HABITAT MODIFICATION LAYER

BY

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Introduction

• There is high demand for data on land cover at a national level:
  ❖ NFEPA project
  ❖ Listing of threatened ecosystem
  ❖ Millennium Development Goals report

• Unfortunately National Land Cover layer is unlikely to be updated before next NBA
Introduction (cont)

• Provincial and metro biodiversity planning work session (Nov 2013)
  – Need for layer depicting Habitat modification
  – Technical working group nominated
  – Met in Dec 2013 to develop methodology
  – Provinces & other stakeholders contacted for input
How is this different

**2009 Mosaic land cover**
- Project was undertaken in-house
- Mosaic Land Cover
- 30M resolution
- 8 Major Land use classes

**Habitat modification layer**
- SANBI consulted interested stakeholders, esp. Conservation Planners
- Habitat Modification Layer
- 10M resolution
- 14 Major Modification classes
Datasets used
Data Harmonization

- All datasets were resampled into 10m resolution.
- GIS models were developed to automate some processing.
- Priority was given to some data based on expert input and their year of production, resolution, scale, etc.
- Provincial land cover datasets were reclassified into 14 classes.
## Habitat Modification Classes

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
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<tbody>
<tr>
<td>Natural Area</td>
<td>Primary Natural Area</td>
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<tr>
<td></td>
<td>Degraded Natural Area</td>
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<td></td>
<td>Secondary Natural Area</td>
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<tr>
<td>Cultivation</td>
<td>Dryland Cultivation</td>
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<td></td>
<td>Irrigated Cultivation</td>
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<tr>
<td>Plantations</td>
<td>Plantations</td>
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<tr>
<td>Waterbodies</td>
<td>Natural Waterbodies</td>
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<tr>
<td></td>
<td>Artificial Waterbodies</td>
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<tr>
<td>Roads</td>
<td>Roads</td>
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<tr>
<td>Urban / Built up</td>
<td>Urban / Built up</td>
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<tr>
<td>Rural</td>
<td>Rural Settlements</td>
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<tr>
<td>Non Natural Urban Space</td>
<td>Non Natural Urban Space</td>
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<tr>
<td>Mining</td>
<td>Mines</td>
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</tbody>
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Land Cover Progress in SA

• NGI is mandated to create NLC for the country (province by province analysis)

• Geo Terra Image has recently done NLC using LandSat 8 (30M resolution, 10 classes?)

• Provinces continue with their provincial land cover mapping
Thank you