

Supplementary Materials: Characterizing Degradation Gradients through Land Cover Change Analysis in Rural Eastern Cape, South Africa

Zahn Münch, Perpetua I. Okoye, Lesley Gibson, Sukhmani Mantel and Anthony Palmer

Table S1. Accuracy assessment of the ENLC 2000 (T1) per catchment based on sample points. Rows represent map categories; columns show reference categories.

T35B ENLC 2000											
Class	UG	FITBs	BRS	Wb	WI	CLs	FP	UrBu	Total	Map Area	
										ha	%
UG	1172	105	39	1	25	37	67	0	1446	29,912	76
FITBs	39	202	0	0	0	12	2	0	255	3306	8
BRS	0	0	0	0	0	0	0	0	0	3	0
Wb	0	0	0	15	0	1	0	0	16	33	0
WI	26	0	0	1	129	51	22	0	229	1220	3
CLs	19	18	0	0	17	421	15	0	490	2417	6
FP	11	6	0	0	2	1	501	0	521	2566	7
UrBu	1	6	0	0	0	11	0	0	18	91	0
Total	1268	337	39	17	173	534	607	0	2975	39,547	100
T12A ENLC 2000											
Class	UG	FITBs	BRS	Wb	WI	CLs	FP	UrBu	Total	Map Area	
										ha	%
UG	1088	61	5	2	4	25	0	27	1212	20,948	75
FITBs	23	563	2	0	0	6	0	0	594	2733	10
BRS	0	0	0	0	0	0	0	0	0	3	0
Wb	1	0	0	3	0	0	0	0	4	1	0
WI	13	0	0	0	2	0	0	0	15	14	0
CLs	15	3	0	0	0	230	0	13	261	2403	9
FP	1	128	0	0	0	0	0	0	129	397	1
UrBu	35	3	0	0	0	12	0	185	235	1365	5
Total	1176	758	7	5	6	273	0	225	2450	27,866	100
S50E ENLC 2000											
Class	UG	FITBs	BRS	Wb	WI	CLs	FP	UrBu	Total	Map Area	
										ha	%
UG	1284	103	15	10	48	128	4	33	1625	27,510	62
FITBs	28	595	0	6	0	8	29	0	666	4328	10
BRS	1	0	0	0	0	0	0	0	1	13	0
Wb	0	0	0	430	1	2	0	0	433	1368	3
WI	2	0	0	0	24	11	0	0	37	193	0
CLs	45	12	0	1	0	837	0	8	903	7269	16
FP	1	119	0	0	0	0	624	1	745	2027	5
UrBu	32	3	0	0	1	32	1	233	302	2050	5
Total	1393	832	15	447	74	1018	658	275	4712	44,759	100

Table S2. Accuracy assessment of DLC 2014 (T2) per catchment based on sample points. Rows represent map categories; columns show reference categories.

T35B DLC 2014											
Class	UG	FITBs	BRS	Wb	Wl	CLs	FP	UrBu	Total	Map Area	
										ha	%
UG	1255	158	6	2	95	15	12	1	1544	31,607	80
FITBs	28	167	0	0	1	0	0	0	196	1599	4
BRS	2	0	13	0	0	1	0	0	16	65	0
Wb	0	2	0	39	6	0	0	0	47	17	0
Wl	15	6	0	17	63	0	2	0	103	463	1
CLs	17	8	0	1	17	400	0	2	445	2444	6
FP	14	0	0	0	0	0	186	0	200	3274	8
UrBu	2	0	0	0	0	0	0	6	8	77	0
Total	1333	341	19	59	182	416	200	9	2559	39,547	100
T12A DLC 2014											
Class	UG	FITBs	BRS	Wb	Wl	CLs	FP	UrBu	Total	Map Area	
										ha	%
UG	766	68	2	2	2	10	0	21	871	19,007	68
FITBs	20	290	0	0	0	1	0	0	311	3450	12
BRS	0	0	4	0	0	0	0	1	5	43	0
Wb	4	0	0	9	0	0	0	0	13	1	0
Wl	8	0	0	0	53	0	0	0	61	17	0
CLs	54	8	6	0	0	192	0	17	277	2537	9
FP	0	0	0	0	0	0	11	0	11	95	0
UrBu	28	2	0	0	0	5	0	178	213	2716	10
Total	880	368	12	11	55	208	11	217	1762	27,866	100
S50E DLC 2014											
Class	UG	FITBs	BRS	Wb	Wl	CLs	FP	UrBu	Total	Map Area	
										ha	%
UG	1261	137	0	12	73	39	0	20	1542	25,354	57
FITBs	27	1018	0	1	0	8	37	0	1091	4812	11
BRS	3	1	7	0	0	0	0	0	11	85	0
Wb	0	0	0	125	0	0	0	0	125	1301	3
Wl	3	0	0	0	5	0	0	0	8	57	0
CLs	20	16	0	3	18	985	0	6	1048	8107	18
FP	1	2	0	0	0	0	344	3	350	806	2
UrBu	9	4	0	0	2	0	0	209	224	4237	10
Total	1324	1178	7	141	98	1032	381	238	4399	44,759	100

Table S3. Theoretical accuracy of LC change (LCC) analysis.

Catchments	Datasets		
	ENLC 2000 (T1)	DLC 2014 (T2)	Change (LCC)
T35B	81	83	67
T12A	87	88	76
S50E	83	87	72
Overall	84	85	71



© 2017 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).