- Willow Sawfly in Victoria Report, July 2006

- www.weeds.org.au/wons/willows

WILLOW MAPPING

LEGEND
△ Recorded locations

LEGEND
■ Area of climatic suitability
■ Extended area *Salix nigra* only
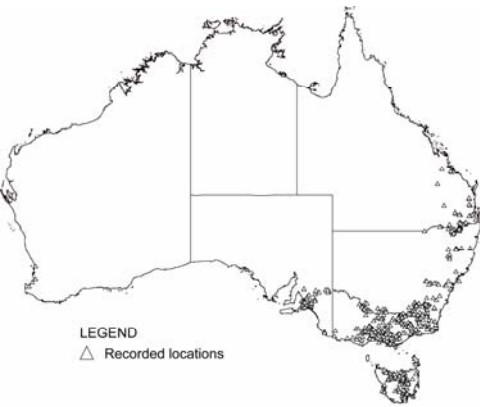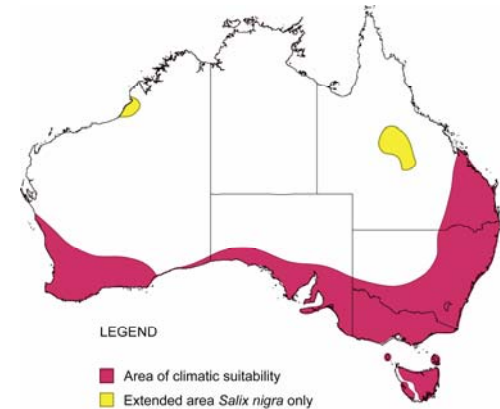
Supported by the State Government of Victoria.

State Government **Victoria** Department of Primary Industries

National **Willows** Taskforce

Australian Government

Did you know?

Q: What industry in South Australia is impacted by willows growing along the River Murray?

Clue: they float on water

A: Houseboating Industry
Nowhere to moor the boats in some sections

Because you can't manage what you don't know!
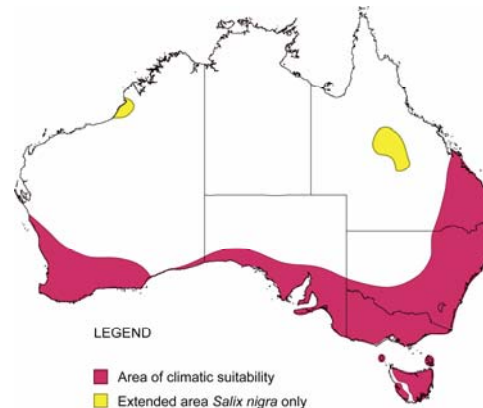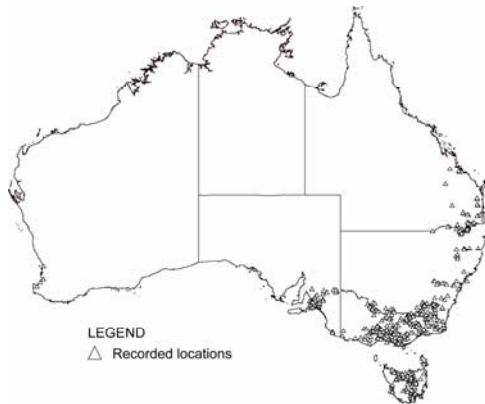

Tasmania

North East bushfires

E.g. Wingecarribee Swamp

Why map willows?

- Setting priorities for management

- Eradication of all willows not feasible

- Prioritise for control, e.g. if they are:

  – females growing within approx. 2km of males

  – 'fragile' and growing along waterways

  – causing significant impacts

Weed risk management

- Weed risk is based on:
  - invasiveness (rate of spread)
  - impacts
  - **current** and potential distribution

LEGEND
△ Recorded locations

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- A less invasive plant may rank as a more important weed than a highly invasive plant if:
  - its overall area and / or the number of ecosystems it invades are greater (invasiveness);
  - it impacts more on social, environmental and agricultural values (impacts)
  - it is presently localised - but could spread much further (current:potential distribution)

- Total cost is a function of:

  – total area infested,

  – annual control cost per unit area and

 – number of years required to achieve the desired level of control.

Impacts and invasiveness

Preliminary results

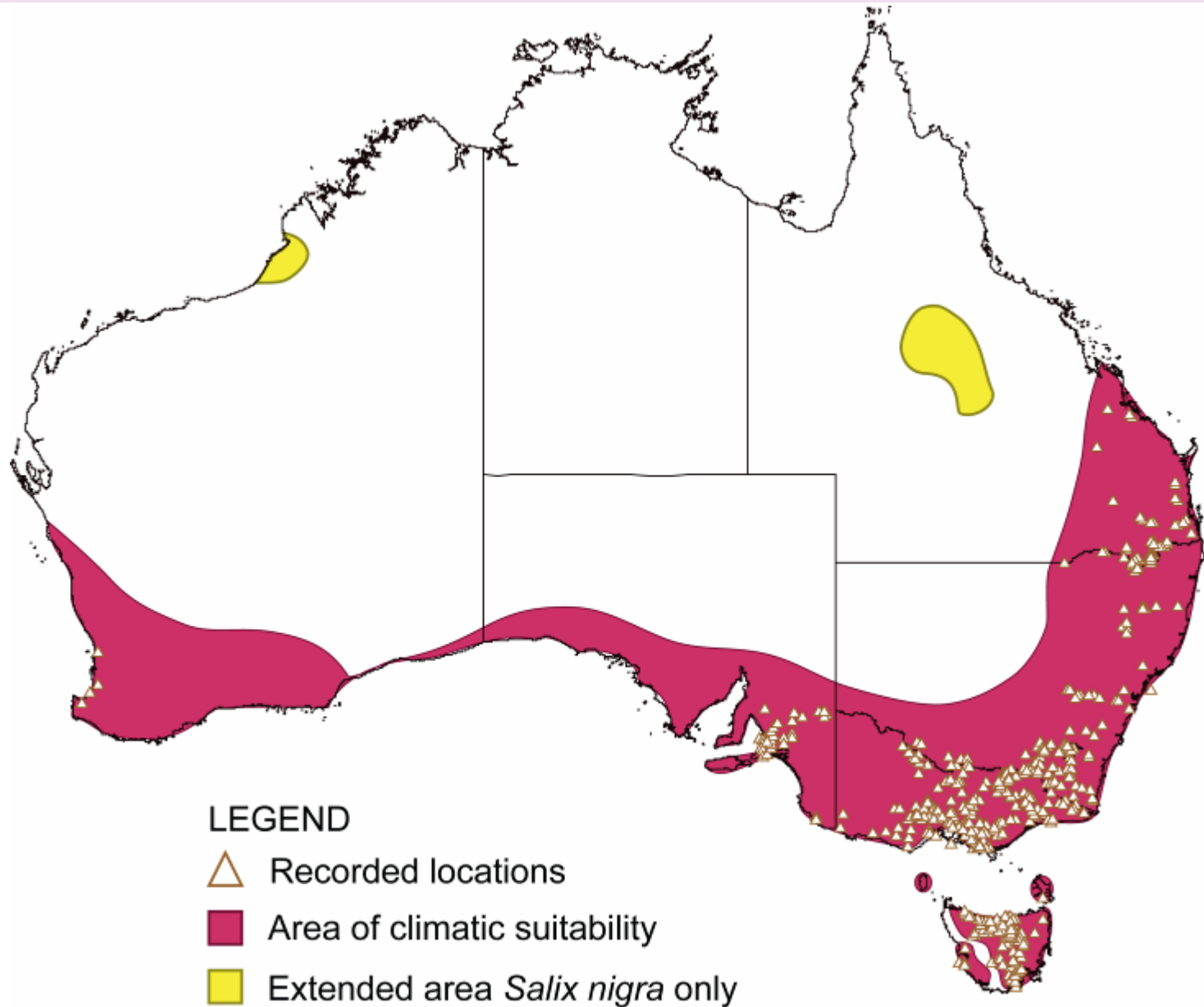| Name	Invasiveness	Impact	Rank
Salix cinerea	0.9190	0.6668	1
Salix purpurea	0.7995	0.6302	2
Salix x rubens	0.6057	0.6283	3
Salix fragilis	0.5141	0.6283	4
Salix alba	0.5995	0.5951	5
Salix nigra	0.5656	0.5594	6
Salix viminalis	0.5605	0.4960	7
Salix exigua	0.6271	0.4517	8
Salix aegyptiaca	0.5454	0.4664	9
Salix x seringeana	0.4565	0.4296	10
Salix matsudana	0.5980	0.3534	11
Salix glaucophylloides	0.5683	0.3593	12
Salix x sepulcralis	0.5920	0.3534	13
Salix humboltiana	0.5007	0.3397	14
Salix x dasyclados	0.4505	0.3309	15
Salix x pendulina	0.5864	0.2763	16

Collate all mapping information:
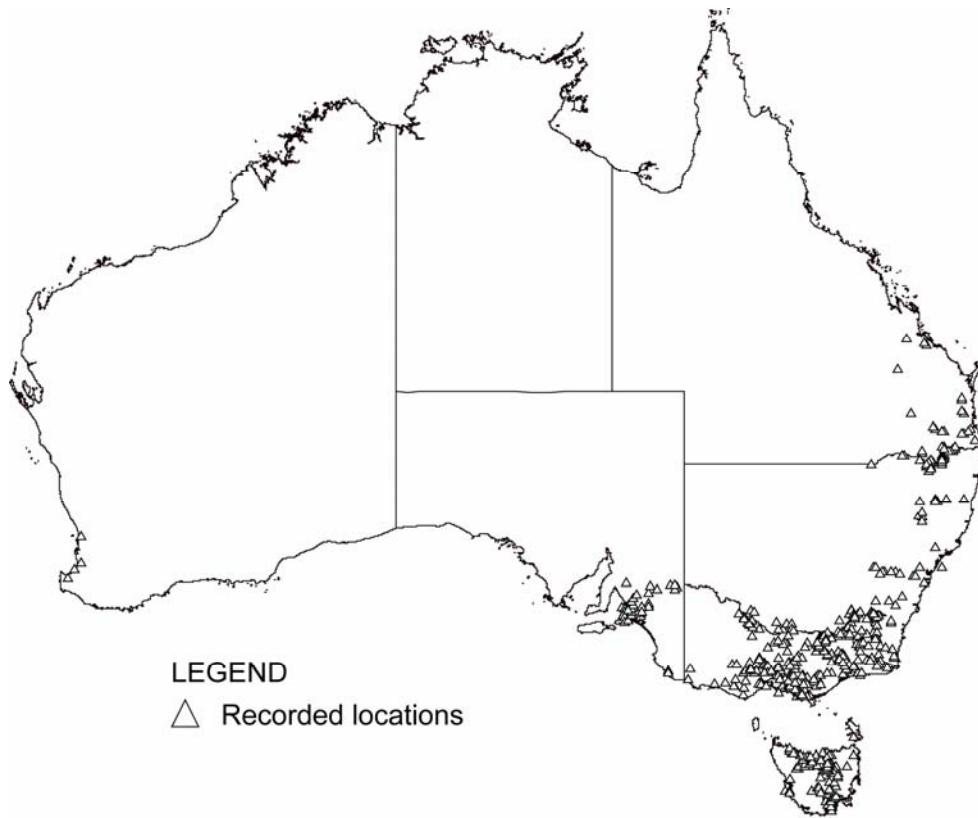
• Electronic data
• Workshops
• Fill in the gaps where possible through on-ground mapping
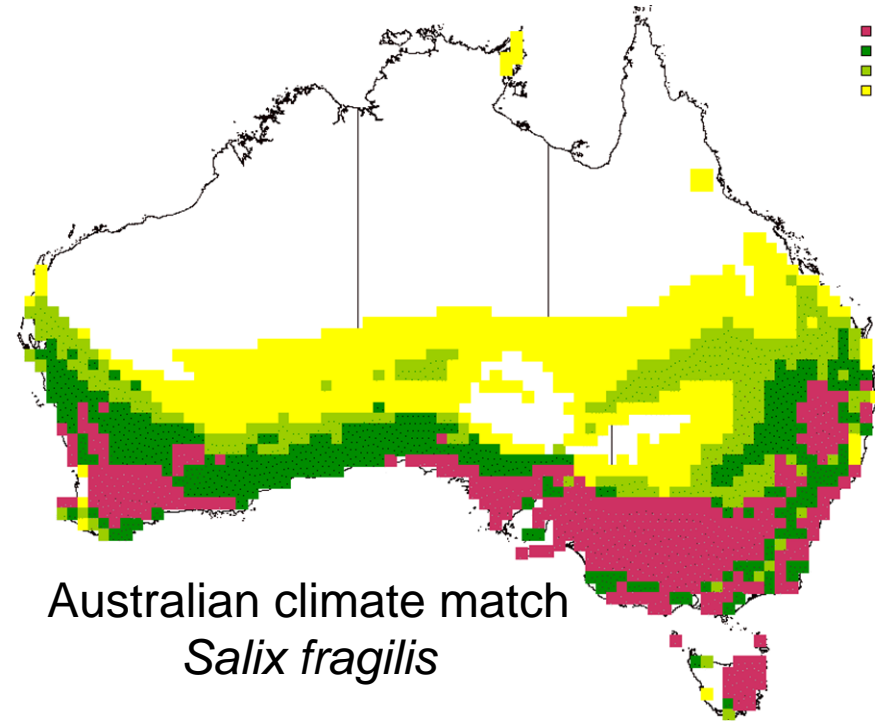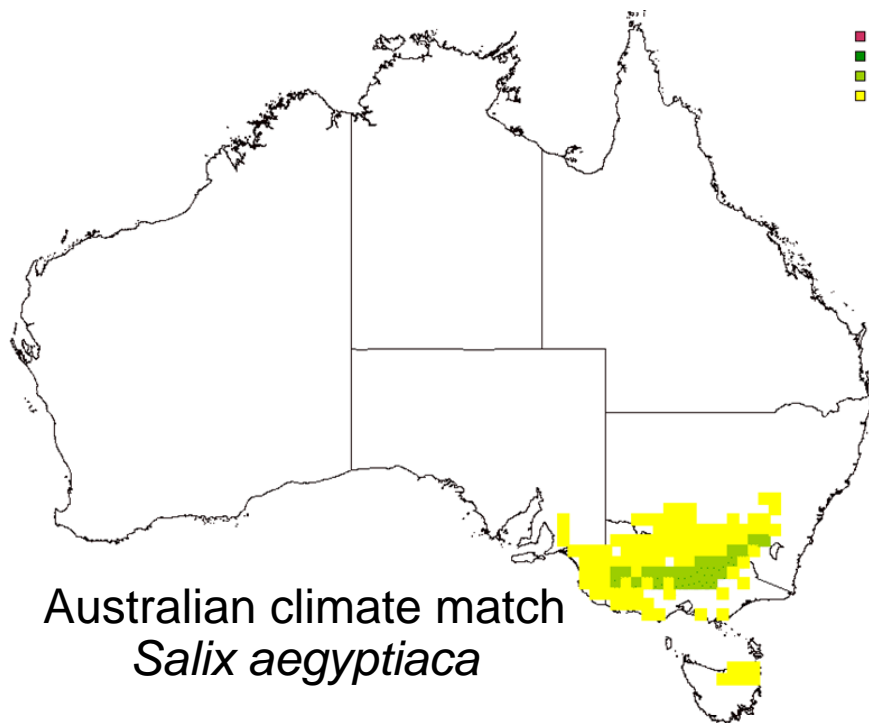

LEGEND
△ Recorded locations

The more detailed the data is, the better the outcomes will be!

Potential distribution

LEGEND

△ Recorded locations

▮ Area of climatic suitability

▮ Extended area *Salix nigra* only

Potential Distribution

Sample maps

Australian climate match
Salix fragilis

Australian climate match
Salix aegyptiaca

Infestation classes 1-4

Class		Density	Condition	Description
Class 1	🟨	Occasional or scattered willows	Mostly native vegetation in good or excellent condition	Individual or small clusters of willows in association with native vegetation in good or excellent condition
Class 2	🟧	Occasional or scattered willows	Mostly weeds, grass or native vegetation in poor condition	Individual or small clusters of willows in association with grass, other weeds or native vegetation in poor condition
Class 3	🟥	Scattered stands with isolated trees interspersed	Mostly native vegetation in good or excellent condition	Up to 50% canopy cover of willows. They can be either continuous or fragmented along the river reach or site and occur in association with native vegetation in excellent or good condition
Class 4	🟪	Scattered stands with isolated trees interspersed	Mostly weeds, grass or native vegetation in poor condition	Up to 50% canopy cover of willows. They can be either continuous or fragmented along the river reach or site and occur in association with grass, other weeds or native vegetation in poor condition

Infestation classes 5-8

Class 5	Large dense infestation	Mostly native vegetation in good or excellent condition	50-100% canopy cover of willows covering the reach or site length that occur in association with native vegetation in good or excellent condition.
Class 6	Large dense infestation	Mostly weeds, grass or native vegetation in poor condition	50-100% canopy cover of willows covering the reach or site length that occur in association with grass, other weeds or native vegetation in poor condition.
Class 7	Willows not present	N/A	Reaches or sites where no willows are present. If willows were once present, but have been treated or removed, please use class 8 instead.
Class 8	Willows treated or removed	N/A	Reaches or sites where willows have been treated. This could be either by cut and paint, stem injection or foliar spray control methods.

Additional notes ...

- Include further details if known, including:
  - males/female/both present in area
  - trees/shrubs/both
  - weeping/upright/both
  - willow species / taxa?
  - deliberately planted?
  - Sawfly present?