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South African National Biodiversity Institute

# METADATA REPORT

| DATA IDENTIFICATION: | |
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| **Title** | VEGMAP2018_AEA_V22_7_16082019_Final |
| **Description (detailed)** | Latest update of the map of the National Vegetation Map Project and follows version VEGMAP 2012. All polygons are single-part. This file is also made available in geodatabase, shapefile format and as a cmf. |
| **Purpose** | To provide the potential or historical extent of ecologically based vegetation units of South Africa (including Prince Edward and Marion Islands), Lesotho and Swaziland at a landscape scale. |
| **Status** | Final version of National Vegetation Map: NVM 2018 |
| **Maintenance and update frequency** | This version has been updated since VEGMAP2018_AEA_07012019_beta.<br>**The following changes have been made since the beta version:**<br>• Spelling correction: Oudshoorn Karroid Thicket corrected to Oudtshoorn Karroid Thicket<br>• Edited polygons: merged 22 slivers of Blombos Strandveld into Hartenbos Dune Thicket<br>• Edited VM code related to reassignment to correct bioregion: Southern Namaqualand Quartzite Klipkloppe Shrubland (SKk 10) reassigned to (Skn 7)<br>• New Fields:<br>  ○ Threat Status and Protection Level. These two fields are associated with the National Biodiversity Assessment 2018 and the user should refer to the documents associated with this work for further information.<br>  ○ Estuary_ID<br>  ○ CoastalPoly<br>• In the Cross-realm field:<br>  ○ lumped: National Coastal Map (Hairpin Parabolic Dunes) under National Coastal Map (Parabolic Dunes) in Cross realm field and<br>  ○ Rename Frontal Dunes Group to Foredunes. |
| **Topic category** | Vegetation Classification and mapping |
| **Lineage** | This version of the vegetation map is an update of the 2012 version released in 2015. Previous versions of the map were 2009 and 2006 (original version). The source of the data for updated areas of the map were developed through contributions from various people including the people included in the contributors field (See Attribute Fields below) |
| **Citation** | South African National Biodiversity Institute (2006- 2018). The Vegetation Map of South Africa, Lesotho and Swaziland, Mucina, L., Rutherford, M.C. and Powrie, L.W. (Editors), Online, http://bgis.sanbi.org/SpatialDataset/Detail/18, Version 2018 |
| **Keywords** | Vegetation, map, classification, historical map |

| ORIGINATOR OF THE DATASET: | |
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| **Individual name** | |

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| **Organisation name** | National Vegetation Map Team, Anisha Dayaram |
| **Position name** | South African National Biodiversity Institute |
| **Contact Number** | Vegetation Scientist |
| **Contact Address** | Kirstenbosch Research Centre, Newlands, Cape Town |
| **Contact Email** | vegmap@sanbi.org.za |
| **Role** | The National Vegetation Map Team is responsible for co-ordinating the collection of data for incorporation into the vegetation map where new data improves the mapping accuracy and classification. |
| **Funders** | South African National Biodiversity Institute |

| **AUTHOR OF THE METADATA:** | |
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| **Individual name** | Anisha Dayaram |
| **Organisation name** | South African National Biodiversity Institute |
| **Position name** | Vegetation Scientist |
| **Contact Number** | a.dayaram@sanbi.org.za |
| **Contact Address** | Kirstenbosch Research Centre, Newlands, Cape Town. |
| **Contact Email** | |
| **Role** | Author; Custodian; Distributor; Owner; Point of contact; Processor; User. |

| **RESOURCE CONSTRAINTS:** | |
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| **Access constraints** | Copyright holder: South African National Biodiversity Institute |
| **Use constraints** | This data may not be reproduced by any means, nor redistributed via web site or ftp site, without prior permission. Whilst every effort has been made to ensure the accuracy of data, users are advised to use the data and conclusions drawn from its use with caution. Users noting errors and omissions are requested to notify the office of the VEGMAP project (Vegmap@sanbi.org.za) to improve data accuracy. These data are not for resale or replicating. This digital version is in the public domain requiring only the conventional acknowledgement of source in publications and reports. |
| **Other restrictions** | APPROPRIATE USE OF THIS DATASET: The VEGMAP has been created for national purposes and the boundaries of vegetation types are mapped at a coarse scale. While some vegetation types are mapped at a finer scale, these do not map vegetation past the level of subtype. Therefore the vegetation map may act as a guide to the vegetation in a region but is not appropriate for any work requiring fine scale investigations of communities or species beyond the landscape scale. Much of the map still requires field verification. More information on the clarity around appropriate use of the data can be discussed by contacting us. |

| **SPATIAL RESOLUTION:** |
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| **Spatial representation type** | Geodatabase, Shapefile, Text, Vector. |
| **Equivalent scale - Denominator** | Various (See technical documents) 1:3000 to 1:50 000 |

| **COORDINATE REFERENCE SYSTEM: Custom** | |
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| **Projected/Geographic coordinate system** | PROJCS["AEA_RSA_WGS84",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",637813<br>24.0],PARAMETER["Standard_Parallel_2",-33.0],PARAMETER["Latitude_Of_Origin",0.0],UNIT["Meter",1.0]] |

| **TEMPORAL EXTENT (time period covered by the content of the dataset):** | |
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| **Temporal extent - Begin date** | 2016 |
| **Temporal extent - End date** | 2018 |

| **ONLINE RESOURCE (additional resources available online):** | |
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| **Description** | The Vegetation Map Project has various resources that link to the map dataset. These resources include the development of the original map, the methods used to develop updates to the original map, detailed descriptions of the vegetation types (i.e. the vegetation classification) and other information related to the project. |
| **Linkage** | Project Page: http://bgis.sanbi.org/vegmap<br><br>Description of vegetation types: http://bgis.sanbi.org/Projects/Detail/171<br><br>Publications describing the development of the vegetation map: http://bgis.sanbi.org/Projects/Detail/192 |

| **LEGEND PROPERTIES:** | |
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| **Classification** | See attribute fields |

| **DETAILED NOTES:** | |
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| **Supplemental information** | Methodology: Full details of the methodology can be found in the book The Vegetation of South Africa, Lesotho and Swaziland and in the Technical documents and journal papers available upon request from vegmap@sanbi.org. |

The attribute field data can also be provided as a MS Excel spreadsheet and uploaded as an online resource.

| ATTRIBUTE FIELDS | | |
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| **Field Name** | **Full name** | **Description** |
| OBJECTID | Object Identification | Internal feature number. |
| Shape | Shape | Feature geometry. |
| NAME_18 | Name 2018 | Name of a national vegetation type in 2018 |
| MAPCODE18 | Map code 2018 | Code for a vegetation type. Types added in 2006 correspond with codes in Mucina and Rutherford (2006). Vegetation types added in subsequent versions have been assigned new codes. Follows BiomeCode+BioregionCode+Sequence. |
| BIOME_18 | Biome 2018 | Name of Biome in 2018 |
| BIOREGION_18 | Bioregion 2018 | Name of Bioregion |
| SUBTYPNM_18 | Subtype Name 2018 | Name of the subtype of the National Vegetation Type |
| MPCDSUBT18 | Map code subtype 2018 | Code for the sub-type of a vegetation type. These types are different at a scale which is too fine to warrant the definition of a new type at a national scale. Subtypes are represented by polygons with a name and code only, no descriptions are provided. Follows Mapcode12+Subtype Sequence. |
| PLYGN_SOURCE_18 | Polygon Source 2018 | The name of the data set that served as the source of the polygon delineation. In some cases these polygons were slightly modified from the original data. |
| CHANGE_VER_18 | Version in which polygon was edited 2018 | If a polygon was affected by a refinement of a vegetation type after the 2006 release, this field indicates the version in which the polygon was changed. VM06 = Version 2006, VM09 = Version 2009, VM12 = Version 2012, VM17 = Version 2017. |

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| CHANGE_REF_18 | Change reference 2018 | Indicates the reference which guided the refinement of a vegetation type. Examples include: VegMap2006 = polygons that remain unchanged; NVMC=Decisions or refinements made by the National Vegetation Map Committee with the year and indication of the biome expert that digitized, re-assigned or made the decision for the edit captured in brackets; Lotter, M.C. (2014) refers to a publication.<br><br>The full reference and an indication of where to find these documents are indicated below:<br><br>**Ethekwini Historical Map 2015**: McLean, C.T., Ground, L.E., Boon, R.G.C., Roberts, D.C., Govender, N. & McInnes, A. 2016. Durban's Systematic Conservation Assessment. EThekwini Municipality, Environmental Planning and Climate Protection Department, Durban, South Africa. http://www.durban.gov.za/City_Services/development_planning_management/environmental_planning_climate_protection/Publications/Documents/DurbansSystematicConservation.pdf<br>**Lotter,M.C. (2014):** Lötter, M.C. (2014) Indigenous forests of Mpumalanga Province (South Africa); patterns and processes for inclusion in a systematic conservation plan, Phd thesis, University of the Witwatersrand, Johannesburg, South Africa. http://wiredspace.wits.ac.za/jspui/bitstream/10539/14841/2/Lotter%20PhD%20thesis%20%E2%80%93%20final%20signed%2011%20February%202014.pdf<br>**Scott-Shaw & Escott (2011):** Scott-Shaw, R. and Escott, B.J. (Eds) (2011) KwaZulu-Natal Provincial Pre- Transformation Vegetation Type Map – 2011. Unpublished GIS Coverage [kznveg05v2_011_wll.zip], Biodiversity Conservation Planning Division, Ezemvelo KZN Wildlife, P. O. Box 13053, Cascades, Pietermaritzburg, 3202. http://bgis.sanbi.org/SpatialDataset/Detail/340<br>**Van der Merwe et al. (2008)**: Van der Merwe, H., Van Rooyen, M.W. & Van Rooyen, N., 2008a, 'Vegetation of the Hantam-Tanqua-Roggeveld subregion, South Africa. Part 1. Fynbos Biome related vegetation', *Koedoe* 50, 61–71. & Van der Merwe, H., Van Rooyen, M.W. & Van Rooyen, N., 2008b, 'Vegetation of the Hantam-Tanqua-Roggeveld subregion, South Africa. Part 2. Succulent Karoo Biome related vegetation', *Koedoe,* 50, 160–183.<br><br>**Vlok et al. (2005)**: http://bgis.sanbi.org/STEP/project.asp<br>**Other references from other realms (i.**e. estuaries) will be listed online at http://bgis.sanbi.org/vegmap/project.asp<br><br>The following are available as technical documents or notes upon request from vegmap@sanbi.org:<br>NVMC 2017 (EC Conservation Plan 2016 (Digitised, Philip Desmet))<br>NVMC 2017 (Digitised, Anisha Dayaram), NVMC 2017 (Digitised, Coert Geldenhuys), NVMC 2017 (Digitised, Donovan Kirkwood), NVMC 2017 (Modelled classification around Alexandria Forest, remaining + historical, Donovan Kirkwood), NVMC 2017 (Digitised, Keneilwe Hlahane), NVMC 2017 (Digitised, Mcebisi Qabaqaba), NVMC 2017 (Anisha Dayaram), NVMC (Tony Rebelo), NVMC (Re-assigned Anisha Dayaram 032018), NVMC (Anisha Dayaram), NVMC 2017 (STEP integration team: Cowling, R., Grobler, A., Potts, A., Skowno, A. and Vlok, J.), NVMC 2017 (reassignment), Digitised (Vincent Egan ed. Pieter Winter), NVMC 2017 (Digitised Linda Harris), NVMC 2017 (Classification change), NVMC 2012 (Mervyn Lotter), NVMC 2009 (Mervyn Lotter), NVMC 2017 (Digitised, Mervyn Lotter), NVMC 2017 (NMMU Institute for Coastal and Marine Research Mapping), Helme & Desmet (2006)_KBERG, Desmet et al (2009)_NSF, Desmet et al (2005)_BCI, Desmet & Helme (2010)_WCDM, Helme (2007) WC, Helme (2007) Upper Breede, City of Cape Town (2011). |

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| PRIMARYREALM_18 | Primary Realm 2018 | There are five realms (or ecosystems) that have national habitat maps that SANBI serves including: Inland Aquatic/Wetland, Marine, Estuarine, Terrestrial and Coastal. This National Vegetation Map forms the Terrestrial habitat map but also includes some Coastal polygons since the Coastal realm is transitional. There are some Inland Aquatic/Wetland and Estuarine polygons that are represented in this layer, but do not form part of the habitat. This field indicates which polygons in this layer are also shared between other Realms. The extent of these polygons are represented in the VEGMAP for completion across South Africas terrestrial border. However these polygons have a classification under their respective realms and these realm maps should be consulted for more information on these polygons. The following list indicates which polygons should be considered part of the VEGMAP:<br><br>**National Vegetation Map** : These polygons are cross realm and part of the VEGMAP only<br>**National Coastal Map** : These polygons are cross realms and part of the VEGMAP as well as part of the coast<br>**National Estuary Map** : These polygons are not part of the VEGMAP but their spatial extent is delineated to indicate non-vegetated areas. Terrestrial areas falling within the Estuarine Functional Zone have been mapped as separate units within the vegetation map. It is up to the user to decide whether to include these units depending on the analysis.<br>**National Wetland Map** : These polygons are not part of the VEGMAP but their spatial extent is delineated to indicate non-vegetated areas with open water. |
| CROSSREALM_DESCRIPTION_18 | Cross-Realm Description 2018 | Please see PRIMARYREALM_18 (above). This field provides more detail about the habitat from other realms especially where vegetation (non-terrestrial) has been mapped by other realms. The following list indicates which polygons should be considered part of the VEGMAP:<br><br>**National Coastal Map (Barrier Dunes)** : These polygons are cross realms and part of the VEGMAP<br>**National Coastal Map (Foredunes)** : These polygons are cross realms and part of the VEGMAP<br>**National Coastal Map (Parabolic Dunes)** : These polygons are cross realm and part of the VEGMAP<br>**National Coastal Map (Transgressive Dunes)** : These polygons are cross realm and part of the VEGMAP<br>**National Estuary Map (Estuary)** : These polygons are not part of the VEGMAP but their spatial extent is delineated to indicate non-vegetated areas<br>**National Estuary Map (Microestuary)** : These polygons are not part of the VEGMAP but their spatial extent is delineated to indicate non-vegetated areas<br>**National Estuary Map (vegetation)** : These polygons are cross realm and part of the VEGMAP<br>**National Wetland Map (Limnetic waterbody)** : These polygons are not part of the VEGMAP but their spatial extent is delineated to indicate non-vegetated areas<br>**0** : These polygons part of the VEGMAP terrestrial realm only |
| CONTRBTR_MAIN_18 | Main contributor 2018 | Indicates the name/s of the main contributors of the spatial data only for each mapped unit. This does not refer to the person/s contributing to the descriptions of the vegetation type. Contributors of the mapped units from the original 2006 map have not changed and were determined from the 2006 publication. Where polygons have been updated the name of the person that mapped/edited the new unit is provided. |
| CNSRV_TRGT_18 | Conservation target 2018 | Indicates the percent area of the vegetation type that should be conserved according to the National Biodiversity Assessment 2011. New vegetation types added in version 2009 and 2012 of the vegetation map were not included in this assessment. Therefore, interim values were assigned for these types by borrowing values from similar vegetation types. Interim values were based on a combination of descriptions from contributing partners and the extent and biogeographic association with similar or adjacent vegetation types. Values for new types in the Thicket Biome were assigned from the 2012 vegetation shape with which the new type shared the greatest extent. |
| VMPOLYID_18 | VEGMAP Unique polygon ID number 2018 | Unique polygon ID for this version. Note that Unique ID's change between versions as polygons are updated. |
| Estuary_ID | Estuary ID | Unique Estuary Identification number which can be linked with the Estuary Ecosystem Map |

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| CoastalPoly | Coastal Polygon | Indicates which polygons were considered to be part of the coastal zone. |
| NBA2018_PL | NBA 2018 Protection Level | Indicates the Protection Level of ecosystems as indicated in the 2018 National Biodiversity Assessment. See the NBA 2018 reports for more information. |
| NBA2018_RLE | NBA 2018 Red List of Ecosystems Status | Indicates the IUCN Red List of ecosystems status as indicated in the 2018 National Biodiversity Assessment. See the NBA 2018 reports for more information. |
| Shape_Length | Shape Length | Automatically generated geodatabase value indicating the length of the polygon in meters |
| Shape_Area | Shape Area | Automatically generated geodatabase value indicating the length of the polygon in square meters |