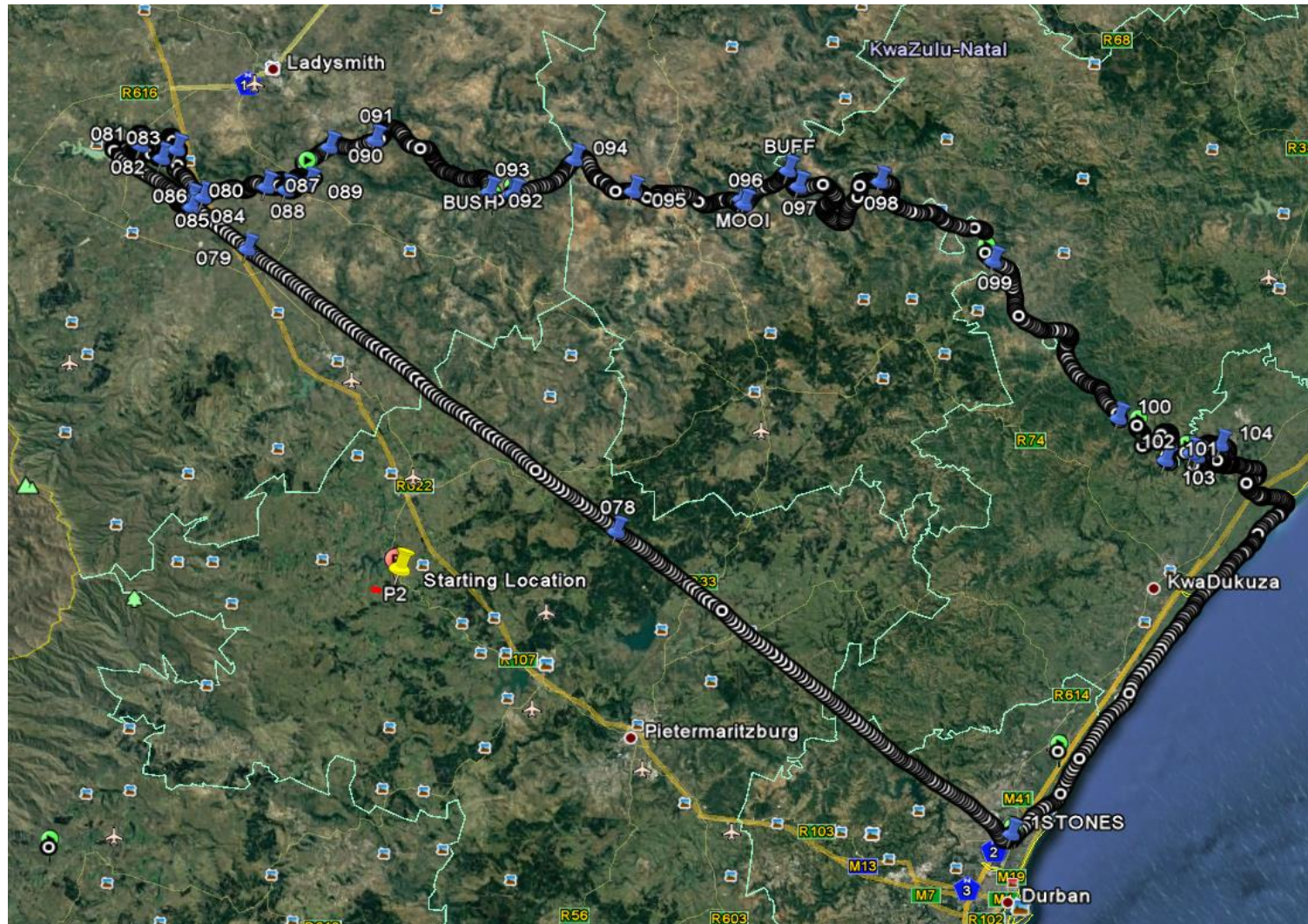


TUGELA

FLIGHT

27 MAY 2016

Flight Path – Spioenkop Dam down Tugela River to Sappi Mandini



- The purpose of the flight was to ascertain possible unlawful abstraction points or reasons for drop in river flows.
- We noted several storage dams which appeared full which would seem odd for this time of the year in the middle of the drought, they could possibly have been pumped into but at the time of the flight no pumping was taking place i.e. lawfulness still needs to be determined.
- There was also a storage dam on one of the tributaries which appeared to have been raised (possibly unlawfully).
- Also noted were several diversions in the form of sand bags across the Tugela River, these all leading to abstraction points, highly possible that some of these are unlawful.
- Several clumps of large centre pivot irrigation and some major abstraction points.
- Many bridges in the process of construction (with coffer dams)
- All of the above still needs to be verified for lawfulness.

New Unregistered Irrigation –
3 km D/S of Spioenkop Dam



Possible unlawful storage structure
on Little Tugela River 4 km U/S of N3



Unregistered Irrigation 17 km D/S



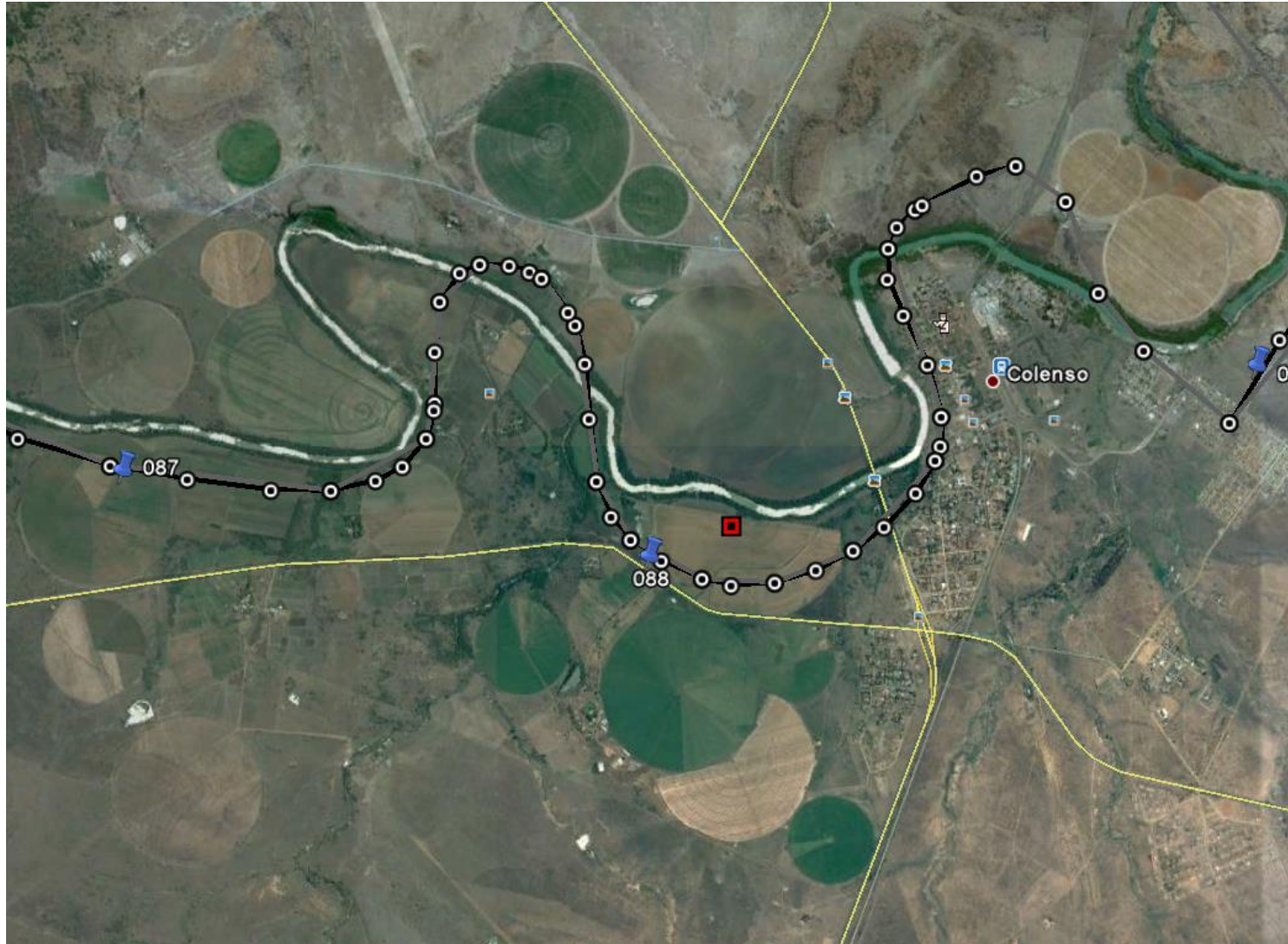
More Unregistered
Irrigation 23 km D/S



Full dams plus plenty of irrigation
just above N3 (possibly from L Tugela &
Tugela)



Irrigation around Colenso (this might have increased without relevant authorisation)



No contribution from Onderbrook Spruit (DRY)



Very wet lands need to check registration @ confluence with Bloukrantz
(Ingomyama Trust - Tugela Estates)



Bushmans River Confluence



Sundays River Confluence



New Weir and Pump Station



eMbabane pump station



Mooi River Confluence (Dry)



Temporary Weir



One of several new bridges



New Bridge



Some diversions on Tugela



Diversion to several pumps



Generally most of the diversions appear to be unlawful and quite a bit of irrigation appears unregistered hence we are unaware of the abstraction volumes and this could account for some of the losses as well as possible filling of dams from the Tugela River.

END