

Mapping Saltwater Creek across time



- SWCCA Boundary
- SWCCA Green Spaces
- Drainage 2020

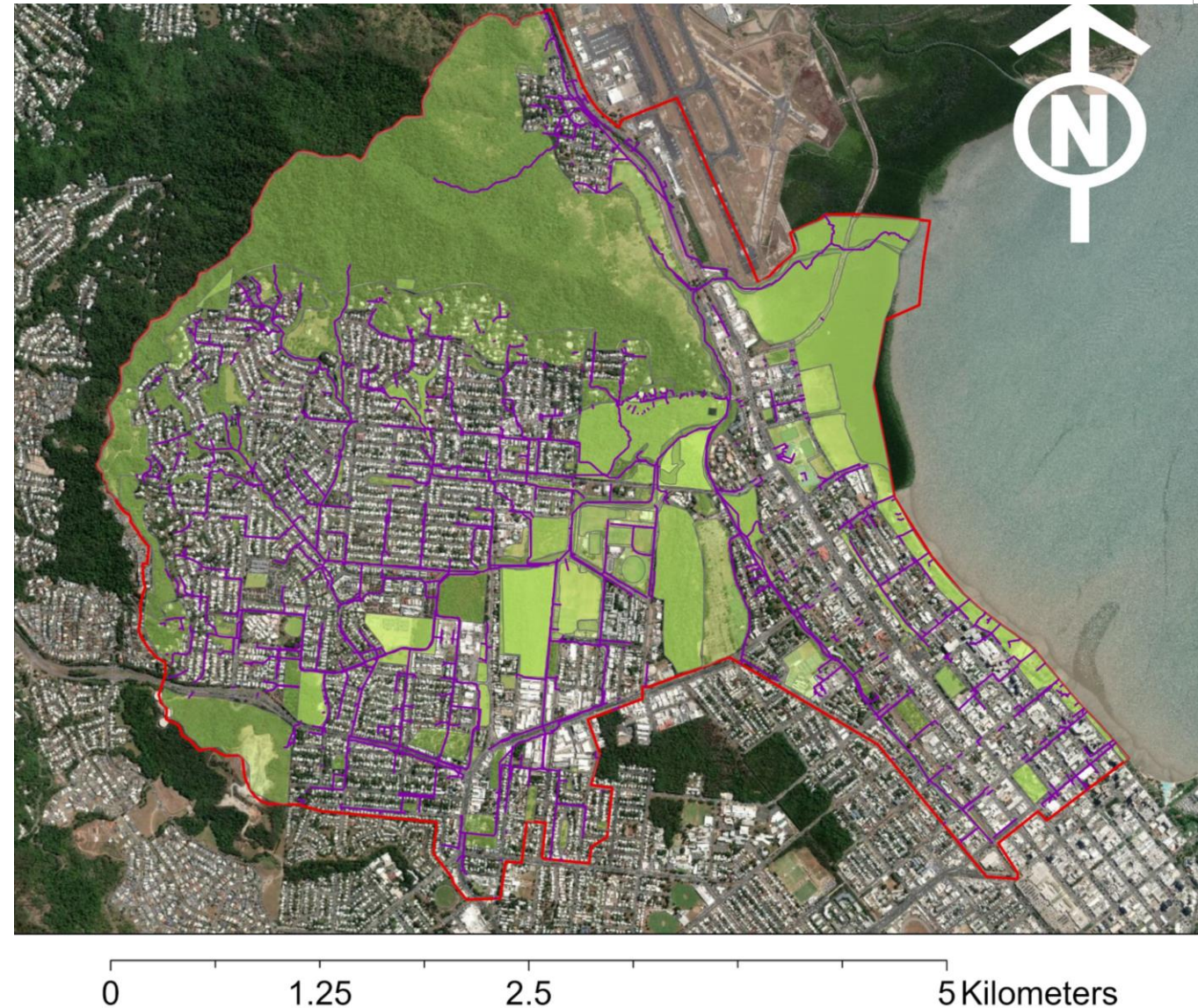


Part of Hanshe Lim's research
into mapping drainage
networks across the
Saltwater Creek Catchment
Area.

Great learning opportunity!

Why map Saltwater Creek?

- Inform future design and management policy.
- Improve blue-green connectivity.
- Identify areas of high / low flood risk.
- Visually convey specialist knowledge to a generalist audience.



My task: plot the historical path of Saltwater Creek using historical images of Cairns

These images needed to be geo-referenced

In the wrong location



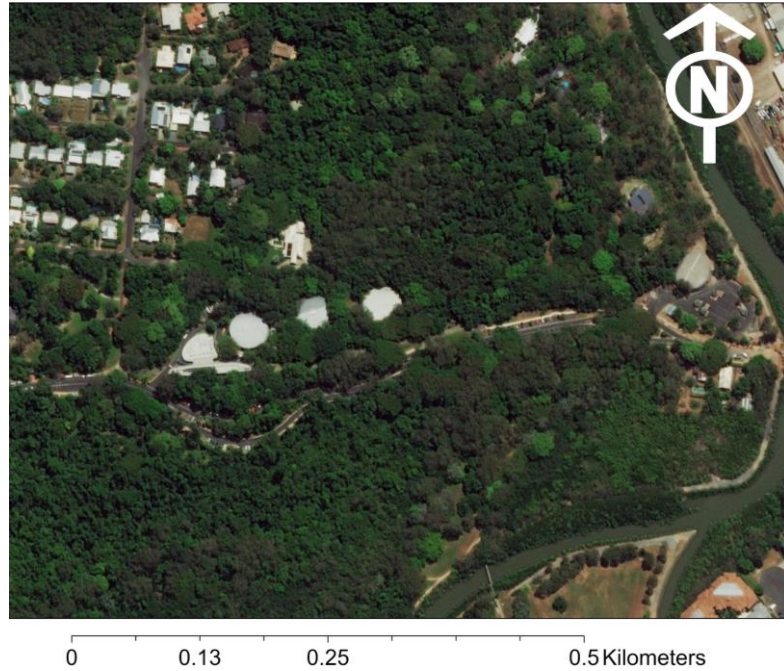
Misalignment of images



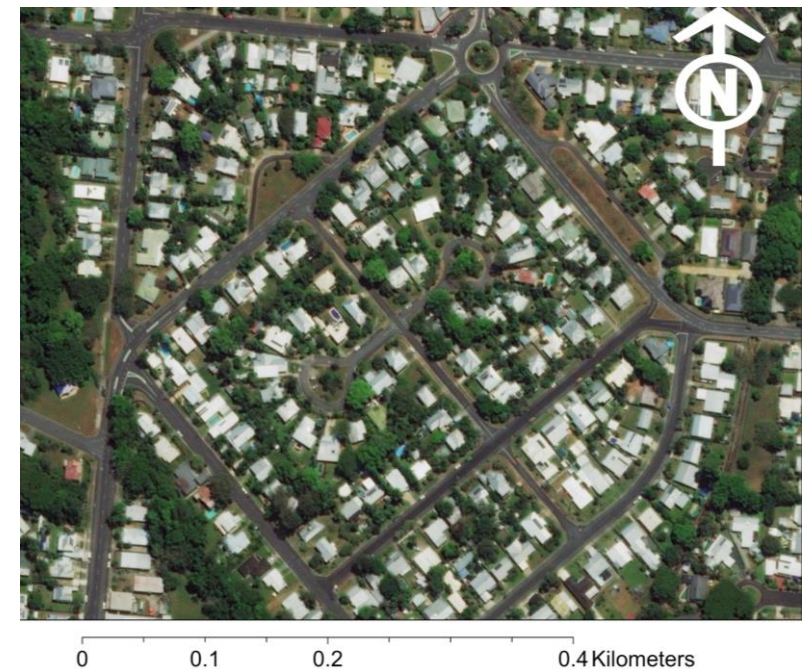
How to geo-reference Cairns?



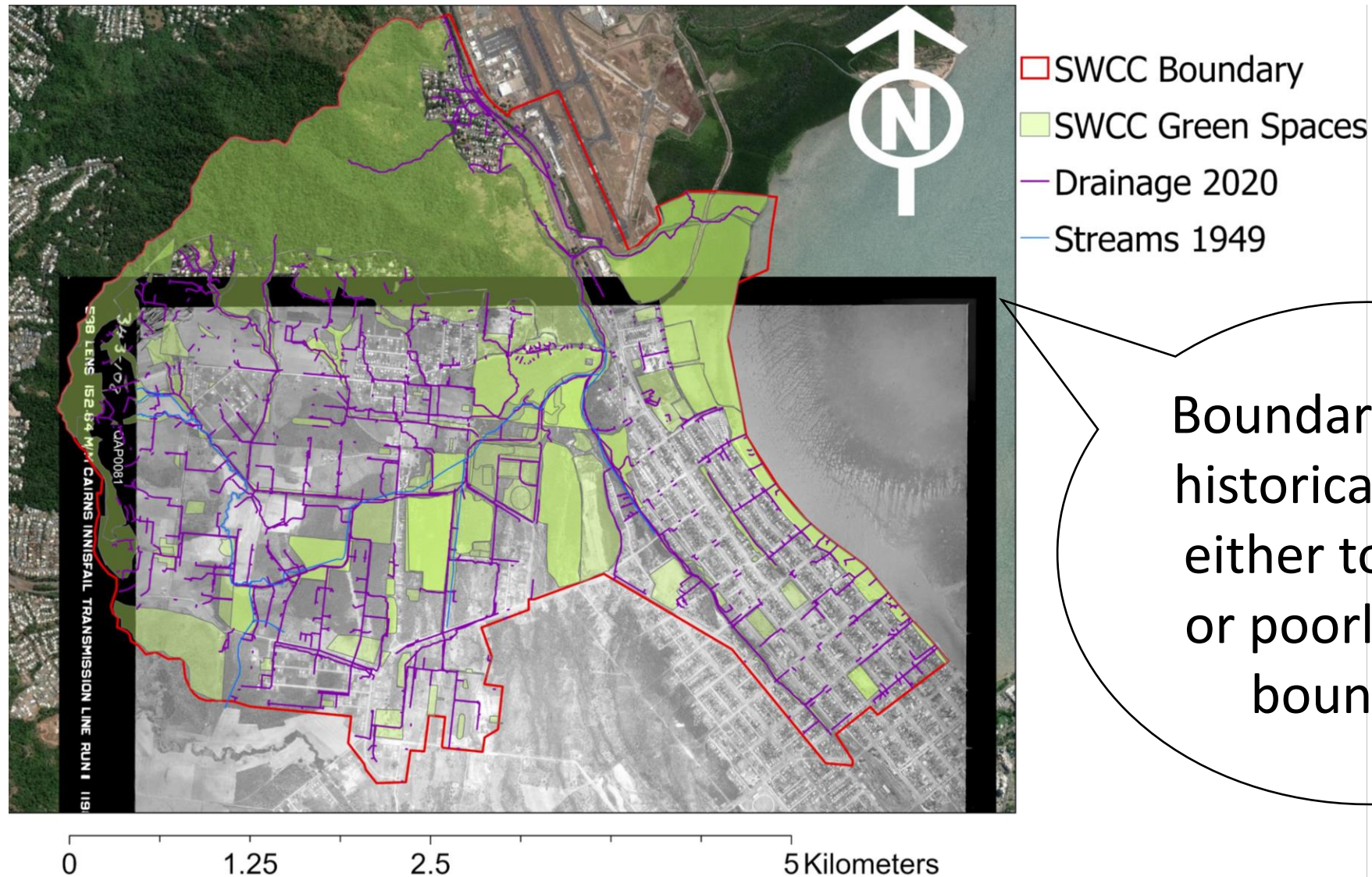
Problems (to overcome)



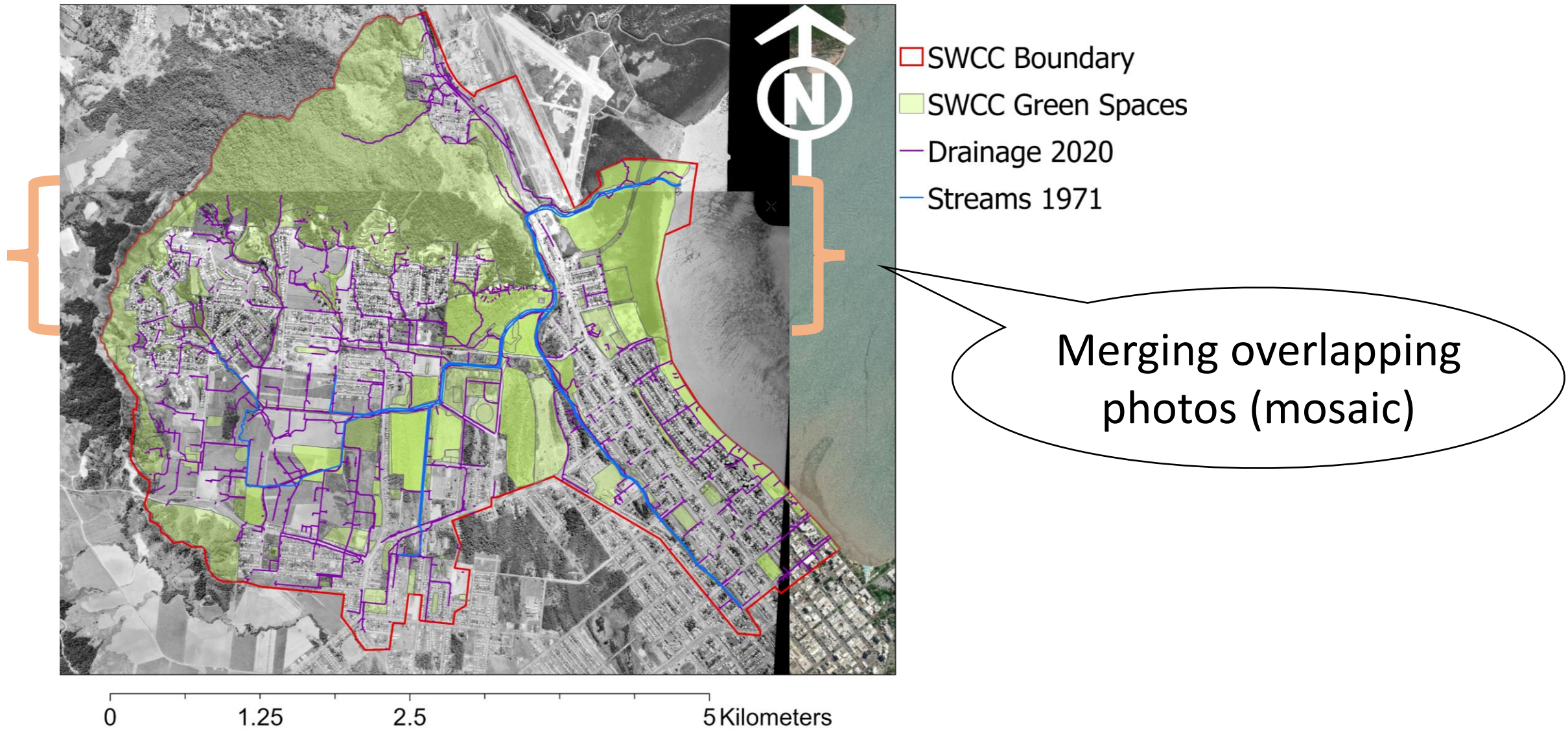
Lack of historically
constant reference
points.



Problems (to overcome)



Problems (to overcome)



Problems (to overcome)



0 1.25 2.5 5 Kilometers

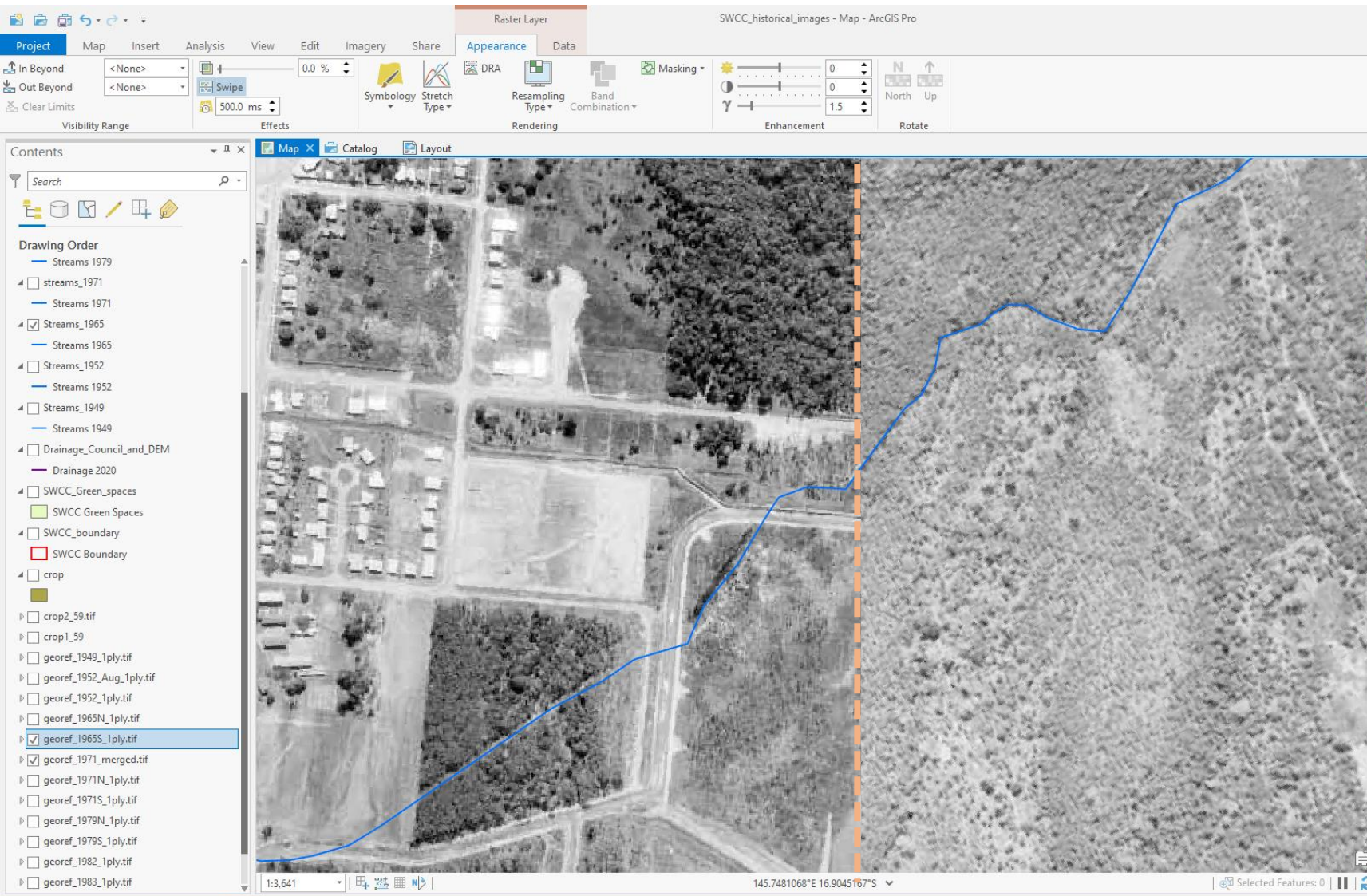
- SWCC Boundary
- SWCC Green Spaces
- Drainage 2020
- Streams 1982

Older images are black & white, with decreasing resolution.

Colour in 1983!



What did we find?

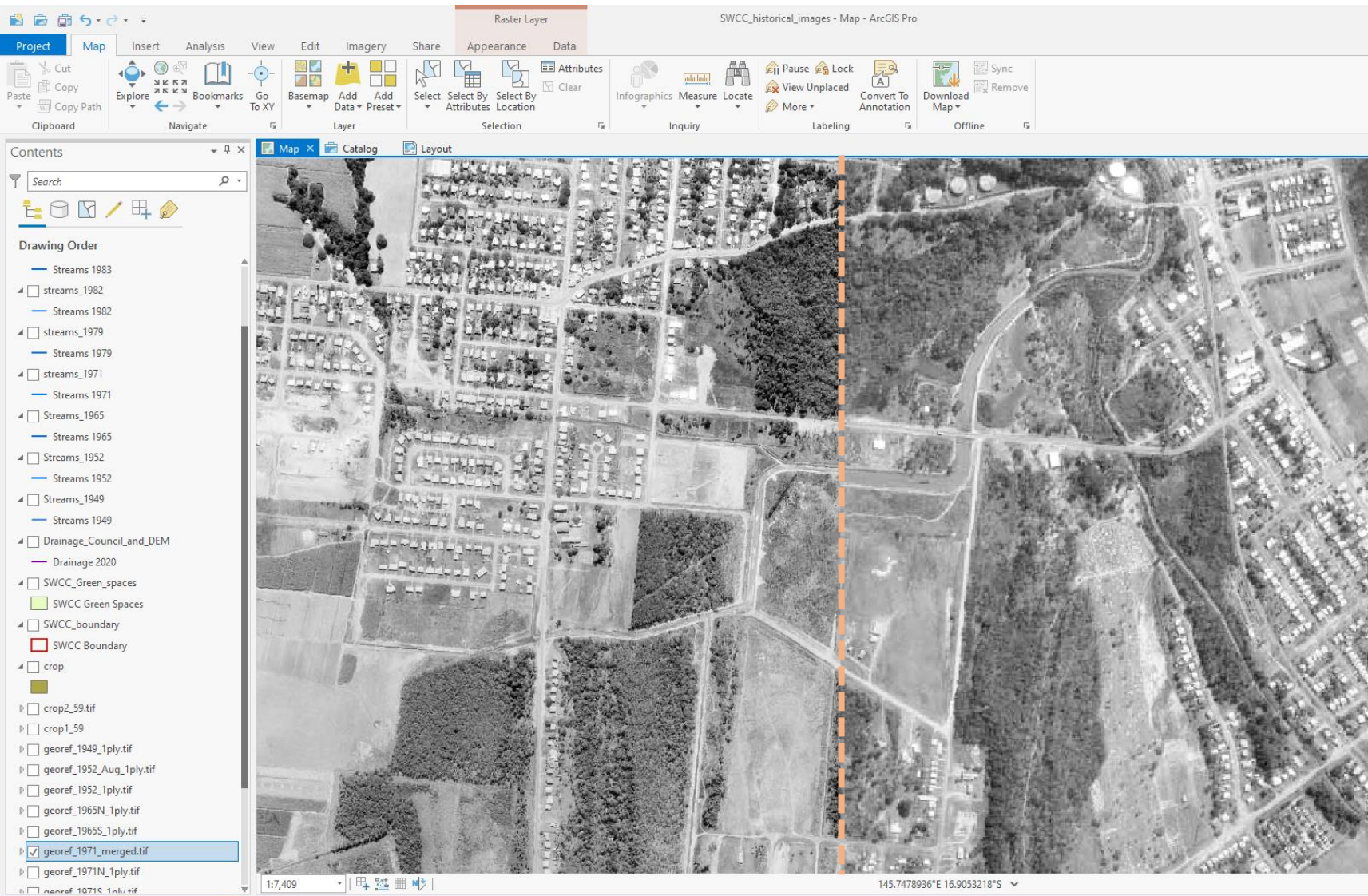


Saltwater Creek

undergoes significant engineering between 1965 (right) and 1971 (left).

The creek becomes wider and straighter, with quarter-turn bends.

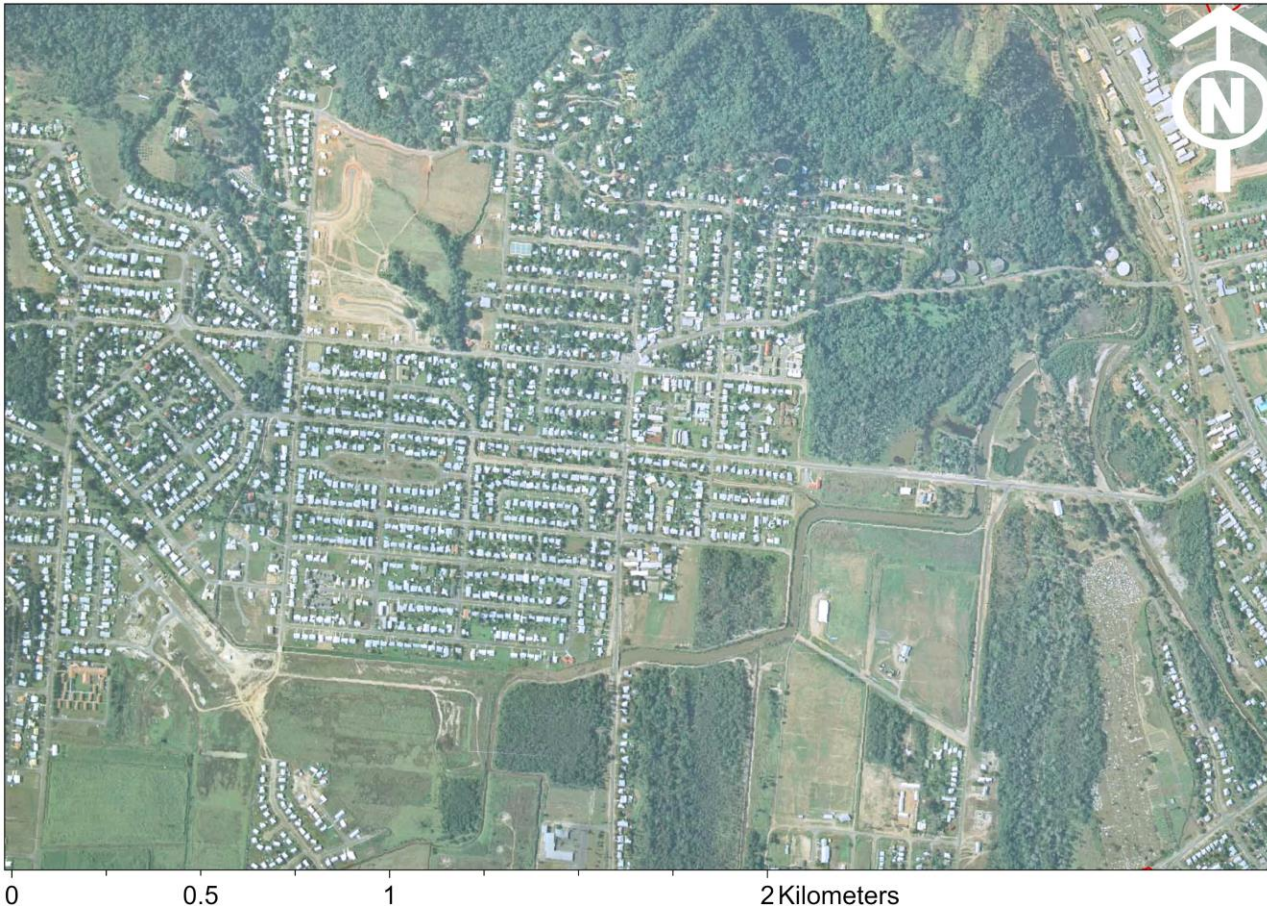
What did we find?



Saltwater Creek becomes wider still, between 1971 (left) and 1979 (right).

Over time there is less vegetation within the drainage network, potentially increasing flow into Saltwater Creek.

What did we find?



Vegetated land within the drainage network decreases again between 1983 (left) and 1996 (below).



Hopefully visualising the creeks past will help inform future decisions.

Question for the audience

What did I miss?

Local knowledge is key!

Are there any historical
markers within the
Saltwater Creek
catchment area?

