Wetlands and extractive industries

1st Workshop of the STRP African National Focal Points and other Wetland Experts in the region.

Johannesburg, South Africa, 30 November-2 December 2010

Outline of the work session

- Background to the development of this task
- 2.3A Flyway vulnerability assessment methodology
- 2.3B Guide to available guidance on extractive industries
- Breakout groups

Background

- African and Latin American Parties discussed their concerns with STRP and AEWA-TC in 2006-07:
  - Increasing activity and rapid expansion in extractive industries leading to wetland damage;
  - Wanted help to manage impacts of extractive industries.
- STRP commissioned a briefing note (2007) to better understand:
  - Economic trends and drivers in the sector;
  - Needs of the Parties with respect to technical guidance and support.
- Resolution X.26 adopted in 2008:
  - Outlines Ramsar's concerns and issues;
  - Sets out Ramsar position on extractive industries
  - Requested STRP to address this sector in the 2009-2012 work plan.
- UK voluntary contribution:
  - funded a collaborative project with the AEWA-Technical Committee.

Issues

1. High commodity prices driving rapid expansion:
   - Previously unattractive deposits now feasible to exploit;
   - Much shorter times from exploration to operation.
   - Result: inadequate baseline studies and inventory to support EIA and decision-making

2. Wetland managers have poor understanding of technical aspects of extractive sector:
   - Inadequate review of EIA studies submitted in mining permit application process;
   - Permit conditions do not adequately address management of impacts on and downstream of extraction site.
   - Result: impacts on wetlands during operation, insufficient attention to restoration and post-closure management.

3. Poor governance (both government and corporate) leading to violation of license conditions without consequences.

STRP response

1. High commodity prices driving rapid expansion:
   - Wetland managers and decision makers need longer lead times for baseline studies ahead of mining development.
   - Task 2.3A

2. Wetland managers have poor understanding of technical aspects of extractive sector:
   - Wetland managers need guide to available technical guidance (rather than new guidance).
   - Task 2.3B

3. Poor governance (both government and corporate) leading to violation of license conditions.
   - Not for STRP to address.

Extractives task 2.3A – flyway vulnerability assessment methodology

Terms of reference

- Undertake a desk study to identify sites/areas, especially wetlands, likely to be vulnerable to the impacts of the extraction of minerals and other geological products. This will aim to identify hotspots for mineral resources, and overlay that with information on site/wetland distributions.

- Proposed products:
  - working model
  - technical report and/or journal-ready publication,
  - recommendations for further development and application to other regions.

Full scope of work

Commodities –

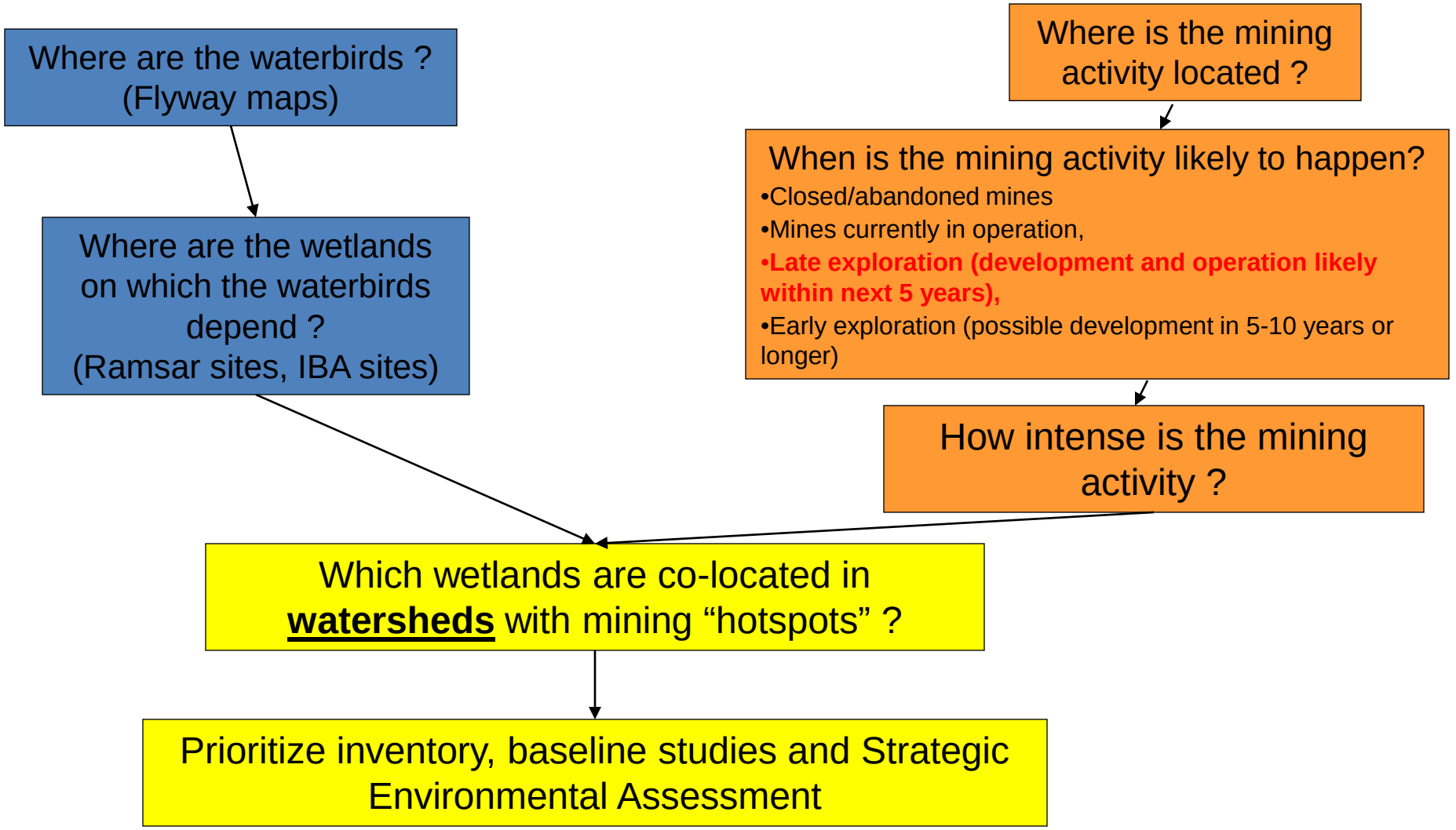
- **Fuel resources**: oil and gas, coal, (uranium), peat
- **Metallic minerals**: precious metals (Au, Ag etc.), industrial metals (Cu, Zn, Pt etc.), (uranium), rare/special metals
- **Industrial minerals**: rocks (e.g. limestone), sediments (sand, gravel, clay), other (diamonds, bentonite etc.)

- Scale –
  - Large scale, medium/junior, artisanal

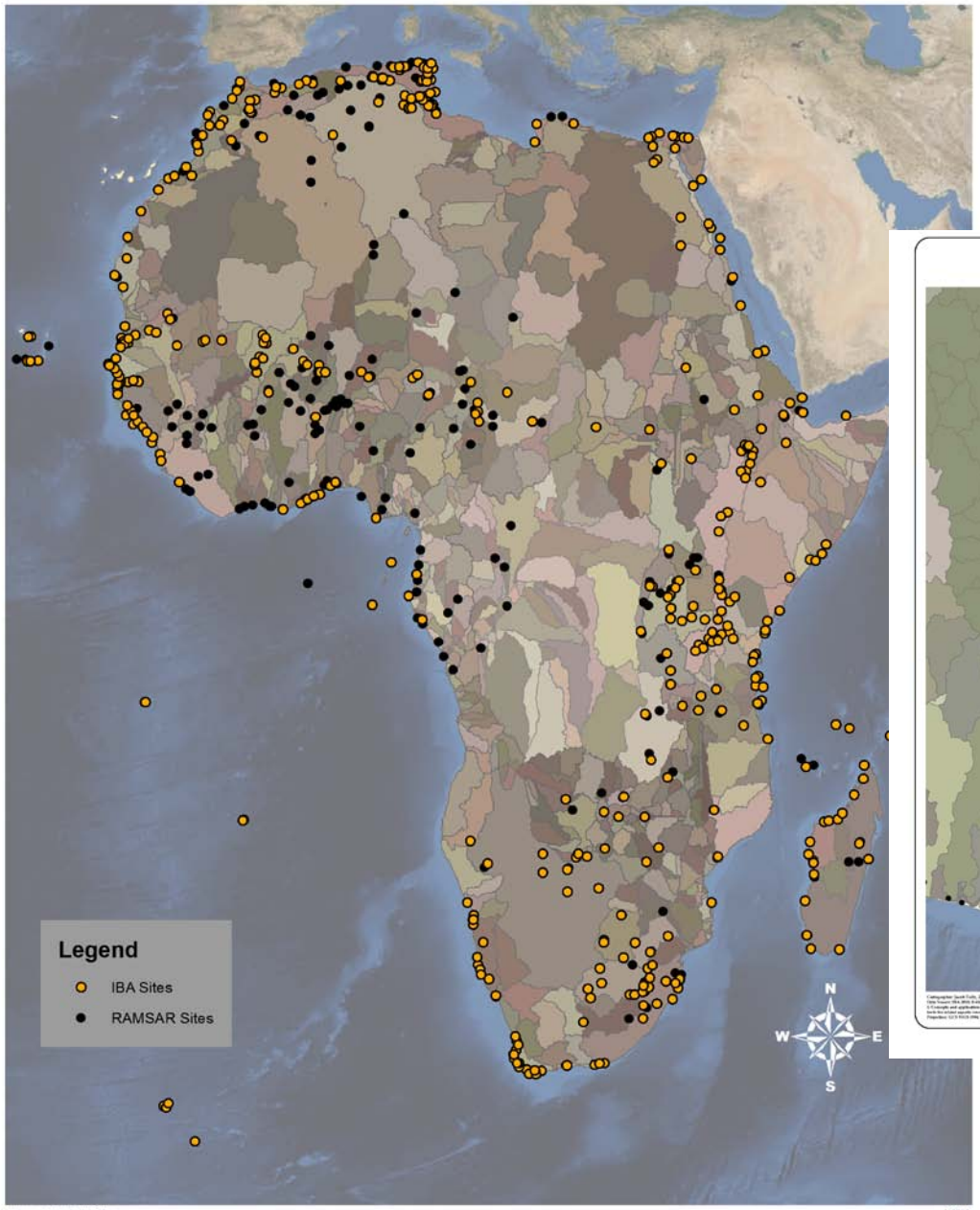
Full scope of work cont.

- Phases of the mining cycle for flyway assessment –
    - Late exploration (pre-feasibility and feasibility studies)
    - Development and operation
    - Closed/ mothballed

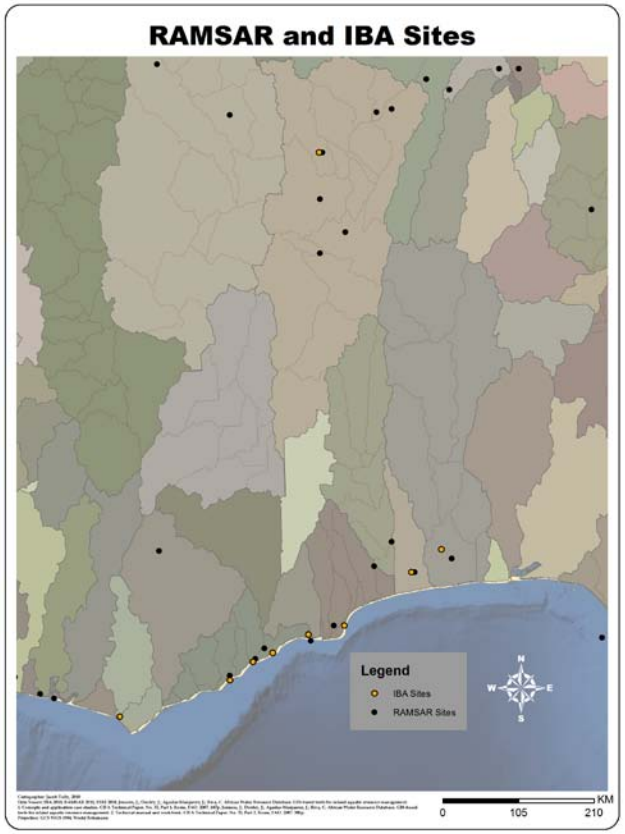
Conceptual basis for methodology



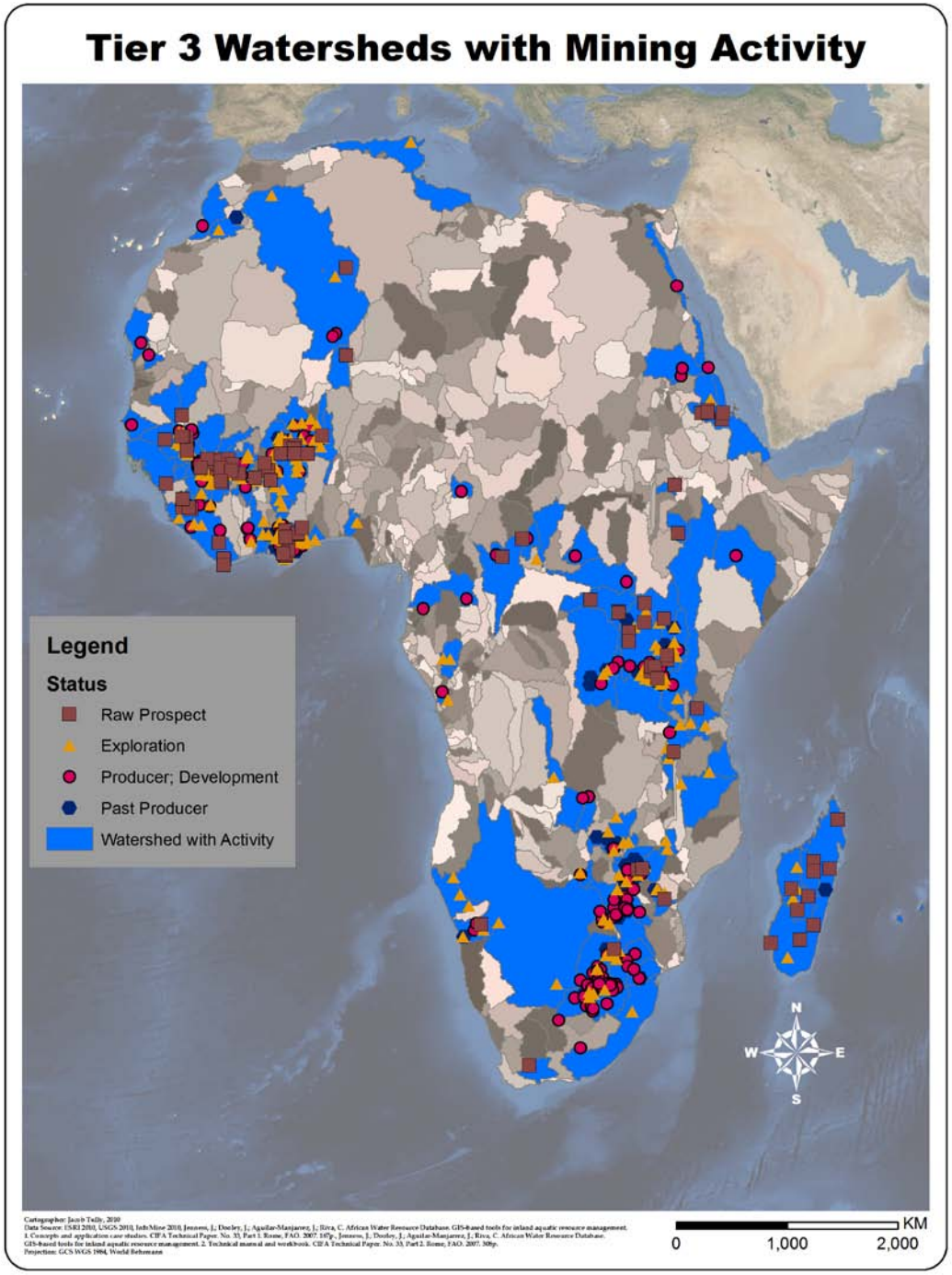
RAMSAR and IBA Sites



Cartographer: Jacob Tully, 2010
Data Source: IBA 2010, RAMSAR 2010, ESRI 2010, Jonsson, J.; Dooley, J.; Aguilar-Manjarrez, J.; Riva, C. African Water Resource Database. GIS-based tools for inland aquatic resource management. 1. Concepts and application case studies. CIFA Technical Paper. No. 33, Part 1. Rome, FAO. 2007. 167p. Jonsson, J.; Dooley, J.; Aguilar-Manjarrez, J.; Riva, C. African Water Resource Database. GIS-based tools for inland aquatic resource management. 2. Technical manual and workbook. CIFA Technical Paper. No. 33, Part 2. Rome, FAO. 2007. 308p.
Projection: GCS WGS 1984, World Behrmann



Au only


Tier 3 Watersheds with Mining Activity
Legend
Status
Raw Prospect
Exploration
Producer; Development
Past Producer
Watershed with Activity
N
W
E
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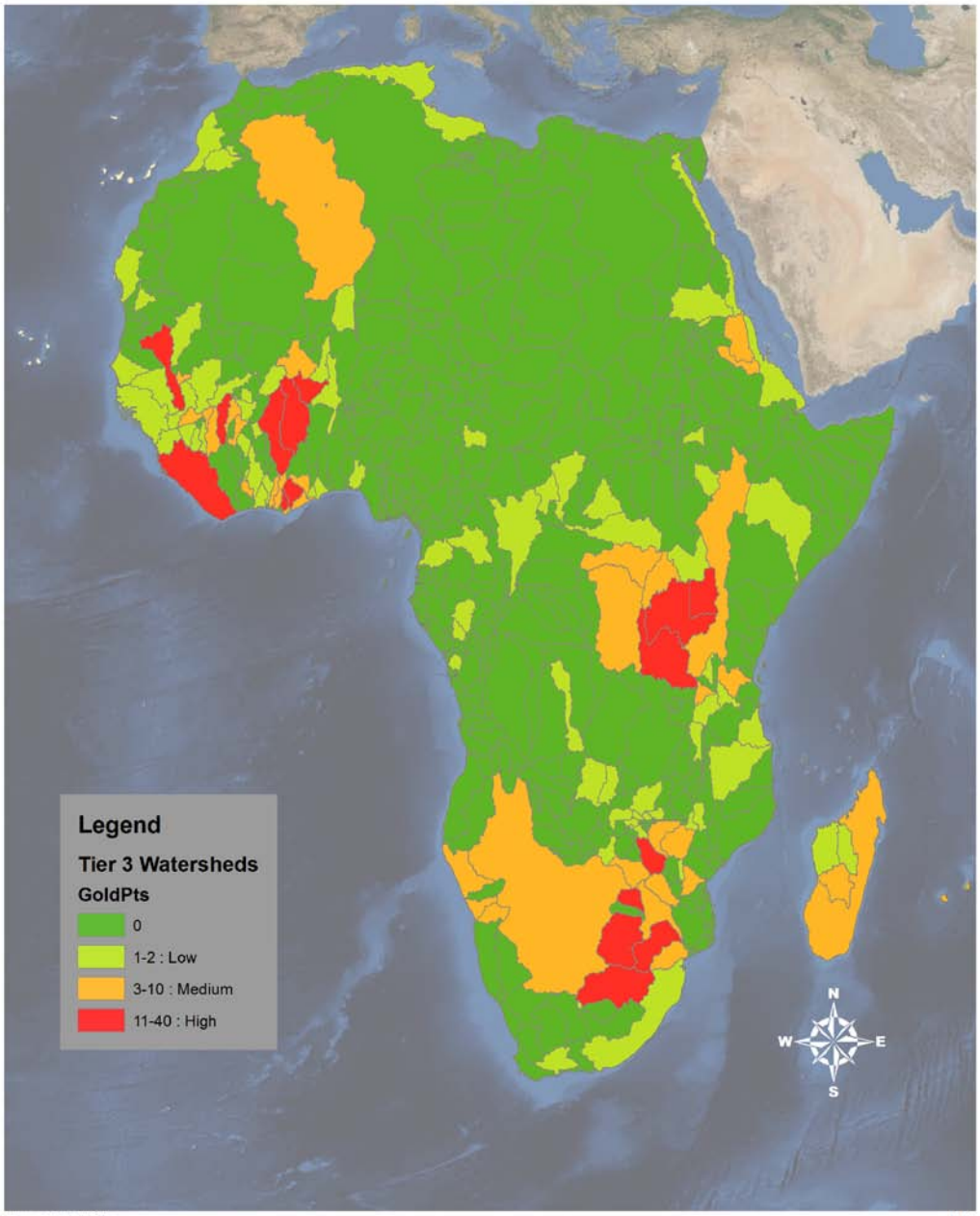
Tier 3 Watersheds with Au Mining Activity



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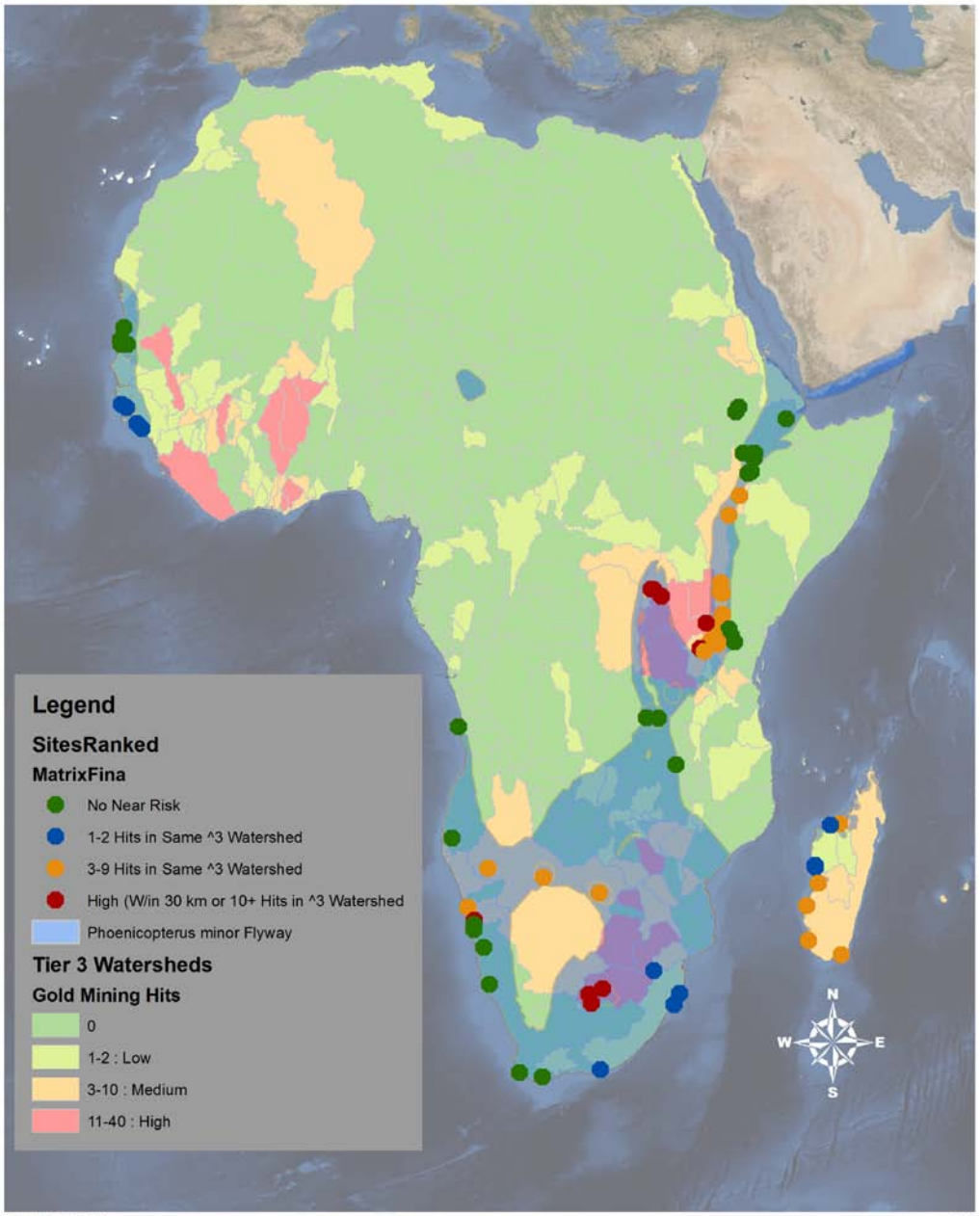
Phoenicopterus minor Flyway and IBA Sites



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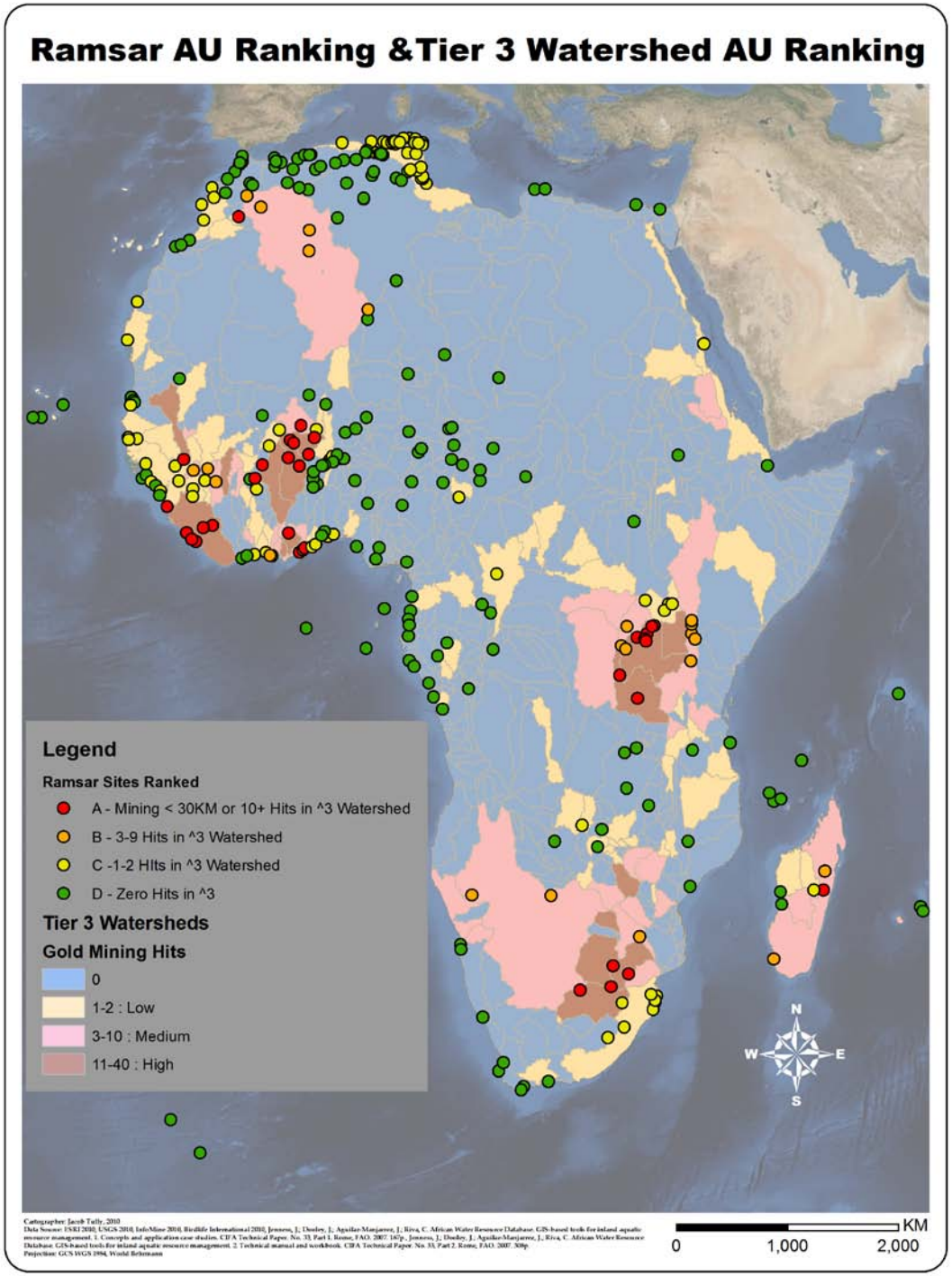
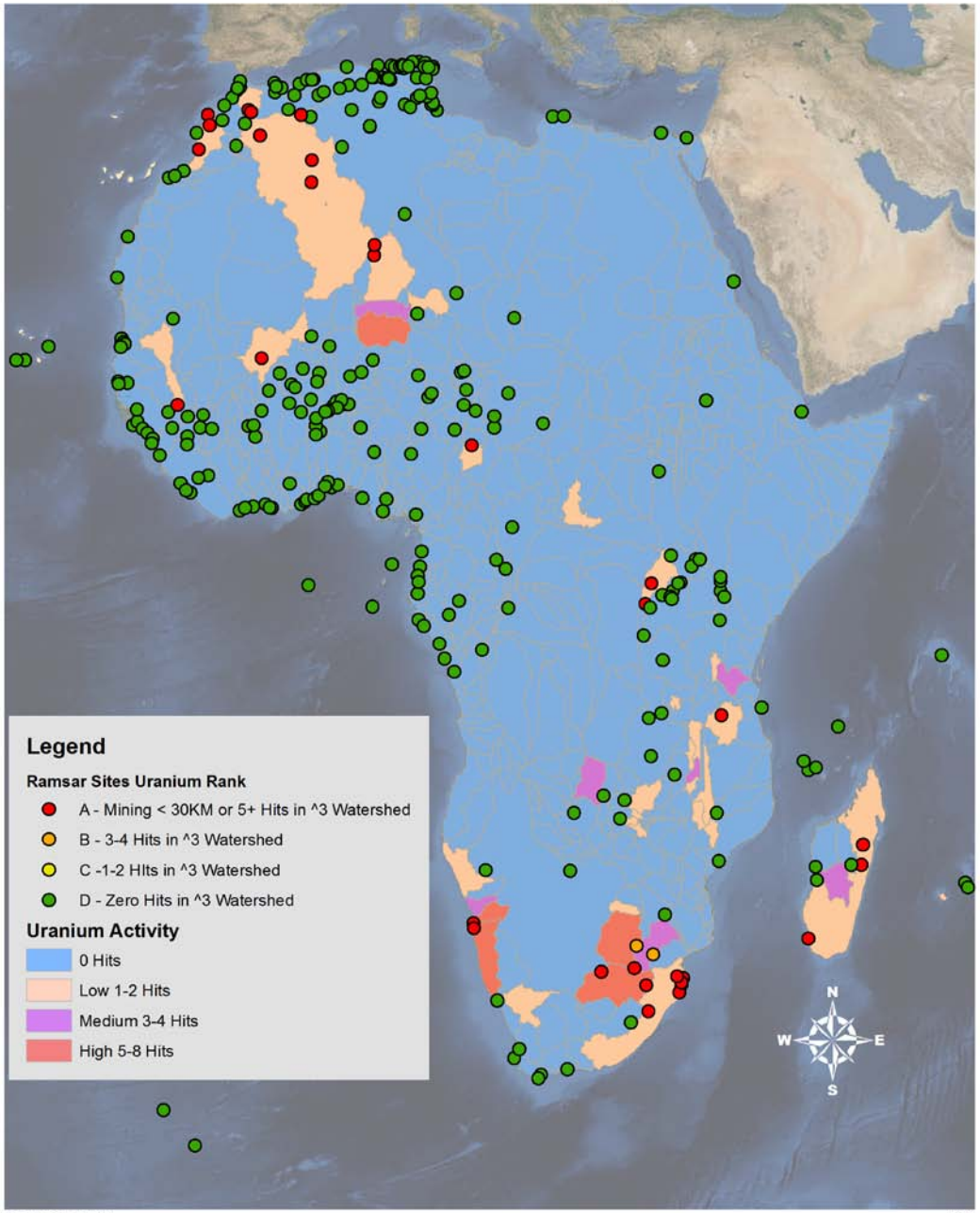
Ramsar AU Ranking &Tier 3 Watershed AU Ranking



Ramsar Uranium Ranking & Tier 3 Watershed Uranium Ranking



Cartographer: Jacob Tully, 2010
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- Limitations of current data set:
  - Does not reflect investments by national governments and sovereign wealth funds.
- Worksheet – sources of data on mining license applications.