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EGI SEA:
Freshwater Assessment Results

ERG Meeting

21 July 2015

Freshwater Consulting Group

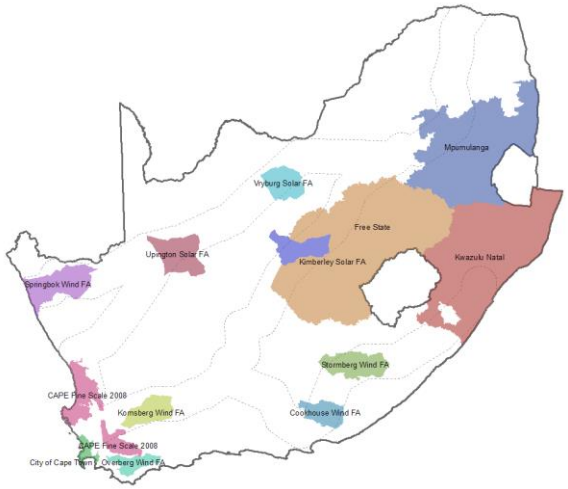
environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Eskom

SANBI
Biodiversity for Life
South African National Biodiversity Institute

Data and Data manipulation

- Key datasets used were the 2011 NFEPA rivers and wetlands datasets. The NFEPA rivers layer was not edited: good representation of the important river systems of South Africa.
- Inaccuracies in the NFEPA wetlands layer, and significant under-mapping of isolated wetlands.
  - supplemented by local fine-scale data where available
    - City of Cape Town: NFEPA wetlands entirely erased and replaced with the fine-scale wetland mapping.



Sensitivity rating

- Aquatic features were treated differently from most other biophysical features in that all wetlands and river reaches were classified as being of **very high sensitivity**.
- **Artificial wetlands** are not sensitive Biophysical features, but were left in as a comprehensive source data set to assist in identifying engineering sensitivity.

Water Licensing wrt Electricity Grid Infrastructure

- The construction and operation of EGI is likely to result only in non-consumptive water uses, specifically Section 21 (c) and (i).
- Even these non-consumptive water uses may impact on the integrity and function of water resources and the overall quality of the resource and therefore must be authorised as a water use by the Department of Water and Sanitation (DWS) or competent authority (such as a Catchment Management Agency).
- The process to be followed to obtain authorisation for these categories of water use are different, and relate to the risk associated with the water use. Lower risk water uses fall under a number of GAs, and authorisation is a simpler, faster process than for licensing.
- A GA permits the use of water in a specific area, or according to a set of conditions or limits.

WULA vs GA: Status Quo

- Currently, there are two GAs, one for consumptive and one for non-consumptive use, with each specifying areas of applicability and exclusion. The non-consumptive water use GA is relevant here.
- Non-consumptive GA (GN 1199)
- This GA currently does not apply to any activities occurring within regulated areas
  - Within 500m of a wetland
  - Within 1:100 year flood line of river or riparian zone (whichever greatest)
  - quaternary catchments specified as being exclusions from this GA .
- Any water uses falling within these areas are still subject to a Section 21 (c) and (i) water use licence (Full WULA).
- This GA is currently under review, and an amended GA is likely to be released in the coming months.
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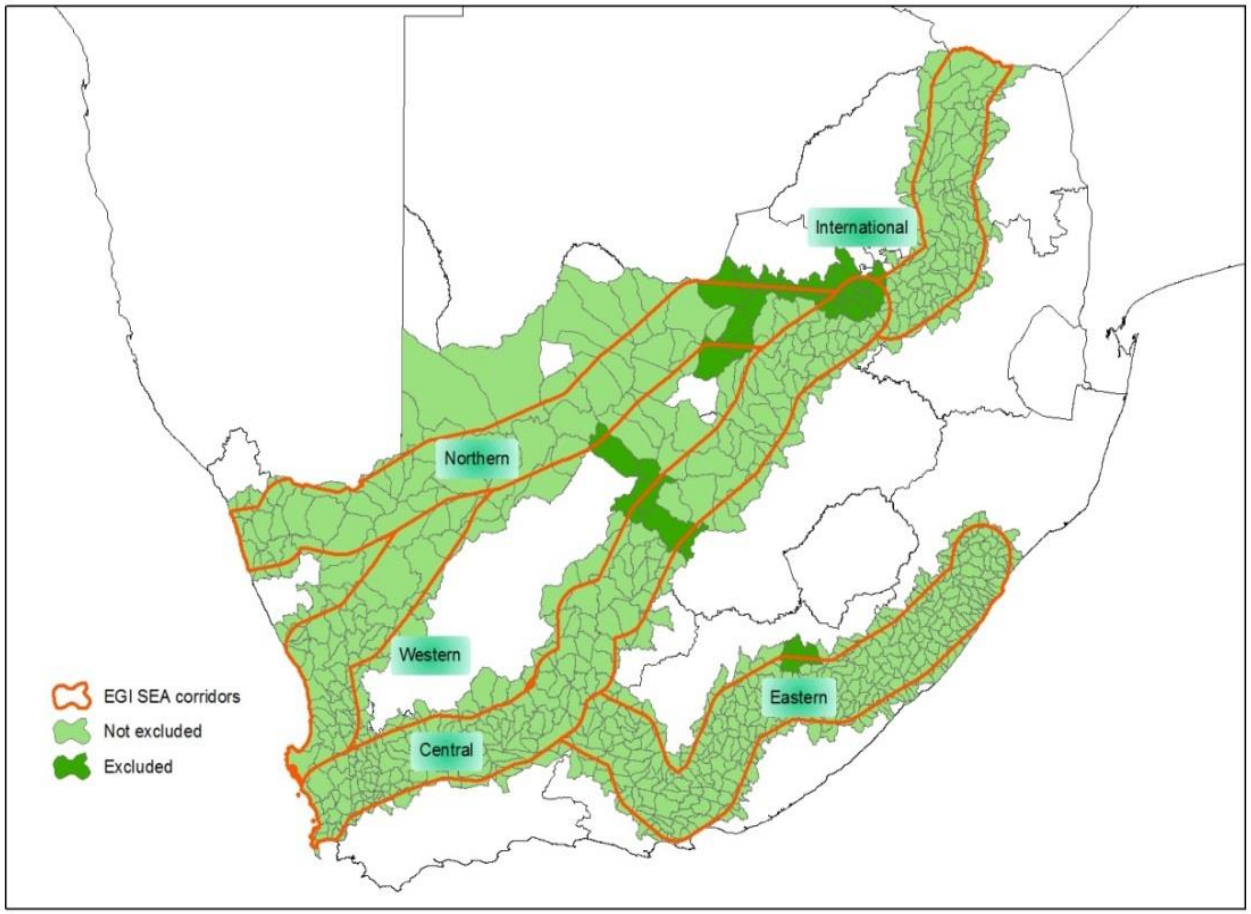
Quaternary Catchments excluded from GA currently



GN 1199 Amendment

- The amended GA proposes the use of a risk-based approach for the authorisation of Section 21 (c) and (i) water uses, applicable to State-Owned Companies as well as private individuals and entities. This is designed to facilitate the water use authorisation process, by allowing the General Authorisation of certain water uses, deemed to be of an acceptably low environmental and socio-economic risk.
- The matrix specifically addresses impacts:
  - Within the extent of the watercourse, defined as “within the outer edge of the 1 in 100 year floodline or delineated riparian area as measured from the middle of the watercourse measured on both banks, and
  - Within a 500 m radius from the boundary of any wetland (the boundary of a wetland is the outer edge of the seasonal or temporary zone as delineated for the wetland)”.
- The amended GA specifies **Eskom’s transmission and distribution infrastructure** (specifically towers, pylons and powerlines) as a low risk activity that qualifies for general authorisation, based on the implementation of certain controls as described in technical documents, to be supplied by Eskom.

GN 1199 Amendment

- Internal controls include:
  - EMPr, method statements, engineering designs, and best practices;
  - Delineation of watercourses (must indicate 1:100 year floodline where affected, and designs must cater for 1 in 100 year floods);
  - Proof of mitigation hierarchy, basic impacts/risks and mitigation measures;
  - Risk assessment of **generic** activities determined using Risk Assessment Matrix

GN 1199 amendment, Integration with SEA, Protocol and EMPr

- Proposal to incorporate GN 1199 amendment requirements for GA registration into protocol as part of aquatic specialist ToR for completing environmental assessment
- Therefore aquatic specialist to undertake assessment requirements to inform both environmental assessment and GA decision making.
- GA submitted to DWS for registration as part of EA process
- Ensures alignment and integration between EA and water use registration
- Amended GN still subject to change i.e. to undergo public comment
- Any changes to GN to be incorporated into EGI protocol prior to gazetting

Thank you

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