





# **INKOMATI WETLANDS: METHODS**

- Desktop assessment
  - Wetlands screened at Quaternary and SQ scales.
  - Priority wetland/s / catchments based on:
    - Diversity of wetland types
    - Total wetland extent
    - Presence of NFEPA wetlands
    - Presence of NFEPA wetland clusters
    - Occurrence of RAMSAR sites
  - Only priority wetlands assessed for PES & EIS
- 




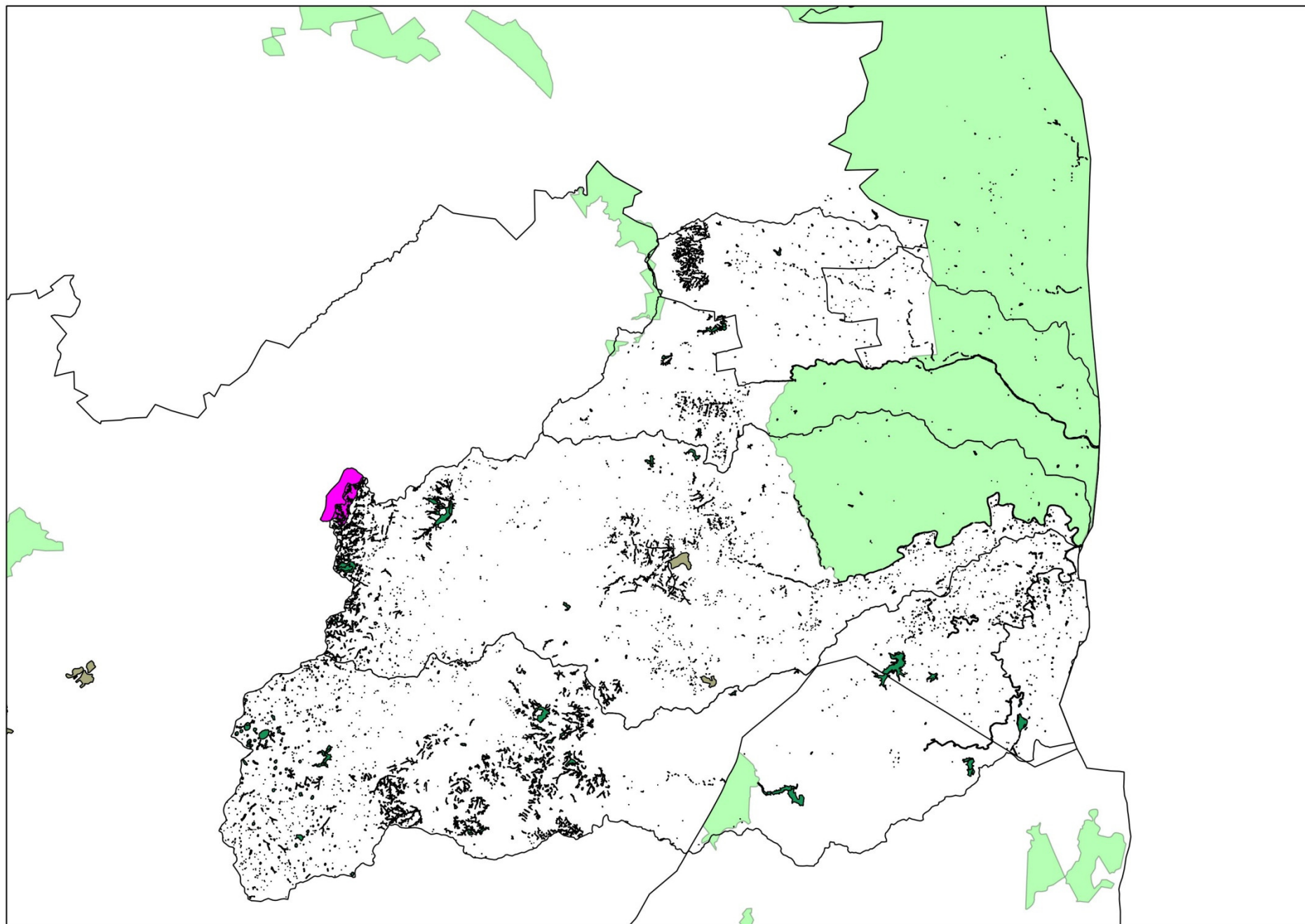
# **INKOMATI WETLANDS: PES**

- Wetland PES assessed using Inkomati PES-Ei-ES data and verified with Google Earth.
  - PES based on following metrics:
    - Afforestation/Invasive plants
    - Dams, irrigation, other flow reduction activities
    - Extent of Urbanisation/catchment hardening
    - Landuse activities (mining, agriculture, over grazing)
    - Flow Modification
    - Erosion of wetlands
    - Sedimentation
    - Potential Physico-chemical modification
    - Bed and Channel disturbance
    - Vegetation removal
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# **INKOMATI WETLANDS: EIS**

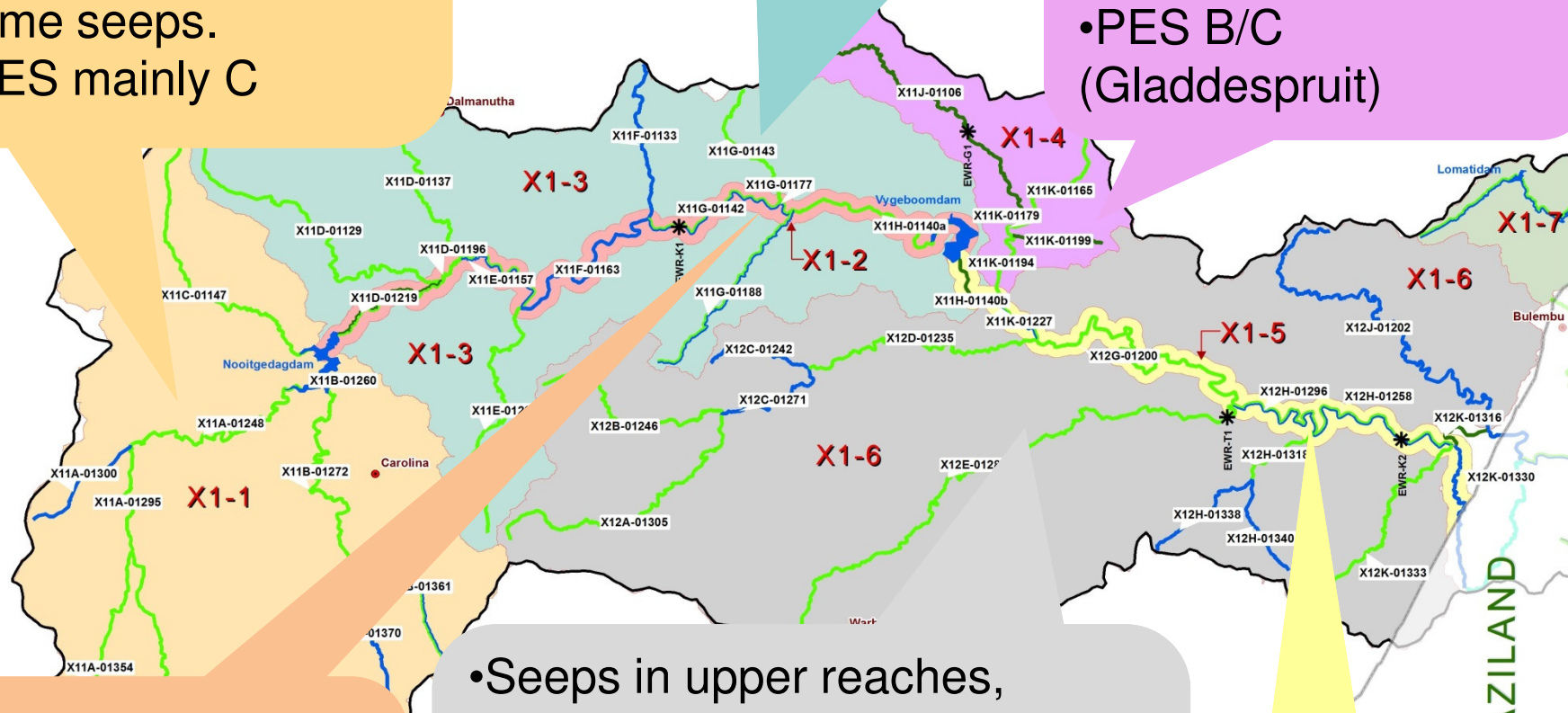
- Integrated wetland EIS assessed using Inkomati PES-Ei-ES data, SANBI data, NFEPA data
  - EIS based on following metrics:
    - Diversity of wetland types
    - Density / extent of wetlands
    - Unique wetlands
    - Wetland species richness (plant based)
    - Importance of conservation & natural areas
    - Migration corridor/s (links to other systems)
    - Rare/endangered/unique/threatened species/populations
    - Sensitivity to upstream flow changes
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- Frequent pans, depressions, channelled valley-bottom wetlands, some seeps.
- PES mainly C

- Mainly pans & depressions
- PES mainly B/C
- Swartspruit

- Channelled valley-bottom wetlands, many on tribs
- PES B/C (Gladdespruit)



- Pans, depressions, channelled valley-bottom
- PES mainly C

- Seeps in upper reaches, channelled valley-bottom wetlands lower reaches
- Buffelspruit, Seekoeispruit, Teespruit
- PES = B to C

- No priority wetlands highlighted

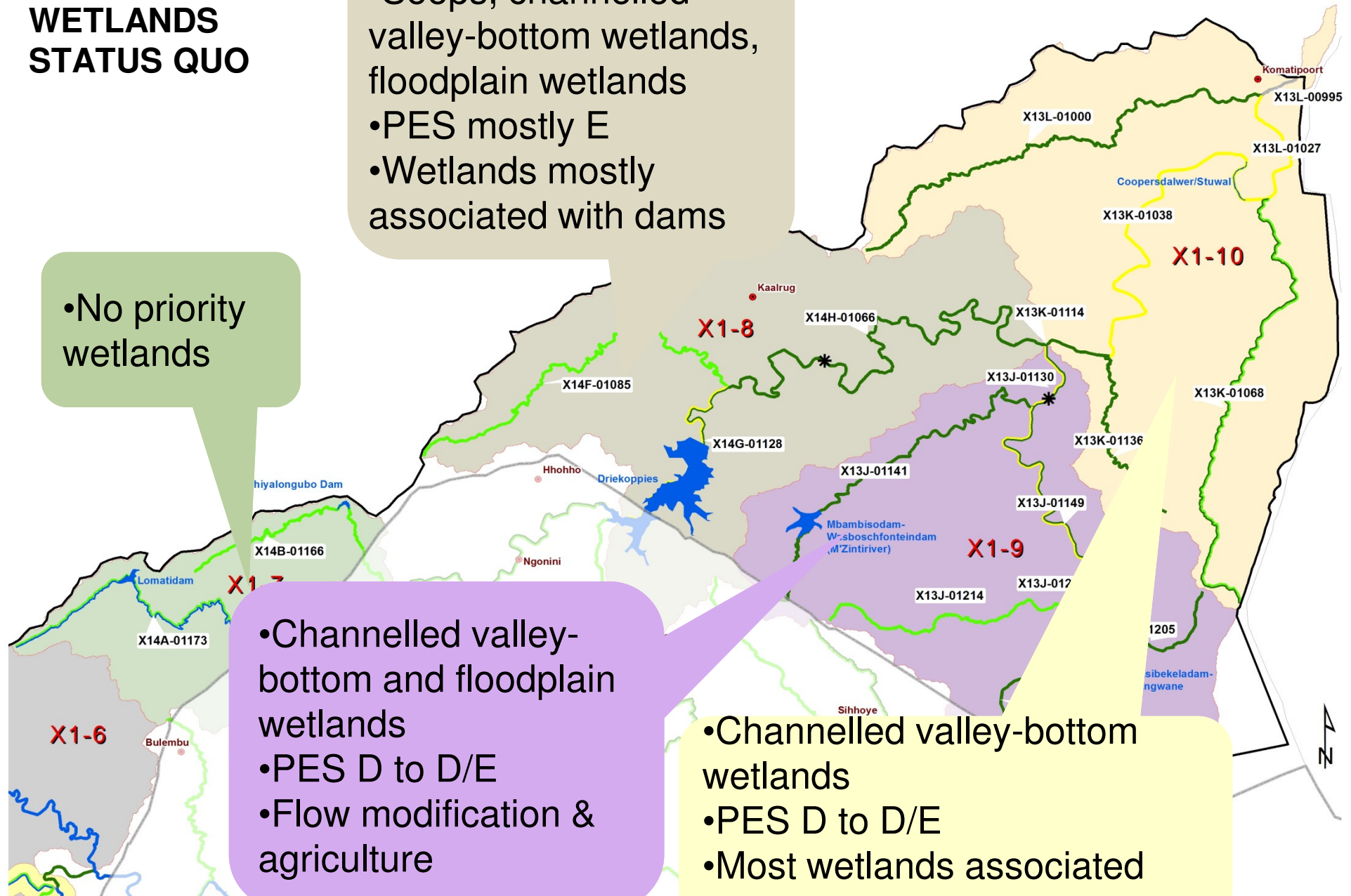
## X1 (Komati) WETLANDS STATUS QUO


- Seeps, channelled valley-bottom wetlands, floodplain wetlands
- PES mostly E
- Wetlands mostly associated with dams

- No priority wetlands

- Channelled valley-bottom and floodplain wetlands
- PES D to D/E
- Flow modification & agriculture

- Channelled valley-bottom wetlands
- PES D to D/E
- Most wetlands associated with dams



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- RAMSAR:  
Verloren Valei
  - High altitude  
seeps
  - PES mostly C

- No priority wetlands

- No priority wetlands

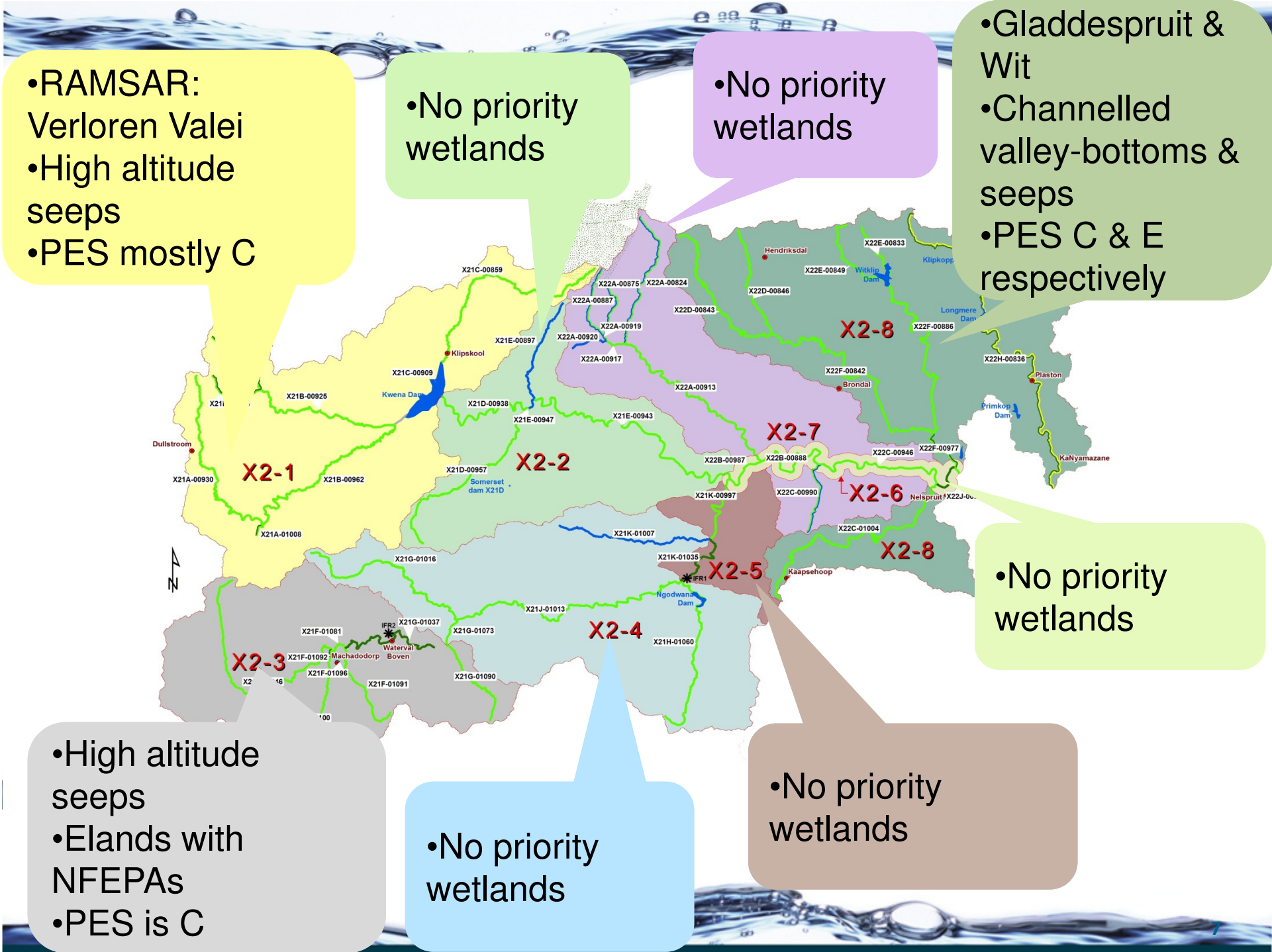
- Gladdespruit & Wit
- Channelled valley-bottoms & seeps
- PES C & E respectively

- No priority wetlands

- High altitude seeps
- Elands with NFEPAs
- PES is C

- No priority wetlands

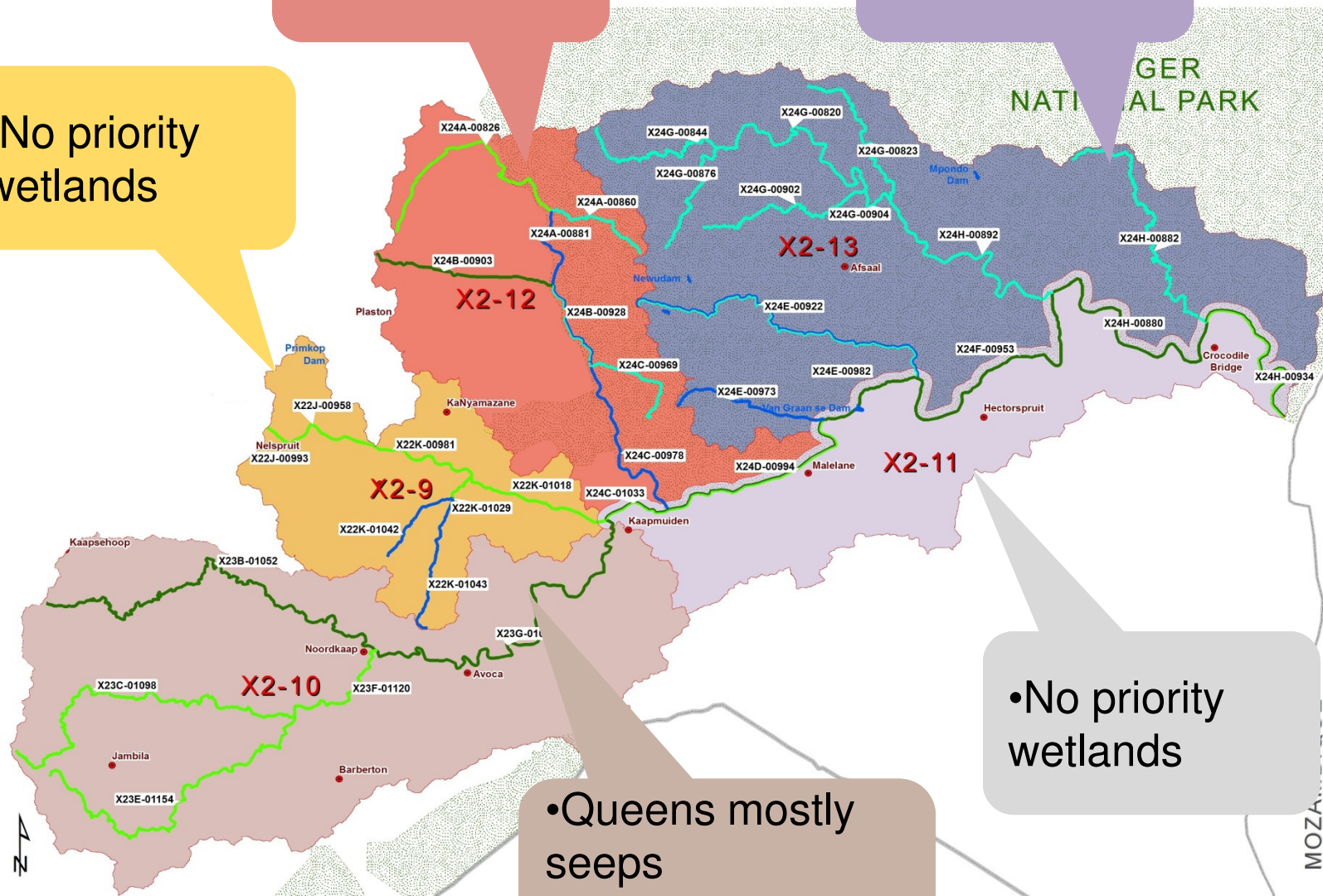
- No priority wetlands



•No priority wetlands

•No priority wetlands

•No priority wetlands

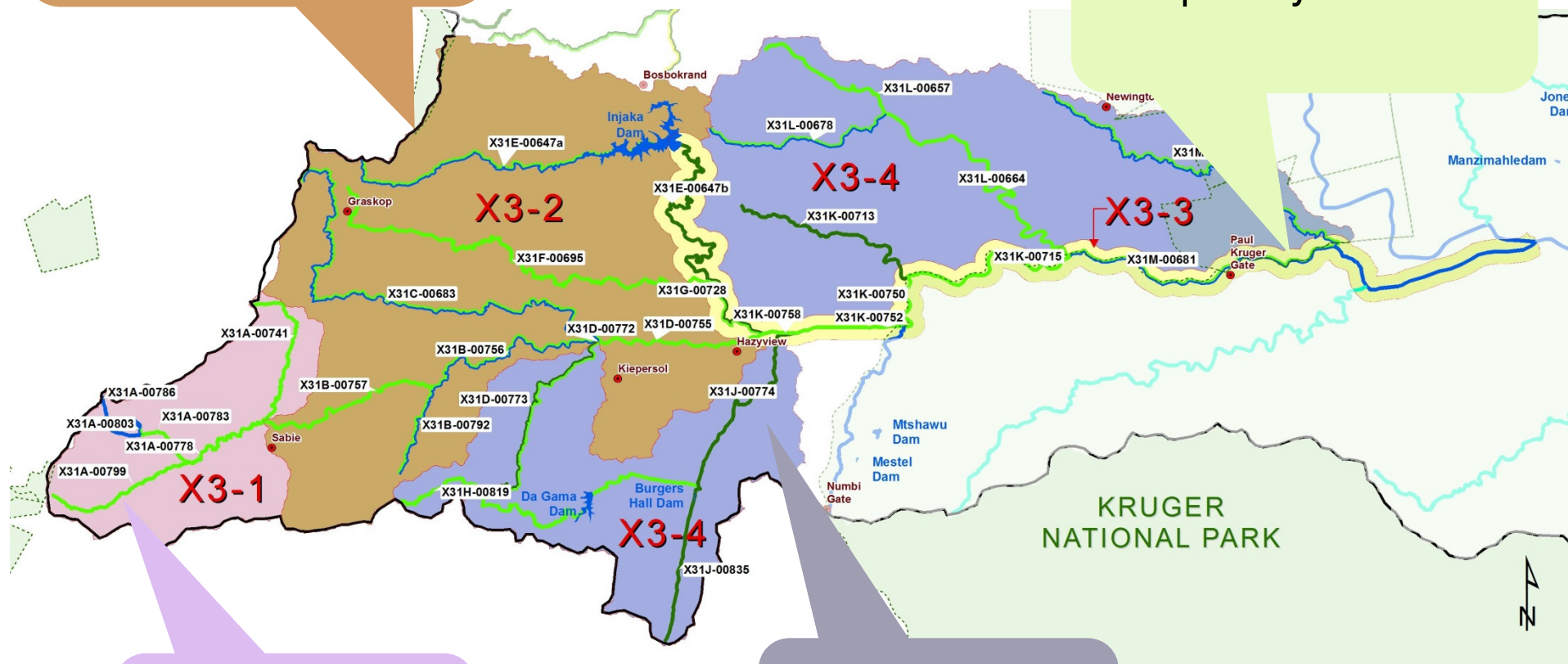


•No priority wetlands

•Queens mostly seeps  
•Not NFEPA  
•PES is C

- Motitsi mostly channelled valley bottoms
- PES = C

- No priority wetlands



- No priority wetlands

- No priority wetlands





**Thank You**