Guided by Water:
incorporating landcover-derived wetlands into the Western Cape Biodiversity Sector Plan

Biodiversity Planning Forum

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RIVERS
1:500K to
1:50K
Subclass (HGM) typing method:
Modelled in vector environment, Using rule-set & Hammonds Landform Model

Overall User Accuracy = 98%
Wetlands, valley-bottom = 90%
Wetlands, other = 93%

Semi-automated, seasonally-defined, spectral foundation classes

Wetlands:
90m SRTM based terrain model to generate ‘mask’, then single (“wettest”) or dual (“flush”) date methodology;
Indices applied (4 vs 8) re: ‘wet veg’

Classification
- Water rivers seasonal
- Water rivers permanent
- Water pan water seasonal
- Water pan water permanent
- Water natural water seasonal
- Water natural water permanent
- Water estuarine (seasonal)
- Water estuarine (permanent)
- Water sea (combined seasonal _permanent)
- Water seasonal (dams)
- Water permanent (dams)
- Wetlands estuarine
- Wetlands floodplain
- Wetlands valley-bottom
- Wetlands seeps / highland
- Wetland pans
- Wetlands other
- Dams50
Going forward

• Before final runs
  – Remove additional dams from integrated wetland layer
  – Dis-integrate?

• Next iteration / update
  – Improve wetland typing
    • NWI / NFEPA not as good as original project-based
    • Land cover-derived misses ‘flats’
  – Use ground-truthing protocol to improve