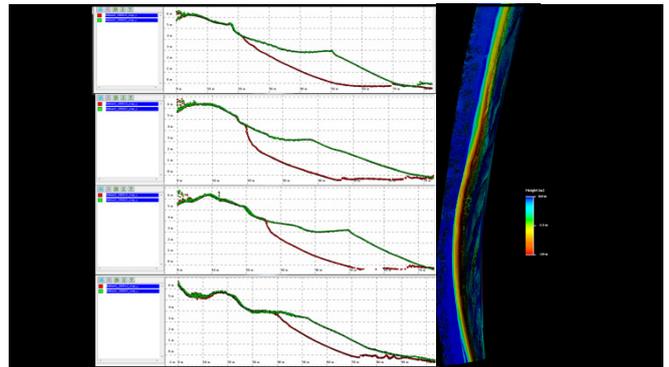
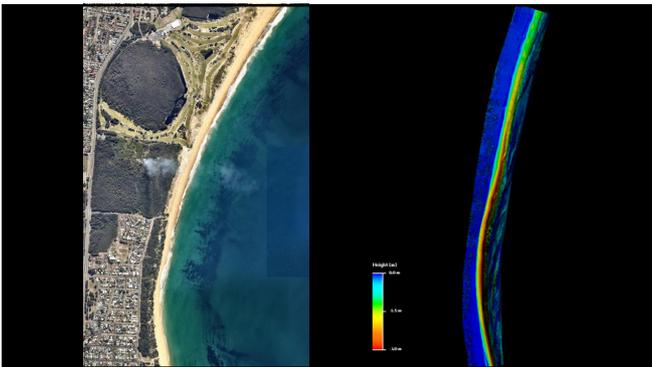


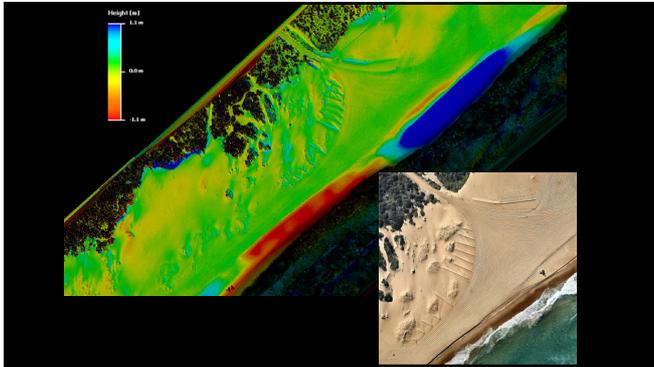


The Ups and Downs of Coastal Management
Applying Remote Sensing Technologies

Symon Walpole

Beach LiDAR
Collected regularly (3-4 times per year)
Provider – School of Aviation UNSW





ANDITI
Bringing insight to Data

ROBOTIC SYSTEMS

Streambank Stability and Weed Pilot Study
Q2429 – Remote Sensing

27
March
2019

Lake Macquarie

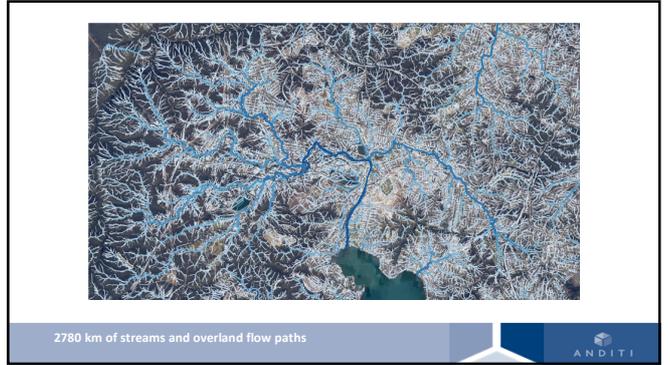
- LGA 757km²
- Lake 110 km²
- Study 105 Km²

Cockle Creek/Winding Creek Pilot Study Area

ANDITI

Coloured LIDAR Point Cloud

ANDITI

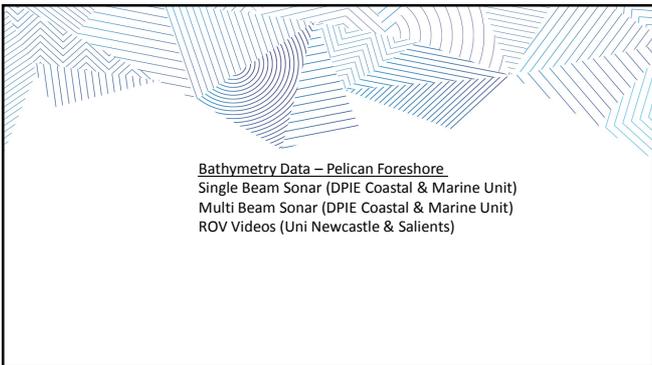
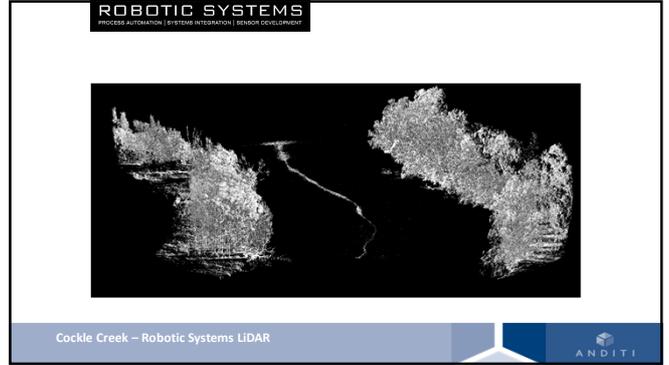


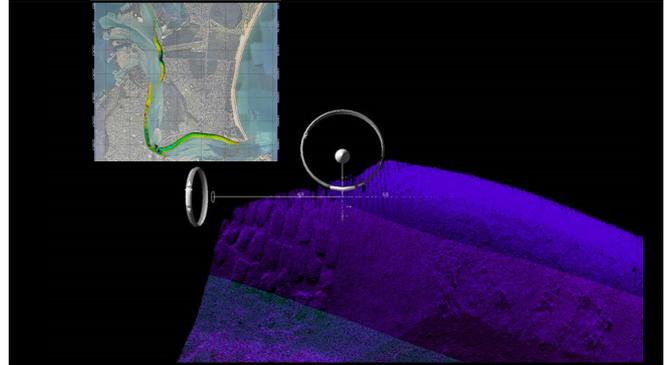
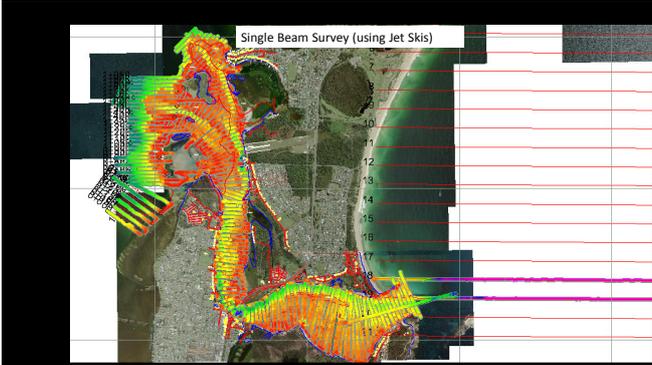
FME Flow Path Order	Strahler Stream Order	Length (km)
1	Overland flow path	1472
2	Overland flow path	619
3	1st	288
4	2nd	147
5	3rd	84
6	4th	38
7	5th	18
8	6th	8
Total overland flow path length		-2090 km
Total stream length		-590 km

Drainage Line Length Analysis

ANDITI







Underwater ROV
Used to assess Pelican foreshore
Provider – Uni Newcastle (& Salients)





Blacksmiths Beach Surf Amenity

- Intelligent Camera Monitoring System
- Provider – UNSW WRL




Limitations

- Data storage in Council systems
- Unexpected problems when using emerging technologies
- In-house expertise
- Procedural issues (ie., Drone usage)



Acknowledgements

- DPIE Coast and Estuary Grants
- Data Providers
 - School of Aviation UNSW
 - DPIE (Coastal & Marine Unit)
 - Uni Newcastle & Salients
 - UNSW WRL

