

GREAT AUSTRALIAN BIGHT RESEARCH PROGRAM

RESEARCH REPORT SERIES

Asphaltite and tarball surveys

APPENDIX 5

Beach Dossiers

Andrew Ross, Alex Corrick, Christine Trefry, Se Gong, David McKirdy, Tony Hall, Chris Dyt, Zack Angelini, Richard Kempton, April Pickard, Cameron White, Stacey Maslin, David Griffin, John Middleton, John Luick, Stephan Armand, Tania Vergara and Richard Schinteie

GABRP Research Report Series Number 25c

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FOR FURTHER INFORMATION

www.misa.net.au/GAB

GREAT AUSTRALIAN BIGHT RESEARCH PROGRAM

The Great Australian Bight Research Program is a collaboration between BP, CSIRO, the South Australian Research and Development Institute (SARDI), the University of Adelaide, and Flinders University. The Program aims to provide a whole-of-system understanding of the environmental, economic and social values of the region; providing an information source for all to use.

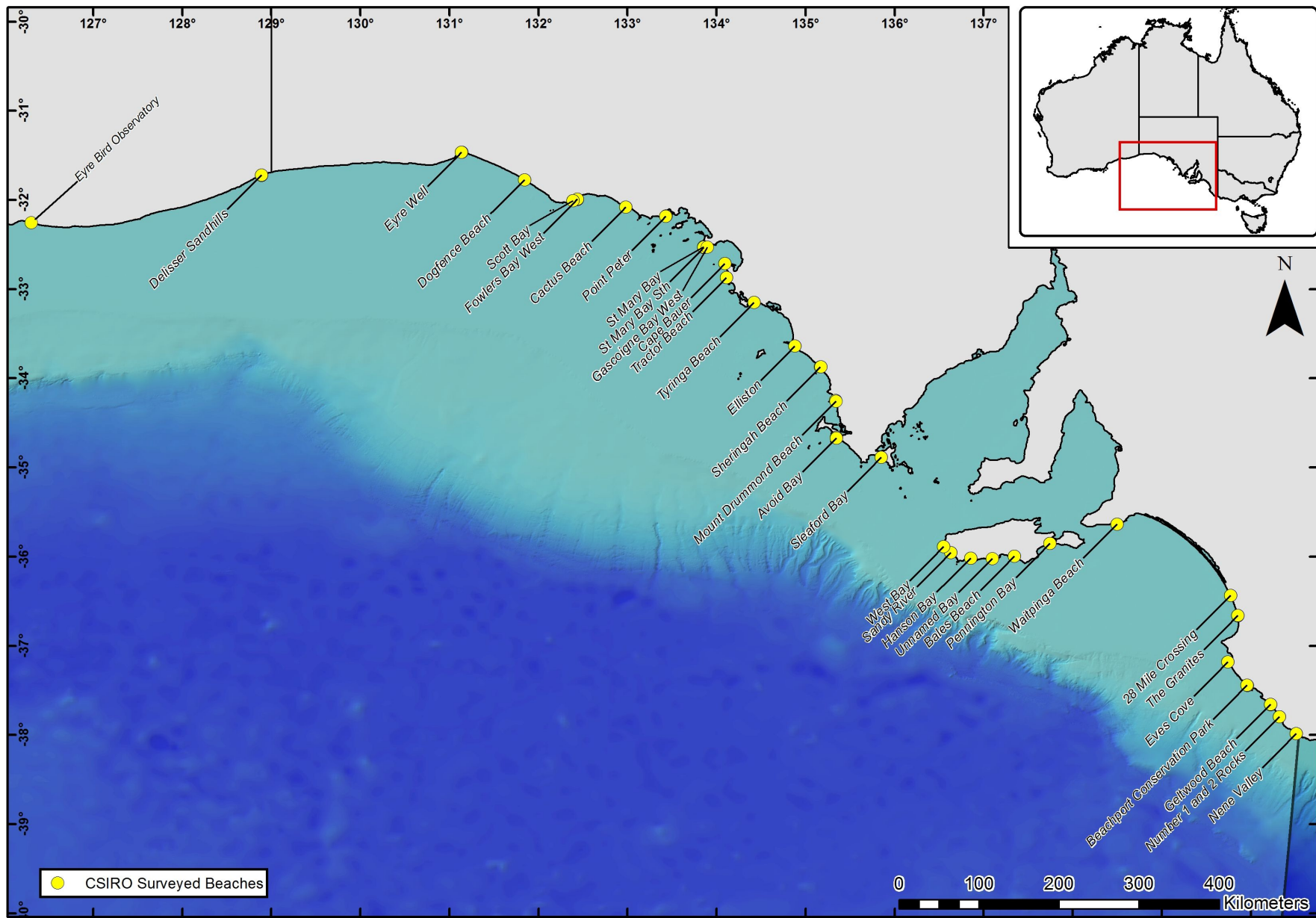


Figure 1 Beaches surveyed by CSIRO during the 2014, 2015 and 2016 seasons

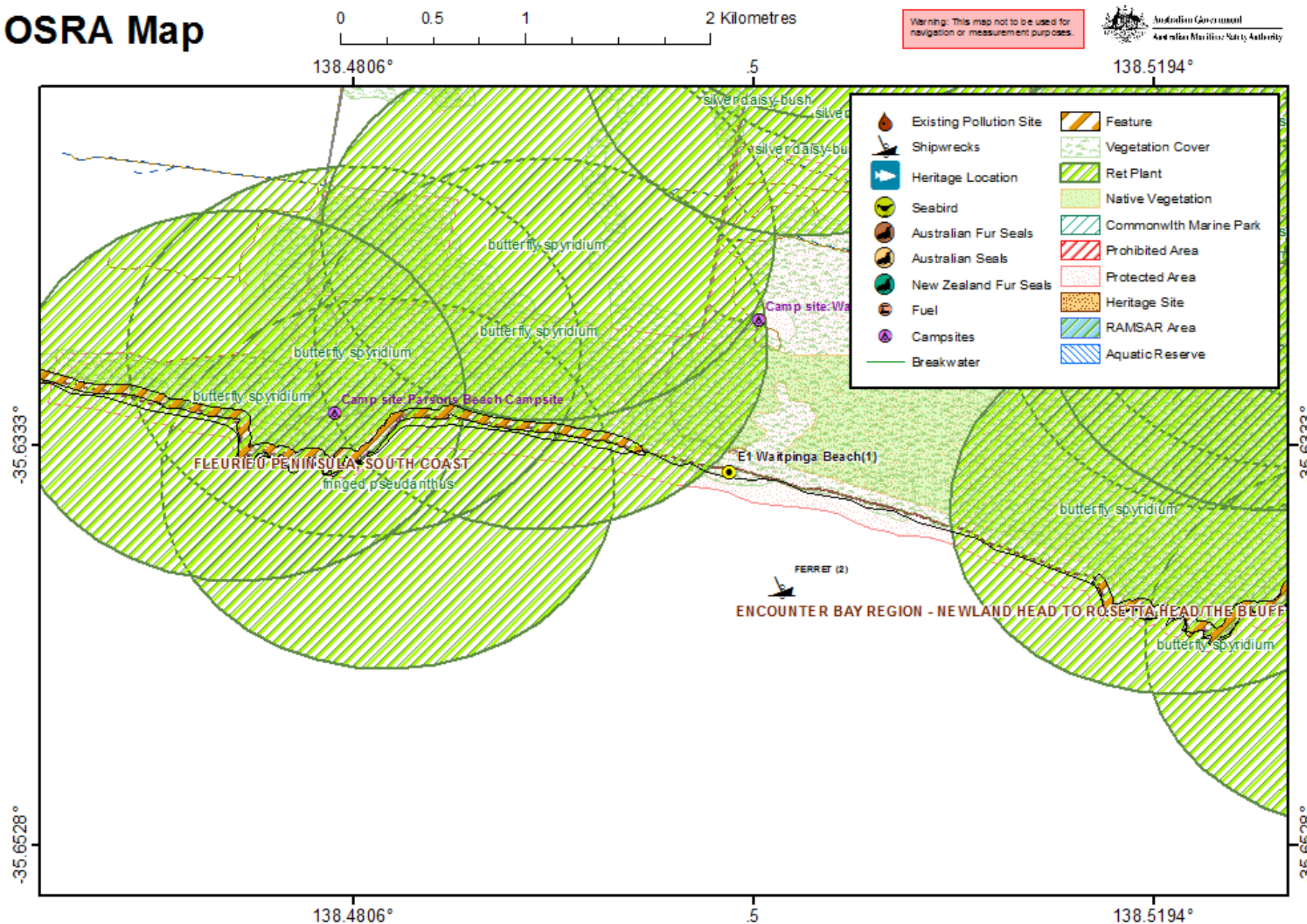
Beach details

Beach Name:	Waitpinga Beach	Beach ID:	E1	Priority:	1
Access point location (DD):	Latitude: -35.6345797309 Longitude: 138.498864676	Maximum Beach survey length (km):	1.2km		

General description and information

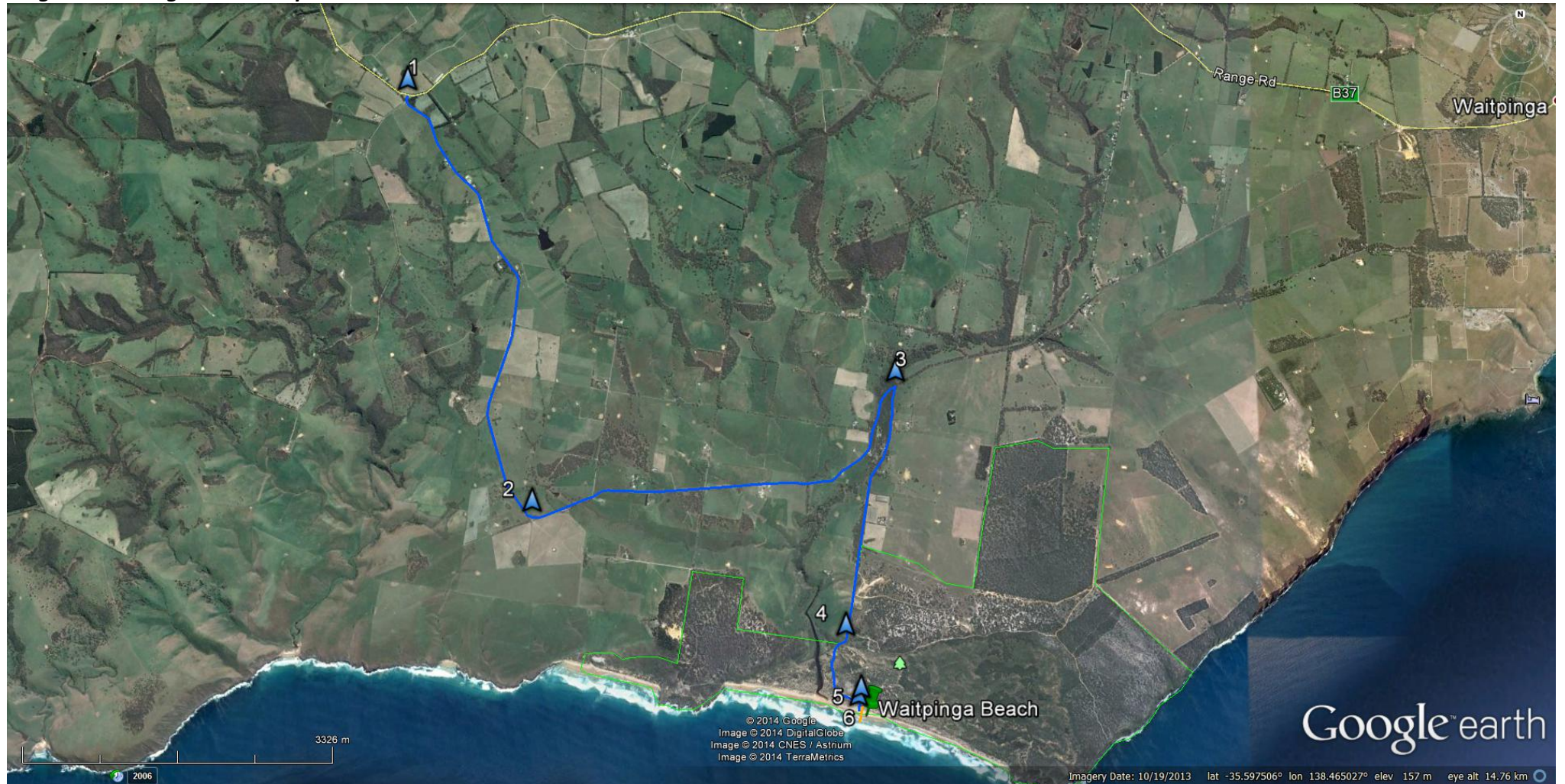
Beach exposure or shape:	<u>Concave (cove)</u> / <u>Straight</u> /Convex (headland)	Aspect:	N NE E SE <u>S SW</u> W NW	Likely beach gradient:	Shallow/ <u>Medium</u> /Steep
Beach Width:	~50m	Likely substrate:	Fine sand	Backshore type	Vegetated dunes
General description:	3.1 km long beach is backed by largely vegetated dunes back, with Waitpinga creek and elongated lagoon behind the centre of the beach				
Beach classification	Wave dominated rhythmic bar and beach				
General information:	The beach faces almost due south exposing it to persistent high swell which averages about 2 m. Ninety metre high Newland Head forms the eastern boundary, with a 40 m high Waitpinga Hill head separating it from adjoining Parsons Beach.				
Permits and access:	3 km long sealed road leading from the main road right to the beach. There is a car park behind the dune with bathroom facilities and an elevated walkway across the dune to the centre of the 3.1 km long beach.				

OSRA Map



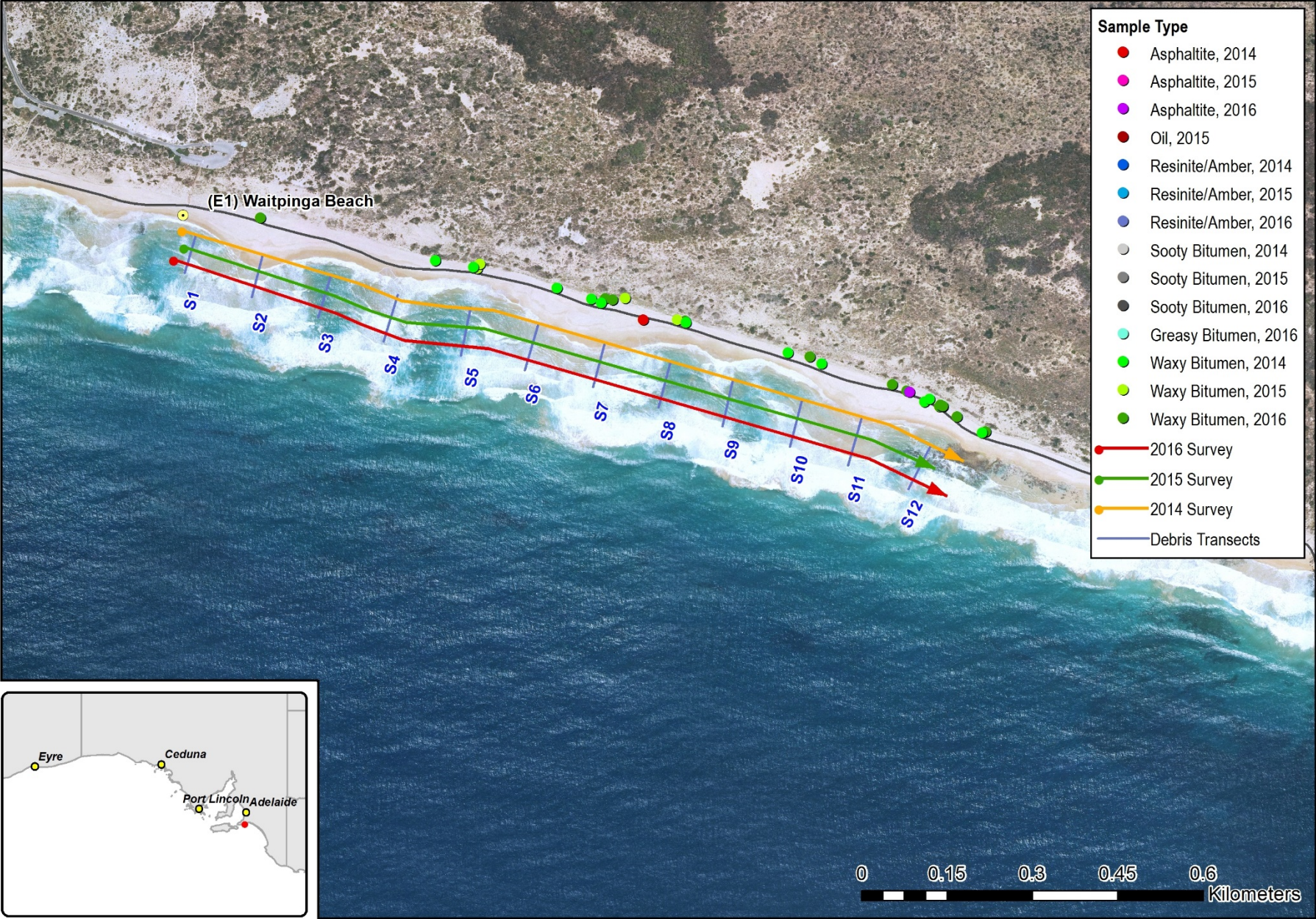
Oil Spill Response Atlas (OSRA) map layers provided courtesy of the Australian Maritime Safety Authority (AMSA)

Large scale Google Earth map



Beach Survey Records

Transects and imagery



Beach: Waitpinga Beach

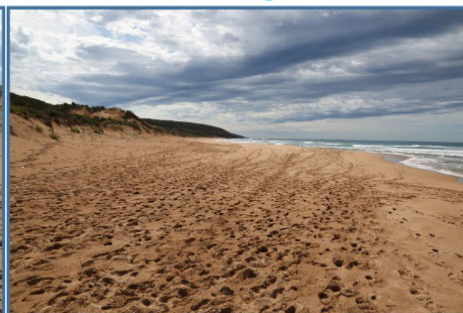
To Sea

To Shore

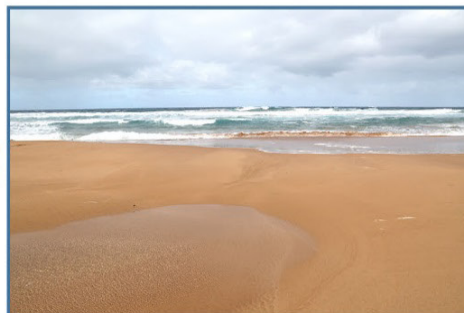
Along

Back

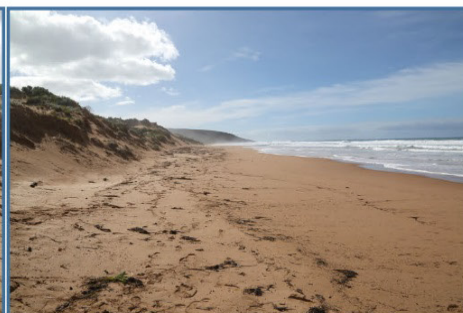
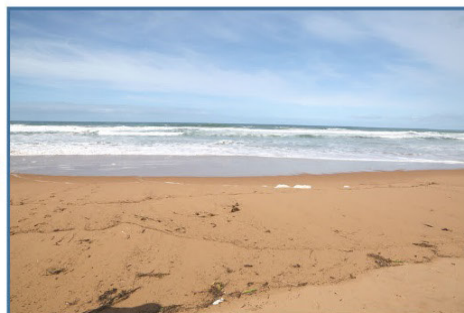
2014



2015



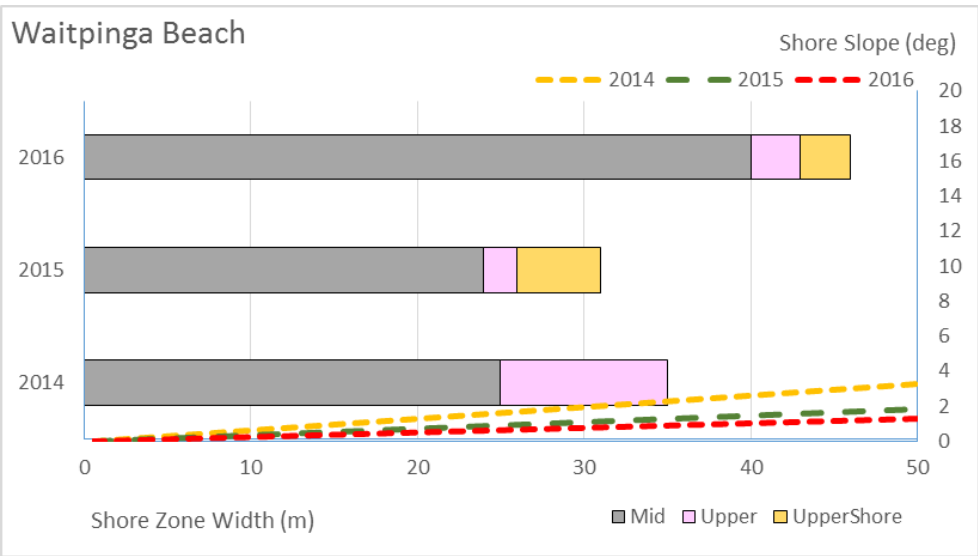
2016



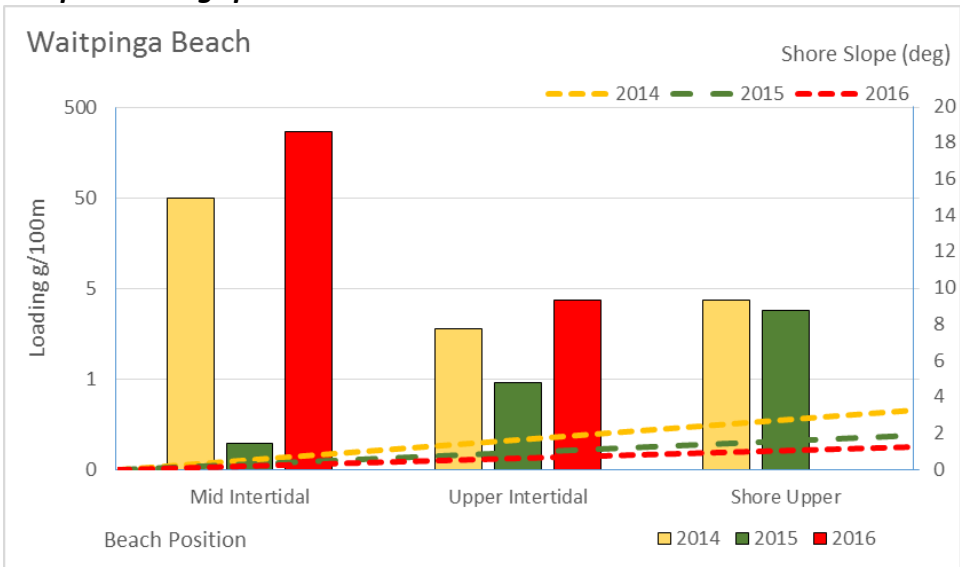
Beach Summary Data

[sample types include asphaltite, tarball and resinite]

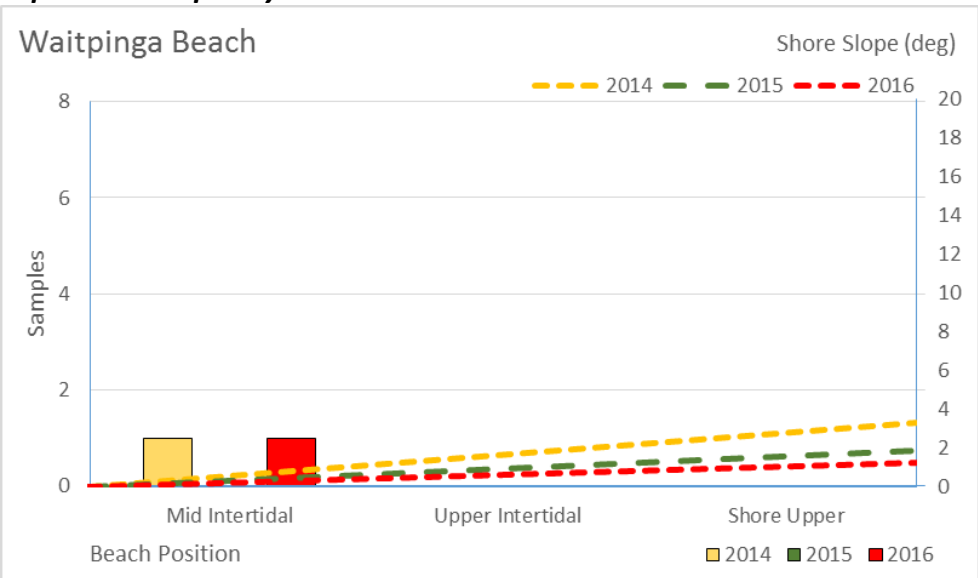
Beach Character Chart



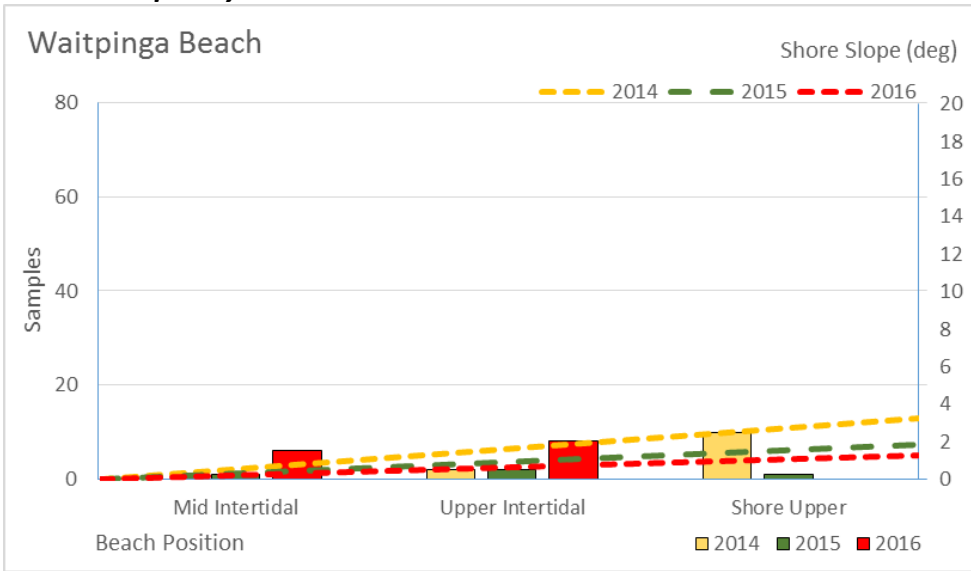
Sample Loadings per 100m Chart



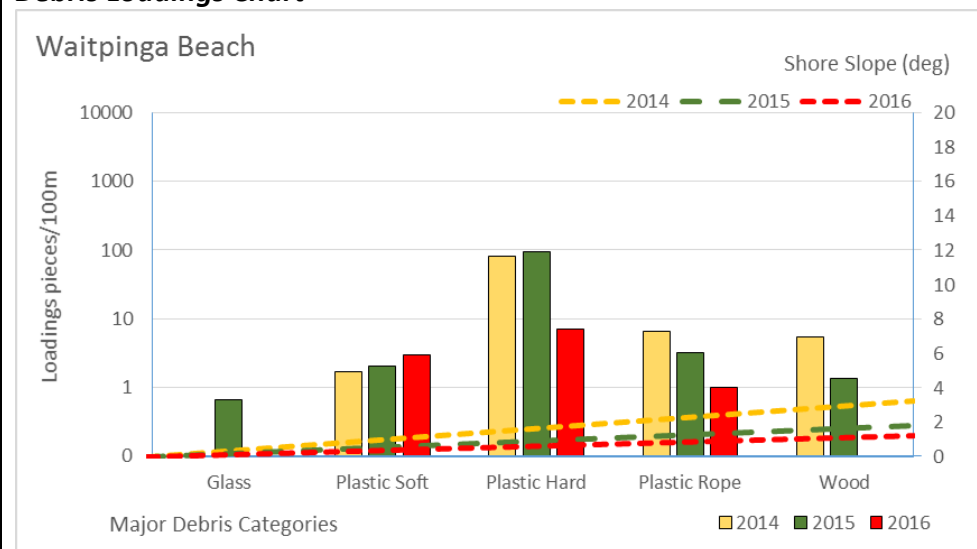
Asphaltite Frequency Chart



Tarball Frequency Chart

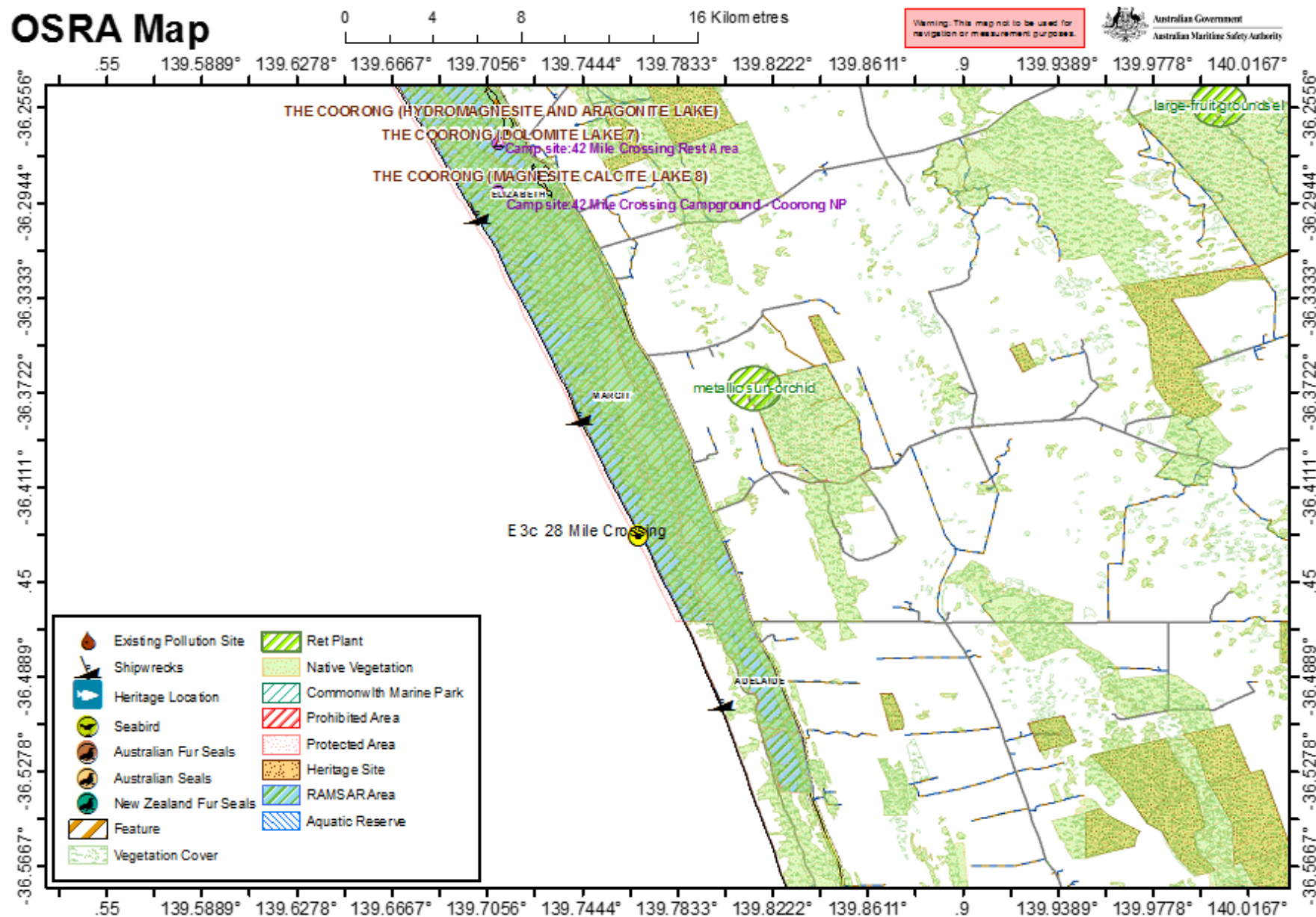


Debris Loadings Chart



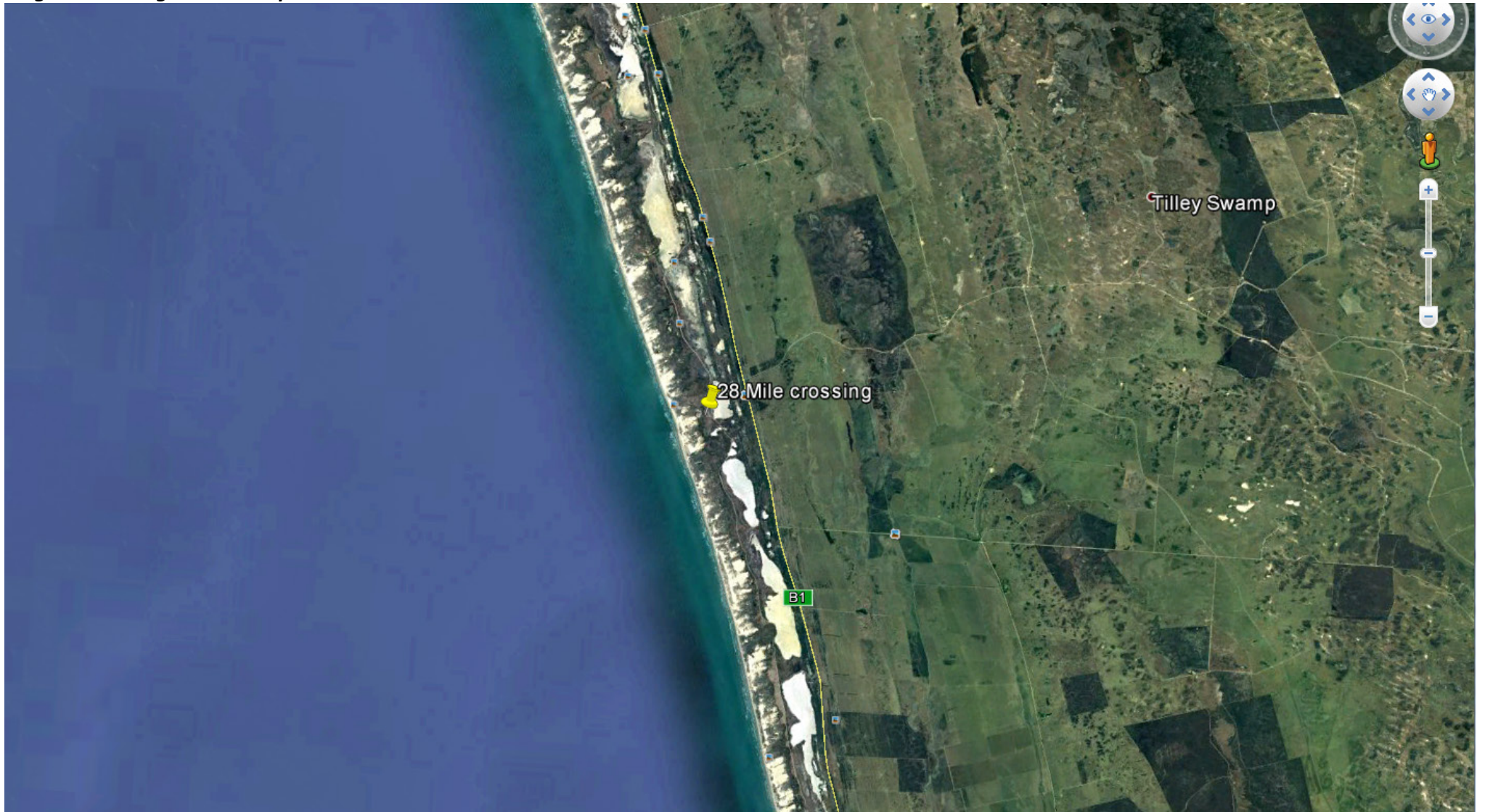
Beach details					
Beach Name:	28 Mile Crossing Crossing		Beach ID:	E3c	Priority: 1
Access point location (DD):	Latitude: -36.2000387669 Longitude: 139.64144551		Maximum Beach survey length (km):	1.07	
General description and information					
Beach exposure or shape:	Concave (cove)/ <u>Straight</u> /Convex (headland)	Aspect:	N NE E SE S <u>SW</u> W NW	Likely beach gradient:	Shallow/ <u>Medium</u> / <u>Steep</u>
Beach Width:	~60m	Likely substrate:	Coarse sand	Backshore type	Vegetated dunes; Dunes
General description:	The 42 Mile Crossing leaves the main highway and skirts the southern most of the usually full Coorong Lakes for 2 km. Before following a sandy track for another 2 km to the beach. The beach (148J) remains steep and coarse fronted by a wide energetic surf zone between the 42 Mile and Tea Tree Crossing, 11 km to the north.				
Beach classification	Assumed Wave dominated				
General information:	The beach faces southwest directly into the persistent high southwest swell with waves averaging over 2 m, and breaking over 500 m out to sea, across a wide double bar surf zone. Massive dunes systems averaging 1.5 km wide back the beach				
Permits and access:	<p>Spoke with Joanne from Martin Washpool Conservation Park (08-8575-1200). She said that Tea Tree Crossing will most likely be under water because the lagoon does not dry up until around January. 42 Mile crossing was not a great catchment area and the beach was overrun with fisherman. Therefore, 28 Mile Crossing was chosen. There were sign posts for 28 Mile Crossing leading from the way points at 42 mile crossing to a car park behind the dunes. It was approximately a 0.4 km walk over the dunes to get from the car park to the beach.</p> <p>There are many kilometres of beach camping. However, outside of Kings Camp and Kingston SE there are no facilities, apart from the camp sites.</p> <p>(2015) – Spoke with Joanne again who said we won’t have any trouble with access.</p>				

OSRA Map



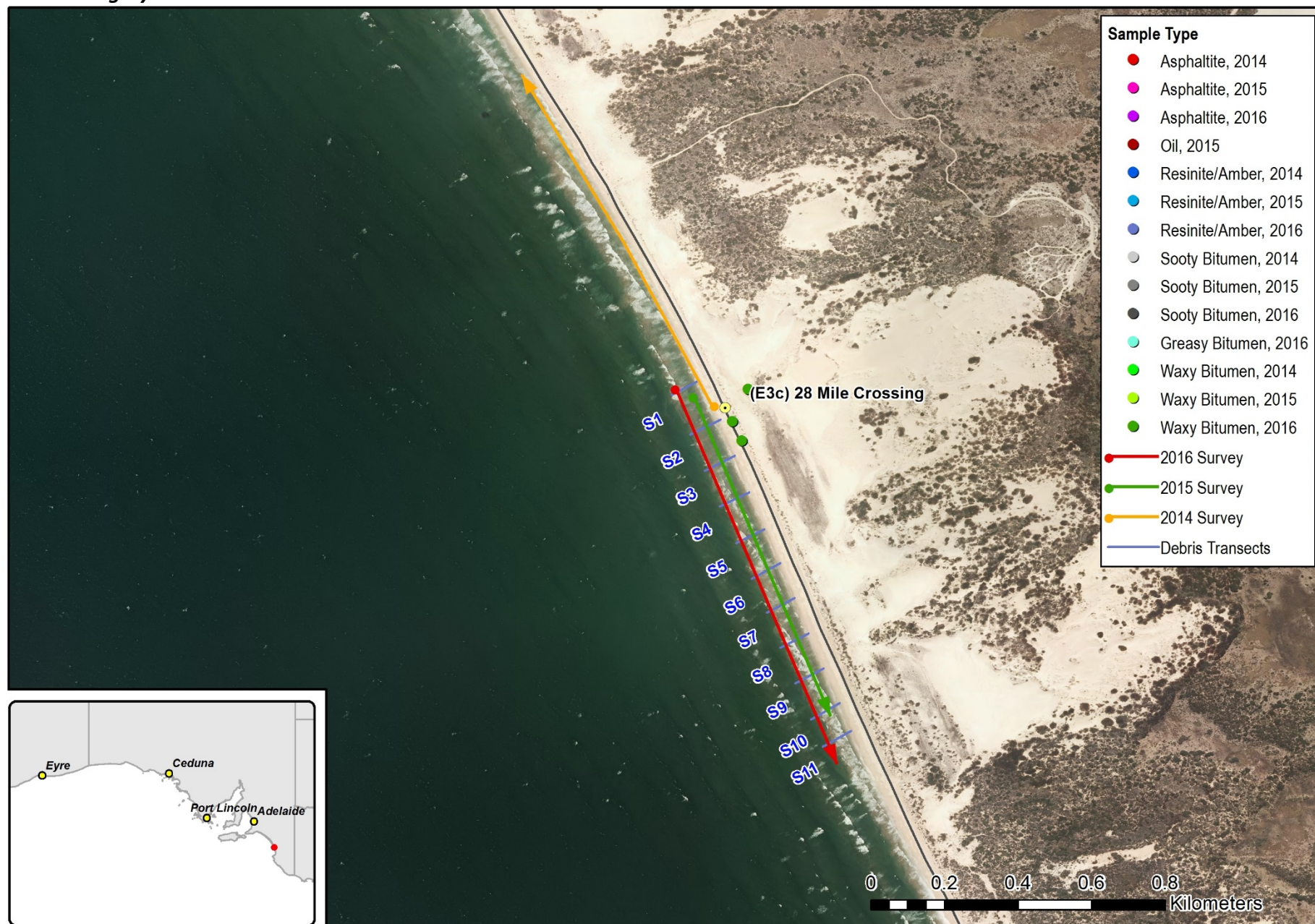
Oil Spill Response Atlas (OSRA) map layers provided courtesy of the Australian Maritime Safety Authority (AMSA)

Large scale Google Earth map



Beach Survey Records

Transects and imagery



Photographs

Beach: 28 Mile Crossing

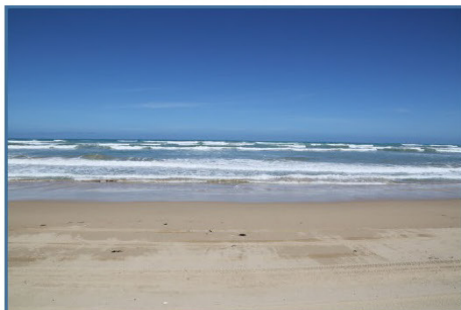
To Sea

To Shore

Along

Back

2014



NOTE: 2014 transect travelled in the reverse direction

2015



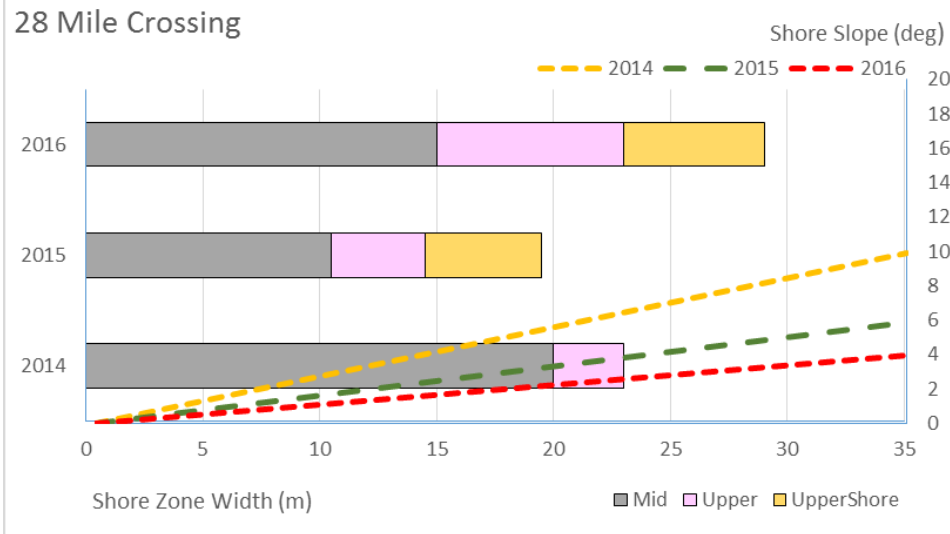
2016



Beach Summary Data

[sample types include asphaltite, tarball and resinite]

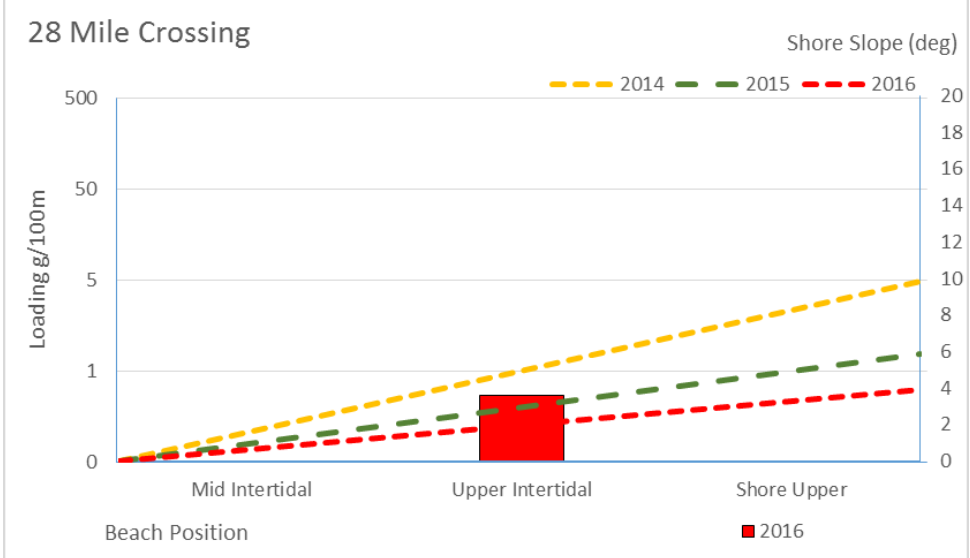
Beach Character Chart



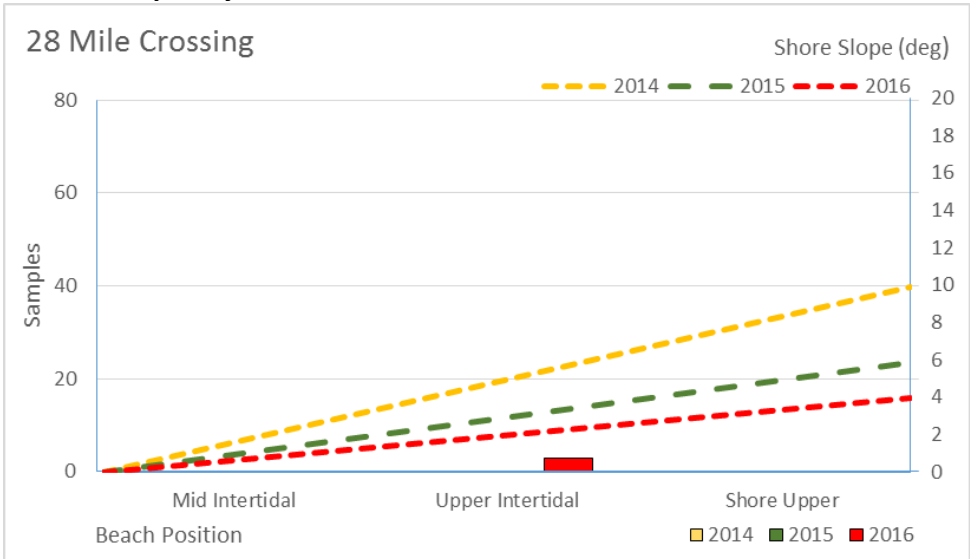
Asphaltite Frequency Chart

No asphaltites found on this beach

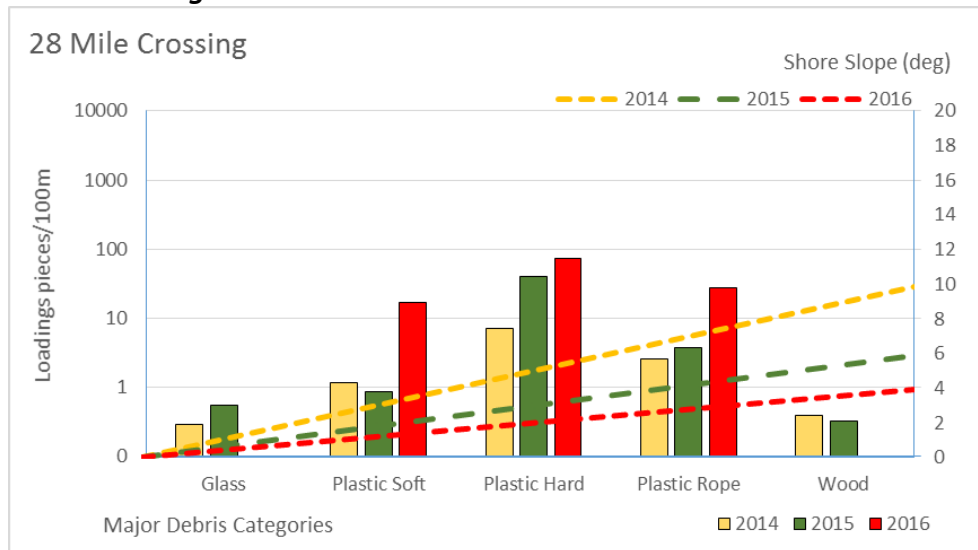
Sample Loadings per 100m Chart



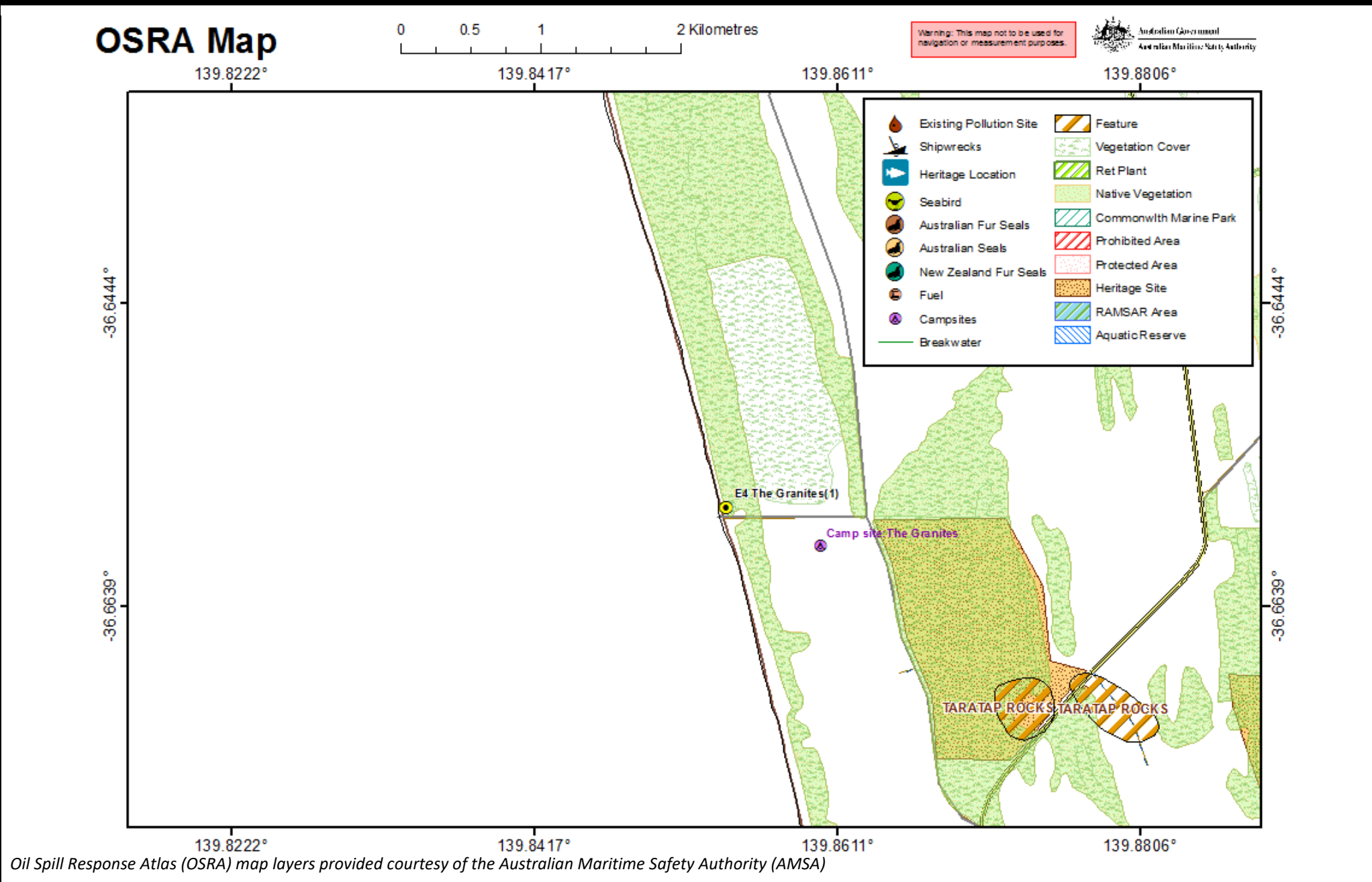
Tarball Frequency Chart



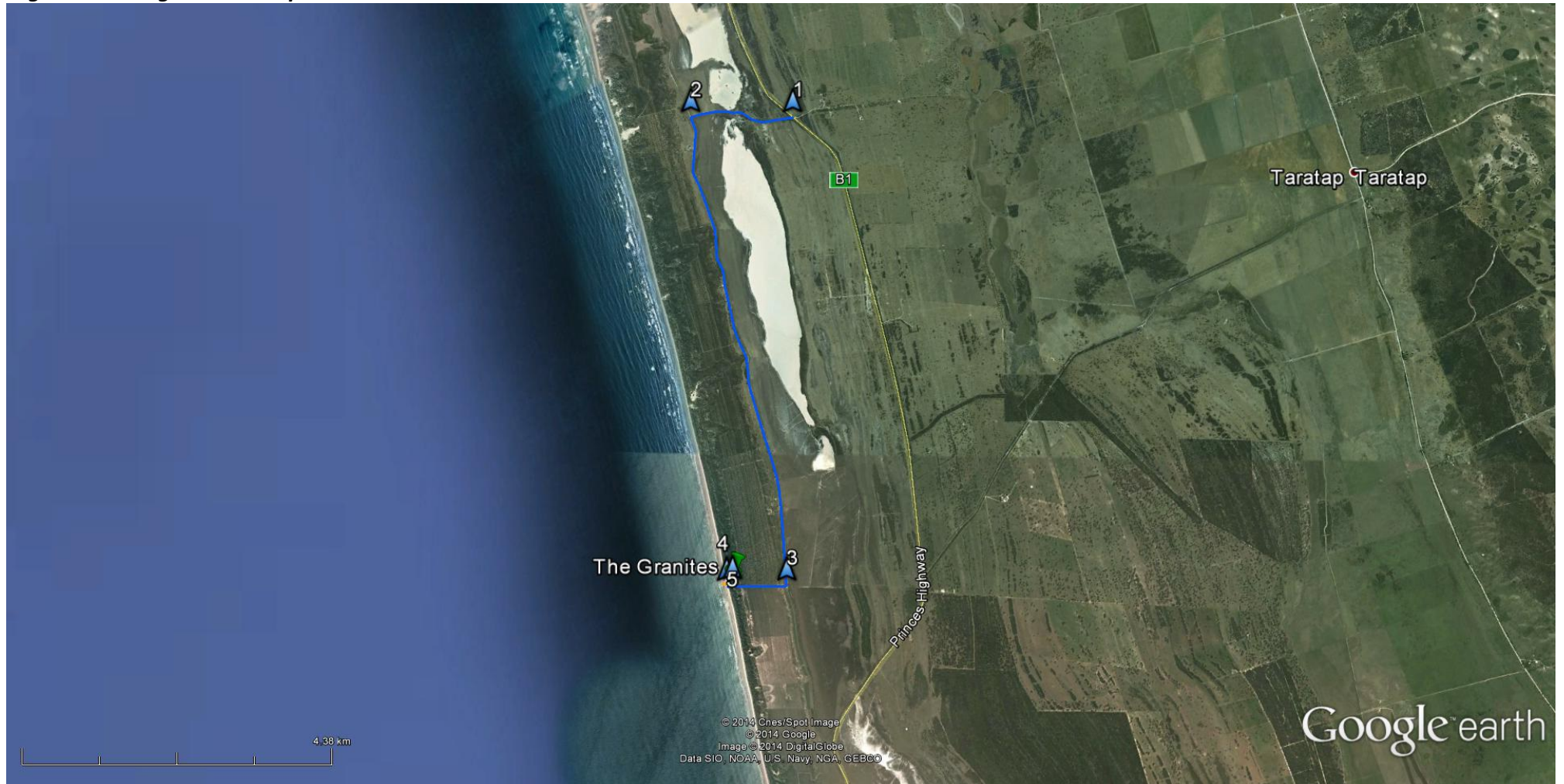
Debris Loadings Chart



Beach details					
Beach Name:	The Granites		Beach ID:	E4	Priority: 1
Access point location (DD):	Latitude: -36.6575066742 Longitude: 139.854003111999		Maximum Beach survey length (km):	1.52	
General description and information					
Beach exposure or shape:	Concave (cove)/ <u>Straight</u> /Convex (headland)	Aspect:	N NE E SE S <u>SW W</u> NW	Likely beach gradient:	Shallow/ <u>Medium</u> / <u>Steep</u>
Beach Width:	~50m	Likely substrate:	Coarse sand	Backshore type	Vegetated dunes;
General description:	The Granites beach (148F) is the site of the only rocks on the entire beach, a few 2 m high rounded granite knobs that lie in the intertidal swash zone.				
Beach classification	Assumed Wave dominated				
General information:	Local station owner have been cleaning up the beach and have agreed to keep in contact and inform us when they find any samples. Contact info was exchanged between David and her. Station owner had collected a large asphaltite sample and handed it to us. She also informed us she had seen a much larger sample along the beach but could not recollect exactly where. Can contact NRM Kingston SE for debris collection details. Waves average over 1 m along this 5 km section of beach, and maintain a surf zone up to 200 m wide containing three low bars.				
Permits and access:	<p>Spoke with Meleny (08 8767 2033) from Kingston District Council and she said we will have no trouble accessing The Granites and that we can drive right onto the beach with a 4WD vehicle. There is a vehicle access track and car park behind the rocks, but no other facilities.</p> <p>(2015) – Spoke with Meleny again who said we won't have any trouble with access.</p>				

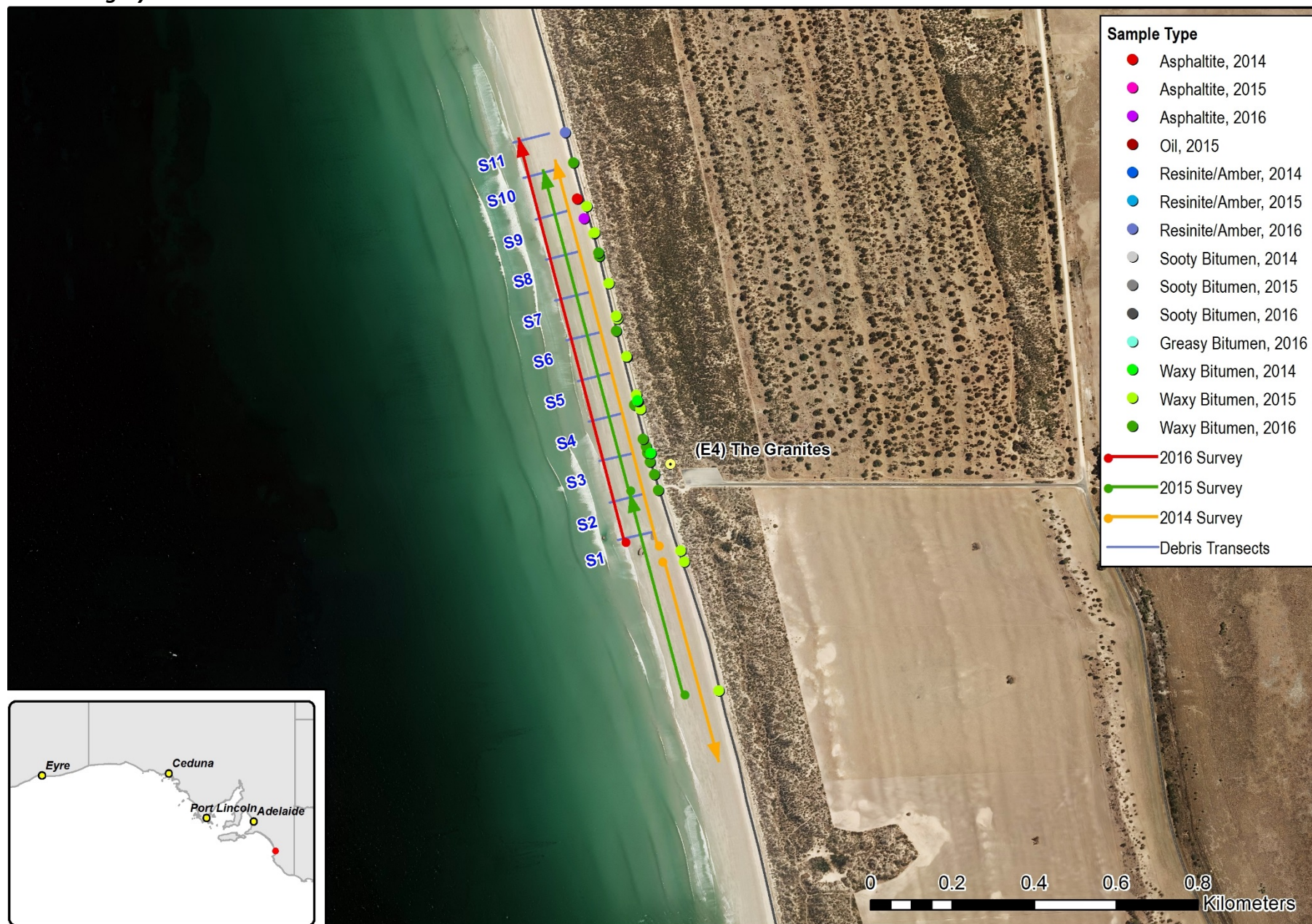


Large scale Google Earth map



Beach Survey Records

Transects and imagery



Beach: The Granites

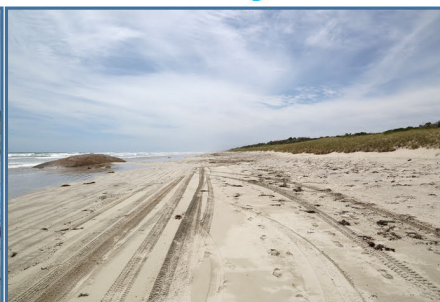
To Sea

To Shore

Along

Back

2014



2015



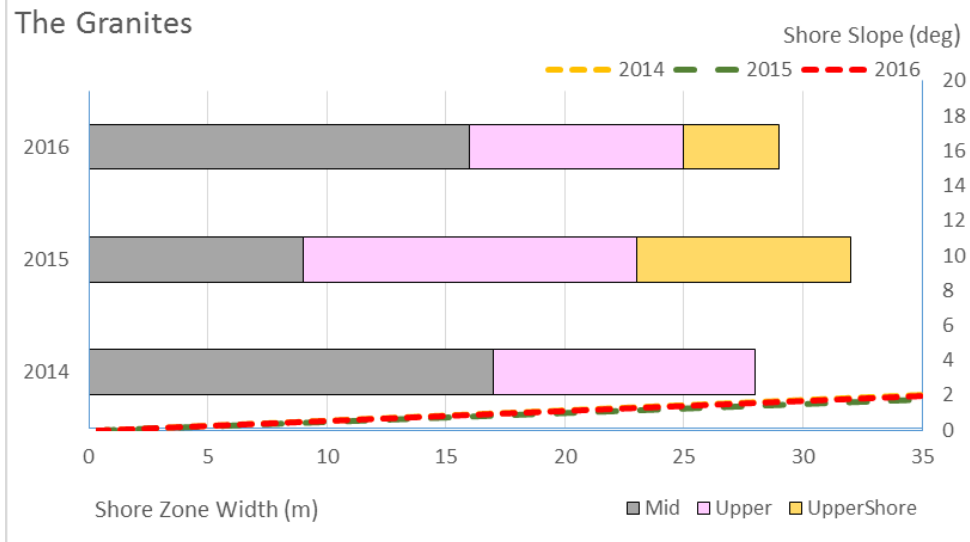
2016



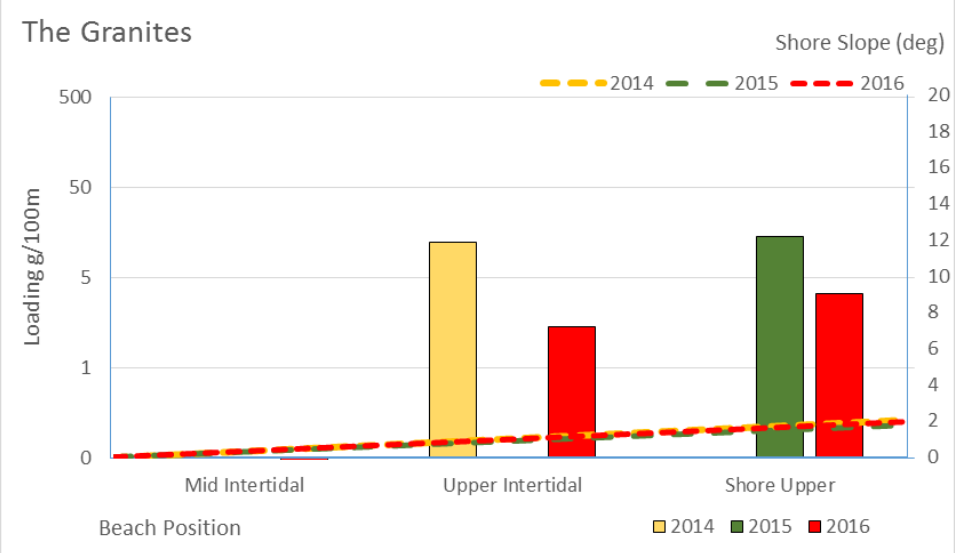
Beach Summary Data

[sample types include asphaltite, tarball and resinite]

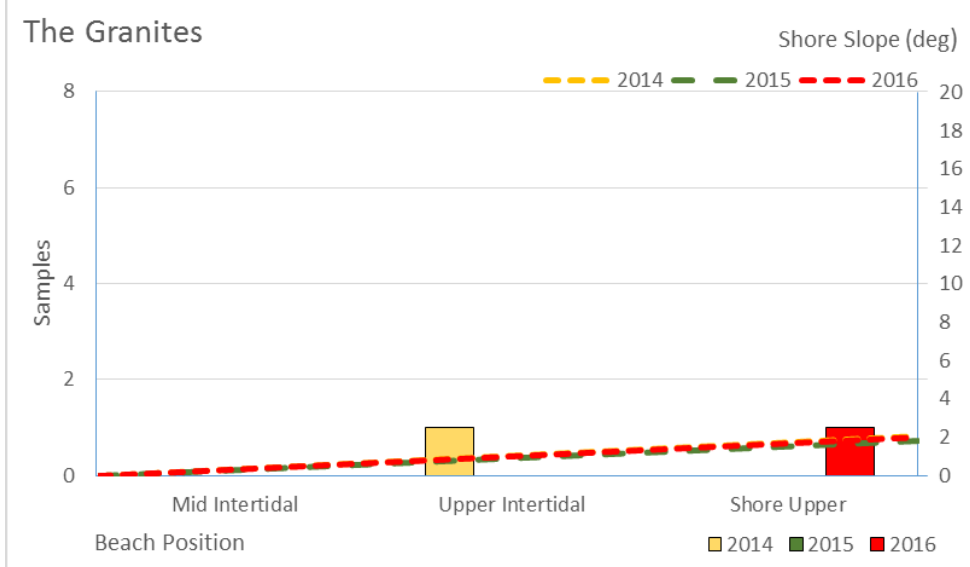
Beach Character Chart



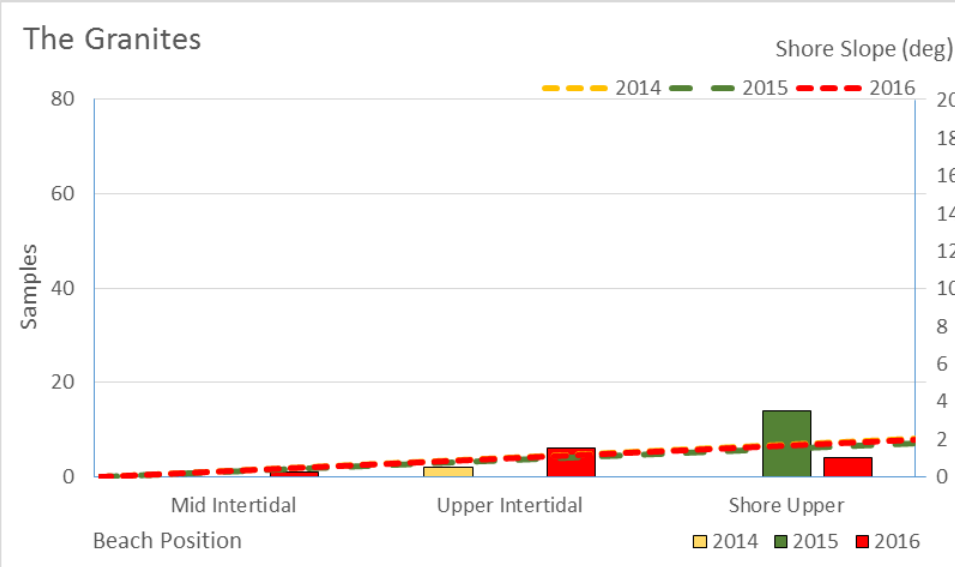
Sample Loadings per 100m Chart



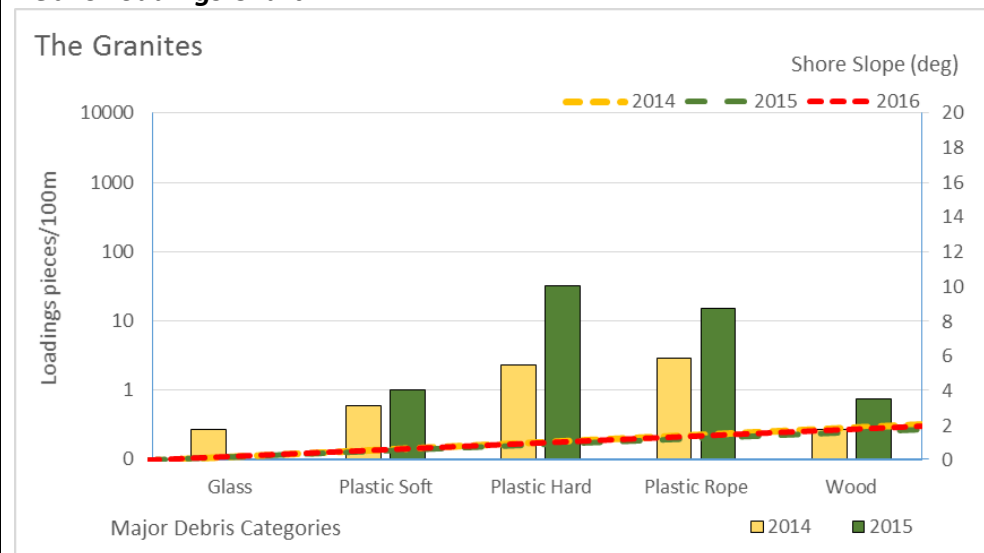
Asphaltite Frequency Chart



Tarball Frequency Chart



Debris Loadings Chart

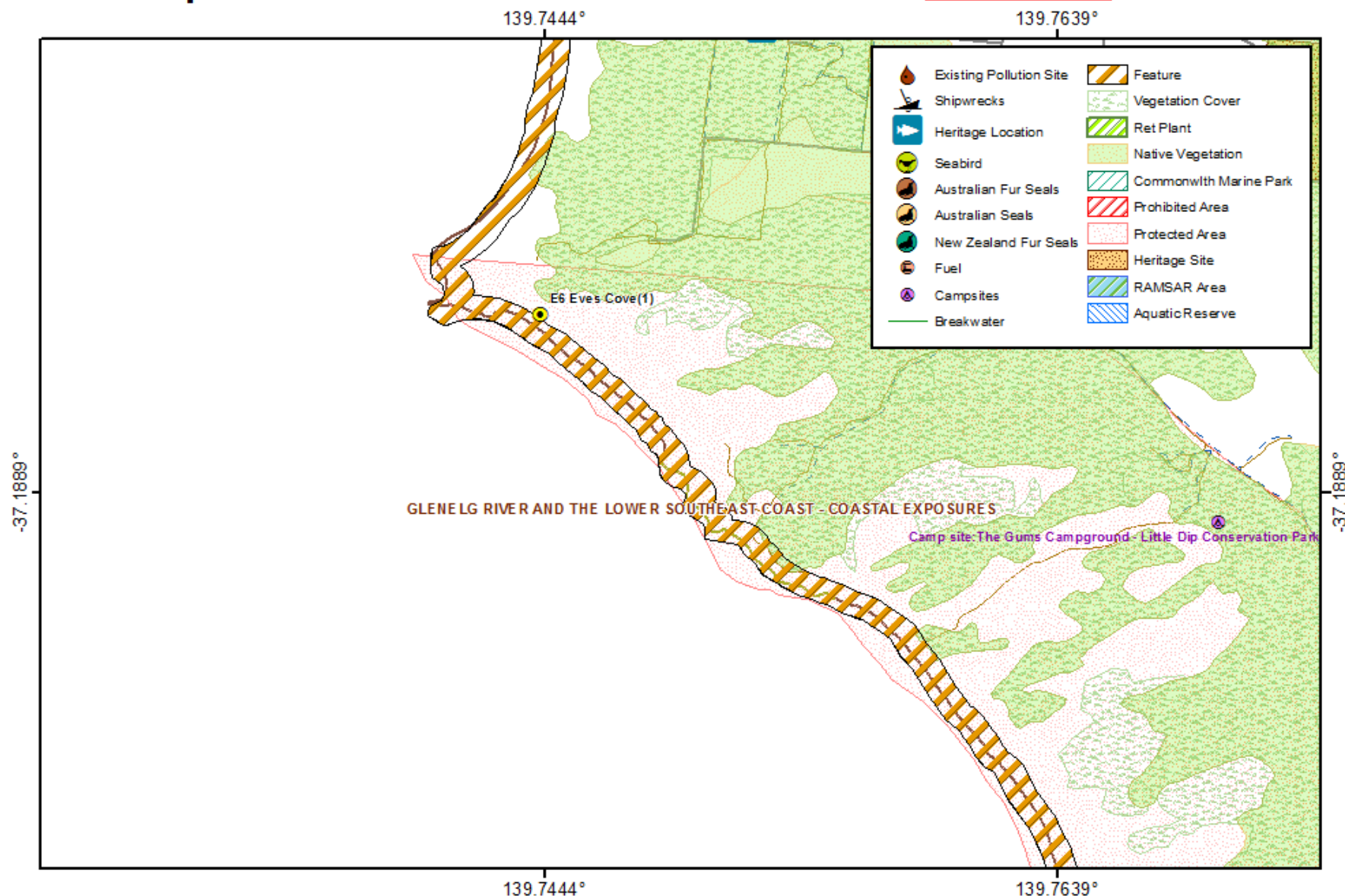


Beach details					
Beach Name:	Eve’s Cove (AKA Evan’s Cave)		Beach ID:	E6	Priority: 1
Access point location (DD):	Latitude: -37.1820822329 Longitude: 139.744265138		Maximum Beach survey length (km):	0.77	
General description and information					
Beach exposure or shape:	Concave (cove)/Straight/Convex (headland)	Aspect:	N NE E SE S <u>SW</u> W_NW	Likely beach gradient:	Shallow/ <u>Medium</u> /Steep
Beach Width:	~40m	Likely substrate:	Fine sand	Backshore type	Dunes; Vegetated dunes
General description:	No info available online				
Beach classification	Wave dominated transverse bar and rip				
General information:	Large area of coastal sand dunes located behind beach. Weather started OK but a front came in later. Sheltered for a while then called off the survey as weather did not improve.				
Permits and access:	<p>Spoke with Barry (0417 019 247) from Little Dip Conservation Park - Coastal Department. He said that the terrain is typically soft so it can be treacherous. If there are tracks there already then we should be fine, but we should stick to the fore dunes and drop the tire pressure to 15 psi. He is out on the beaches every day and said to give him a call if we have any trouble. We had no issue travelling in the land cruiser with the tire pressure at 20 psi. We stopped on the side of the track prior to the beach and walked in.</p> <p>Camping Fees: \$13/ vehicle at Long Gully, Old Man Lake, Stony Rise, and The Gums</p> <p>2015) – Spoke w/ Barry again who said we will be able to access all of the beaches from here to Nene valley, but we shouldn’t drive onto them depending on weather/tides. He will be away the week we are there. Said to call Glen (87356053) to check conditions at closer date.</p>				

OSRA Map

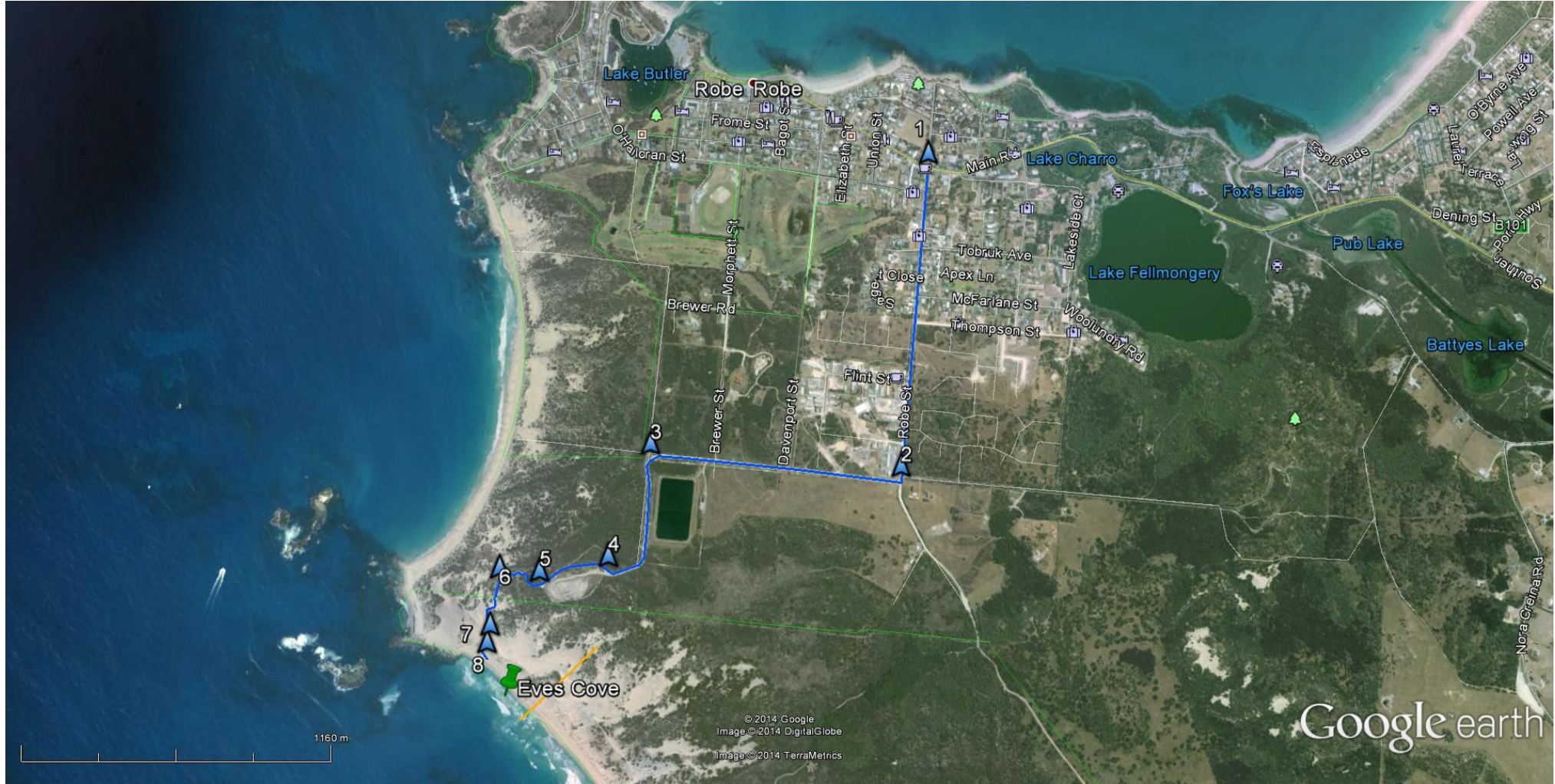
0 0.375 0.75 1.5 Kilometres

Warning: This map not to be used for navigation or measurement purposes.



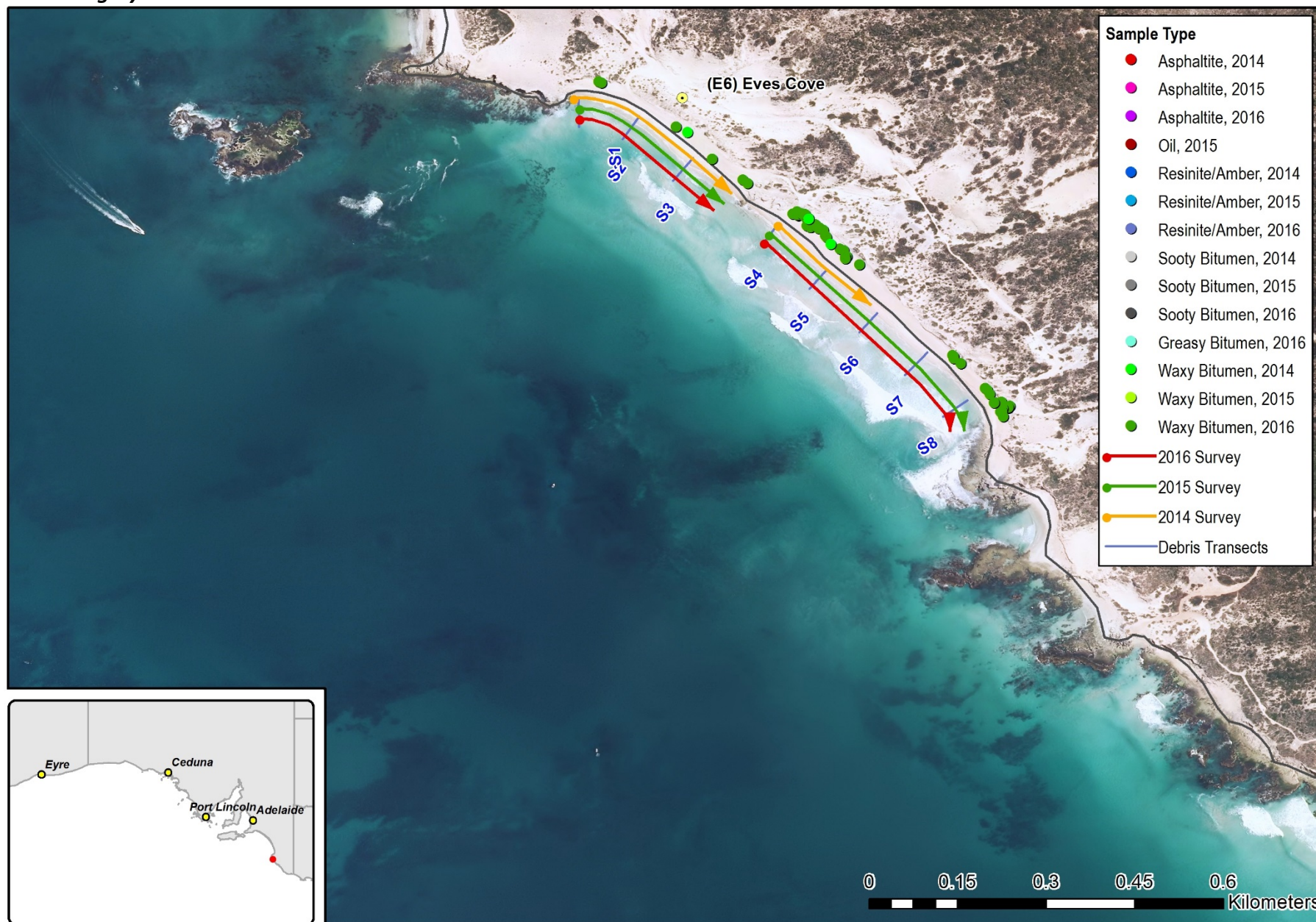
Oil Spill Response Atlas (OSRA) map layers provided courtesy of the Australian Maritime Safety Authority (AMSA)

Large scale Google Earth map



Beach Survey Records

Transects and imagery



Beach: Eves Cove

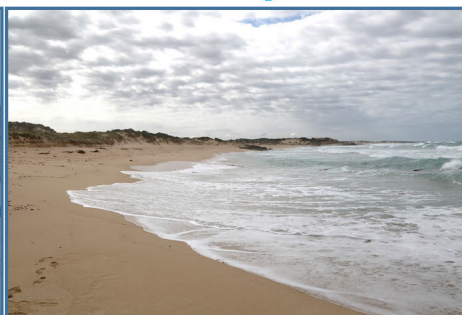
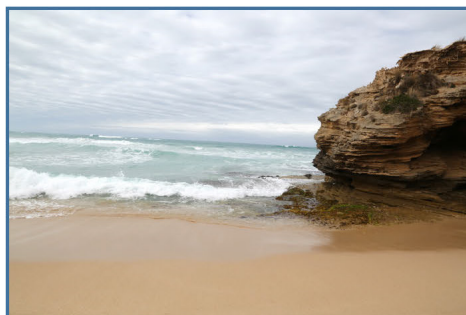
To Sea

To Shore

Along

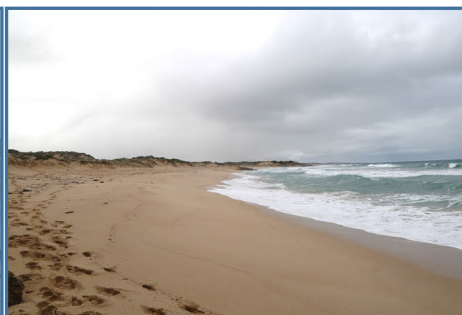
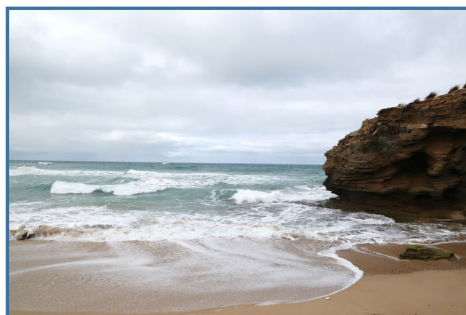
Back

2014



NOTE: 2014 transect stopped 300m shorter than 2015/16

2015



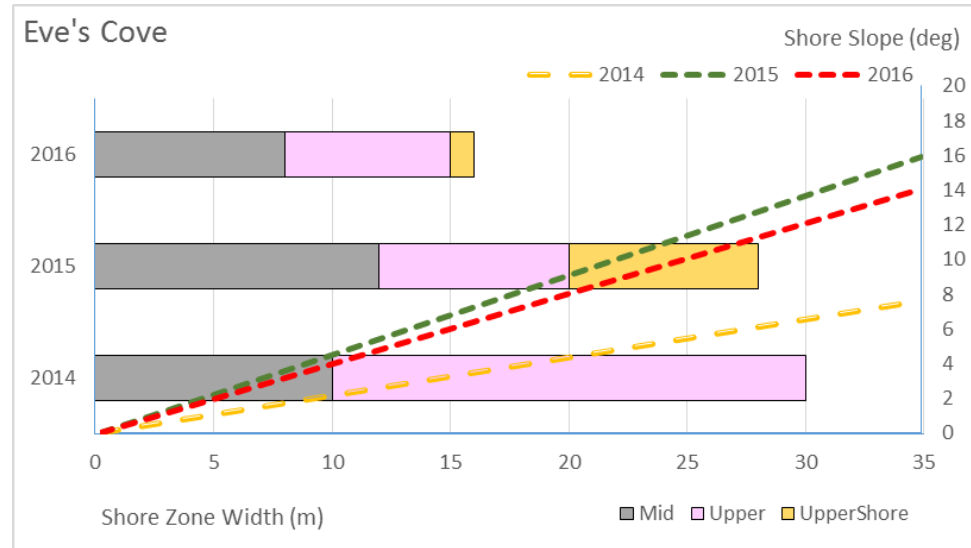
2016



Beach Summary Data

[sample types include asphaltite, tarball and resinite]

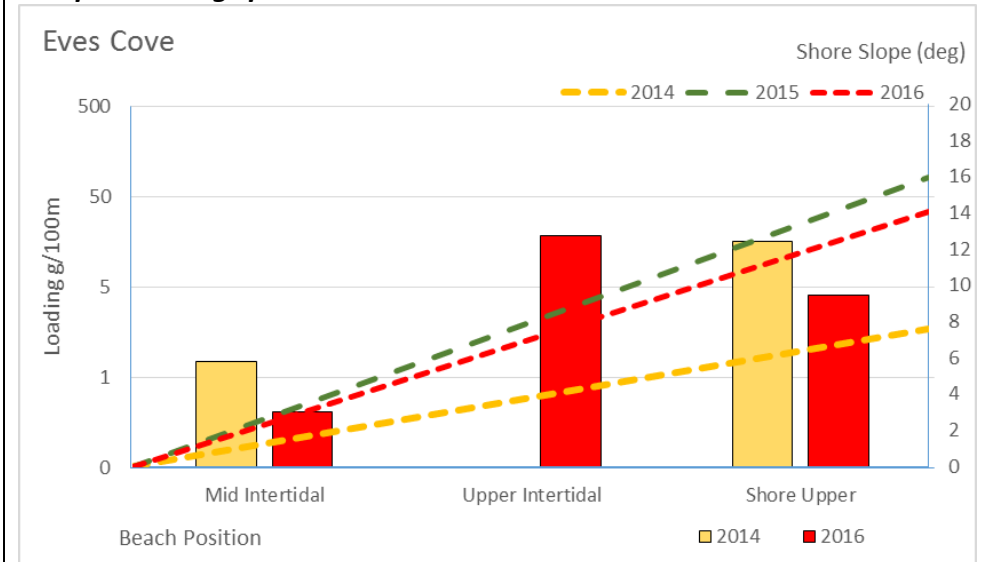
Beach Character Chart



Asphaltite Frequency Chart

No asphaltites found on this beach

Sample Loadings per 100m Chart



Tarball Frequency Chart

