector		SANBI		
Rivers & Wetlands	rivers.shp	Vector		SANBI	Including rivers, wetlands & dams. Buffered 150 m	
Rivers Status	river_status.shp	Vector		CSIR	Utilise field name [PES19999]	
Roads	roads.shp	Vector		Chief Directorate: Surveys & Mapping		
Runoff from catchments	Quaternary_Catchments1.shp	Vector		MetroGIS	Mean Annual Runoff(MARQ4) field used in mapping.	
Shaded Relief	reliefgdd.tif	Raster		MetroGIS	Generated from contour data	
Steep Slopes > 8 degrees	Steep Slopes_8dg.shp	Vector	2010	MetroGIS	Generated from contour data	
Towns	towns.shp	Vector		Chief Directorate: Surveys & Mapping		
Transformed Areas						
Agricultural Fields	LP_fields_030507_II.shp	Vector	2007	AGIS	Incorporated in C-Plan dataset	
Built-up Areas	Built-up_Final	Vector	2001/2011	CSIR / MetroGIS	Incorporated in C-Plan dataset	
Mining	landcover1.shp	Vector		SCIR / DWA / ARC-ISCW	Incorporated in C-Plan dataset	
Vegetation	vegm2006_Limpopo.shp	Vector	2006	SANBI		
Ecological Status	Thematic query	Vector		MetroGIS	Derived from Vegetation dataset	
Protection Level	Thematic query	Vector		MetroGIS	Derived from Vegetation dataset	

APPENDIX C - CHARACTERISTICS OF EACH OF THE 56 VEGETATION TYPES IN LIMPOPO

VEGETATION TYPE	CONS TARGET %	CONSERVATION STATUS	BIOME CODE	BIOME	Total Area in LP (Ha)	% Outside Transformed	Area in Protected Areas (Ha)	Target Area to be Protected (Ha)	% of Vegetation Type Inside Protected Areas	% of Target protected in Protected Areas
Subtropical Alluvial Vegetation	35%	Least threatened	AZ	Azonal Vegetation	60473.12	87.6	32295.13	18539.19	61.0	174.2
Subtropical Freshwater Wetlands	25%	Least threatened	AZ	Azonal Vegetation	11278.22	97.5	7909.59	2749.84	71.9	287.6
Subtropical Salt Pans	35%	Least threatened	AZ	Azonal Vegetation	453.56	69.4	214.37	110.13	68.1	194.7
SUB-TOTAL					72204.91	84.83	40419.09	21399.15	67.00	218.83
Lowveld Riverine Forest	100%	Critically endangered	FO	Forests	3958.18	96.5	3804.77	3820.84	99.6	99.6
Ironwood Dry Forest	100%	Critically endangered	FO	Forests	4634.14	100.0	4578.03	4634.14	98.8	98.8
Northern Afrotperate Forest	32%	Least threatened	FO	Forests	391.06	97.0	4.70	121.37	1.2	3.9
Northern Mist belt Forest	30%	Least threatened	FO	Forests	29627.94	99.4	21474.33	8833.59	72.9	243.1
Sand Forest	100%	Critically endangered	FO	Forests	1470.08	100.0	1470.08	1470.08	100.0	100.0
SUB-TOTAL					40081.40	98.58	31331.91	18880.02	74.51	109.07
Leolo Summit Sourveld	75%	Vulnerable	G	Grassland	2034.44	99.3	0.00	1515.01	0.0	0.0
Lydenburg Montane Grassland	24%	Vulnerable	G	Grassland	1215.73	100.0	1197.52	291.78	98.5	410.4
Lydenburg Thornveld	25%	Vulnerable	G	Grassland	48919.33	96.7	38656.54	11823.45	81.7	326.9
Northern Escarpment Afromontane Fynbos	27%	Least threatened	G	Grassland	202.20	100.0	151.56	54.59	75.0	277.6
Northern Escarpment Dolomite Grassland	27%	Endangered	G	Grassland	2374.01	99.3	1948.04	636.81	82.6	305.9
Northern Escarpment Quartzite Sourveld	27%	Vulnerable	G	Grassland	42979.83	99.4	37232.59	11529.77	87.2	322.9
Rand Highveld Grassland	29%	Endangered	G	Grassland	80428.88	82.3	39738.17	19205.37	60.0	206.9

Sekhukhune Montane Grassland	28%	Vulnerable	G	Grassland	55158.41	84.2	26898.81	13011.06	57.9	206.7
Soutpansberg Summit Sourveld	24%	Least threatened	G	Grassland	8619.89	99.9	6761.18	2067.19	78.5	327.1
Strydpoort Summit Sourveld	24%	Least threatened	G	Grassland	26808.07	99.8	20175.71	6423.95	75.4	314.1
Waterberg-Magaliesberg Summit Sourveld	24%	Least threatened	G	Grassland	50096.50	99.7	32150.34	11991.70	64.3	268.1
Wolkberg Dolomite Grassland	100%	Least threatened	G	Grassland	26084.47	100.0	23129.69	26084.47	88.7	88.7
Woodbush Granite Grassland	100%	Critically endangered	G	Grassland	33986.40	97.7	4777.79	33203.72	14.4	14.4
SUB-TOTAL					378908.2	96.8	232817.9	137838.9	66.5	236.1
Central Sandy Bushveld	24%	Vulnerable	SV	Savanna	1097529.46	78.8	75216.32	207583.89	8.7	36.2
Dwaalboom Thornveld	22%	Least threatened	SV	Savanna	414368.03	85.8	26836.64	78174.50	7.6	34.3
Limpopo Sweet Bushveld	20%	Least threatened	SV	Savanna	1201054.17	94.3	11069.93	226567.70	1.0	4.9
Loskop Mountain Bushveld	24%	Least threatened	SV	Savanna	44884.06	99.1	7343.34	10678.64	16.5	68.8
Loskop Thornveld	23%	Vulnerable	SV	Savanna	64938.09	80.9	1698.48	12085.94	3.2	14.1
Madikwe Dolomite Bushveld	19%	Least threatened	SV	Savanna	22515.47	97.8	111.53	4185.30	0.5	2.7
Makhado Sweet Bushveld	24%	Vulnerable	SV	Savanna	1010721.09	79.7	68086.34	193286.24	8.5	35.2
Mamabolo Mountain Bushveld	25%	Least threatened	SV	Savanna	68295.29	94.3	20990.14	16102.05	32.6	130.4
Ohrigstad Mountain Bushveld	26%	Least threatened	SV	Savanna	181665.18	91.3	63757.27	43122.78	38.4	147.9
Polokwane Plateau Bushveld	25%	See text	SV	Savanna	444439.84	77.5	27816.89	86107.18	8.1	32.3
Poung Dolomite Mountain Bushveld	25%	Least threatened	SV	Savanna	88908.46	96.3	57782.67	21400.20	67.5	270.0
Roodeberg Bushveld	21%	Least threatened	SV	Savanna	649645.99	88.8	31857.08	121119.34	5.5	26.3
Sekhukhune Mountain Bushveld	28%	Least threatened	SV	Savanna	226512.22	84.8	52960.22	53814.45	27.6	98.4
Sekhukhune Plains Bushveld	28%	Vulnerable	SV	Savanna	252224.18	68.7	20389.37	48495.67	11.8	42.0
Soutpansberg Mountain Bushveld	27%	Vulnerable	SV	Savanna	411861.91	89.8	59234.19	99890.31	16.0	59.3
Springbokvlakte Thornveld	35%	Endangered	SV	Savanna	617433.05	54.6	39067.43	117960.95	11.6	33.1
VhaVenda Miombo		See text	SV	Savanna	33.41	100.0		0.00	0.0	0.0
Waterberg Mountain Bushveld	25%	Least threatened	SV	Savanna	882342.85	97.1	199316.57	214204.50	23.3	93.0
Western Sandy Bushveld	19%	Least threatened	SV	Savanna	545244.45	97.6	38566.92	101095.08	7.2	38.1
Granite Lowveld	24%	Vulnerable	SV	Savanna	775145.46	80.3	2468.50	149393.08	0.4	1.7

Gravelotte Rocky Bushveld	20%	Least threatened	SV	Savanna	32349.29	92.9	35.88	6012.48	0.1	0.6
Legogote Sour Bushveld	23%	Endangered	SV	Savanna	2675.68	81.6	1416.67	502.18	64.9	282.1
Makuleke Sandy Bushveld	21%	Vulnerable	SV	Savanna	204155.41	90.1	61923.02	38626.32	33.7	160.3
Northern Lebombo Bushveld	24%	Least threatened	SV	Savanna	44334.31	100.0	43895.40	10640.23	99.0	412.5
Nwambyia-Pumbe Sandy Bushveld	19%	Least threatened	SV	Savanna	14222.89	100.0	14220.64	2702.35	100.0	526.2
Tshokwane-Hlane Basalt Lowveld	19%	Least threatened	SV	Savanna	3482.71	99.3	3458.33	657.08	100.0	526.3
Tzaneen Sour Bushveld	26%	Endangered	SV	Savanna	342532.43	73.3	35998.20	65279.91	14.3	55.1
Cathedral Mopane Bushveld	19%	Least threatened	SV	Savanna	27594.50	100.0	27594.50	5242.96	100.0	526.3
Limpopo Ridge Bushveld	19%	Least threatened	SV	Savanna	277941.15	99.2	67934.87	52403.50	24.6	129.6
Lowveld Rugged Mopaneveld	22%	Least threatened	SV	Savanna	286705.27	84.6	89439.13	53380.91	36.9	167.5
Mopane Basalt Shrubland	19%	Least threatened	SV	Savanna	269297.95	100.0	269285.05	51164.17	100.0	526.3
Mopane Gabbro Shrubland	19%	Least threatened	SV	Savanna	27245.53	100.0	27245.53	5176.65	100.0	526.3
Musina Mopane Bushveld	20%	Least threatened	SV	Savanna	879640.69	96.7	27780.75	170070.56	3.3	16.3
Phalaborwa-Timbavati Mopaneveld	21%	Least threatened	SV	Savanna	139646.32	90.2	39853.24	26440.79	31.7	150.7
Tsende Mopaneveld	20%	Least threatened	SV	Savanna	531576.31	92.8	336053.07	98630.82	68.1	340.7
SUB-TOTAL					10985633.7	90.0	1775487.8	2184614.8	34.2	161.2
TOTAL					11476828.12		2080056.71	2362732.86		

- Vegetation types in red have less than 50% of their target protected.
- Vegetation types in blue have limited information available for calculation and were indicated, but excluded from calculations.

BIOMES

BIOME CODE	BIOME	Total AREA in LP (sq m)	Total AREA in LP(ha)	Area Outside Transformed(ha)	% Outside Transformed	% Transformed
AZ	Azonal Vegetation	722049057.28	72204.91	64283.11	89.03	10.97

FO	Forests	400814023.96	40081.40	39749.63	99.17	0.83
G	Grassland Biome	3789081638.27	378908.16	353120.00	93.19	6.81
SV	Savanna Biome	120831631129.89	12083163.11	10439644.80	86.40	13.60
		125743575849.39	12574357.58	10896797.55		