Update on NWI

By

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Mpekweni Resort 2014
Flow chart Map3

**INPUT DATA**

- National Land Cover 2000
  - Waterbody
  - Wetland

- DWAF 2004 Farmdams & rivers
  - Dam
  - Lake
  - River

- Chief Directorate: Surveys & Mapping 2005-2007 Inland Water Features

<table>
<thead>
<tr>
<th>Natural Waterbody</th>
<th>Artificial Waterbody</th>
<th>Wetland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry pan</td>
<td>Dam</td>
<td>Marsh vlei Swamp</td>
</tr>
<tr>
<td>Lake</td>
<td>Fish farm</td>
<td></td>
</tr>
<tr>
<td>Mud flats</td>
<td>Large reservoir</td>
<td></td>
</tr>
<tr>
<td>Non-perennial pan</td>
<td>Purification plant</td>
<td></td>
</tr>
<tr>
<td>Perennial pan</td>
<td>Sewerage works</td>
<td></td>
</tr>
<tr>
<td>Pool</td>
<td>Water tank</td>
<td></td>
</tr>
</tbody>
</table>

- Finer-scale sub-national data
  - KZN
  - CAPE fine-scale plans
  - Kamieskroon
  - Niewoudville
  - Overberg

**NATIONAL WETLAND MAP 1**
- (Beta version)
- Waterbody
- Wetland

**NATIONAL WETLAND MAP 2**
- Artificial waterbody
- Wetland
- Natural waterbody
- Unclassified waterbody (20%)

**NATIONAL WETLAND MAP 3**

- Wetland
- Natural waterbody
- Unclassified waterbody
- Artificial waterbody

**NFEPA: WETLAND MAP 3**
- Natural
- Artificial
CLASSIFICATION SYSTEM FOR WETLANDS
and other Aquatic Ecosystems in South Africa

USER MANUAL: Inland Systems

Dean Ollis, Kate Snaddon, Nancy Job and Namhla Mbona
Protection levels & threat status of wetlands

- **CR**: 48
- **EN**: 12
- **VU**: 5
- **LT**: 35

- **Zero protection**: 56
- **Hardly protected**: 16
- **Poorly protected**: 12
- **Moderately protected**: 6
- **Well protected**: 11
The NFEPA project team acknowledged that, being national-scale, the datasets would not be completely accurate at fine scale and that there was an ongoing need to refine these datasets over time, using more localized approaches.

Following closely in importance to strengthening the emerging national ecosystem classification system is the need for regularly updated, countrywide data on the condition of ecosystems. Without good data on ecological condition, it is not possible to assess ecosystem threat status.

Strengthening the consideration of wetlands and water resources in decision-making around mining in Mpumalanga, through improved spatial data.

Aims -:
1. To ground-truth and refine the current data layers of the extent, distribution, condition and type of freshwater ecosystems in the Mpumalanga Highveld coal belt.
NFEPA Wetland data

• Derived from existing data sets (with many flaws), but first attempt to present all the mapped wetlands.
• Problem areas include:
  • Incorrectly mapped wetlands (not really wetlands).
  • Only part of wetlands mapped (incomplete mapping).
  • Poorly mapped off course resolution images (boundaries NOT accurate), or projection problems.
  • Large gaps where no wetlands have been recorded.
  • Wetlands have been lost due to transformation.
Tools and methods
<table>
<thead>
<tr>
<th></th>
<th>NWI</th>
<th>Digitised wetlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number</td>
<td>596</td>
<td>1644</td>
</tr>
<tr>
<td>Total Area (ha)</td>
<td>819</td>
<td>1124</td>
</tr>
<tr>
<td>% Surface Area</td>
<td>0.4</td>
<td>0.6</td>
</tr>
</tbody>
</table>
THANK YOU!

National Wetland Inventory
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http://wetlands.sanbi.org

http://bgis.sanbi.org