

# Building ecological resilience in a rapidly changing landscape



**Corin Simmonds**

*SLR Consulting*

*United Kingdom*

[csimmonds@slrconsulting.com](mailto:csimmonds@slrconsulting.com)

<https://www.slrconsulting.com/en>







# Biodiversity Interest

- Critical habitat qualifying species include:
- Ashy red colobus monkey ***Piliocolobus tephrosceles*** in Burgi Chato NP
- Pancake tortoise ***Malacochersus tomieri*** in Talamai Open Area and Mkwere FR
- Large mammals
- Karamoja apalis ***Apalis karamojae*** in and around Wemberre Steppe (recently designated a GR)
- Itigi sumbu thicket
- Coastal vegetation mosaic

ASHY RED COLOBUS MONKEY



KARAMOJA APALIS



LION FOOTPRINTS



ITIGI SUMBU THICKET



# Current state of biodiversity



Logging



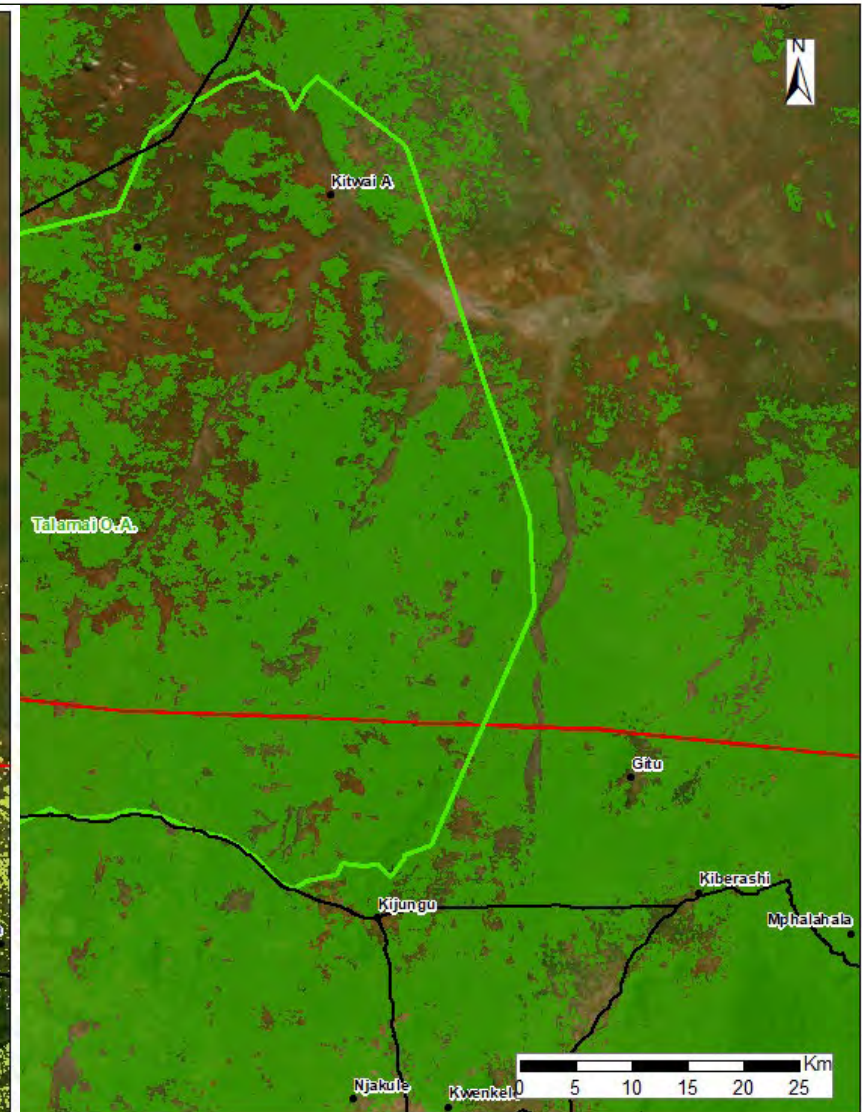
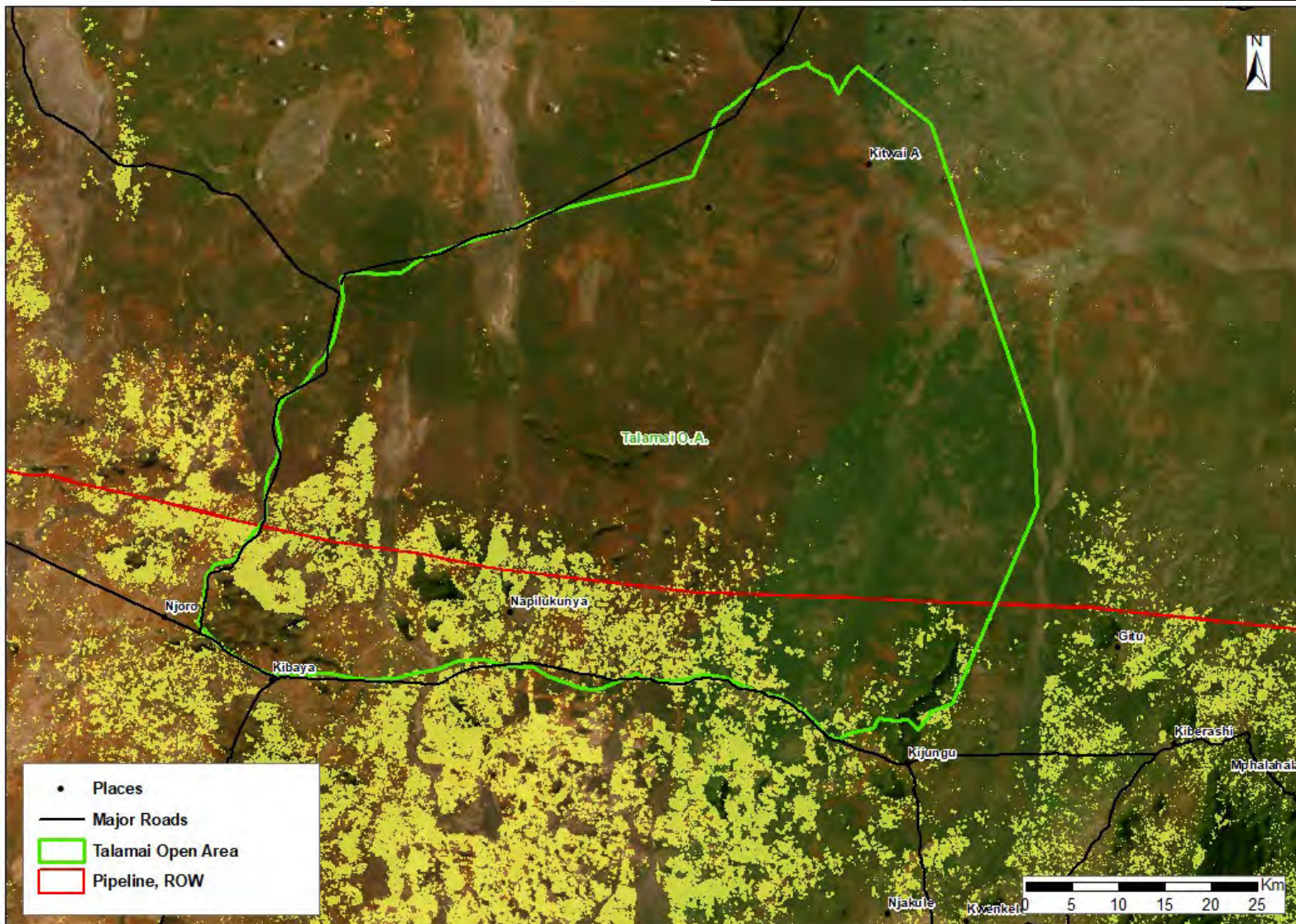
Overgrazing



Charcoal



# Current state of biodiversity





# Updated Mapping

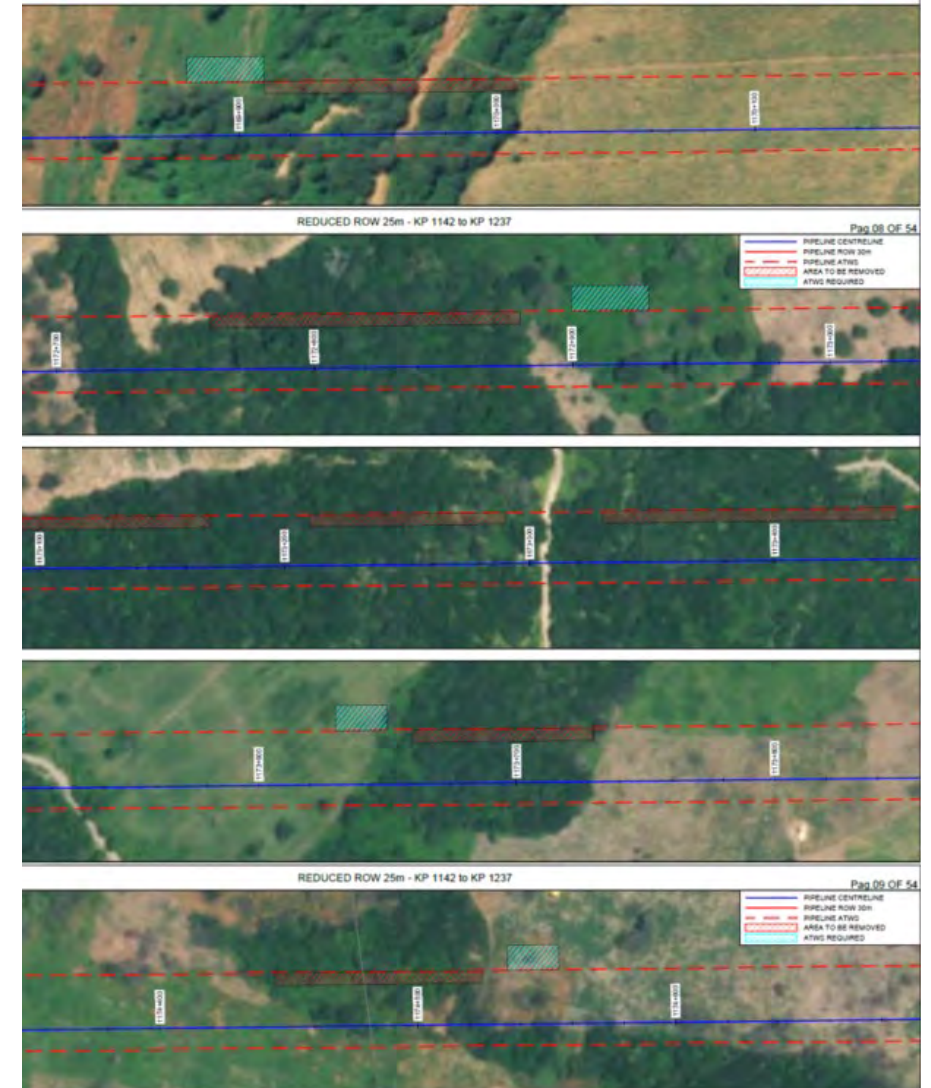
- Detailed mapping extended from 2km to 5km minimum
- Latest satellite imagery
- Ground truthed in the field (near total coverage of route)
- Habitats key to infer species presence due to huge size of project





# Avoidance review: Talamai OA

- Design review process to review opportunities for avoidance and minimisation of impact upon Critical and Natural Habitat





# Avoidance review: Burigi Chato NP

- Design review process resulted in no direct loss of forest habitat









# Mitigation


Receptor	
Karamoja Apalis	
IUCN Status	Critical Habitat Criteria
VU	1
Presence Confirmed	Yes



Receptor	
Ashy red colobus monkey	
IUCN Status	Critical Habitat Criteria
EN	1
Presence Confirmed	Yes



Receptor	
Pancake Tortoise	
IUCN Status	Critical Habitat Criteria
CR	1
Presence Confirmed	Yes



# locations	Location(s)	KP Start
1	Wembere - Whisting Thorn habitat	822


# locations	Location(s)	KP Start	KP End
2	Talamai OA Wakere FR	1142 697	1325 700


Relevant Impact Sources	
Construction of new access roads> Loss of habitat for feeding and breeding Construction of RoW and ancillary facilities> Loss of habitat for feeding and breeding	


Relevant Impact Sources	
Construction of RoW and ancillary facilities> Loss of habitat for feeding and breeding Construction of RoW and ancillary facilities> Habitat fragmentation causing disrupted animal movement Vehicle movements> construction plants and structures > Animal mortality Construction workers > Increased hunting	

Mitigation Required	
Precautionary mitigation measures are required for this receptor	
A Avoidance Measures	

Mitigation Required	
Mitigation is required for this receptor	
A Avoidance Measures	
Micro re-routing Reduced construction width Relocation project components - landscape scale Relocation project components - local scale Where access planned, consider alternative locations Fencing to restrict animal movement	
M Minimisation Measures	
Access prohibitions Access restricted to roads Where access planned, consider alternative locations Animal crossing points	
R Restoration Measures	
Reconstruction of micro-habitats for fauna Animal capture, ex situ conservation/breeding Animal capture and post construction release in situ	
O Offset Measures	
Talamai Open Area. Restoration of bushland and thicket habitat. Wakere FR - provision and restoration of Pancake Tortoise habitat	









# Resilient compensation and offset options

- Full habitat data coverage allowed accurate picture of where impacts on CH are likely
- Habitat condition data available to inform offset accounting
- Understanding of where habitat loss rates were highest helped guide type of offset
- Working with communities is leading the offset design.
- Next steps Ecosystem Service review
- Further development of offset options





# Lessons Learnt

- Habitat mapping essential on such a large project
- Importance of habitat condition data
- Avoidance is iterative and should be considered throughout the project
- Ecological resilience can only be achieved with community engagement





Making  
Sustainability  
Happen

SLRCONSULTING.COM



**Corin Simmonds**

***Technical Director Biodiversity***

**M +**

**E [csimmonds@slrconsulting.com](mailto:csimmonds@slrconsulting.com)**

# Let's continue the conversation!

Post questions and comments in the IAIA23 app.

