REVIEW OF THE SPATIAL DEVELOPMENT FRAMEWORK FOR MKHAMBATHINI MUNICIPALITY

SDF MAP BOOK

STATUS QUO MAPS

JUNE 2019

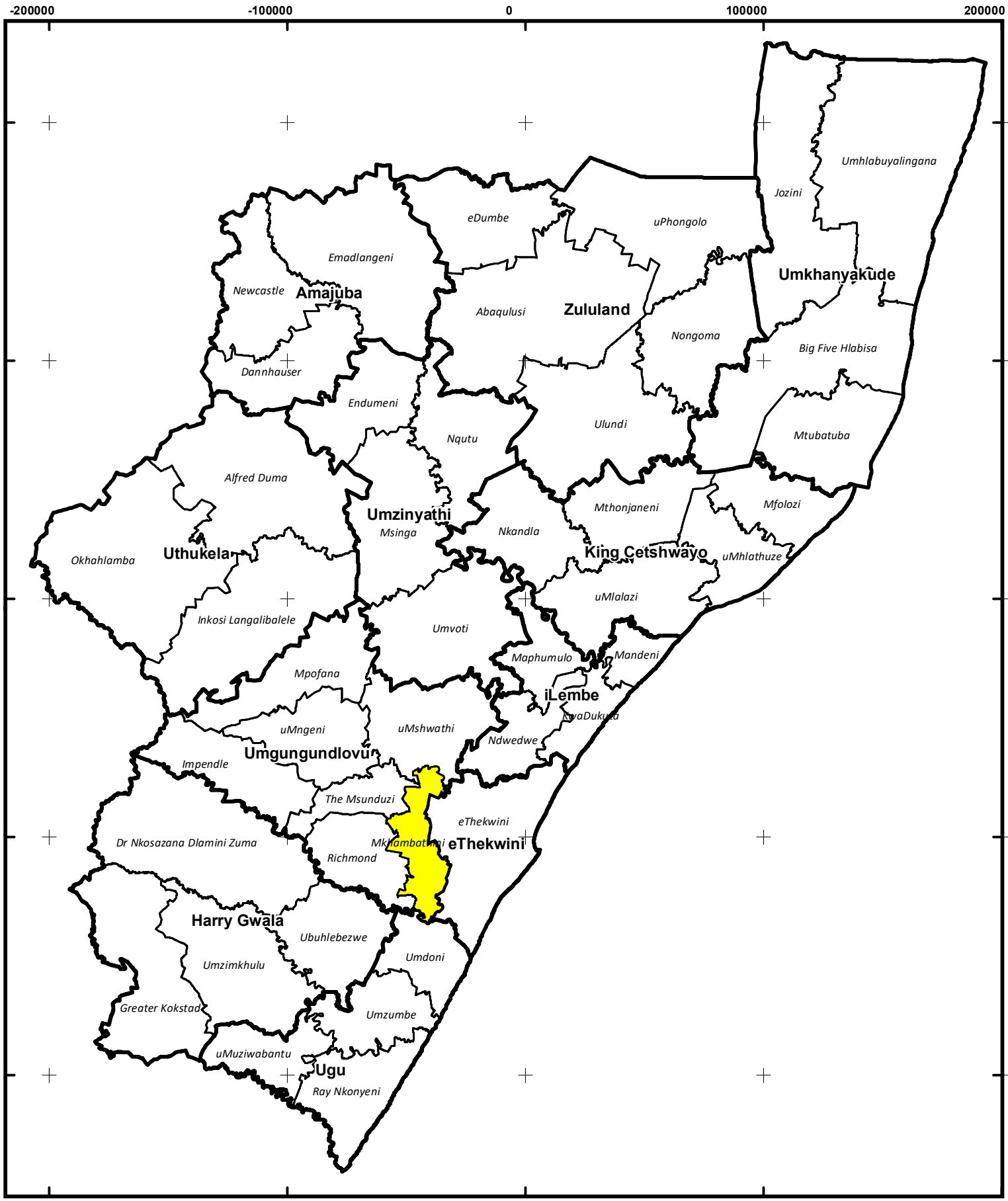
MKHAMBATHINI Municipality
For the community
uMkhandlu Wabantu

uMGUNGUNDLOVU
UMASIPALA WESIPUNDA
DISTRICT MUNICIPALITY
DISTRIK MUNISIPALITEIT

SANBI
Biodiversity for Life
South African National Biodiversity Institute

STATUS QUO MAPS

1. Locality of Mkhambathini Municipality
2. Mkhambathini Electoral Wards 2016
3. Traditional Authorities
4. Rural Settlements
5. Settlement Density
6. Broad Land Use Pattern
7. Camperdown Land Uses
8. Manderston Land Uses
9. Eston Land Uses
10. Mid-Ilovo Land Uses
11. Land Ownership
12. Land Subject to Act 70 of 1970
13. Land Reform
14. Access to Clinics
15. Access to Primary Schools
16. Access to Secondary Schools
17. Access to Police Stations
18. Agricultural Land Potential
19. Agricultural Land Use Categories
20. Economic Activities
21. Access to Water
22. Access to sanitation
23. Access to Electricity
24. Topography and slope
25. Water Erosion Potential
26. Degraded Land
27. Hydrological Characteristics
28. Hydrology (Main Rivers)
29. Water Yield Constraints
30. Water Quality Zones
31. Critical Biodiversity
32. Environmentally Sensitive Areas
33. Vegetation Conservation Status
34. Distribution of existing settlements in relation to steep slopes
35. Distribution of existing settlements in relation to flood lines
36. Distribution of settlements in relation to critical ecological infrastructure (including agriculture land)



Legend

- Mkhambathini Boundary
- District Municipalities
- Local Municipalities

DATA SOURCES:
Municipal/Ward Boundaries:
Municipal Demarcation Board

Datum: WGS84

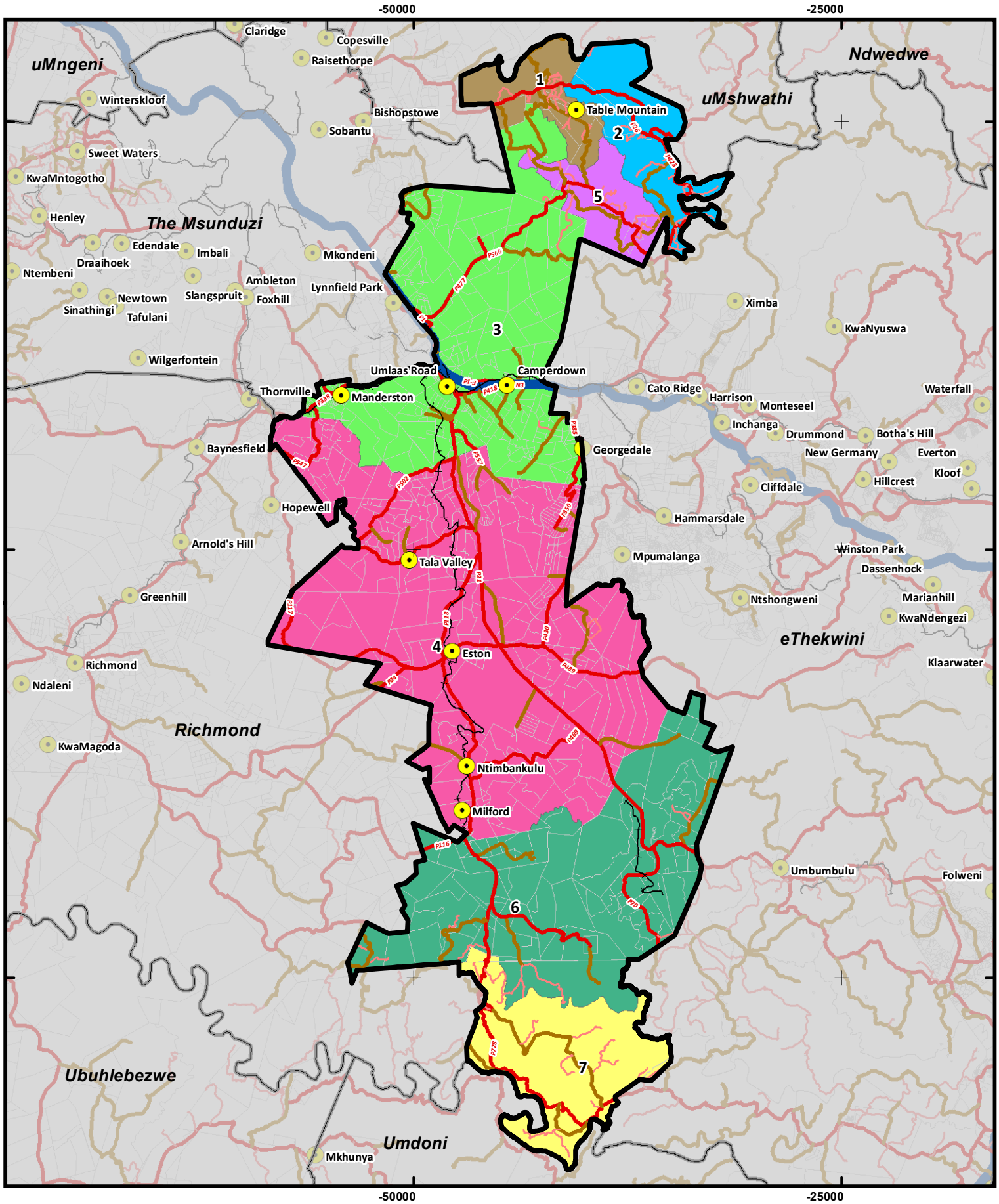
Date: April 2018

0 10 20 40
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Locality

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

Wards

1 2 3 4 5 6 7

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO

Datum: WGS84

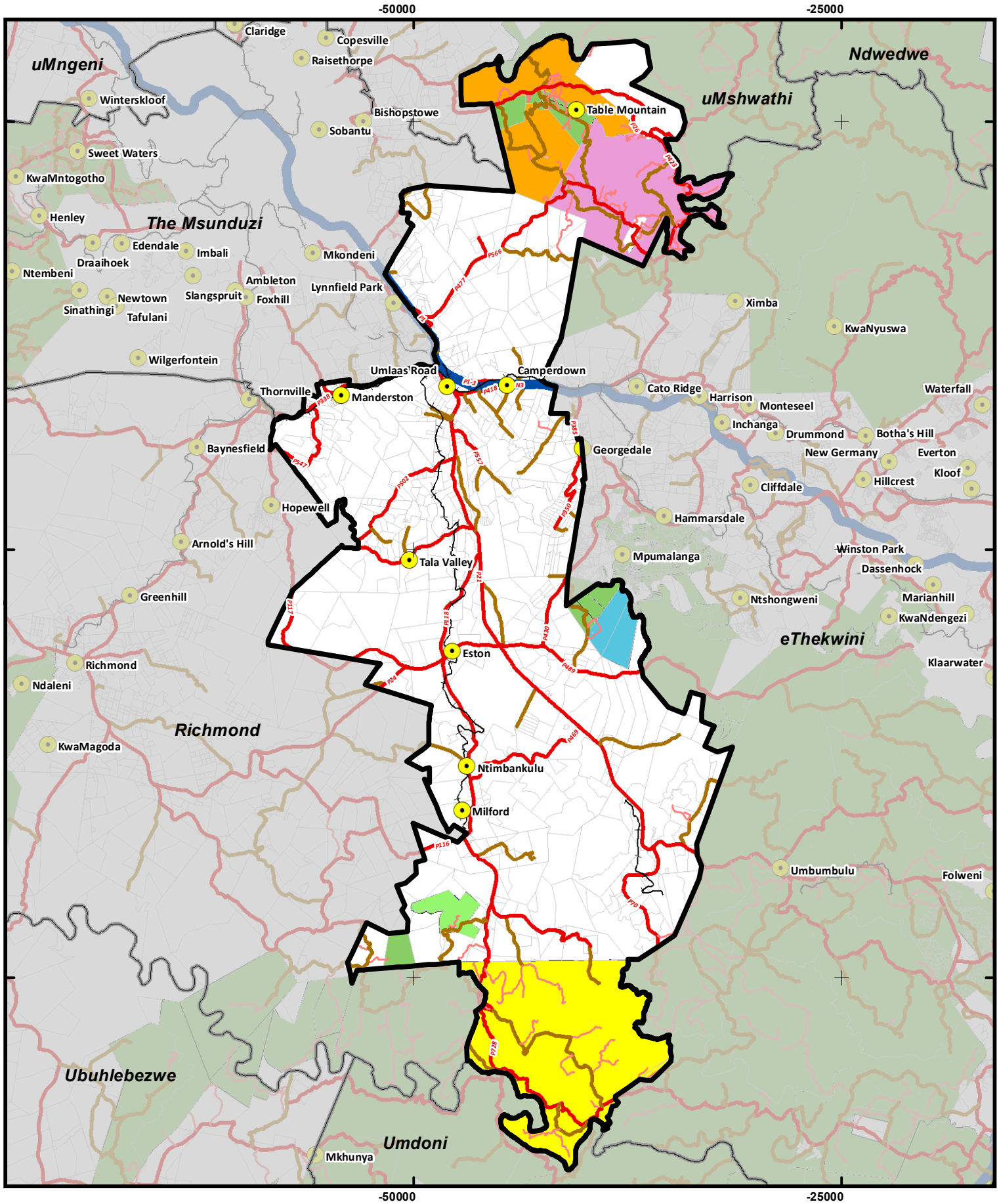
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Wards (2016)

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- EMBO-TIMUNI
- ISIMAHLA
- MANYAVU
- MAPUMULO
- UMACALA-GWALA
- ITB Land

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO
Traditional Authorities: UMDM

N

Datum: WGS84

Date: April 2018

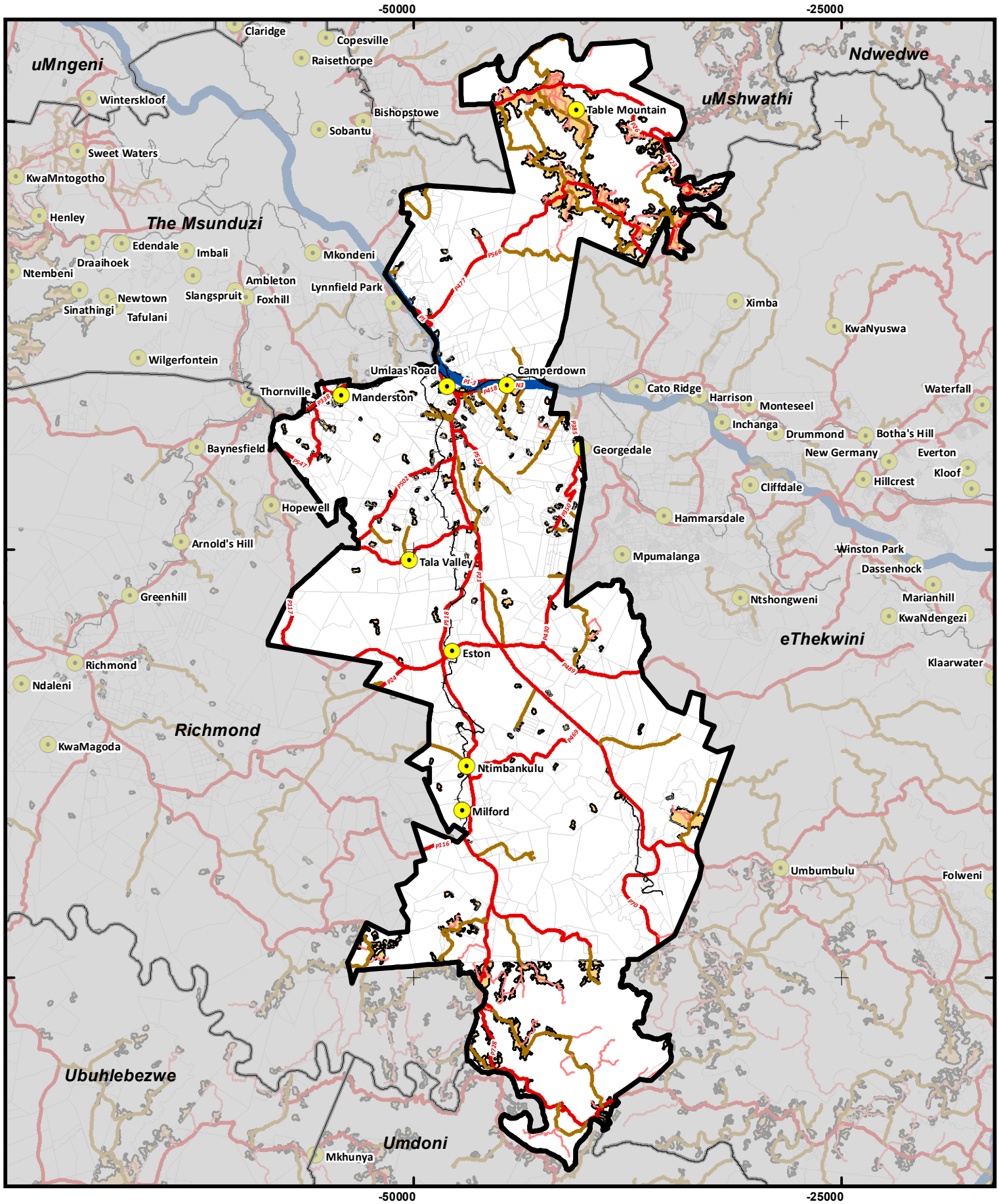
0 1,5 3 6

Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Traditional Authorities

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Settlements

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Setlements: DRDLR
Cadastral: KZN SGO

Datum: WGS84

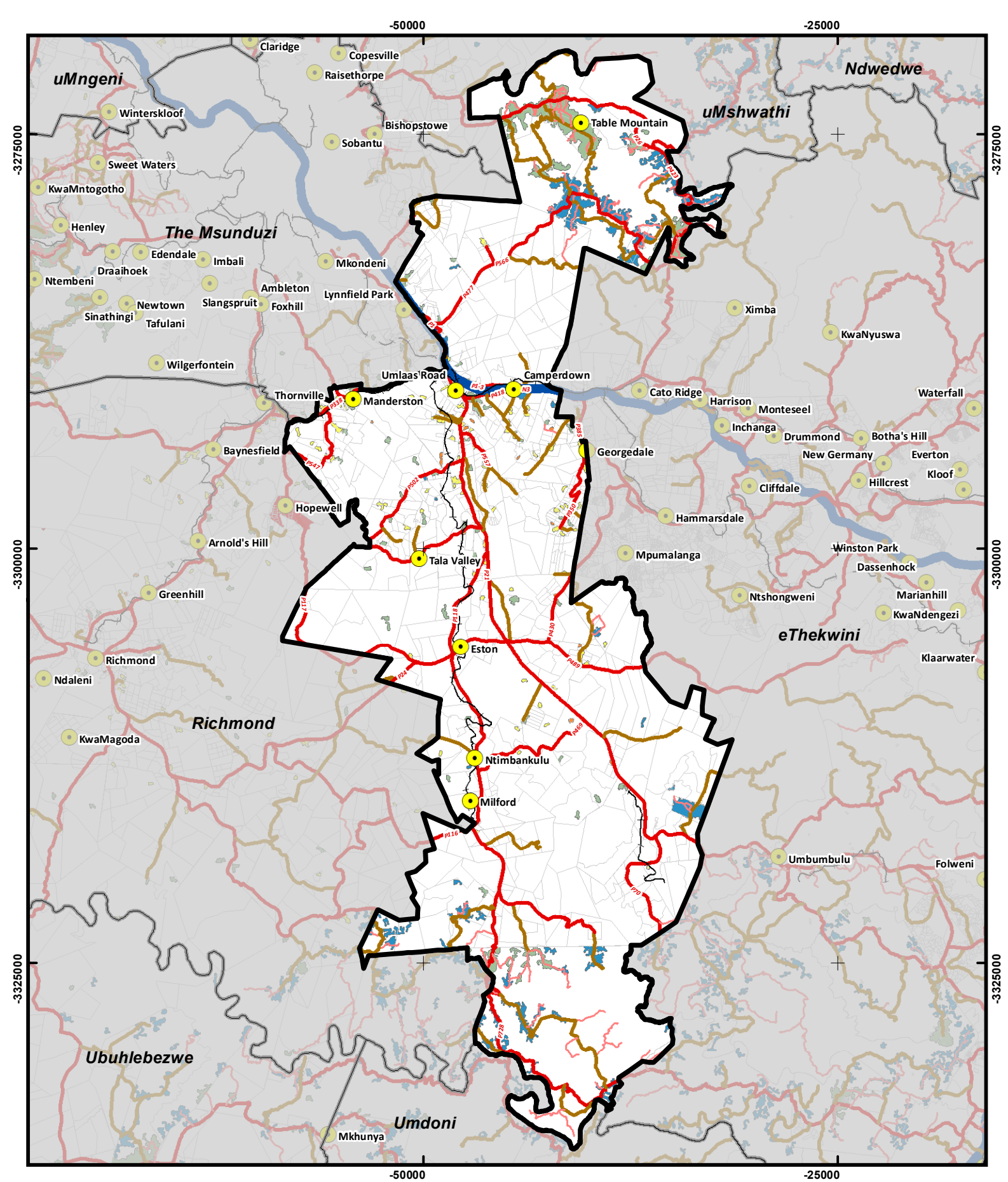
Date: April 2018

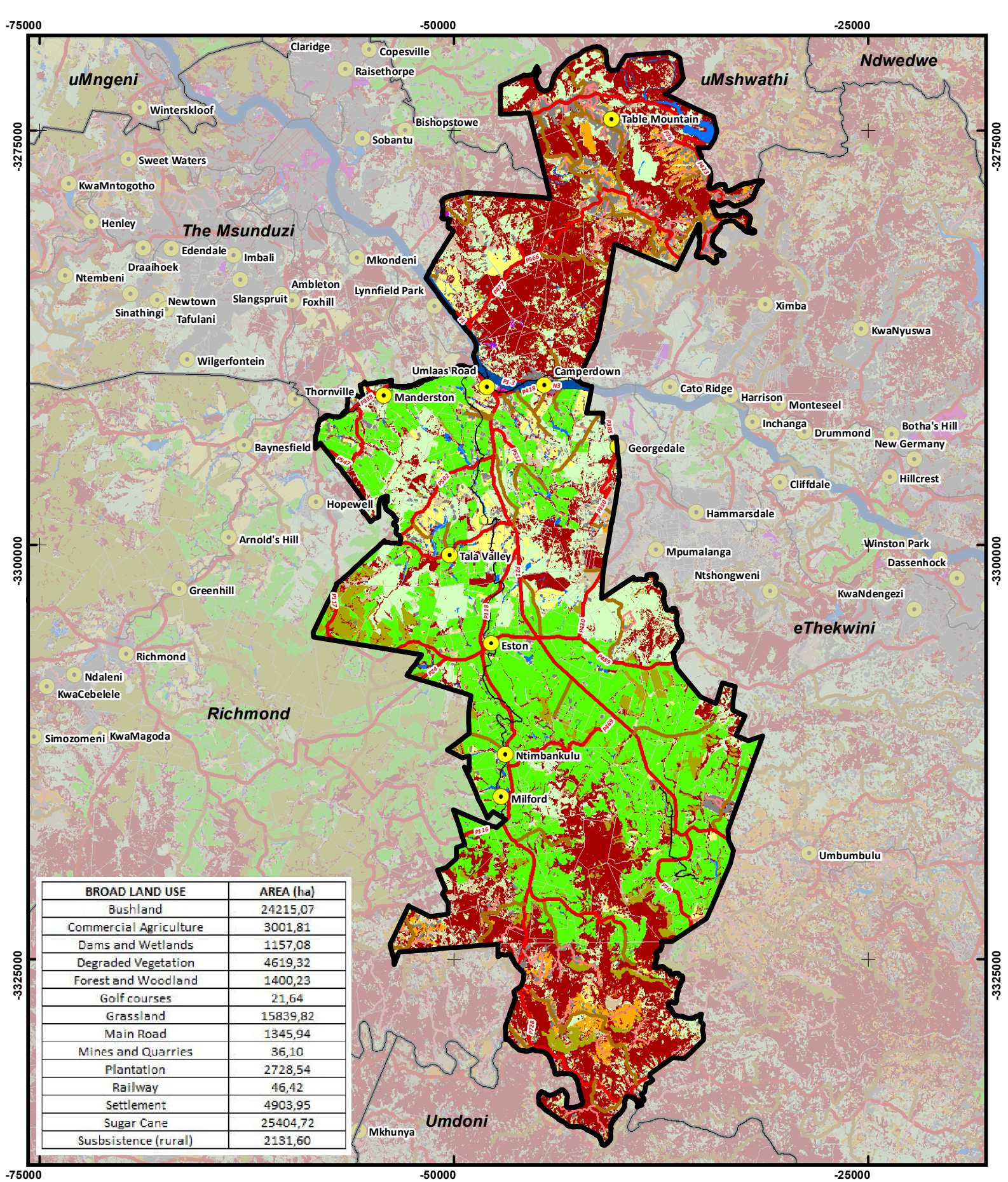
0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Settlements

MKHAMBATHINI Municipality


-50000
-25000
-3275000
-3300000
-3325000
uMngeni
Ndwedwe
uMshwathi
The Msunduzi
Richmond
eThekwini
Ubuhlebezwe
Umdoni
Claridge
Copesville
Raisethorpe
Wintersloof
Bishopstowe
Sobantu
Table Mountain
Sweet Waters
KwaMntogotho
Henley
Edendale
Imbali
Draaihoek
Ntembeni
Mkondeni
Ambleton
Slangspruit
Foxhill
Lynnfield Park
Newtown
Sinathingi
Tafulani
Ximba
KwaNyuswa
Wilgerfontein
Umlaas Road
Camperdown
Thornville
Manderston
Cato Ridge
Harrison
Monteseel
Waterfall
Inchanga
Drummond
Botha's Hill
Baynesfield
Georgedale
New Germany
Everton
Kloof
Hillcrest
Cliffdale
Hopewell
Hammarsdale
Arnold's Hill
Tala Valley
Mpumalanga
Winston Park
Dassenhock
Greenhill
Ntshongweni
Marianhill
KwaNdengezi
Richmond
Ndaleni
Eston
Klaarwater
KwaMagoda
Ntimbankulu
Milford
Umbumbulu
Folweni
Mkhunya
P477
P566
P418
P427
P538
P547
P502
P517
P350
P217
P218
P430
P459
P24
P469
P116
P70
P128
N3
R103
R56
R603
R612
R614
R617
R622
R623
R624
R625
R626
R627
R628
R629
R630
R631
R632
R633
R634
R635
R636
R637
R638
R639
R640
R641
R642
R643
R644
R645
R646
R647
R648
R649
R650
R651
R652
R653
R654
R655
R656
R657
R658
R659
R660
R661



BROAD LAND USE	AREA (ha)
Bushland	24215,07
Commercial Agriculture	3001,81
Dams and Wetlands	1157,08
Degraded Vegetation	4619,32
Forest and Woodland	1400,23
Golf courses	21,64
Grassland	15839,82
Main Road	1345,94
Mines and Quarries	36,10
Plantation	2728,54
Railway	46,42
Settlement	4903,95
Sugar Cane	25404,72
Susbsistence (rural)	2131,60

Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Airfield
- Bushland
- Commercial Agriculture
- Dams and Wetlands
- Degraded Vegetation
- Forest and Woodland
- Golf courses
- Grassland
- Main Road
- Mines and Quarries
- Plantation
- Railway
- Settlement
- Sugar Cane
- Susbsistence (rural)

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Broad Land Use: Ezemvelo KZN Wildlife (2017)
Cadastral: KZN SGO

Datum: WGS84

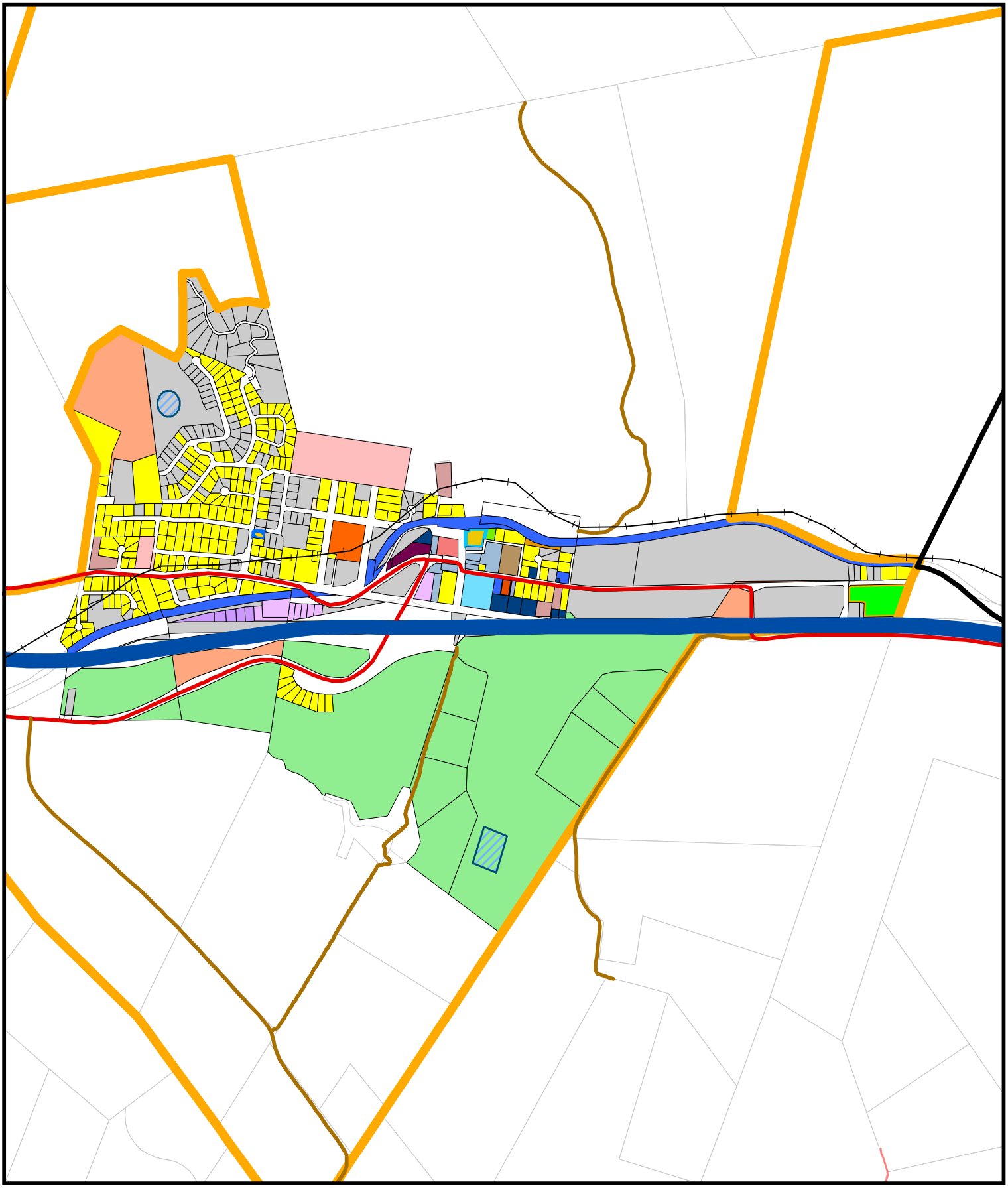
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Broad Land Use Pattern

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Camperdown/Umlaas Urban Edge
- Sewerage Works

Camperdown Landuse

- Agricultural Building
- Agricultural Land
- Agriculture
- Commercial
- Dwelling House
- Educational Building
- Funeral Parlor
- Garage
- Hotel
- Industrial Building
- Informal Dwelling House
- Medium Density Housing
- Office
- Office Building
- Offices
- Place of Worship
- Police Station / Magistrate's
- Public Office
- Railway Line
- Recreational Building
- Road
- School
- Service Industrial Building
- Shop
- Shopping Centre
- Utility
- Vacant
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Land Use: Black Balance
Cadastral: KZN SGO

N

Datum: WGS84

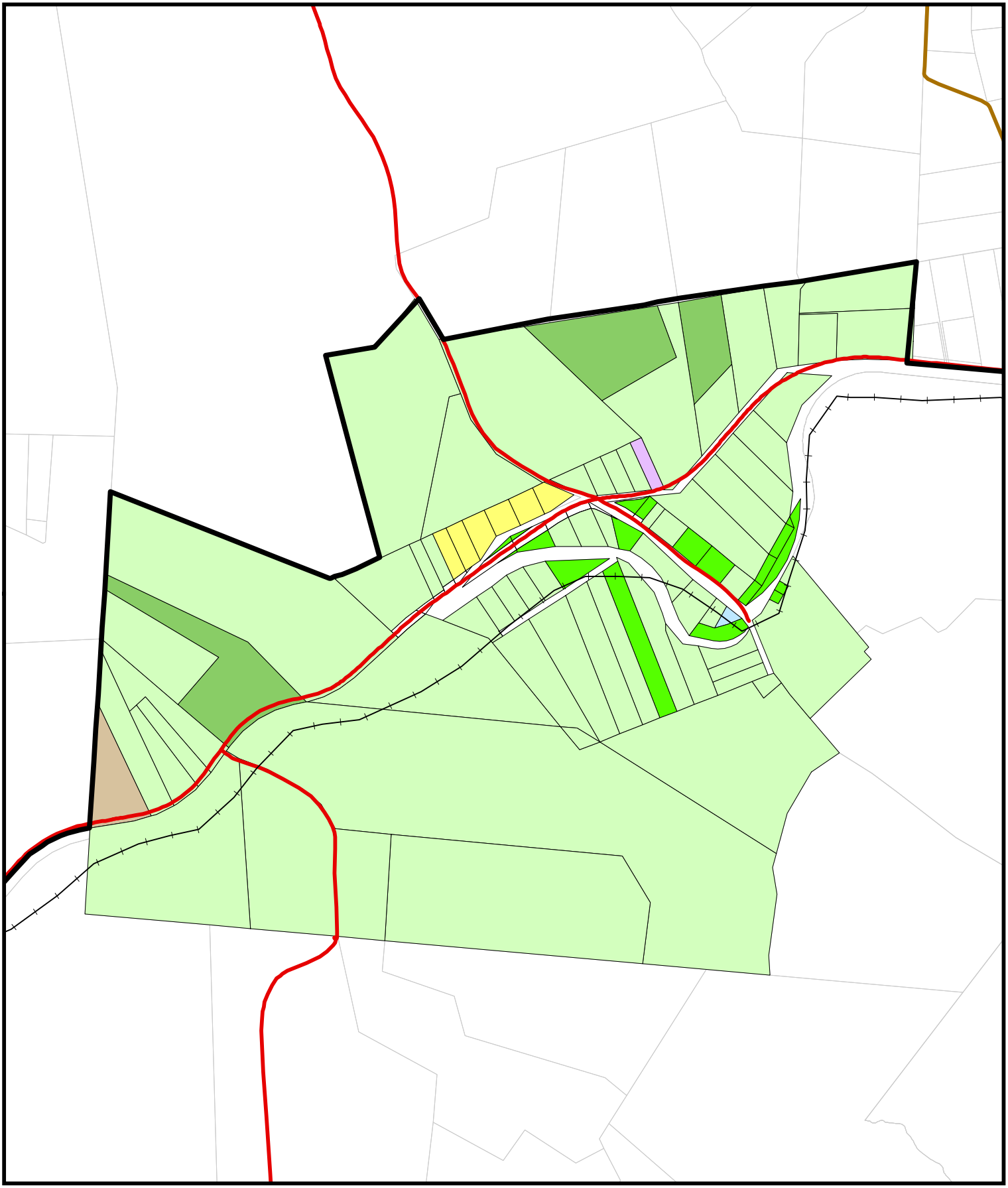
Date: April 2018

0 0,1 0,2 0,4
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

CAMPERDOWN Land Use

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Railway Lines
- Provincial Road
- District Road
- Agricultural Industry
- Agriculture
- Hotel
- Mixed Use
- Residential
- Road
- Small Holding
- Vacant
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Land Use: Black Balance
Cadastral: KZN SGO

N

Datum: WGS84

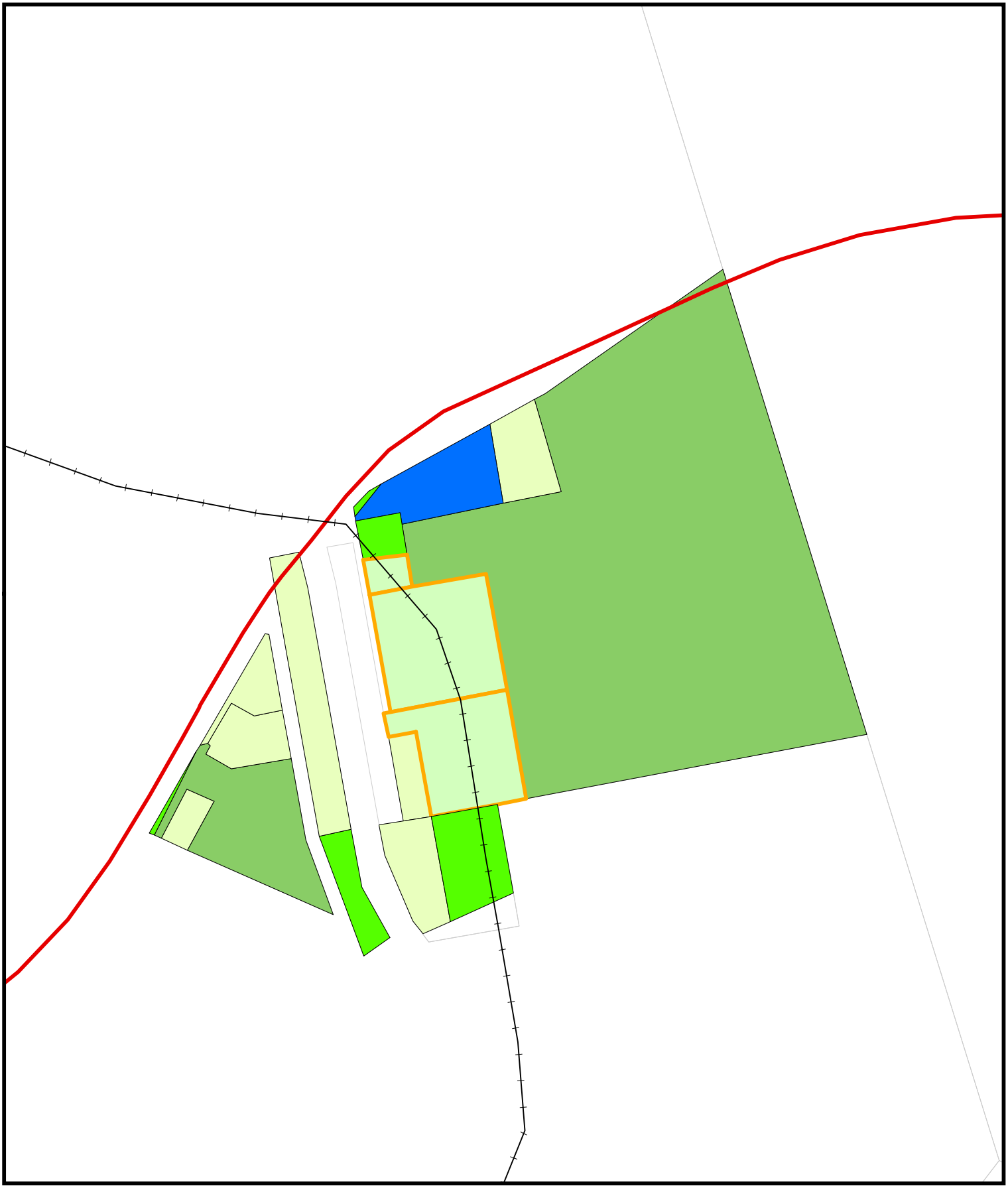
Date: April 2018

0 0,075 0,15 0,3
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

MANDERSTON
Land Use

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Railway Lines
- Provincial Road
- Agriculture
- Commercial Building
- Education
- Small Holding
- Vacant
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Land Use: Black Balance
Cadastral: KZN SGO

N

Datum: WGS84

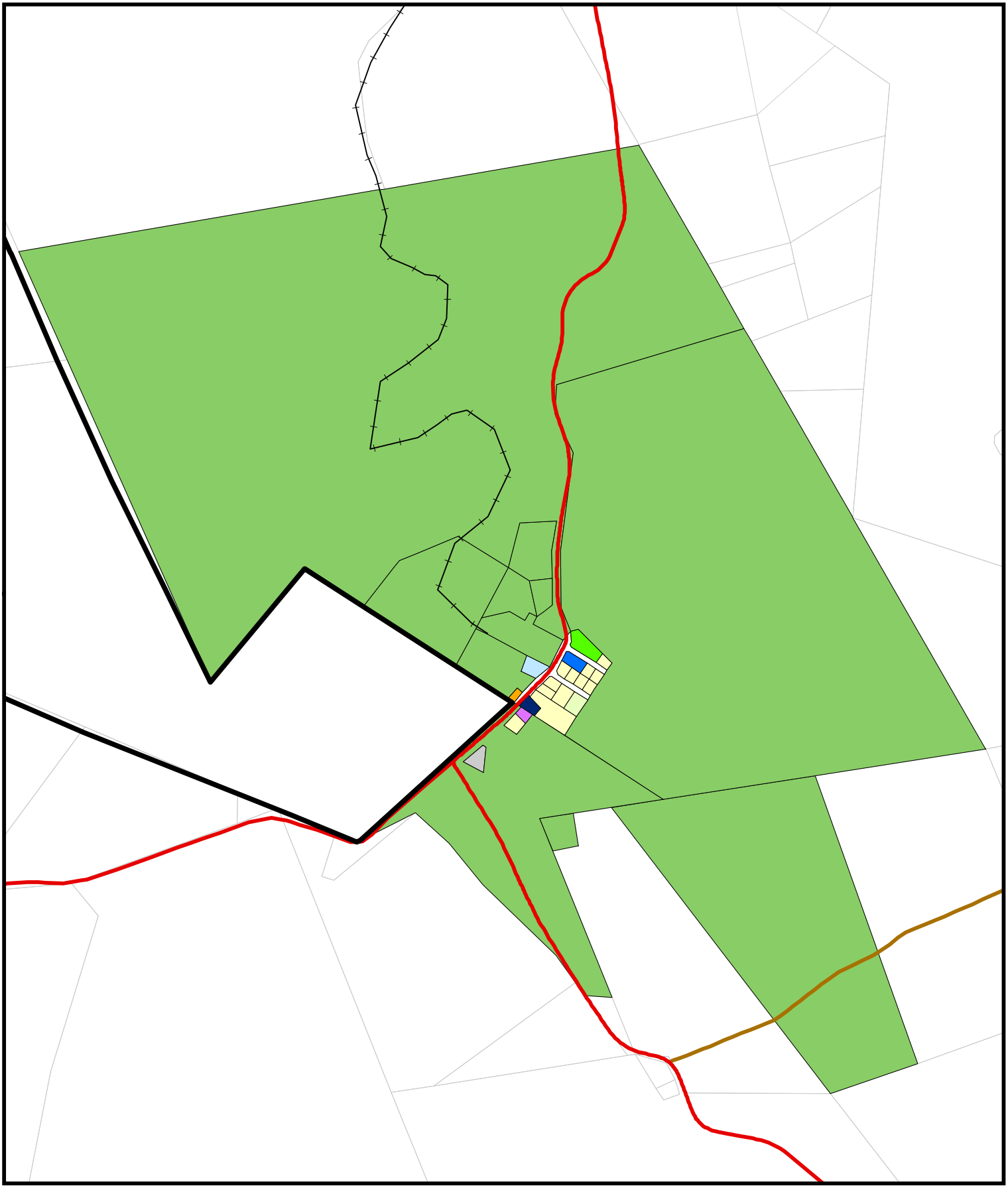
Date: April 2018

0 0,0275 0,055 0,11
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

ESTON
Land Use

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Railway Lines
- Provincial Road
- District Road
- Agriculture
- Commercial
- Filling Station
- Office
- Police Station
- Private Recreational Facility
- Residential
- Road
- Service Industry
- Treatment Works
- Vacant
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Land Use: Black Balance
Cadastral: KZN SGO

N

Datum: WGS84

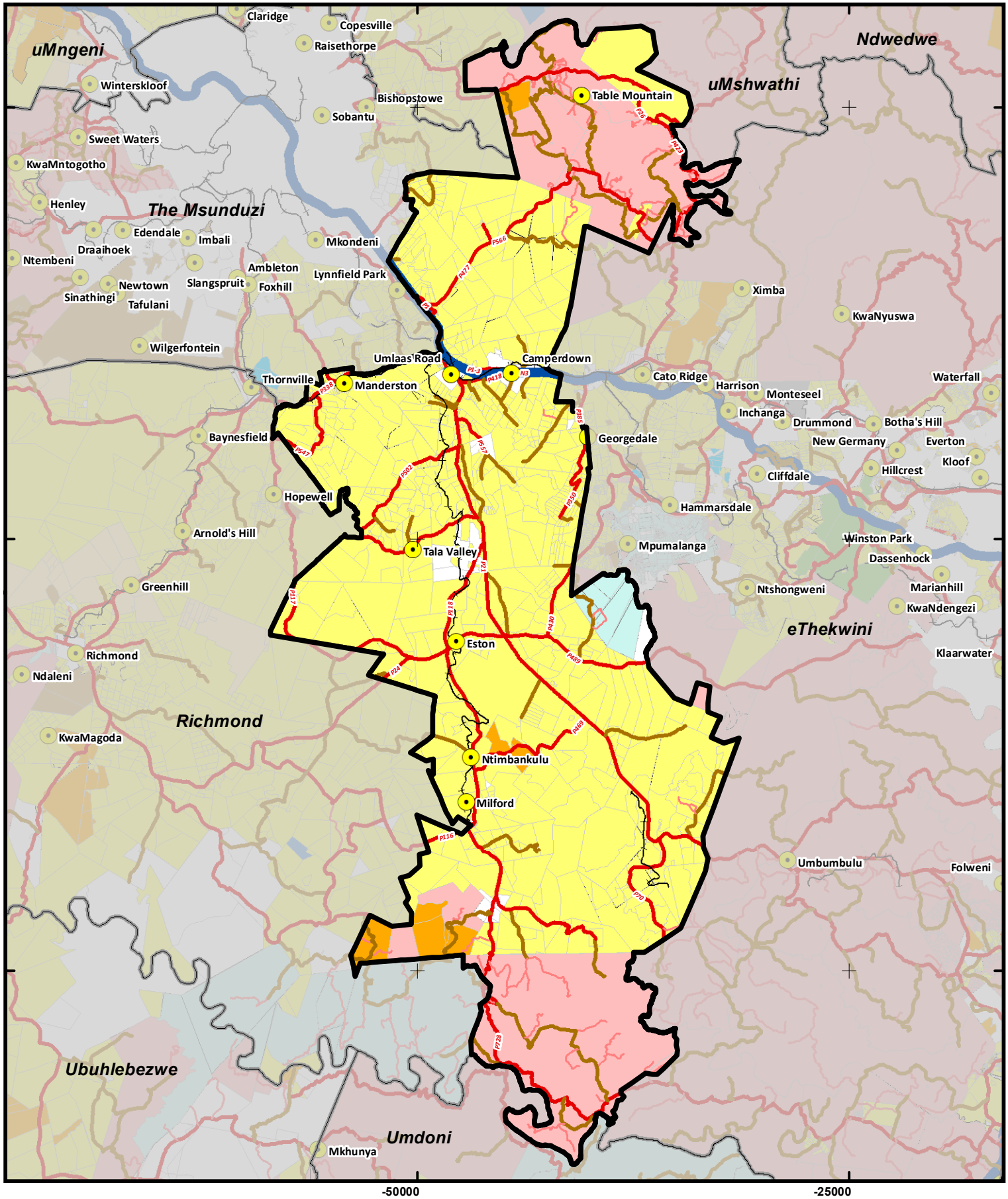
Date: April 2018

0 0,075 0,15 0,3
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

MID ILLOVO Land Use

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Eskom
- Government
- Ingonyama Trust Board
- Mondi
- Municipal
- Private
- Sanral
- Sappi
- Telkom
- Tongaat Hulett
- Transnet
- ITB Land

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Ownership: KZN Deeds
Cadastral: KZN SGO

N

Datum: WGS84

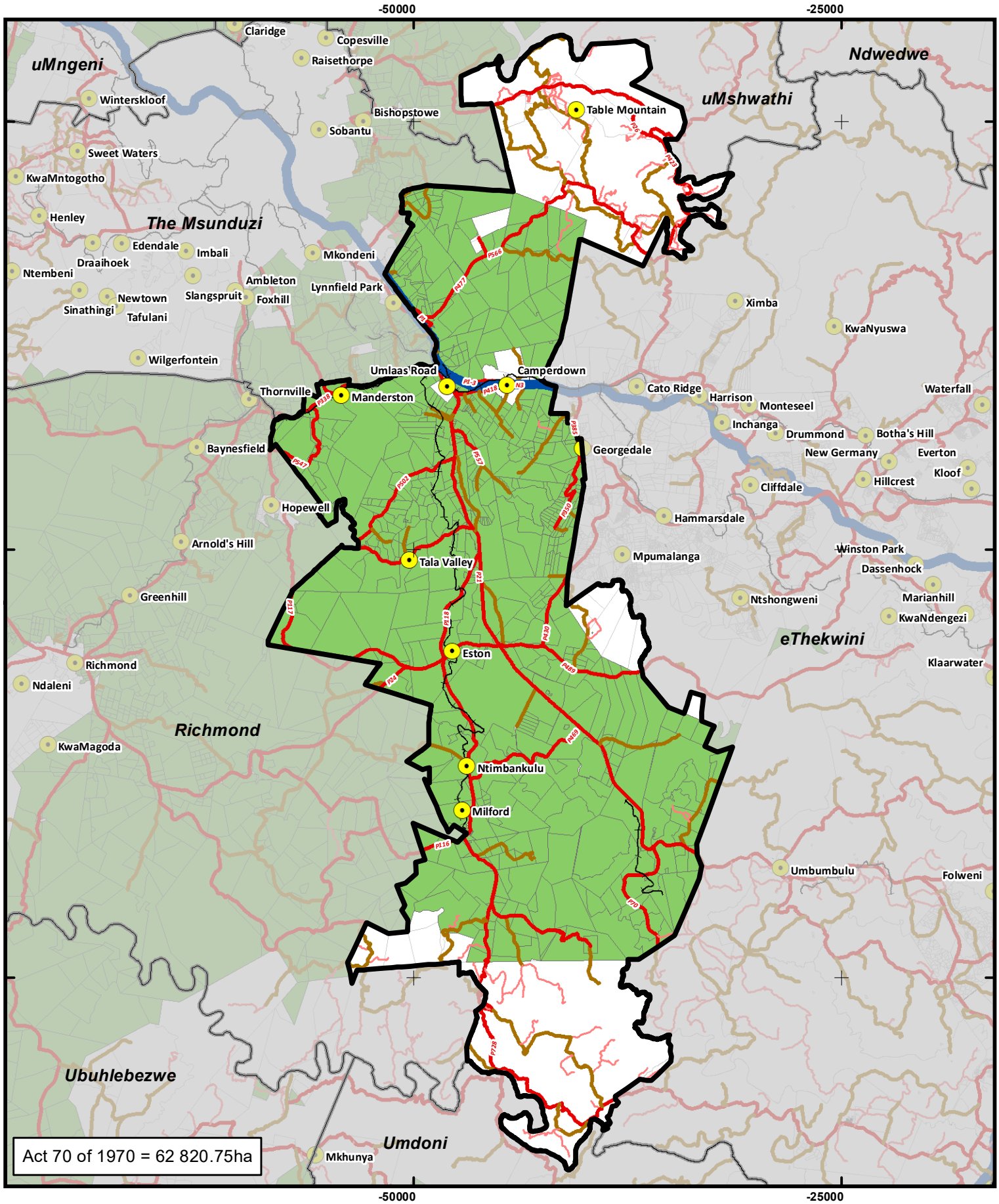
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Ownership

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Included
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Agriculture: KZNDARD
Cadastral: KZN SGO

Datum: WGS84

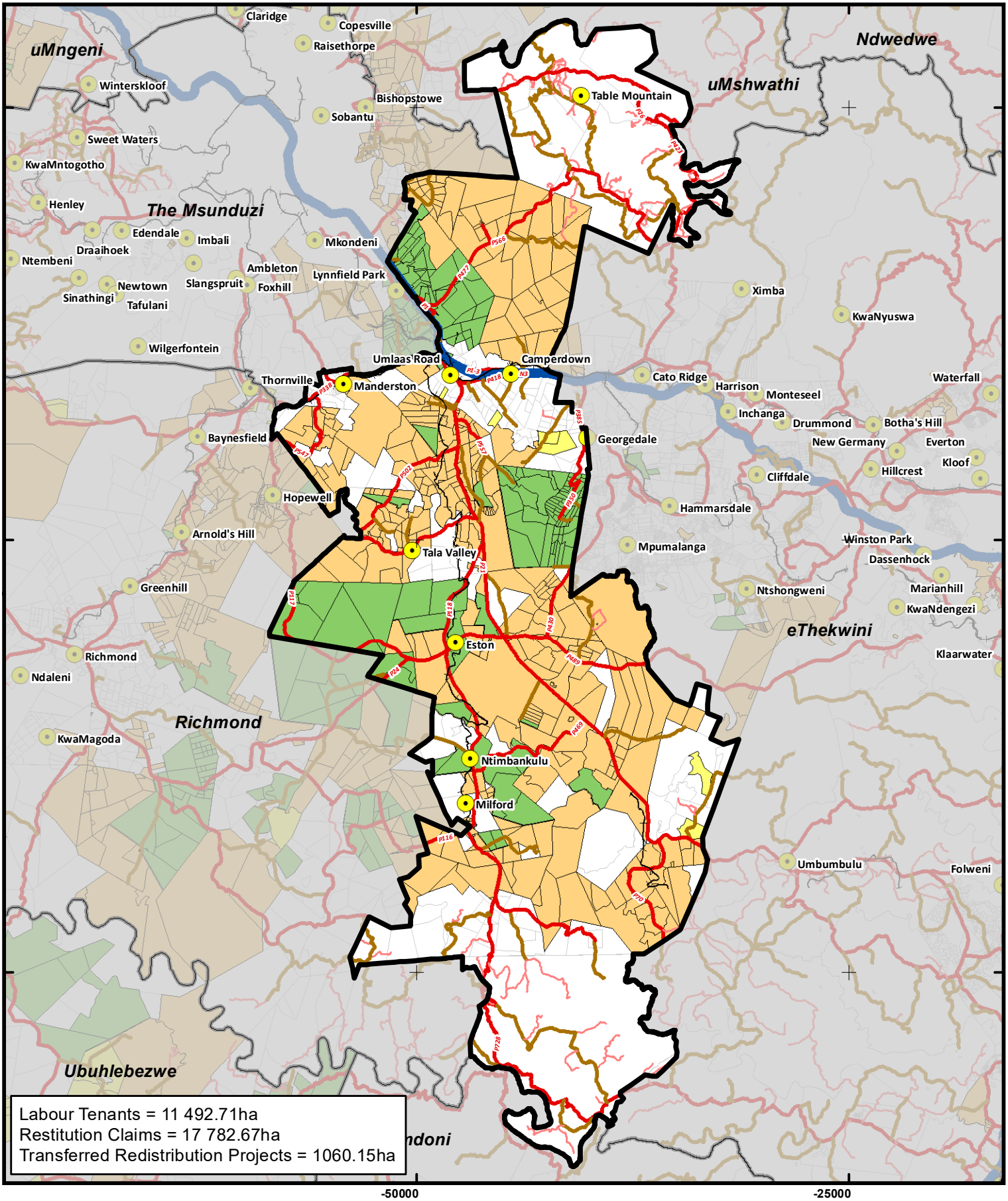
Date: April 2018

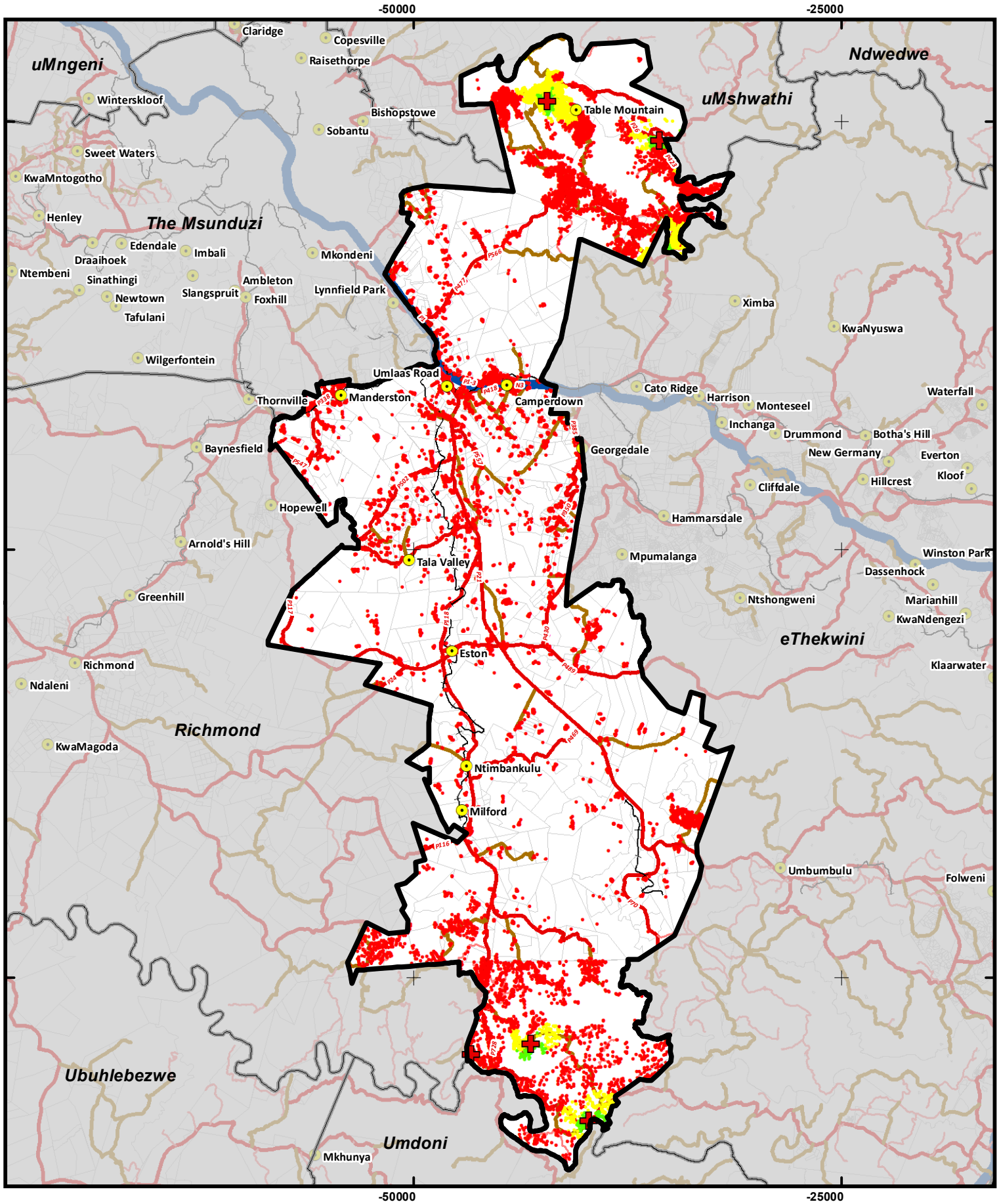
0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Agricultural Land Act 70 of 1970

MKHAMBATHINI Municipality


-50000
-25000
-3275000
-3300000
-3325000
uMngeni
Ndwedwe
uMshwathi
The Msunduzi
Richmond
Ubuhlebezwe
eThekwini
Claridge
Copesville
Raisethorpe
Wintersloof
Bishopstowe
Sobantu
Table Mountain
Sweet Waters
KwaMntogotho
Henley
Edendale
Imbali
Mkondeni
Draaihoek
Ntembeni
Ambleton
Lynnfield Park
Slangspruit
Foxhill
Newtown
Sinathingi
Tafulani
Ximba
KwaNyuswa
Wilgerfontein
Umlaas Road
Camperdown
Thornville
Manderston
Cato Ridge
Harrison
Monteseel
Waterfall
Inchanga
Drummond
Botha's Hill
Baynesfield
Georgedale
New Germany
Everton
Kloof
Hillcrest
Cliffdale
Hopewell
Hammarsdale
Arnold's Hill
Tala Valley
Mpumalanga
Winston Park
Dassenhock
Greenhill
Ntshongweni
Marianhill
KwaNdengezi
Eston
Richmond
Klaarwater
Ndaleni
KwaMagoda
Ntimbankulu
Milford
Umbumbulu
Folweni
Labour Tenants = 11 492.71ha
Restitution Claims = 17 782.67ha
Transferred Redistribution Projects = 1060.15ha
Legend
Mkhambathini Boundary
Local Municipalities
Places
Railway Lines
National Road
Provincial Road
District Road
Local Road
Labour Tenants
Restitution Claims
Transferred Redistribution Projects
Cadastral
DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Land Reform: DRDLR
Cadastral: KZN SGO
SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018
Land Reform
N
Datum: WGS84
Date: April 2018
0 1,5 3 6
Kilometers
MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Health
- Local Municipalities
- Places

Clinic Access

- < 1km
- 1 - 2.5km
- > 2.5km

- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Social Facilities: Cogta, DOE, DOH
Cadastral: KZN SGO

N

Datum: WGS84

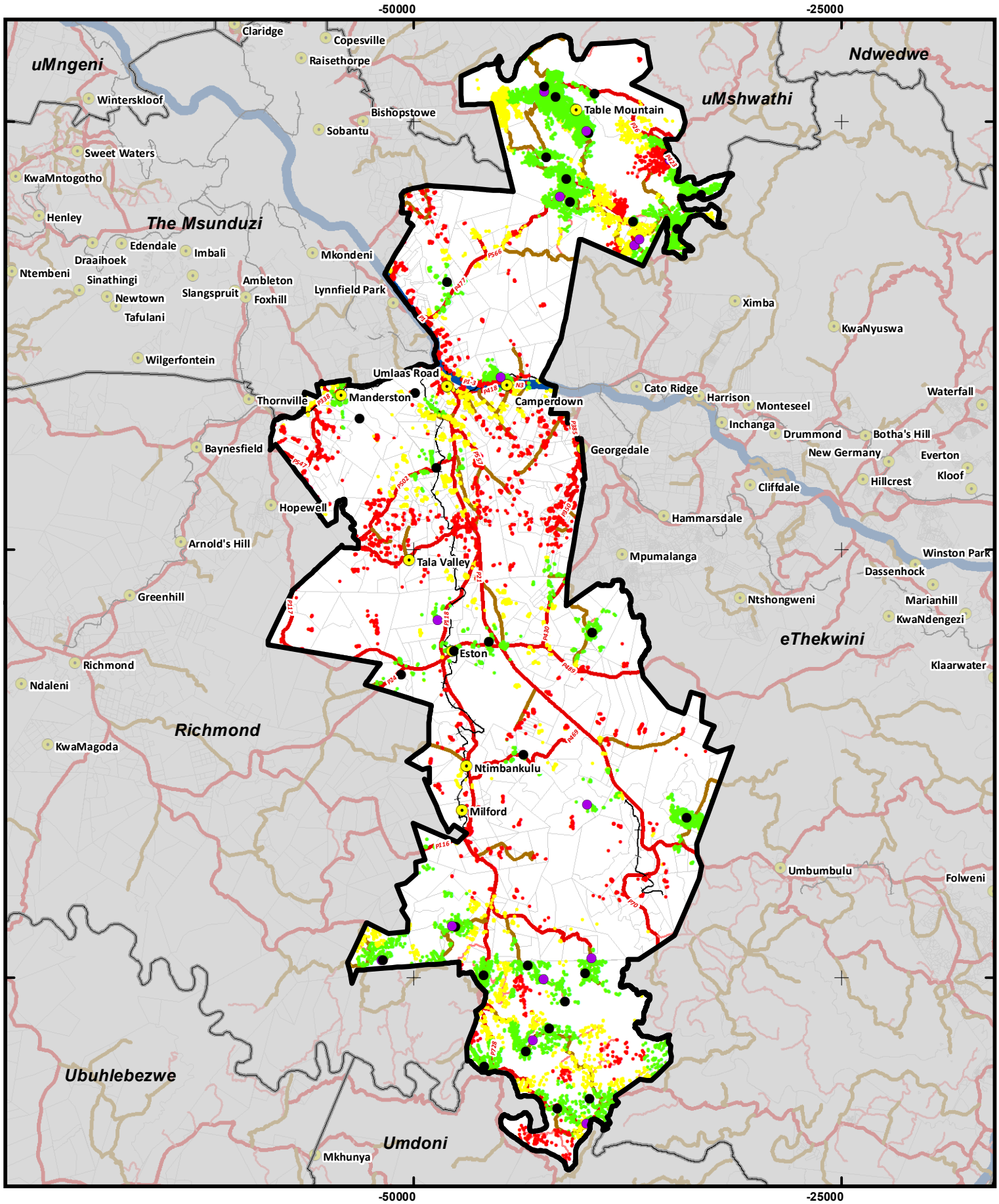
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Clinics

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Primary Schools
- Secondary Schools
- Local Municipalities
- Places

Primary School Access

- < 2.5 km
- 2.5 - 5km
- > 5km

- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Social Facilities: Cogta, DOE, DOH
Cadastral: KZN SGO

N

Datum: WGS84

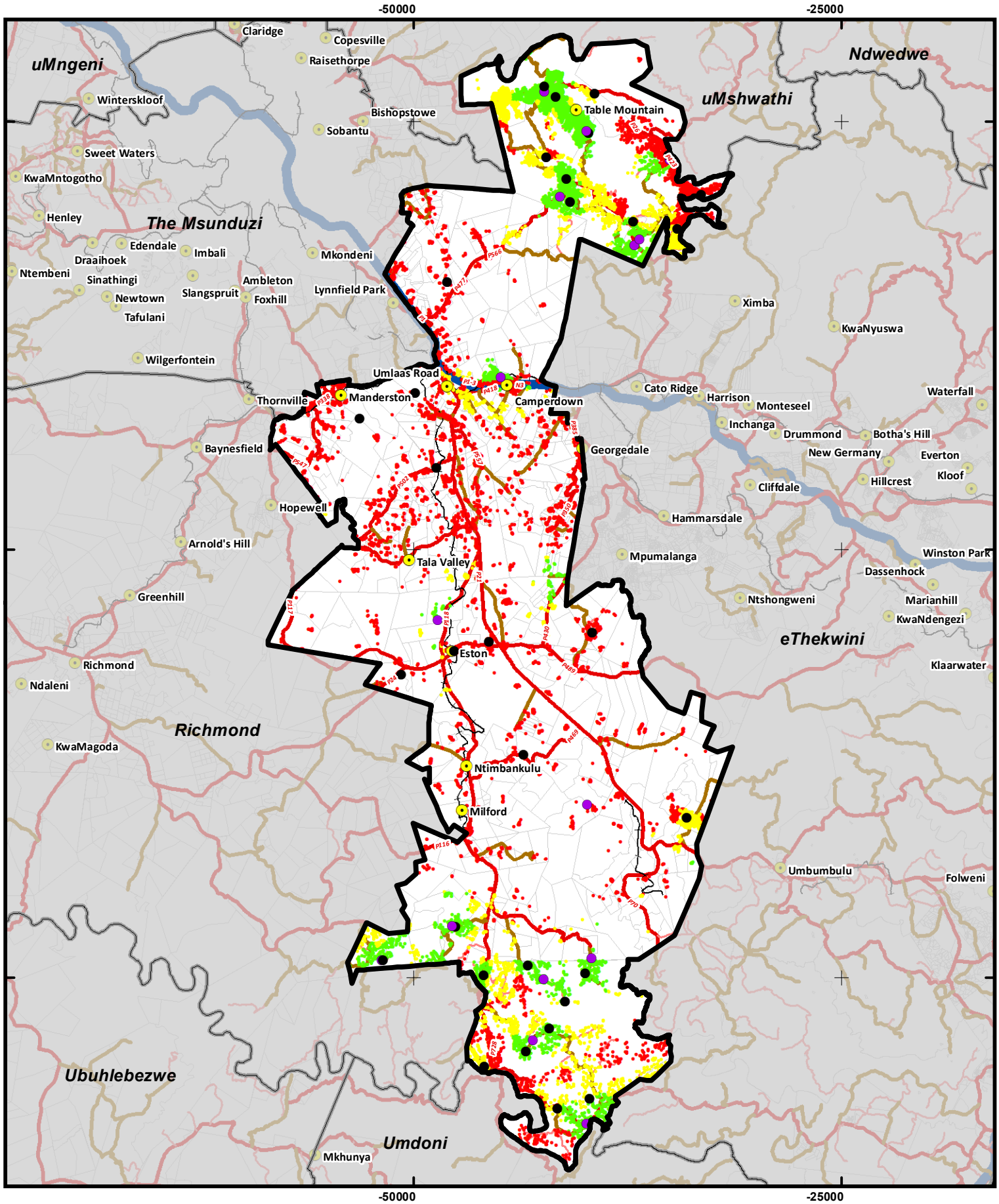
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Primary Schools

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Primary Schools
- Secondary Schools
- Local Municipalities
- Places

Secondary School Access

- < 2.5km
- 2.5 - 5km
- > 5km

- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Social Facilities: Cogta, DOE, DOH
Cadastral: KZN SGO

N

Datum: WGS84

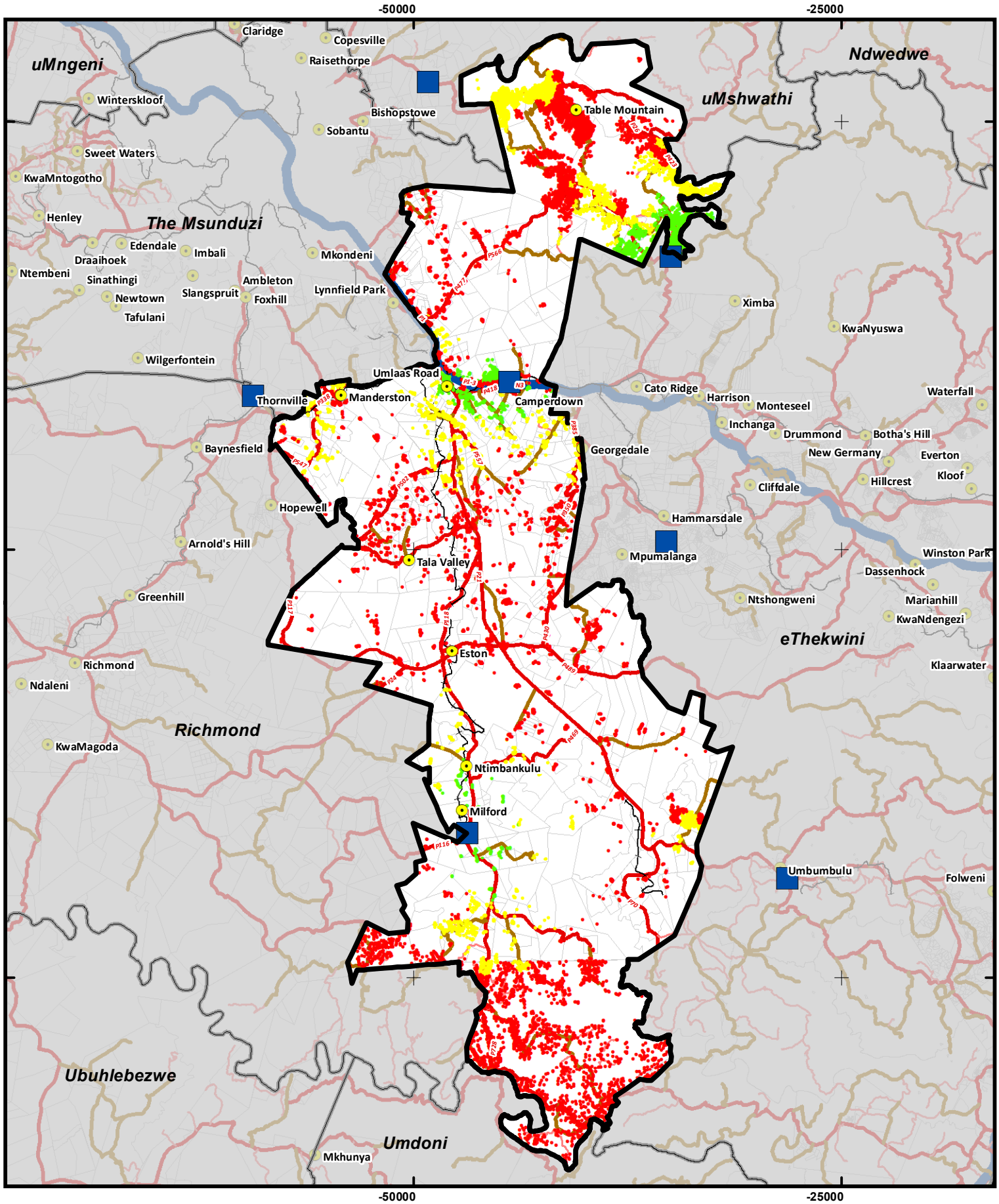
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Secondary Schools

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Police Stations
- Local Municipalities
- Places

Police Access

- < 5km
- 5 - 10km
- > 10km

- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Social Facilities: Cogta, DOE, DOH
Cadastral: KZN SGO

N

Datum: WGS84

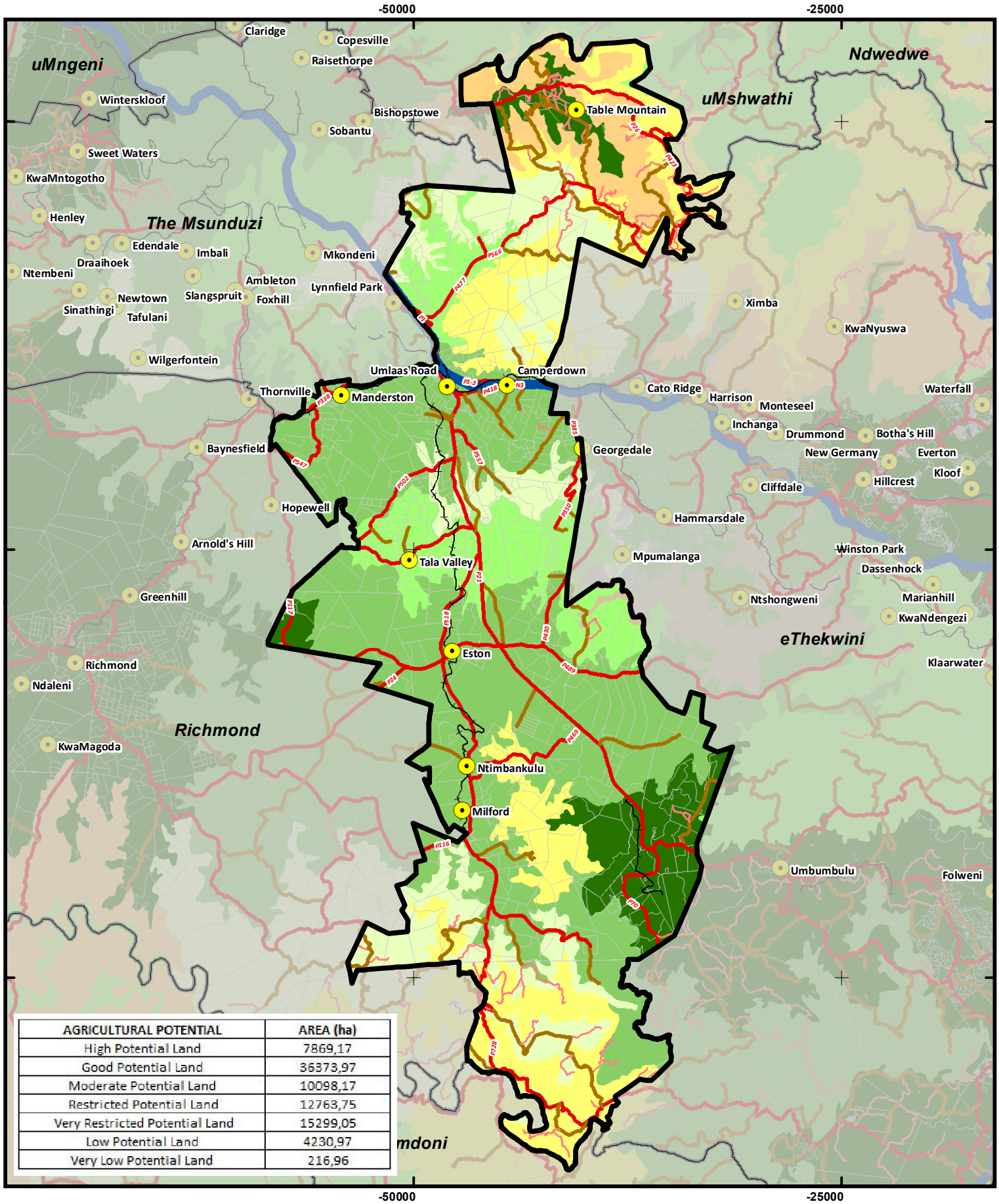
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Police Stations

MKHAMBATHINI Municipality
For the community



AGRICULTURAL POTENTIAL	AREA (ha)
High Potential Land	7869,17
Good Potential Land	36373,97
Moderate Potential Land	10098,17
Restricted Potential Land	12763,75
Very Restricted Potential Land	15299,05
Low Potential Land	4230,97
Very Low Potential Land	216,96

Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- High Potential
- Good Potential
- Moderate Potential
- Restricted Potential
- Very Restricted Potential
- Low Potential
- Very Low Potential
- Dams

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Agriculture: KZNDARD
Cadastral: KZN SGO

N

Datum: WGS84

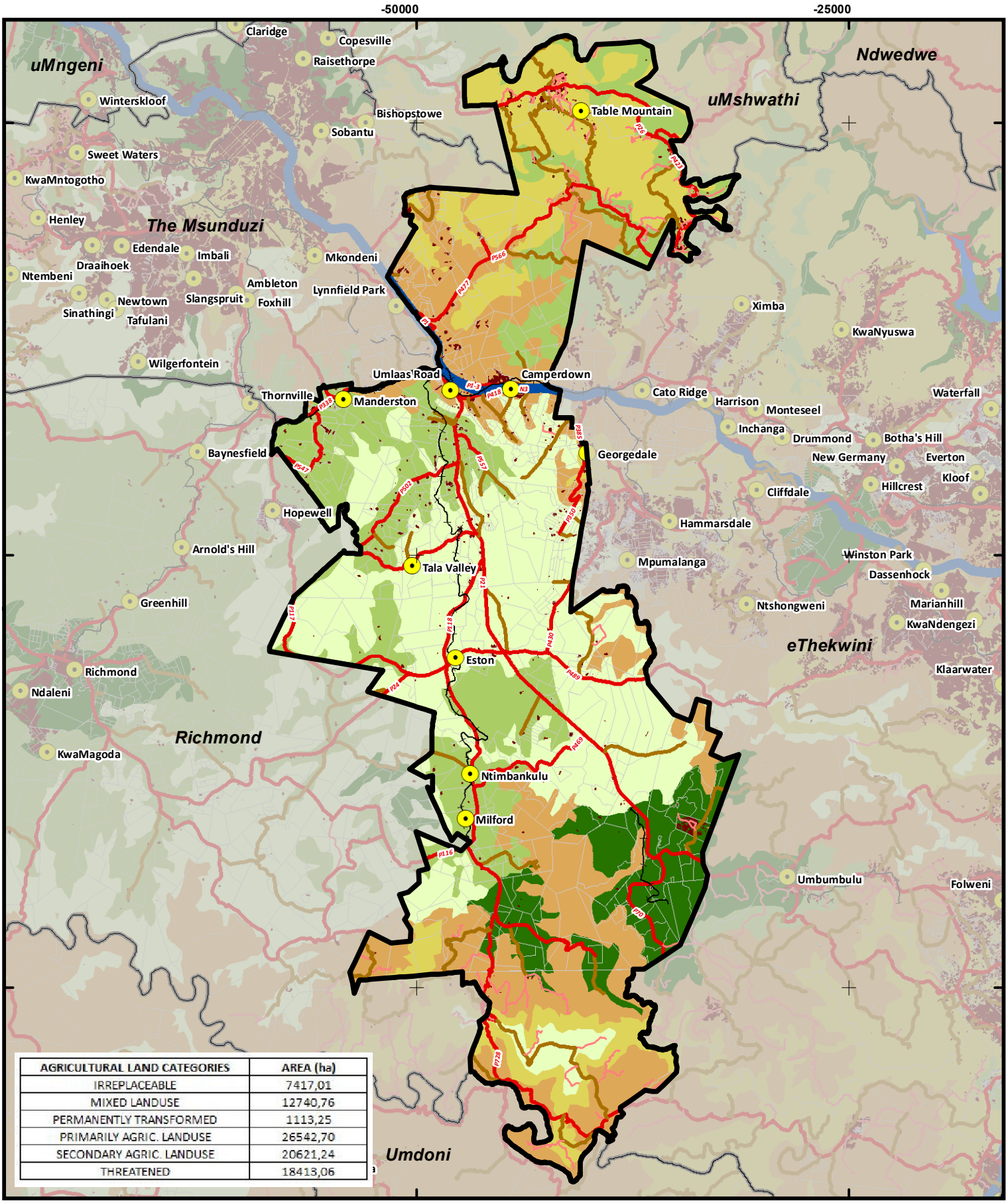
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Agricultural Land Potential

MKHAMBATHINI Municipality



AGRICULTURAL LAND CATEGORIES	AREA (ha)
IRREPLACEABLE	7417,01
MIXED LANDUSE	12740,76
PERMANENTLY TRANSFORMED	1113,25
PRIMARILY AGRIC. LANDUSE	26542,70
SECONDARY AGRIC. LANDUSE	20621,24
THREATENED	18413,06

Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- A: IRREPLACEABLE
- B: THREATENED
- C: PRIMARY AGRIC. LAND
- D: SECONDARY AGRIC. LAND
- E: MIXED AGRIC. LAND
- PERMANENTLY TRANSFORMED
- PROCLAIMED RESERVES
- WATERBODIES

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Agriculture: KZNDARD
Cadastral: KZN SGO

N

Datum: WGS84

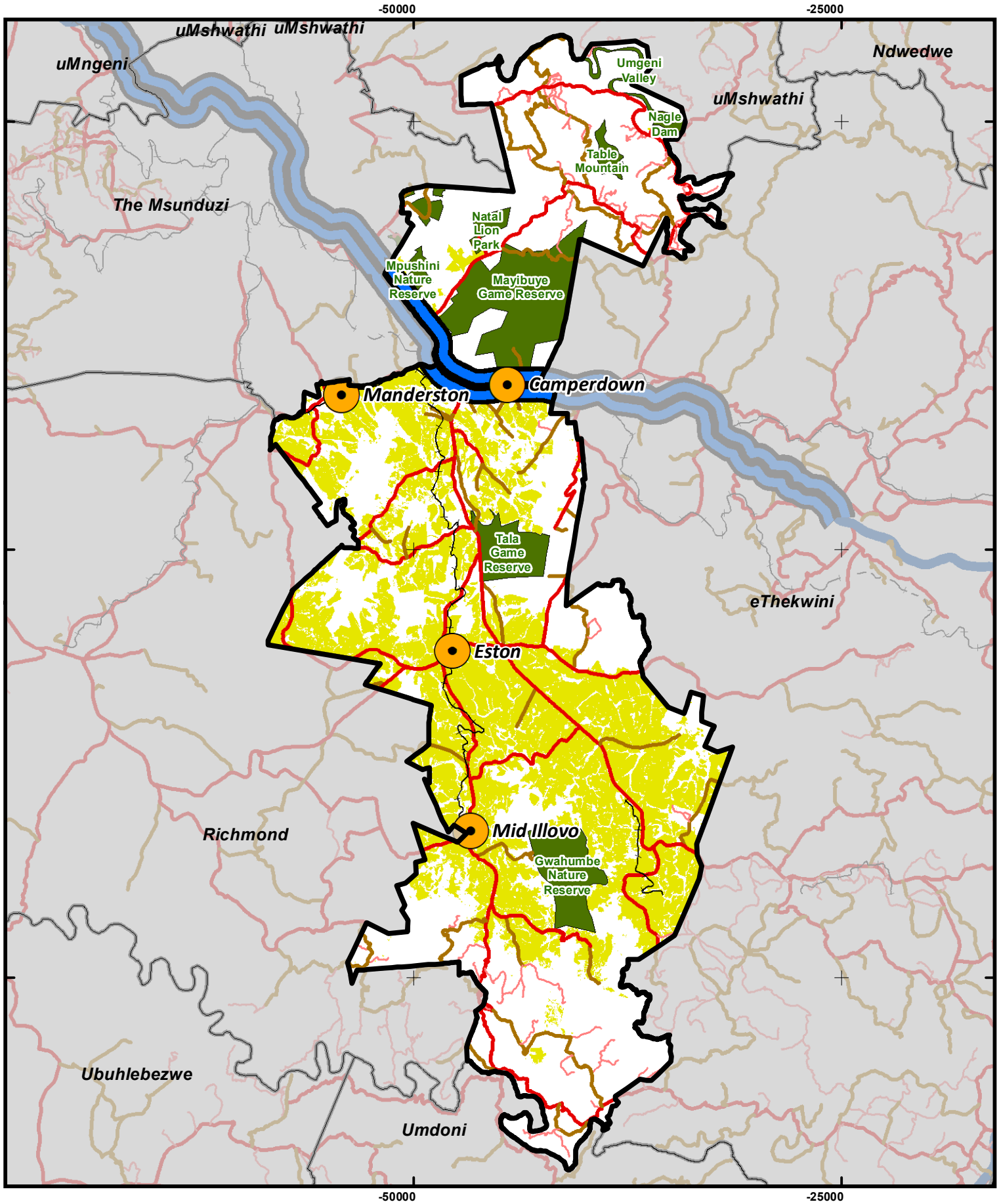
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Agricultural Land Categories

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Service Nodes
- N3 Corridor
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Nature Based Tourism
- Commercial Agriculture

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Agric Land Cover: DAG
Environmental Data: KZN Wildlife2016
Cadastral: KZN SGO

Datum: WGS84

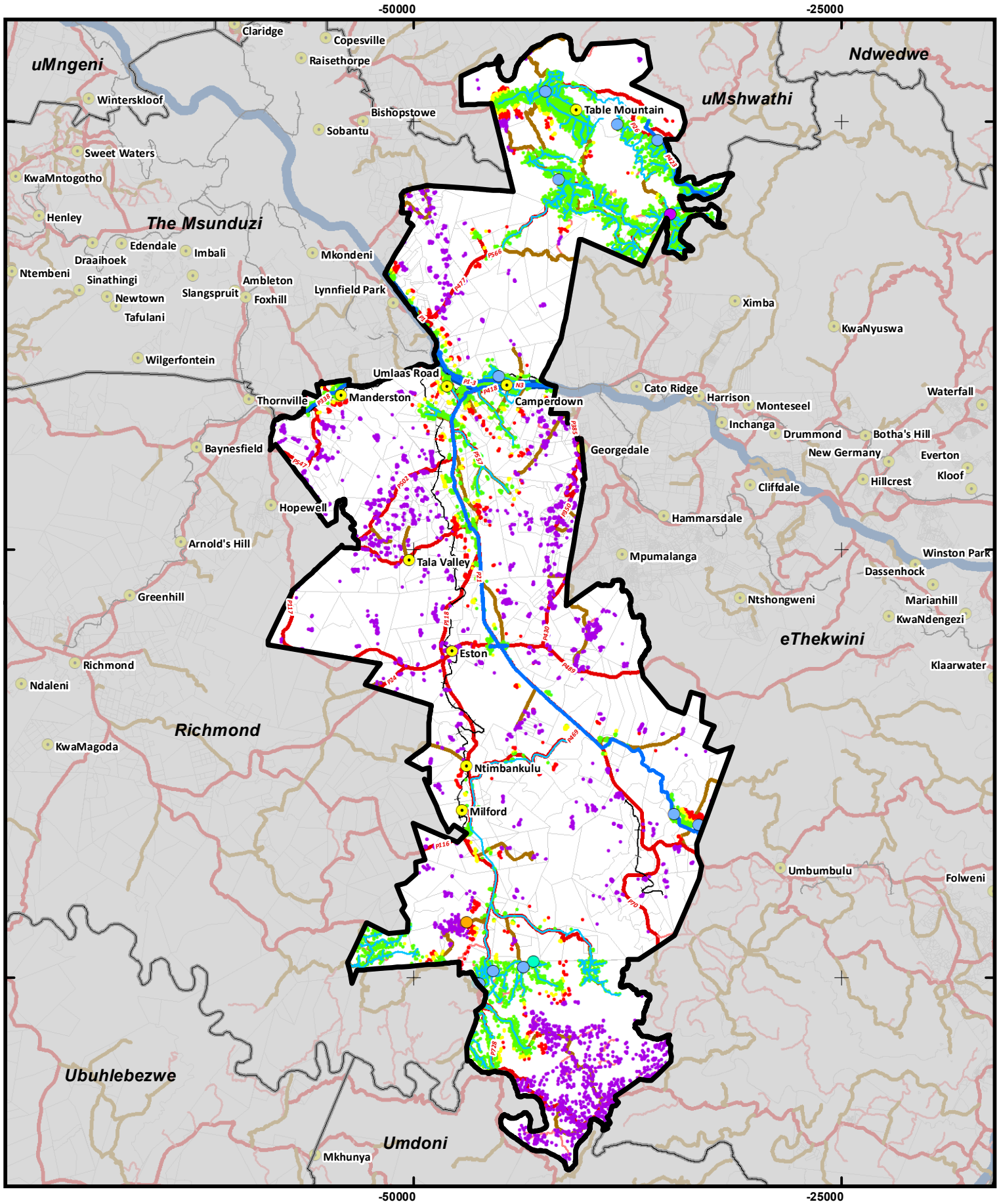
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Economic Activities

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Borehole
- Pump Station
- Reservoir
- WTW
- Umgeni Bulk Pipeline
- Water_Reticulation

Water Access

- within 400m
- within 600m
- within 1000m
- > 1000m

- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Water: Umgeni/UMDM
Cadastral: KZN SGO

N

Datum: WGS84

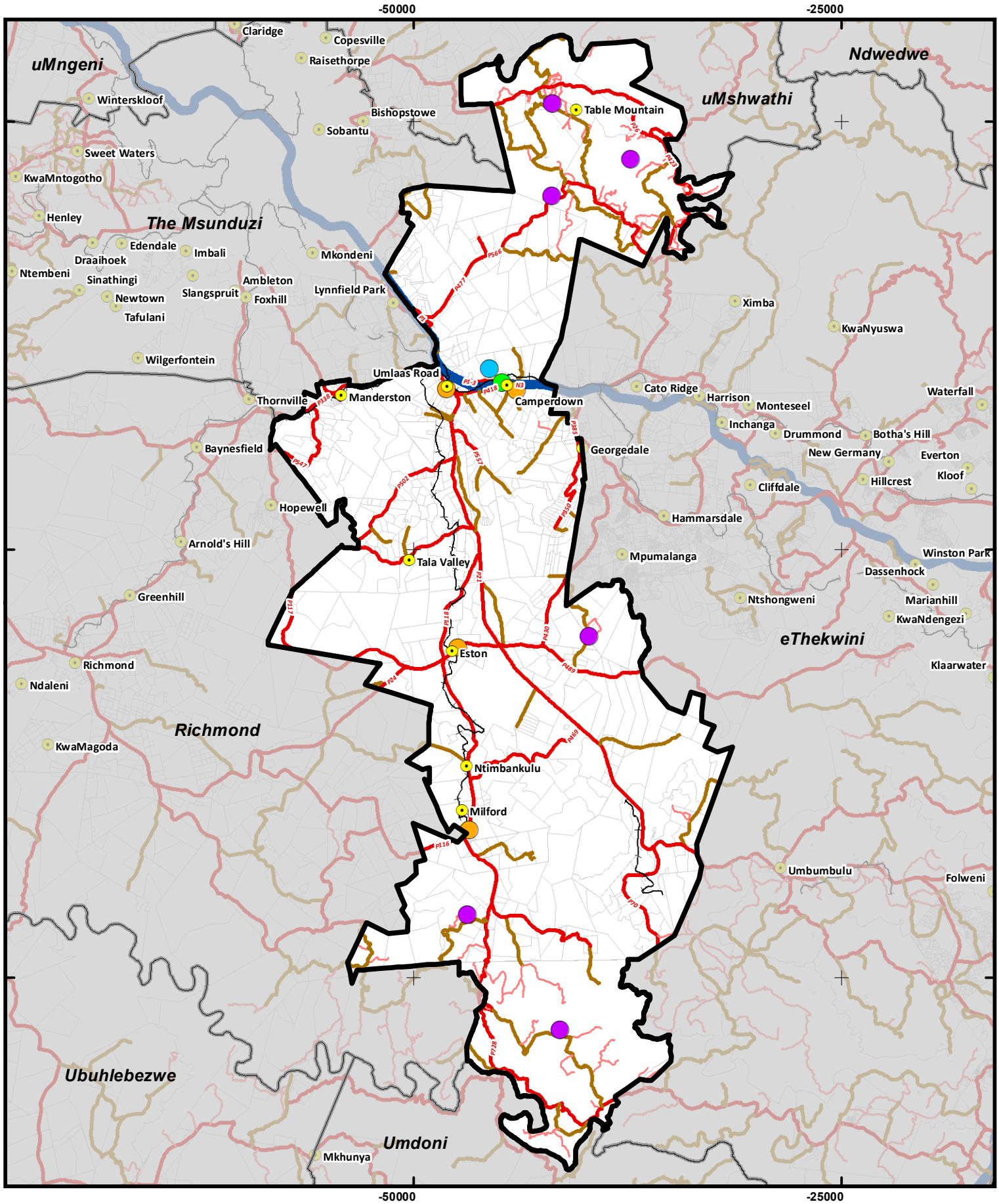
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Water

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Reticulation
- Septic Tanks
- VIP
- WWTW
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Water: Umgeni/UMDM
Cadastral: KZN SGO

N

Datum: WGS84

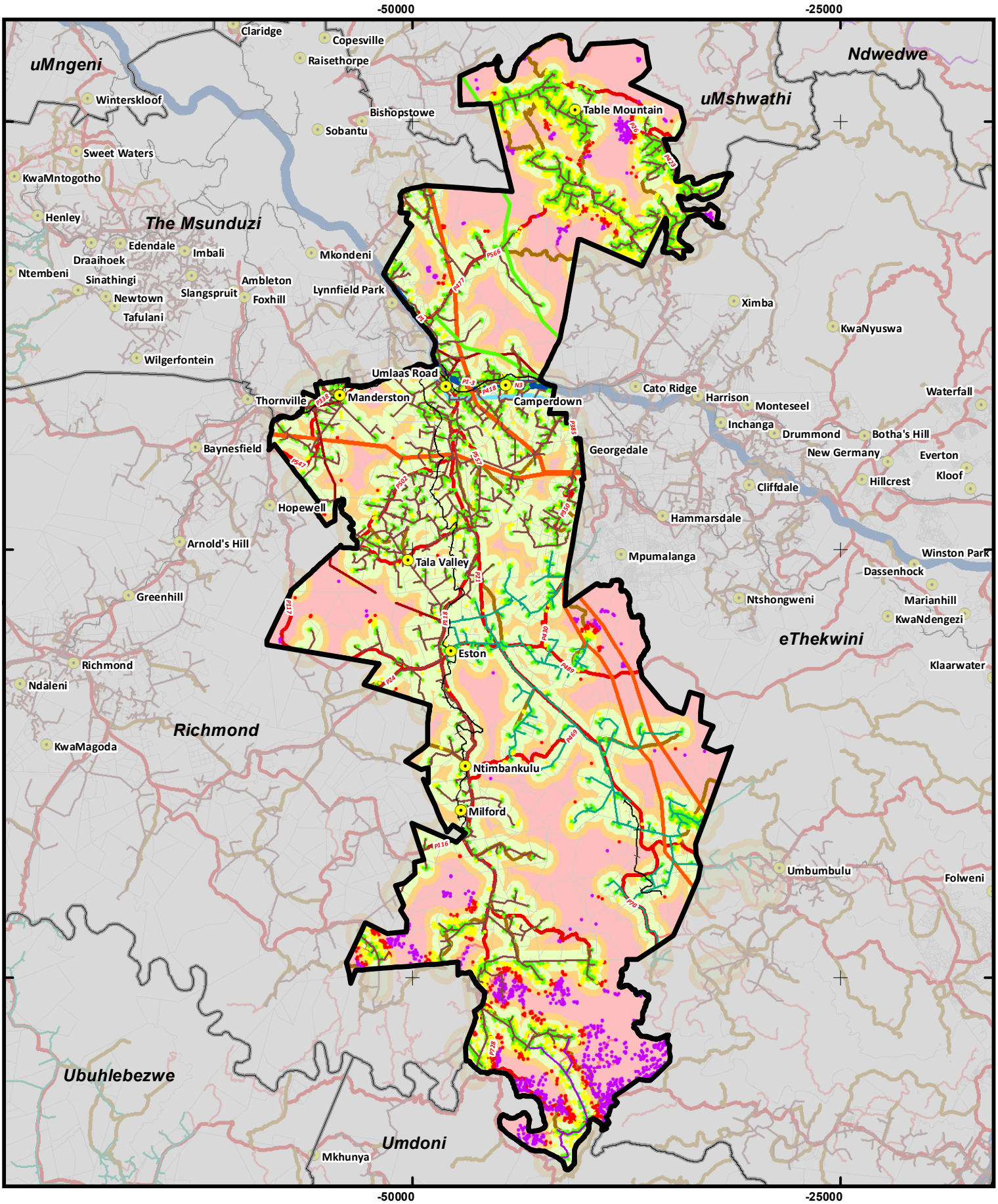
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Sanitation

MKHAMBATHINI Municipality
For the community



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines

Medium Voltage Lines

- 11.00 [kV]
- 19.00 [kV]
- 22.00 [kV]

High Voltage Lines

- 400 [kV]
- 275 [kV]
- 132 [kV]
- 88 [kV]

Electricity Access

- within 200m
- within 600m
- within 1000m
- > 1000m

- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Electricity: ESKOM
Cadastral: KZN SGO

N

Datum: WGS84

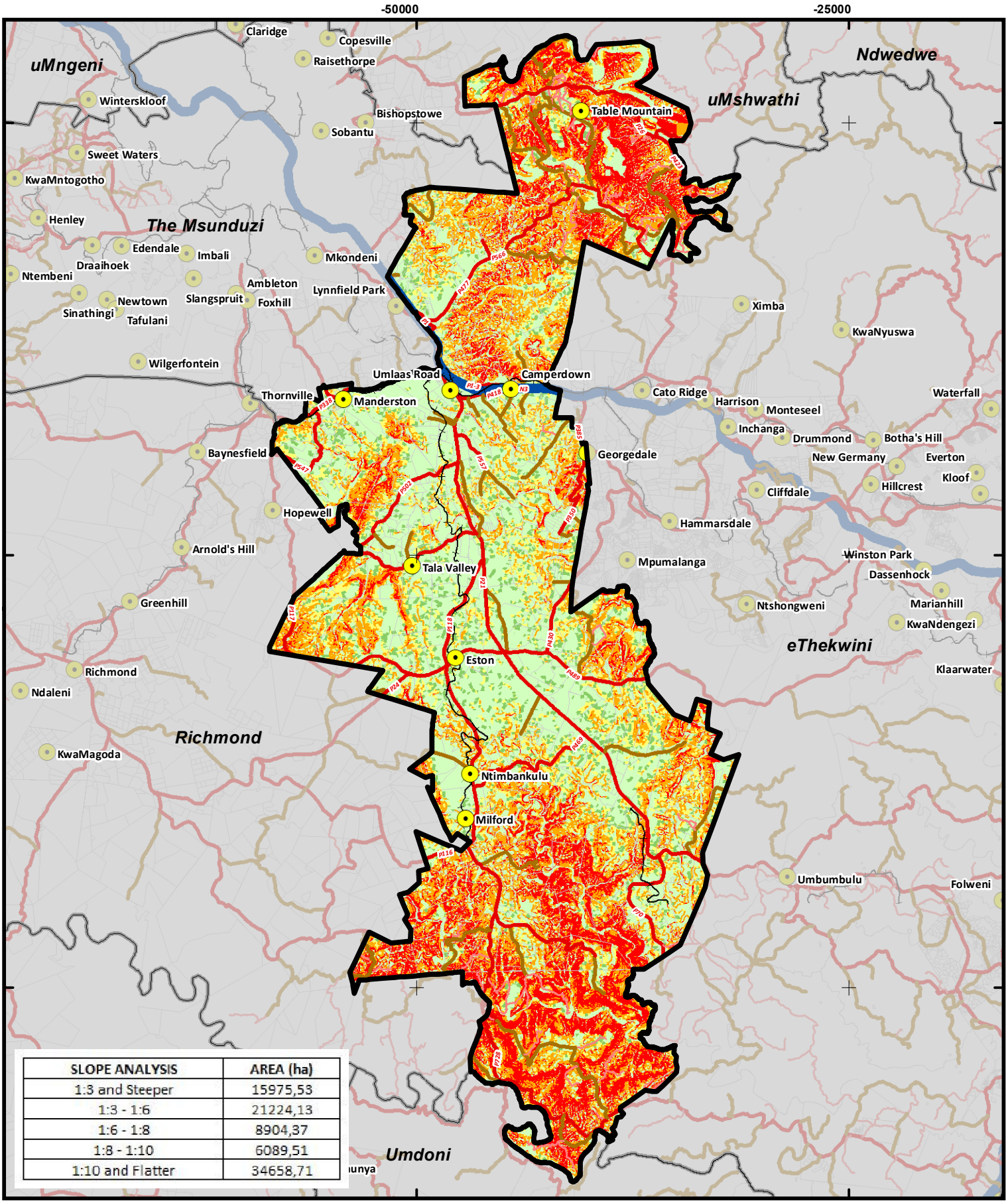
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Access to Electricity

MKHAMBATHINI Municipality



SLOPE ANALYSIS	AREA (ha)
1:3 and Steeper	15975,53
1:3 - 1:6	21224,13
1:6 - 1:8	8904,37
1:8 - 1:10	6089,51
1:10 and Flatter	34658,71

Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- 1:3 and Steeper
- 1:3 - 1:6
- 1:6 - 1:8
- 1:8 - 1:10
- 1:10 and Flatter

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO
Contours: CDSM

N

Datum: WGS84

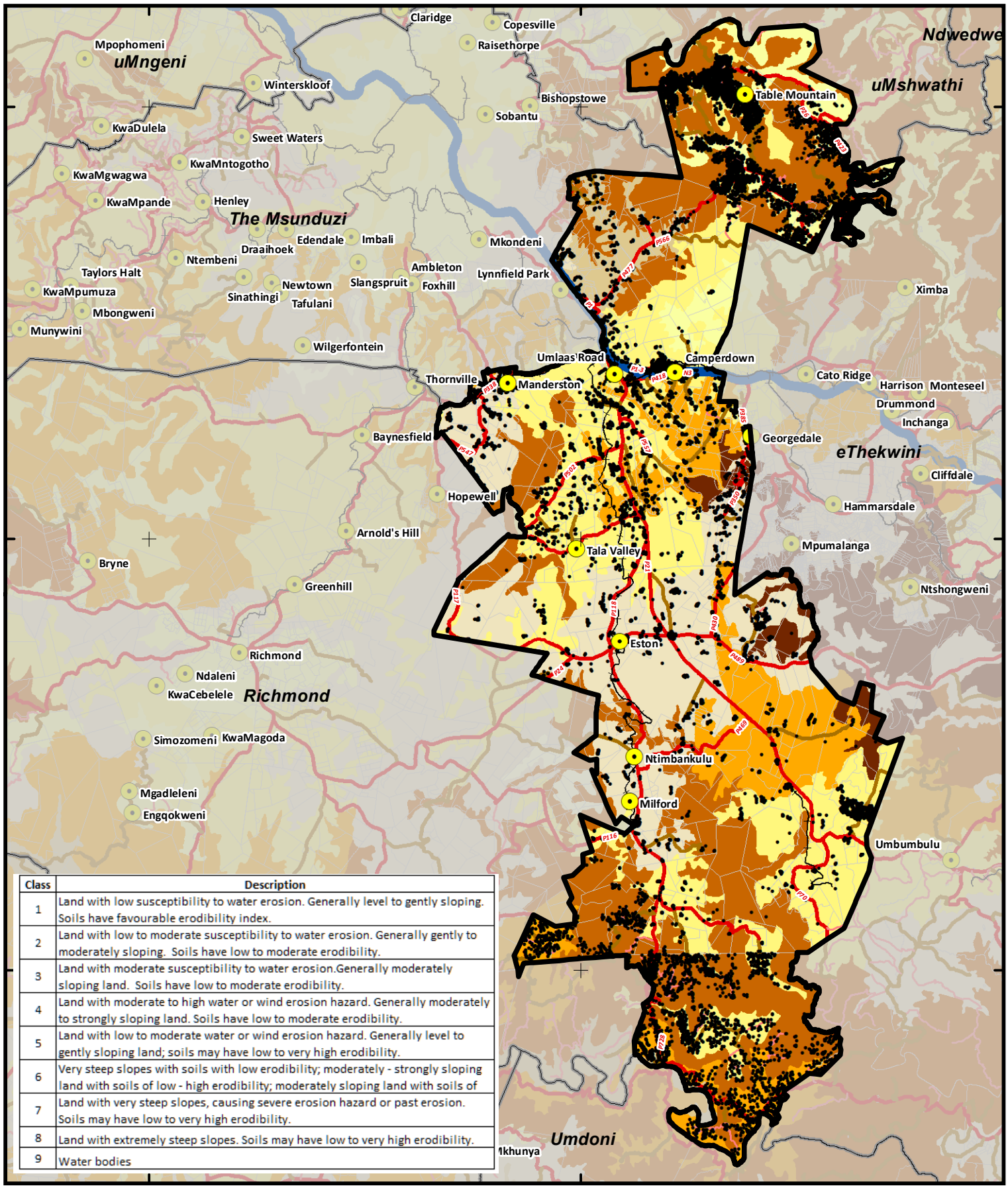
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Topography

MKHAMBATHINI Municipality



Class	Description
1	Land with low susceptibility to water erosion. Generally level to gently sloping. Soils have favourable erodibility index.
2	Land with low to moderate susceptibility to water erosion. Generally gently to moderately sloping. Soils have low to moderate erodibility.
3	Land with moderate susceptibility to water erosion.Generally moderately sloping land. Soils have low to moderate erodibility.
4	Land with moderate to high water or wind erosion hazard. Generally moderately to strongly sloping land. Soils have low to moderate erodibility.
5	Land with low to moderate water or wind erosion hazard. Generally level to gently sloping land; soils may have low to very high erodibility.
6	Very steep slopes with soils with low erodibility; moderately - strongly sloping land with soils of low - high erodibility; moderately sloping land with soils of
7	Land with very steep slopes, causing severe erosion hazard or past erosion. Soils may have low to very high erodibility.
8	Land with extremely steep slopes. Soils may have low to very high erodibility.
9	Water bodies

Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Households
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

Erosion by water

1 2 3 4 5 6 7 8

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO
Contours: CDSM

Datum: WGS84

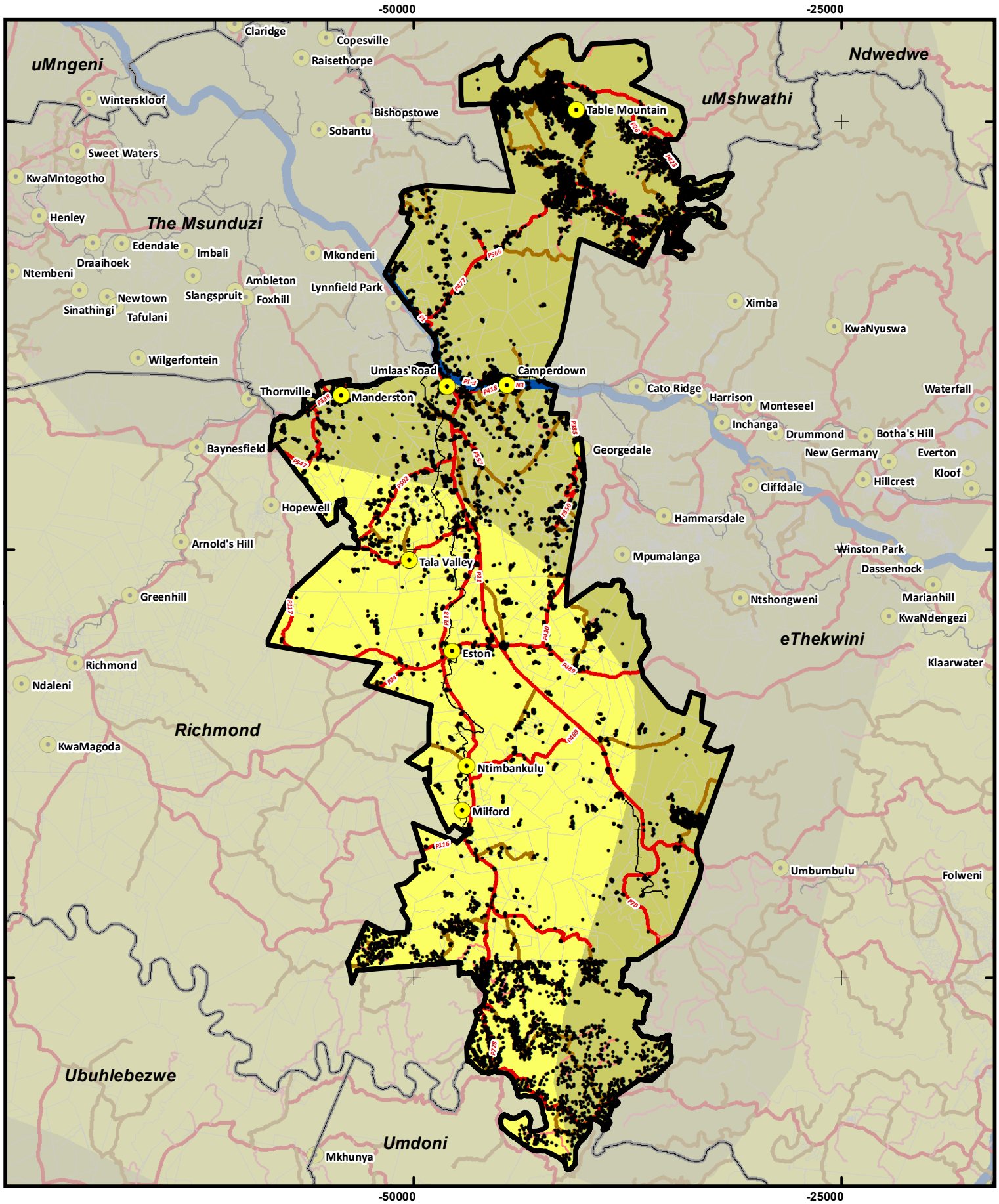
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Land degradation map

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Households
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral

Rainfall Erosivity

- 401 - 500 mm
- 501 - 600 mm

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO
Contours: CDSM

N

Datum: WGS84

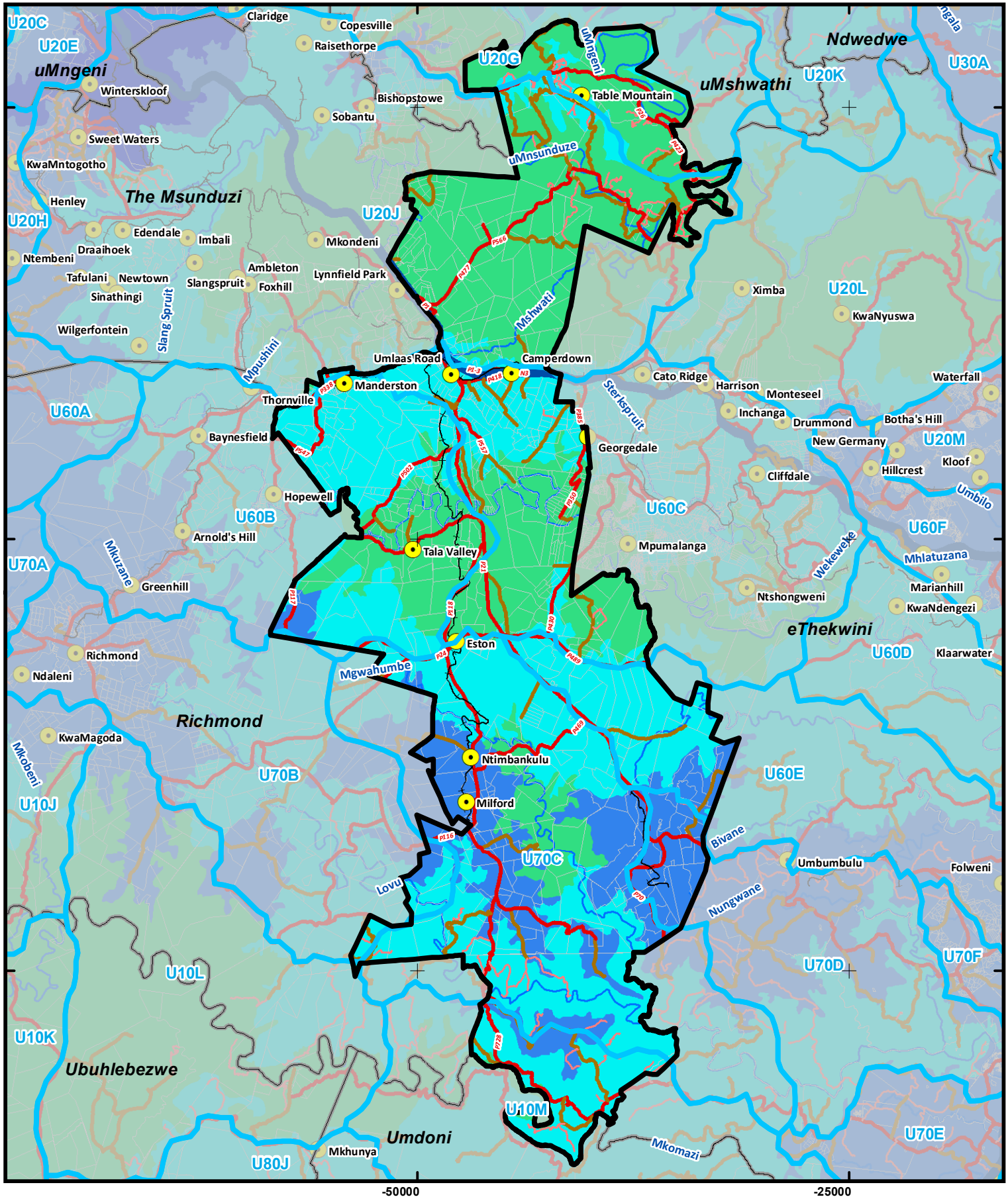
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Land degradation map

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Catchments
- NFEPA Rivers

Rainfall (mm)

- 0 - 762
- 763 - 880
- 881 - 1045
- 1046 - 1389

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife2016
Land Reform: DRDLR
Cadastral: KZN SGO

Datum: WGS84

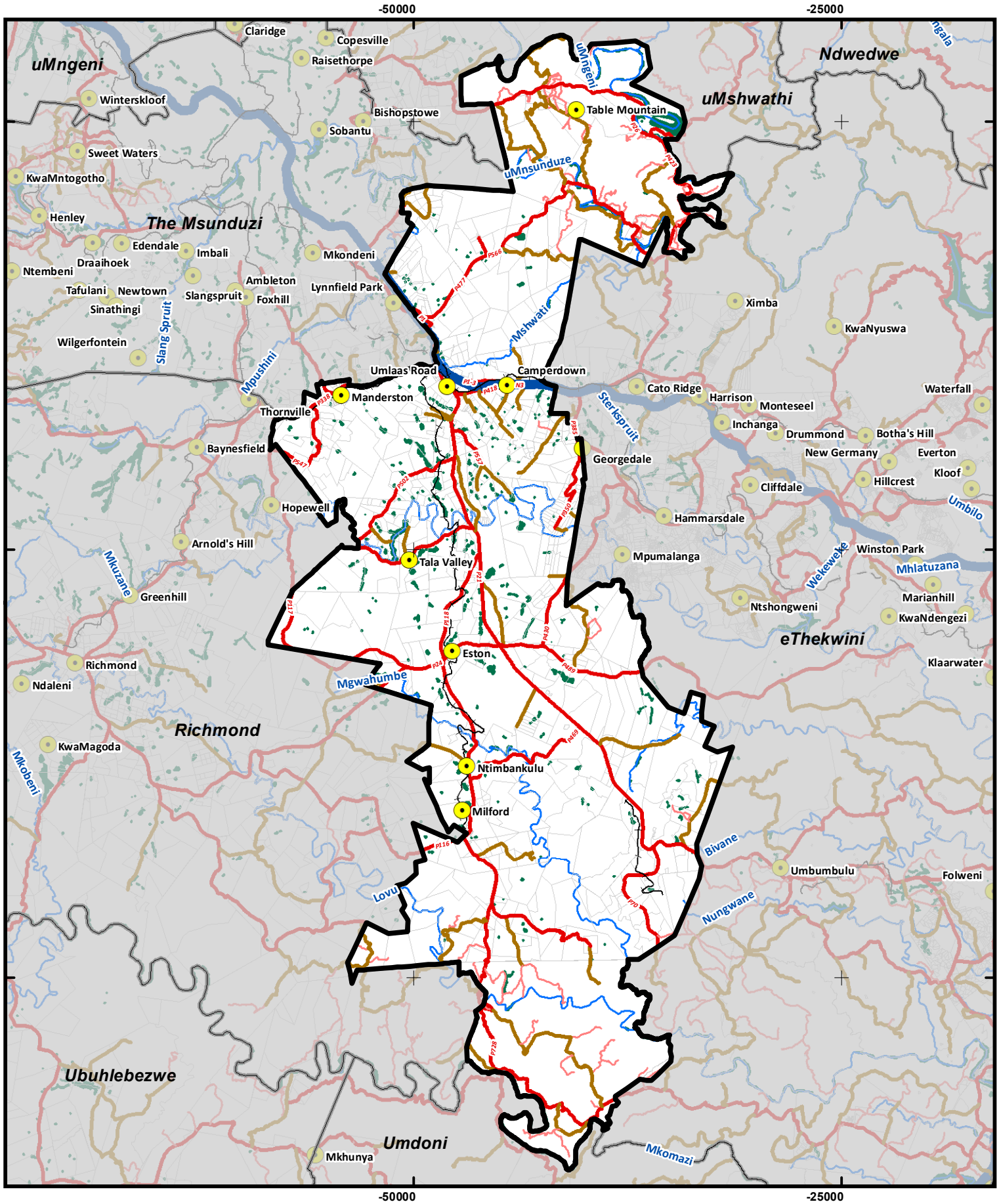
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Hydrological Characteristics

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- NFEPA Rivers
- Wetlands

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife2016
Land Reform: DRDLR
Cadastral: KZN SGO

Datum: WGS84

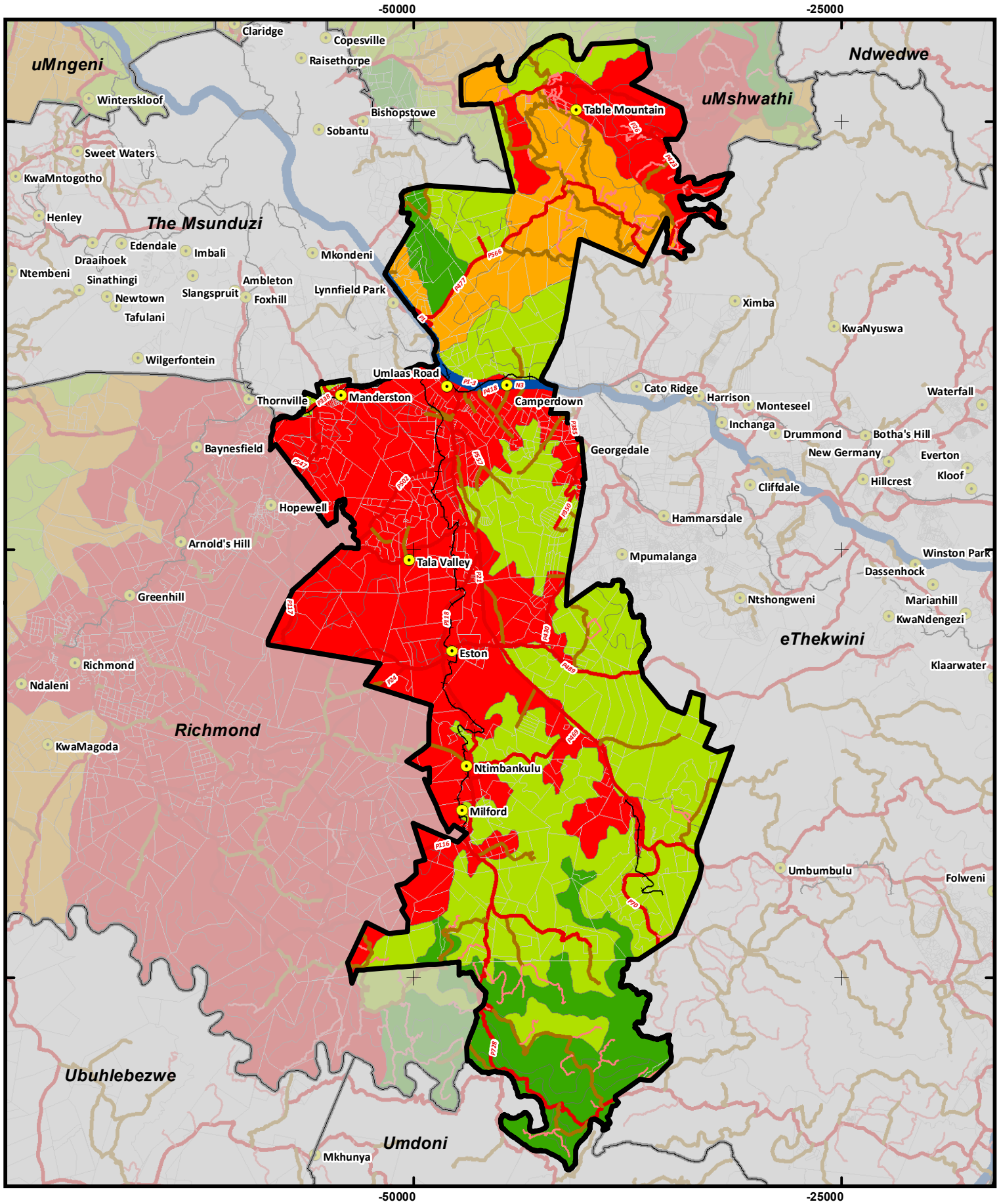
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Hydrological Characteristics

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Low Sensitivity / Low Constraint
- Moderate Sensitivity / Moderate Constraint
- High Sensitivity / High Constraint
- Very High Sensitivity / Very High Constraint

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Water: Umgeni/UMDM
Cadastral: KZN SGO

N

Datum: WGS84

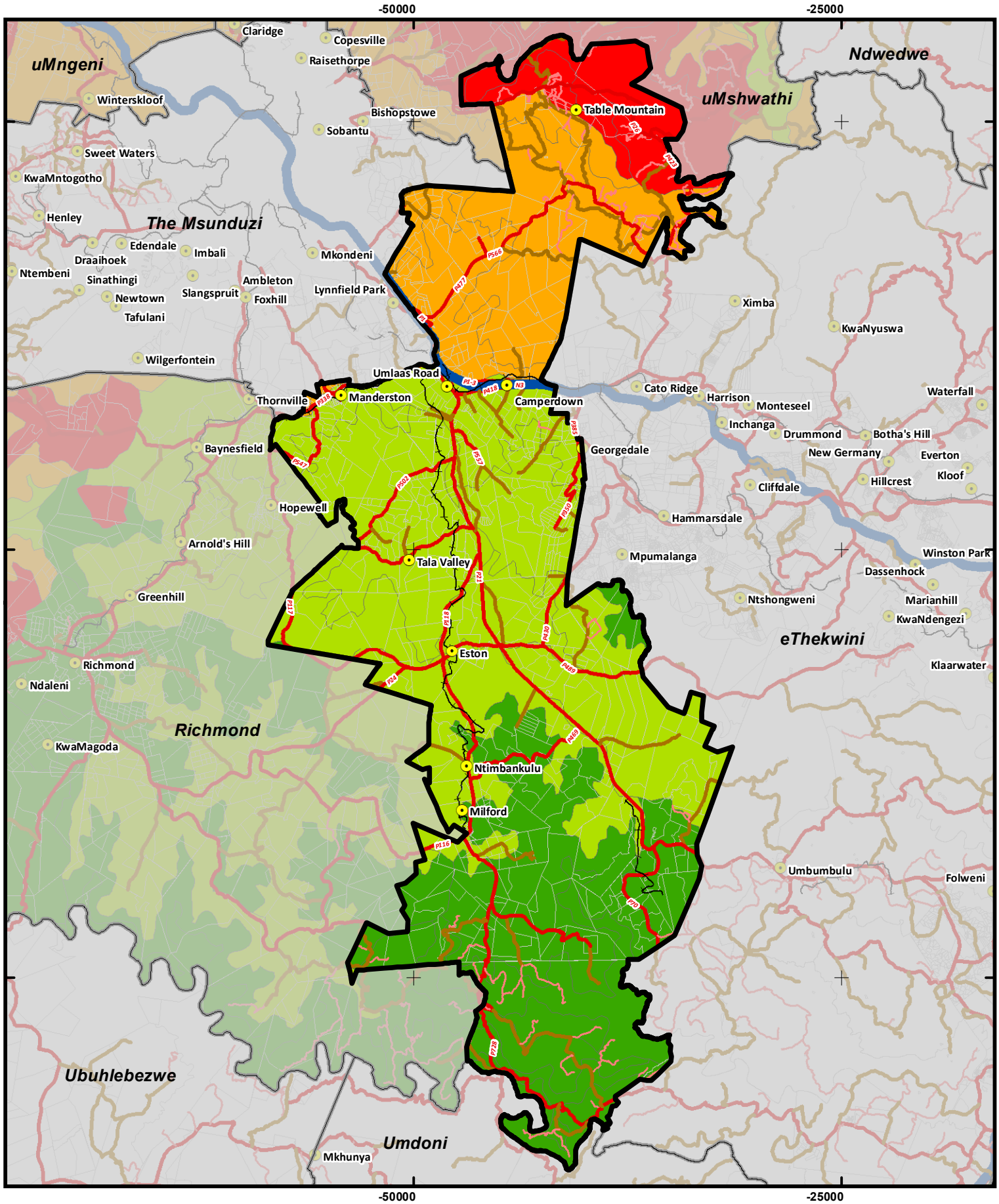
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Water Yield

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Low Sensitivity / Low Constraint
- Moderate Sensitivity / Moderate Constraint
- High Sensitivity / High Constraint
- Very High Sensitivity / Very High Constraint

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Water: Umgeni/UMDM
Cadastral: KZN SGO

N

Datum: WGS84

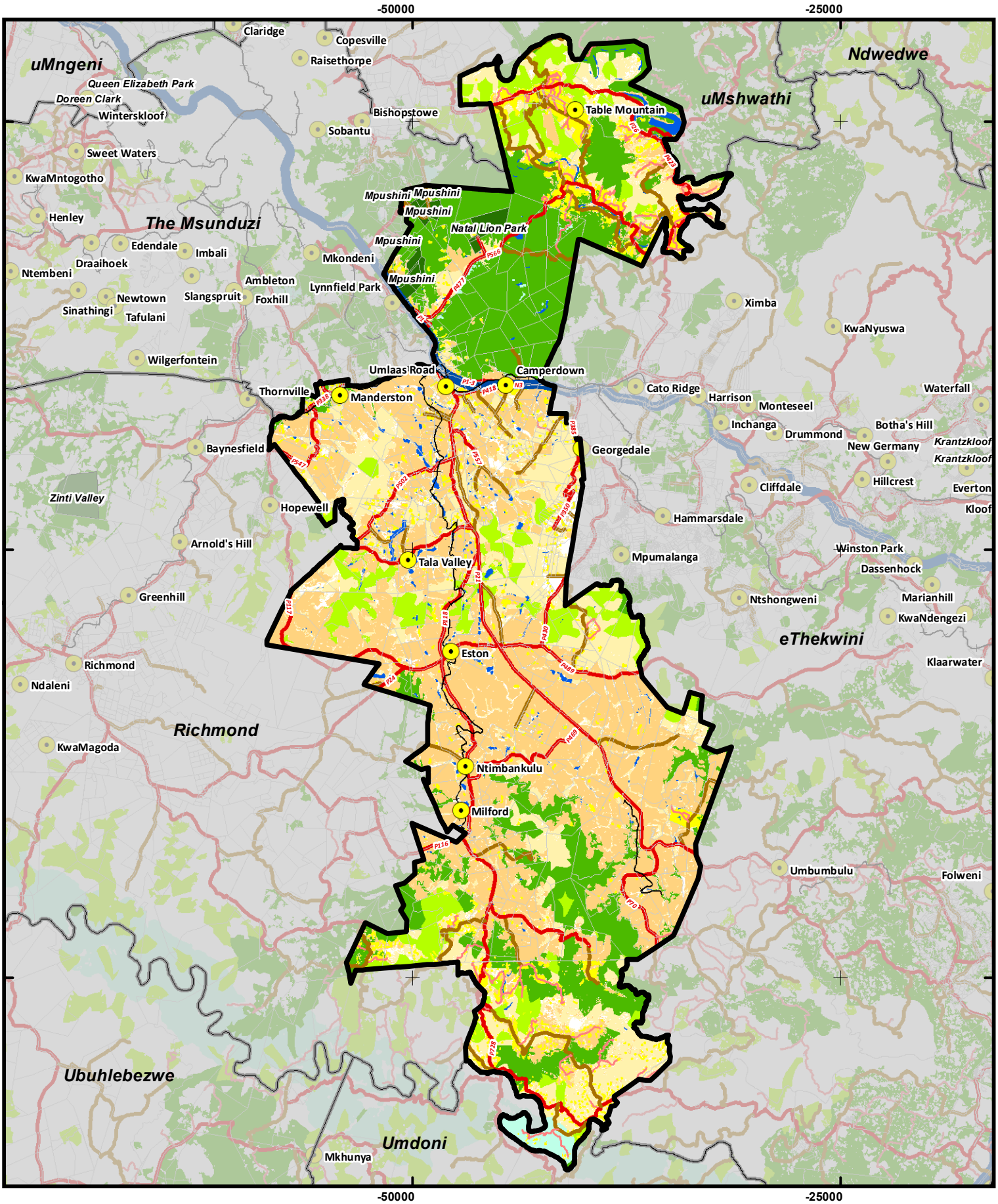
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Water Quality

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- Cadastral
- National Road
- Provincial Road
- District Road
- Local Road
- Protected Areas
- Water Bodies
- CBA Irreplaceable (CBA 1&2)
- CBA Optimal (CBA 3)
- ESA
- Built Up/Settlements
- Natural Vegetation
- Transformed_Areas

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Environmental: Ezemvelo KZN Wildlife (2017)
Cadastral: KZN SGO

N

Datum: WGS84

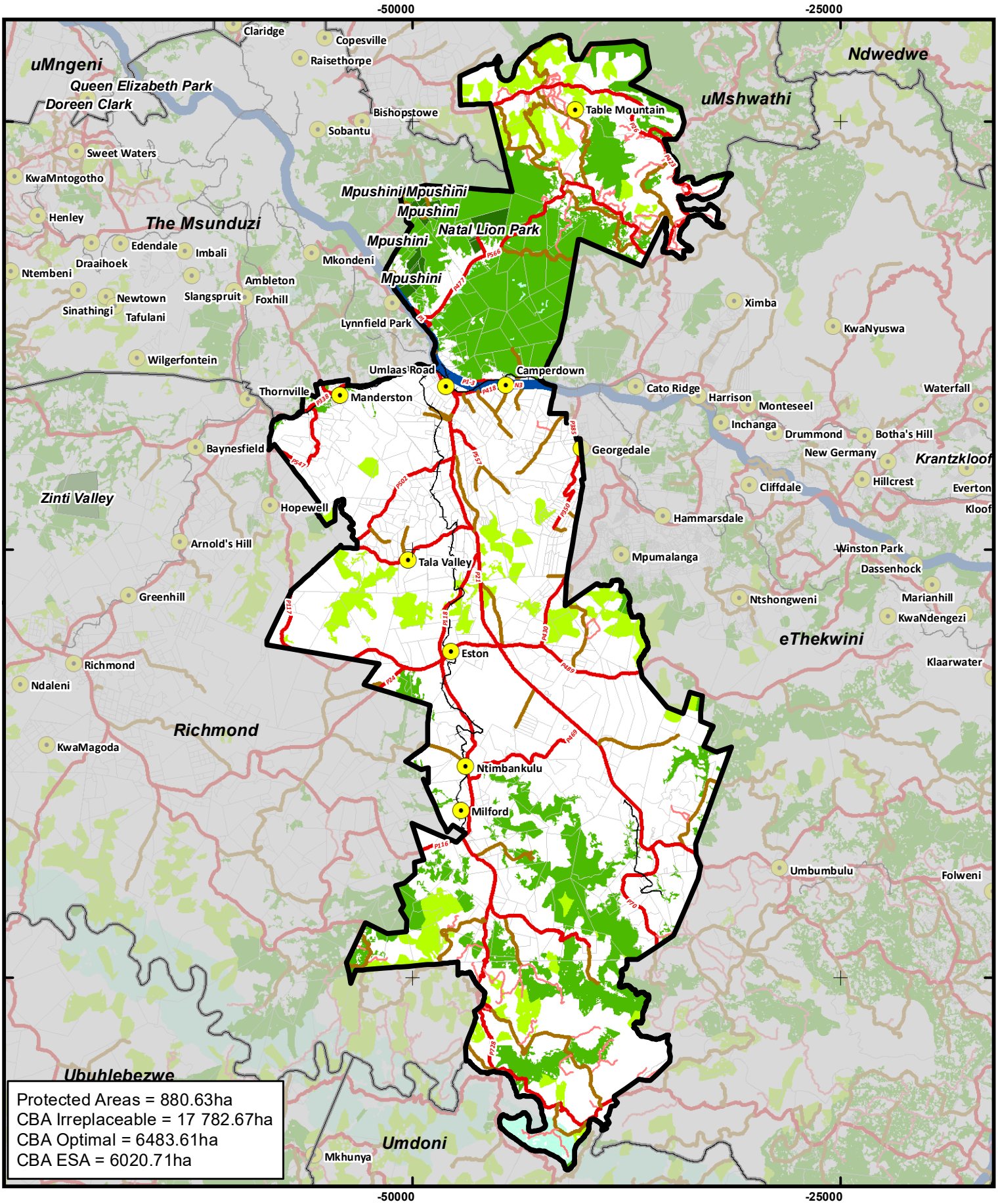
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Critical Biodiversity Map

MKHAMBATHINI Municipality



Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Protected Areas
- CBA Irreplaceable (CBA 1&2)
- CBA Optimal (CBA 3)
- ESA

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Environmental: Ezemvelo KZN Wildlife (2017)
Cadastral: KZN SGO

N

Datum: WGS84

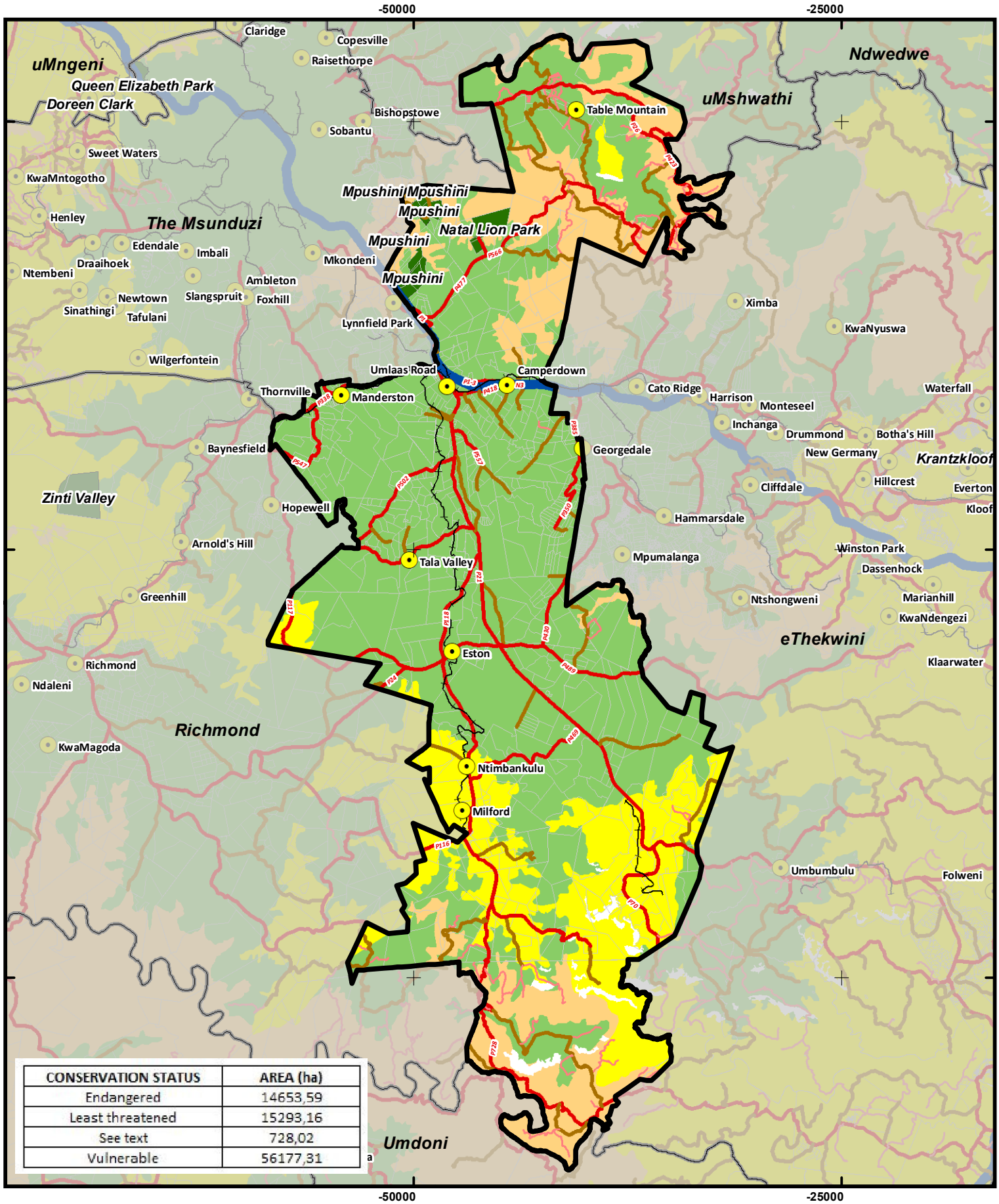
Date: April 2018

0 1,5 3 6
Kilometers

SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Environmentally Sensitive Areas

MKHAMBATHINI Municipality



CONSERVATION STATUS	AREA (ha)
Endangered	14653,59
Least threatened	15293,16
See text	728,02
Vulnerable	56177,31

Legend

- Mkhambathini Boundary
- Local Municipalities
- Places
- Railway Lines
- National Road
- Provincial Road
- District Road
- Local Road
- Cadastral
- Protected Areas

Vegetation Conservation Status

- Endangered
- Least threatened
- Vulnerable

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Environmental: Ezemvelo KZN Wildlife (2017)
Cadastral: KZN SGO

N

Datum: WGS84

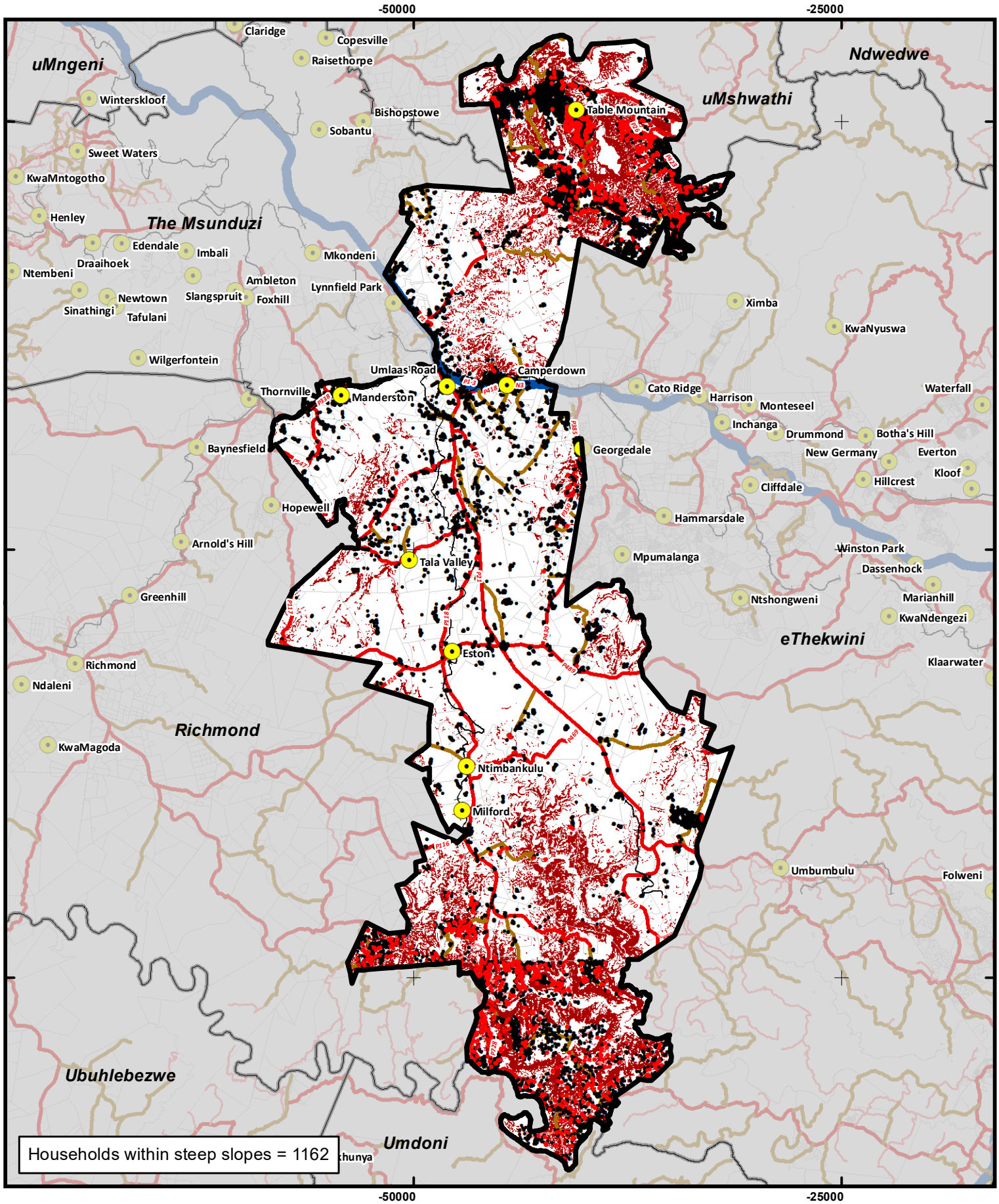
Date: April 2018

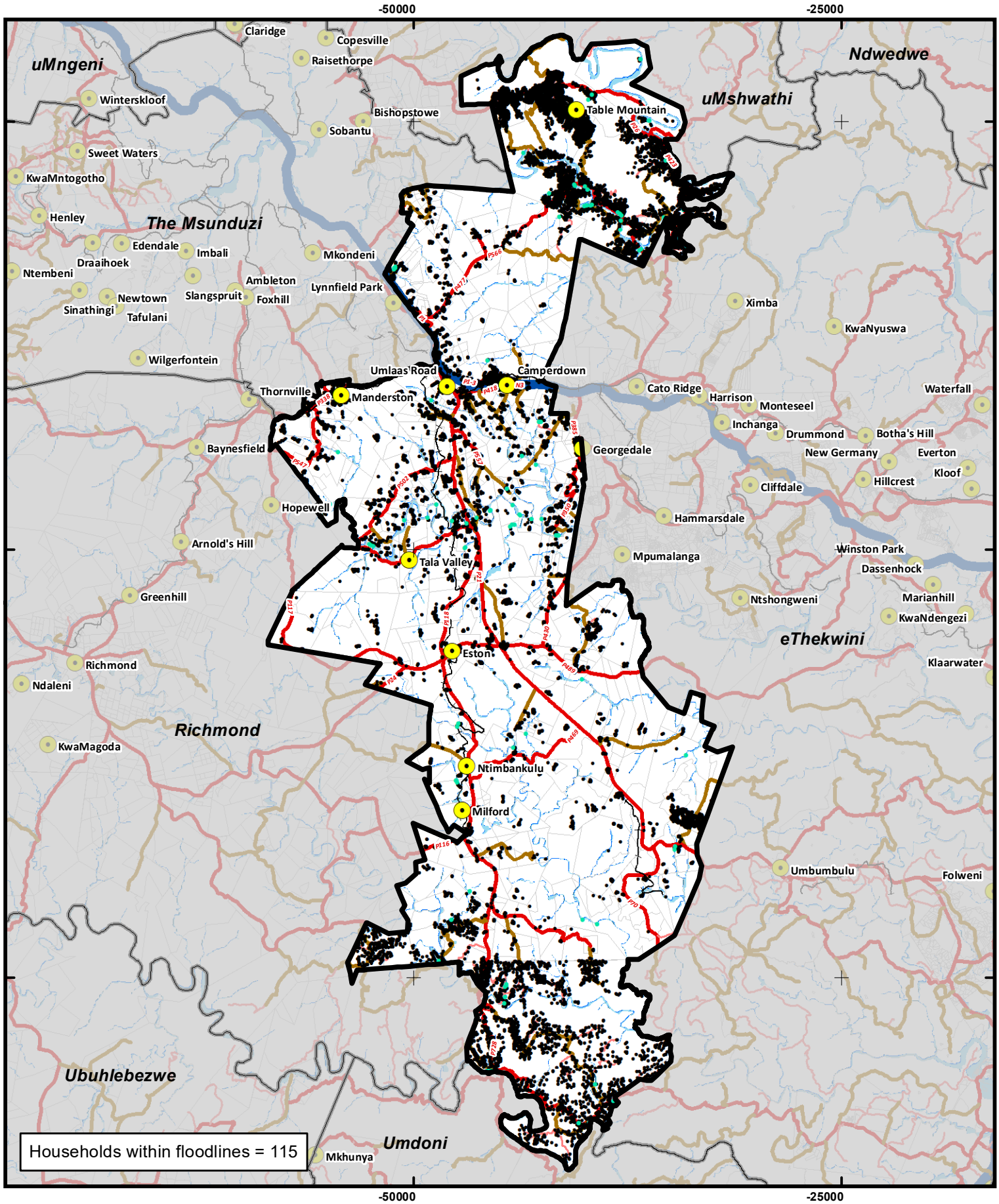
0 1,5 3 6
Kilometers

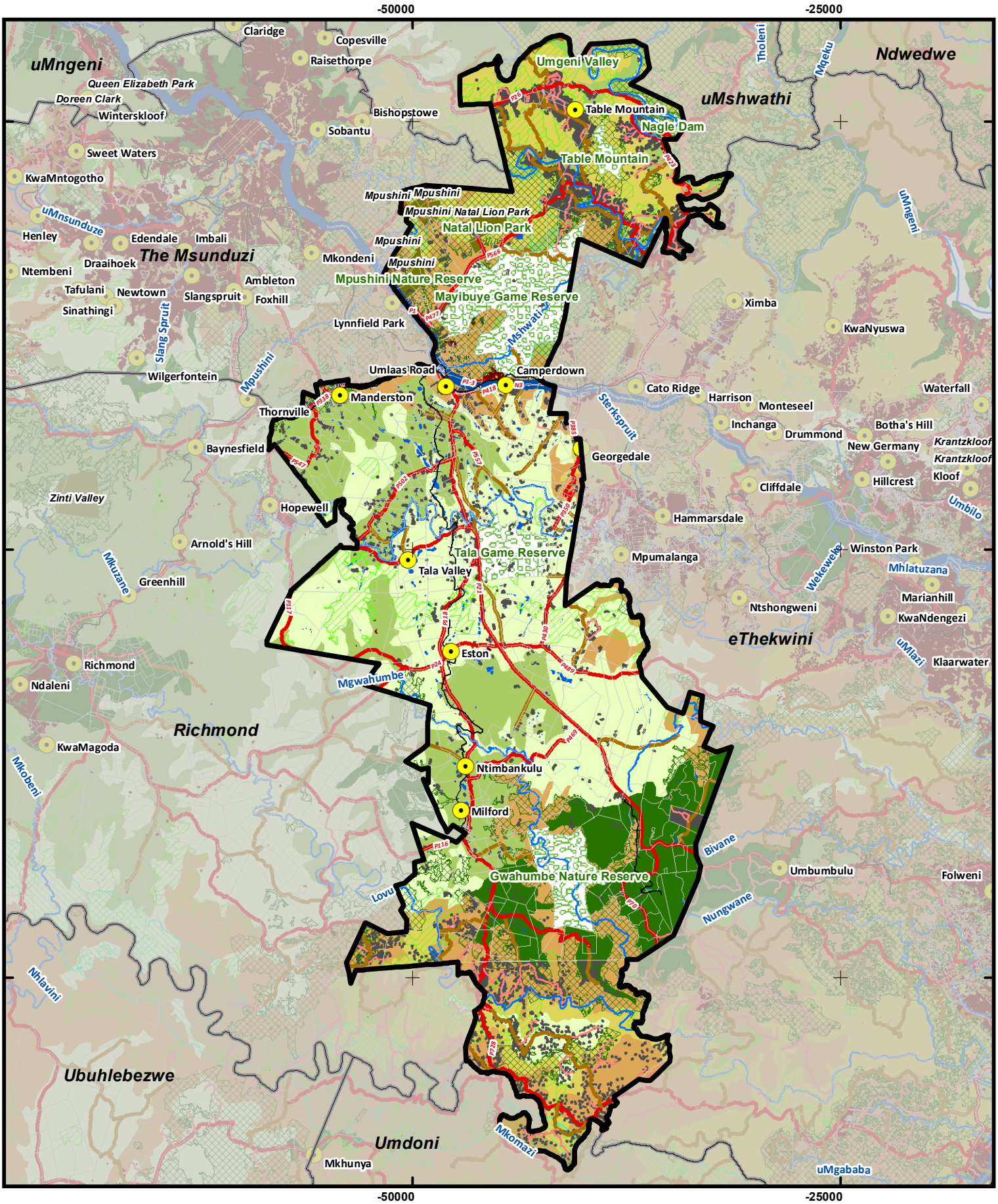
SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018

Vegetation Conservation Status

MKHAMBATHINI Municipality


-50000
-25000
-3275000
-3300000
-3325000
uMngeni
Ndwedwe
uMshwathi
The Msunduzi
Richmond
eThekwini
Ubuhlebezwe
Umdoni
Claridge
Copesville
Raisethorpe
Wintersloof
Bishopstowe
Sobantu
Table Mountain
Sweet Waters
KwaMntogotho
Henley
Edendale
Imbali
Draaihoek
Ntembeni
Mkondeni
Ambleton
Lynnfield Park
Slangspruit
Foxhill
Newtown
Sinathingi
Tafulani
Ximba
KwaNyuswa
Wilgerfontein
Umlaas Road
Camperdown
Thornville
Manderston
Cato Ridge
Harrison
Monteseel
Waterfall
Inchanga
Drummond
Botha's Hill
Baynesfield
Georgedale
New Germany
Everton
Kloof
Hillcrest
Cliffdale
Hopewell
Hammarsdale
Arnold's Hill
Tala Valley
Mpumalanga
Winston Park
Dassenhock
Greenhill
Ntshongweni
Marianhill
KwaNdengezi
Eston
Klaarwater
Richmond
Ndaleni
KwaMagoda
Ntimbankulu
Milford
Umbumbulu
Folweni
Households within steep slopes = 1162
Legend
Mkhambathini Boundary
Local Municipalities
Places
Households within Steep Slopes
Households
Railway Lines
National Road
Provincial Road
District Road
Local Road
Cadastral
Steep Slopes
DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO
Contours: CDSM
N
Datum: WGS84
Date: April 2018
0 1,5 3 6
Kilometers
SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018
Climate change impact
MKHAMBATHINI Municipality


-50000
-25000
-3275000
-3300000
-3325000
uMngeni
Ndwedwe
uMshwathi
The Msunduzi
Richmond
eThekwini
Ubuhlebezwe
Umdoni
Claridge
Copesville
Raisethorpe
Wintersklоof
Bishopstowe
Sobantu
Table Mountain
Sweet Waters
KwaMntogotho
Henley
Edendale
Imbali
Draaihoek
Ntembeni
Mkondeni
Ambleton
Lynnfield Park
Slangspruit
Foxhill
Newtown
Sinathingi
Tafulani
Ximba
KwaNyuswa
Wilgerfontein
Umlaas Road
Camperdown
Thornville
Manderston
Cato Ridge
Harrison
Monteseel
Waterfall
Inchanga
Drummond
Botha's Hill
Baynesfield
Georgedale
New Germany
Everton
Kloof
Hillcrest
Cliffdale
Hopewell
Hammarsdale
Arnold's Hill
Mpumalanga
Winston Park
Dassenhock
Tala Valley
Greenhill
Ntshongweni
Marianhill
KwaNdengezi
Eston
Klaarwater
Richmond
Ndaleni
KwaMagoda
Ntimbankulu
Milford
Umbumbulu
Folweni
Households within floodlines = 115
Legend
Mkhambathini Boundary
Local Municipalities
Places
Households within Floodlines
Households
Railway Lines
National Road
Provincial Road
District Road
Local Road
Cadastral
Floodline 1:20 years
Floodline 1:50 years
Floodline 1:100 years
DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Cadastral: KZN SGO
Contours: CDSM
SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018
Climate change impact
N
Datum: WGS84
Date: April 2018
0 1,5 3 6
Kilometers
MKHAMBATHINI Municipality


-50000
-25000
-3275000
-3300000
-3325000
uMngeni
Ndwedwe
uMshwathi
The Msunduzi
Richmond
eThekwini
Ubuhlebezwe
Umdoni
Claridge
Copesville
Raisethorpe
Queen Elizabeth Park
Doreen Clark
Winterskloof
Bishopstowe
Sobantu
Sweet Waters
KwaMntogotho
uMsunduze
Henley
Edendale
Imbali
Draaihoek
Ntembeni
Tafulani
Newtown
Slangspruit
Foxhill
Ambleton
Sinathingi
Slang Spruit
Wilgerfontein
Mpushini
Umgeni Valley
Table Mountain
Nagle Dam
Table Mountain
Mpushini
Mpushini Natal Lion Park
Natal Lion Park
Mpushini
Mkondeni
Mpushini
Mpushini Nature Reserve
Mayibuye Game Reserve
Lynnfield Park
Mshwati
Umlaas Road
Camperdown
Manderston
Thornville
Baynesfield
Zinti Valley
Hopewell
Arnold's Hill
Mkuzane
Greenhill
Richmond
Ndaleni
KwaMagoda
Mkobeni
Nhlavini
Mgwahumbe
Eston
Tala Game Reserve
Tala Valley
Ntimbankulu
Milford
Gwahumbe Nature Reserve
Lovu
Mkomazi
Mkhunya
Ximba
KwaNyuswa
Cato Ridge
Harrison
Monteseel
Waterfall
Inchanga
Drummond
Botha's Hill
New Germany
Krantzkloof
Kloof
Hillcrest
Cliffdale
Umbilo
Georgedale
Sterkspruit
Hammarsdale
Mpumalanga
Winston Park
Mhlatuzana
Wekeweke
Marianhill
Ntshongweni
KwaNdengezi
uMlazi
Klaarwater
Bivane
Umbumbulu
Folweni
Nungwane
Tholeni
Mqeku
uMngeni
Umbilo
Mgababa
Legend
Mkhambathini Boundary
Local Municipalities
Places
Railway Lines
Cadastral
NFEPA Rivers
National Road
Provincial Road
District Road
Local Road
Settlements
Protected Areas
Nature Based Tourism
Water Bodies
CBA Irreplaceable (CBA 1&2)
CBA Optimal (CBA 3)
ESA
A: IRREPLACEABLE
B: THREATENED
C: PRIMARY AGRIC. LAND
D: SECONDARY AGRIC. LAND
E: MIXED AGRIC. LAND
PERMANENTLY TRANSFORMED
DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Environmental:
Ezemvelo KZN Wildlife (2017)
Cadastral: KZN SGO
N
Datum: WGS84
Date: April 2018
0 1,5 3 6
Kilometers
SPATIAL DEVELOPMENT FRAMEWORK : REVIEW 2018
Biodiversity Criteria
MKHAMBATHINI Municipality