

Onkaparinga River Prickly Pear Problem



Presented by:

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Prickly Pear (*Opuntia*) facts

In South Australia all but one cacti in the Opuntioideae subfamily are declared pests under the *Natural Resources Management Act 2004* (NRM Act).

Native to North America, the West Indies and South America

Several species are present along the Onkaparinga River and the Gawler River

Fragments are readily dispersed by animals, vehicles, footwear, along watercourses and in flood water

Onkaparinga Gorge has the second largest infestation in the state

A record rain event

On the 15th September 2016 after a record rainfall event in the Mount Lofty Ranges, SA Water released 260ML per second of water from the Mount Bold Reservoir because it was at capacity. This occurred during a strong coastal storm surge pushing sea water into the already swollen Onkaparinga River.

The downstream impacts of this release were significant including the rapid rise in river heights causing localised flooding. This flooding caused damage and impacts to built and natural assets including open space reserves, conservation reserves and facilities.











Environmental Impacts of the flood event included:

River bank erosion

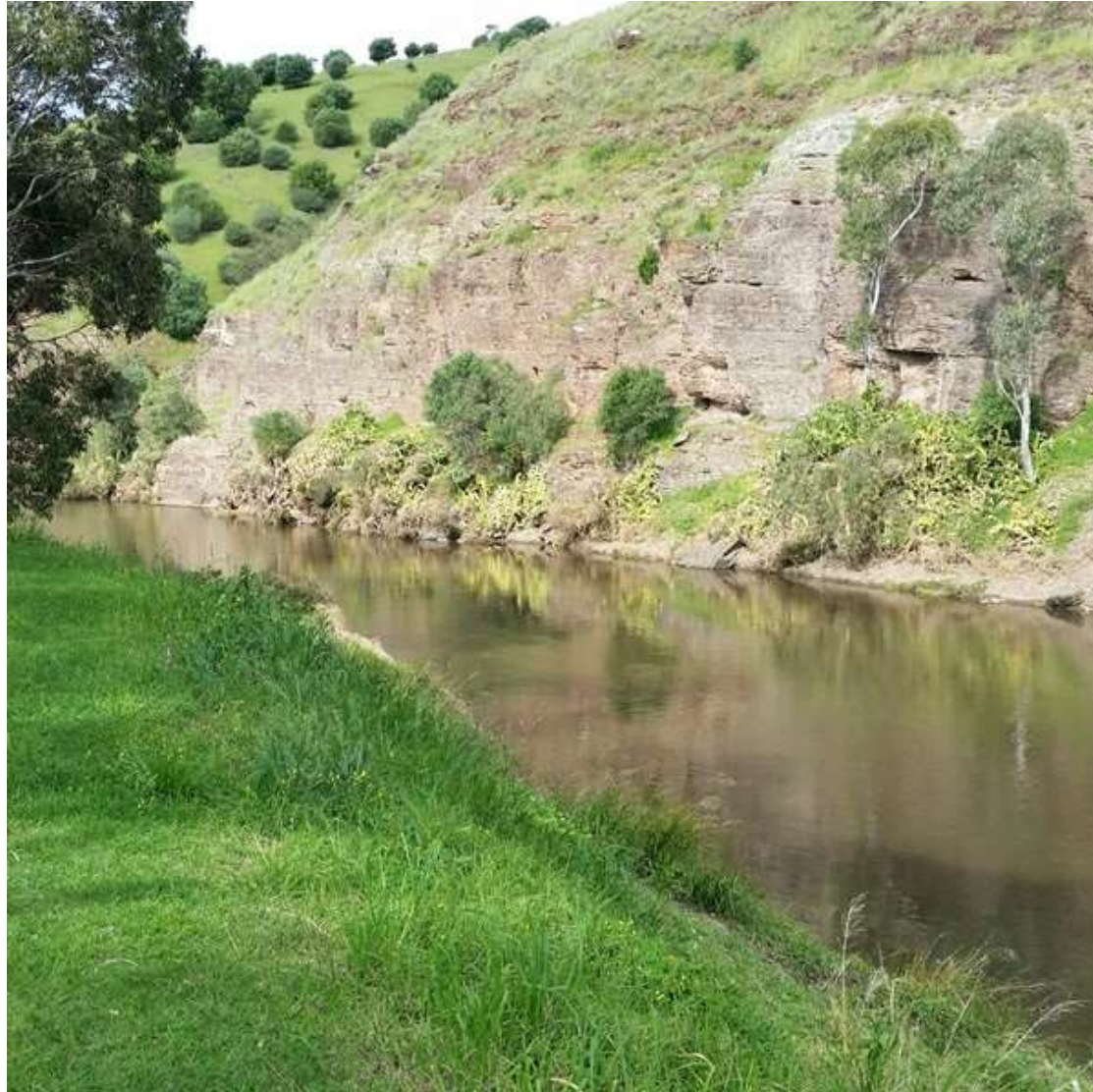
Widespread deposition of debris and silt

Loss of riverside vegetation and revegetation

Dispersal of logs, rubbish and infrastructure along metropolitan beaches

Dispersal of Prickly Pear (*Opuntia monacantha*) throughout the Onkaparinga River and Estuary and on local beaches as far as Seacliff to the north and Sellicks beach to the south

Prickly Pear population upstream



The inspection



The inspection continued



The inspection continued



The inspection continued



The tidy up

Council, DEWNR (now DEW) and DPTI parcels emu pick began Summer 2016/2017

Contractors, volunteers and staff were engaged to assist with the clean up (Senior ranger Steve Johnson and Onkaparinga Park volunteers)

Approximately 300 contractor hours were used in Prickly Pear picking

In January 2017 contractors removed approx. 1.5 tonnes of Prickly Pear segments (pads, seed pods and branches) from land under care and control of Council and DPTI.

The tidy up continued

Segments were flicked (out of thatch) and picked up using Tongs and buckets

All land managed by council and DPTI was traversed and densities of Prickly Pear mapped

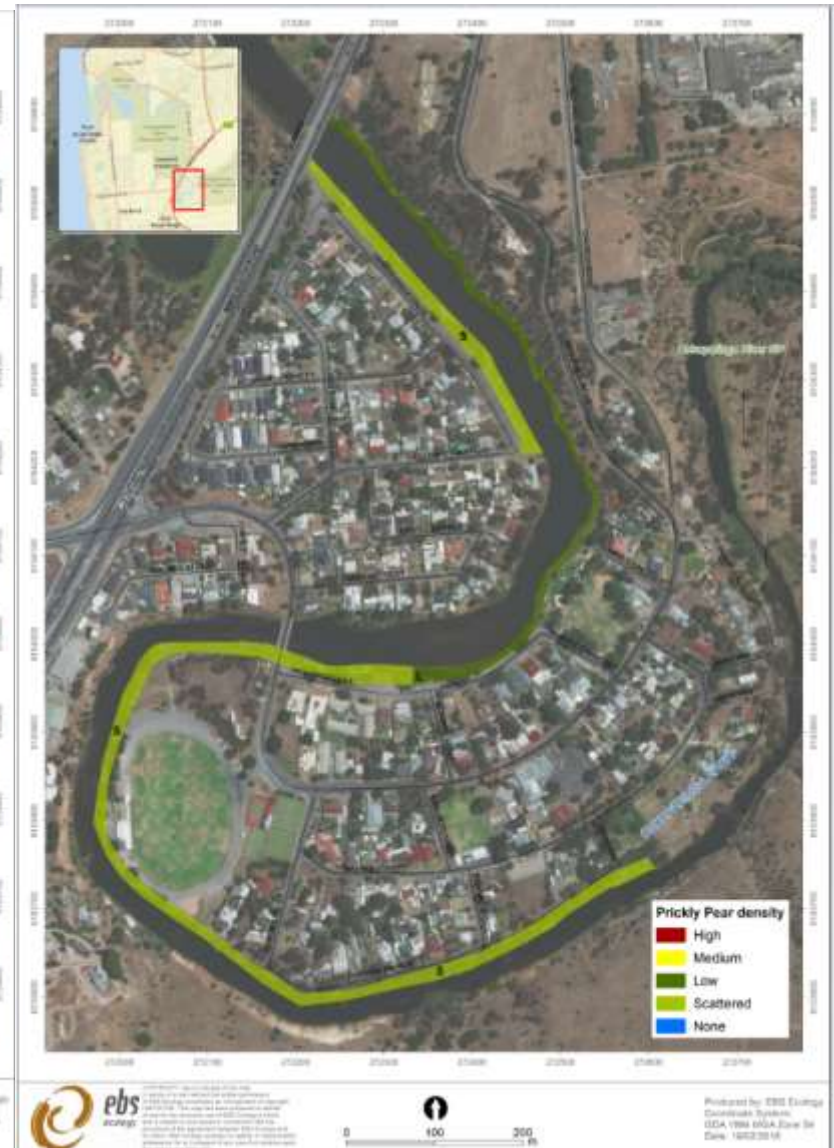
The collection also included rubbish and recyclable items that were distributed during the flood event

The follow up: In 2018 all land parcels (Council, DEW and DPTI) were traversed by contractors and volunteers with approximately 1 tonne of Prickly Pear pads and seed pods collected using over 280 people hours

2017



2018



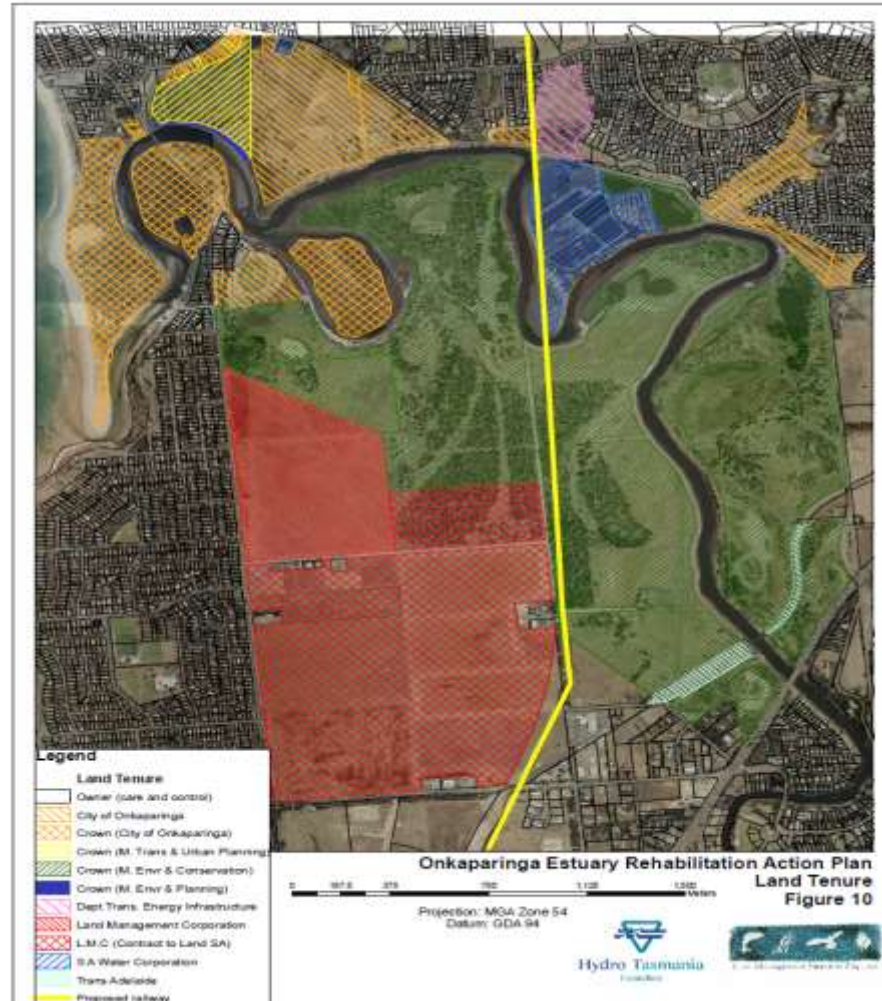
2017

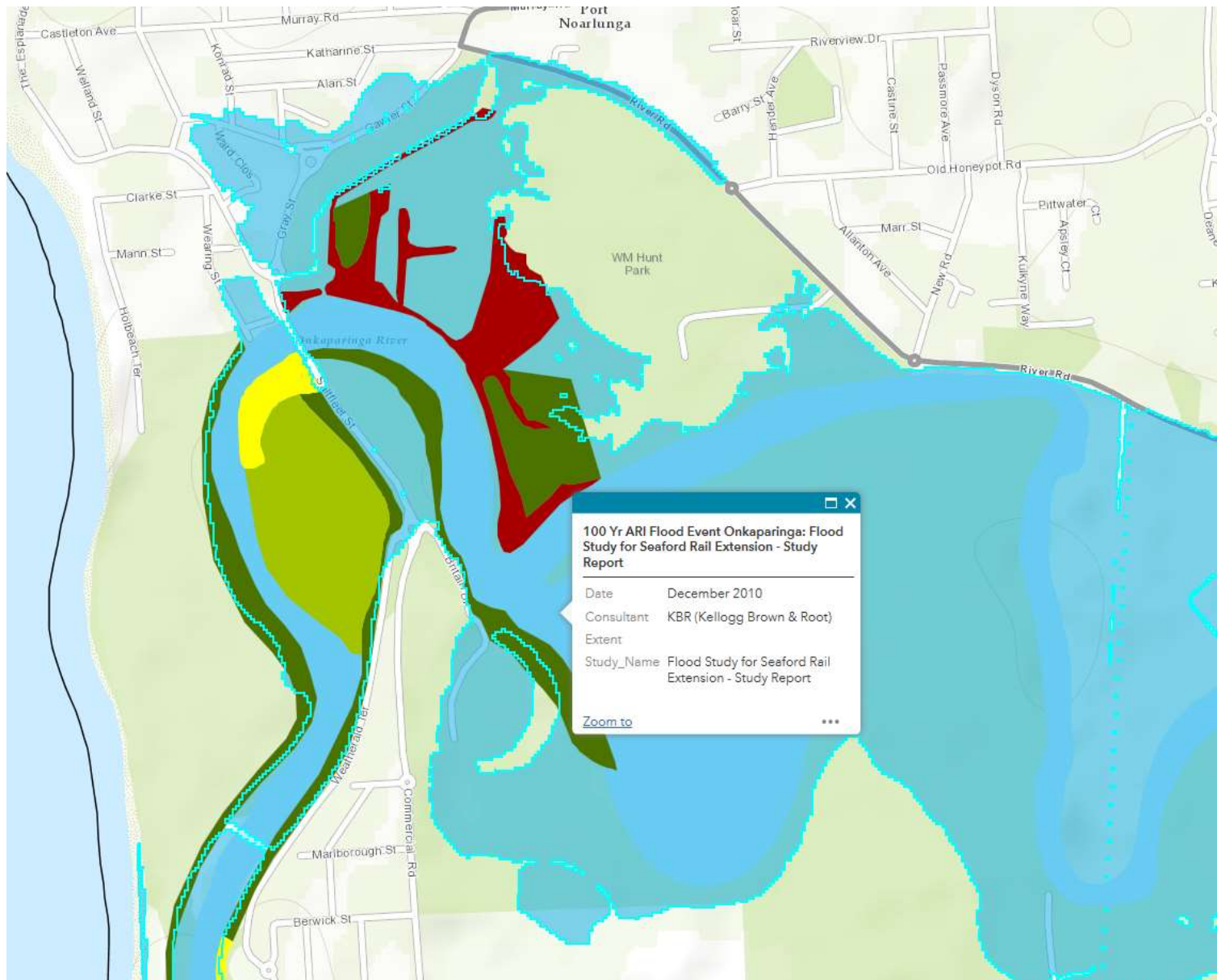


2018



Land ownership adds to the complexity





2017



2018



Summer 2017/2018



Summer 2017/2018



Summer 2017/2018



Solutions:

Annual collection of Prickly Pear segments throughout the known flooded areas (mapped) on Council, DEW and DPTI land parcels

Biological control, Cochineal scale insects

Biological control, Cactoblastis larvae (Cactus moth)

Manual removal of up-stream populations (\$\$\$\$)

Herbicide treatments

On-going monitoring of catchment

Biological control: Cochineal

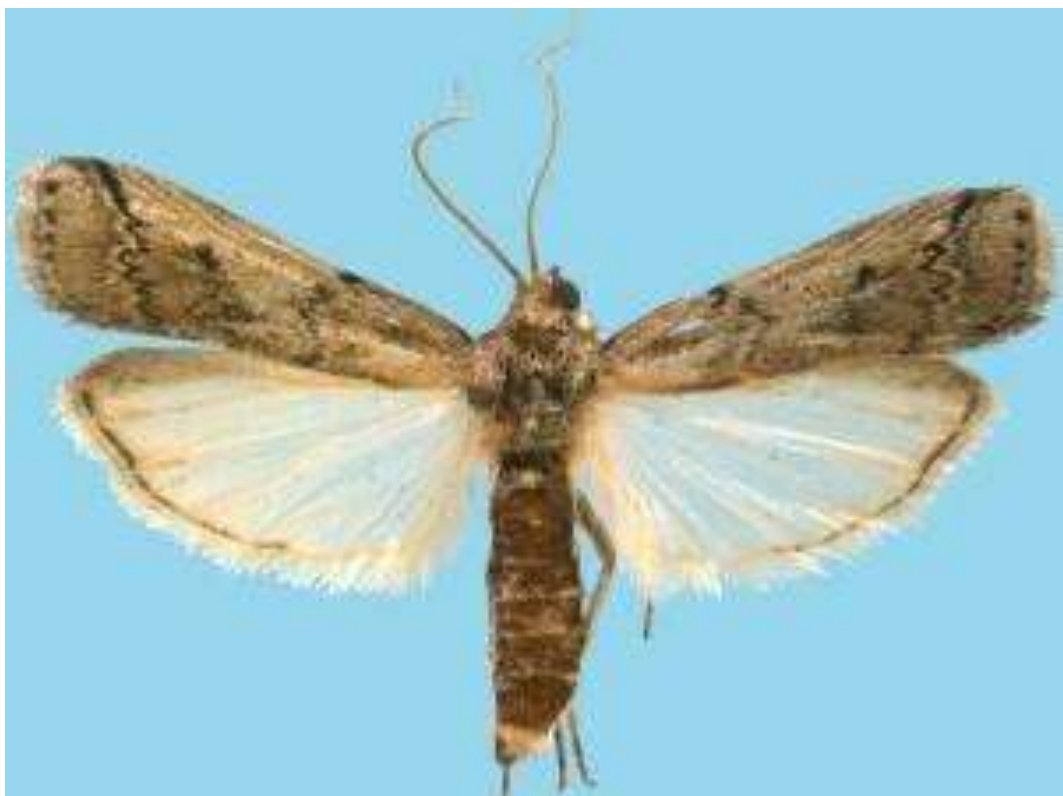






Biological control: Cactoblastis







ONKAPARNGA

