

National Case Study

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Prioritising willow management based on asset protection

Choosing assets to protect

Willows determined in this report as high risk may pose a lower threat than those in the highest priority group, but their impacts can still be high where they do establish. In cases where willows in this group are beyond eradication, management priorities can be informed by the risk these willows pose to high value assets.

As a national-level case study for prioritising willow management based on asset protection, the National Willows Taskforce decided to map willows around Ramsar sites. Ramsar sites were chosen as they are internationally recognised high value assets, and clearly demonstrate high value assets on a National scale.

Selecting populations to manage

Since willow seed can spread up to one hundred kilometres, we identified seeding willows within this distance from Ramsar sites as populations to target for control (see Figure 20). A national map of both assets (Ramsar sites) and threats (present and potential distribution of priority willow taxa) shows that the high priority willows capable of spreading to Ramsar sites by seed include *S. alba*, *S. cinerea*, *S. nigra*, *S. purpurea*, *S. viminalis*, *S. x rubens* and *S. x sepulcralis*.

In addition, those able to cross with other willow taxa to form viable hybrids that may pose a threat to Ramsar sites include *S. babylonica* and *S. fragilis*, (for species-level detail at a regional scale see the layered PDF, Ramsar, accompanying this report).

Directing resources

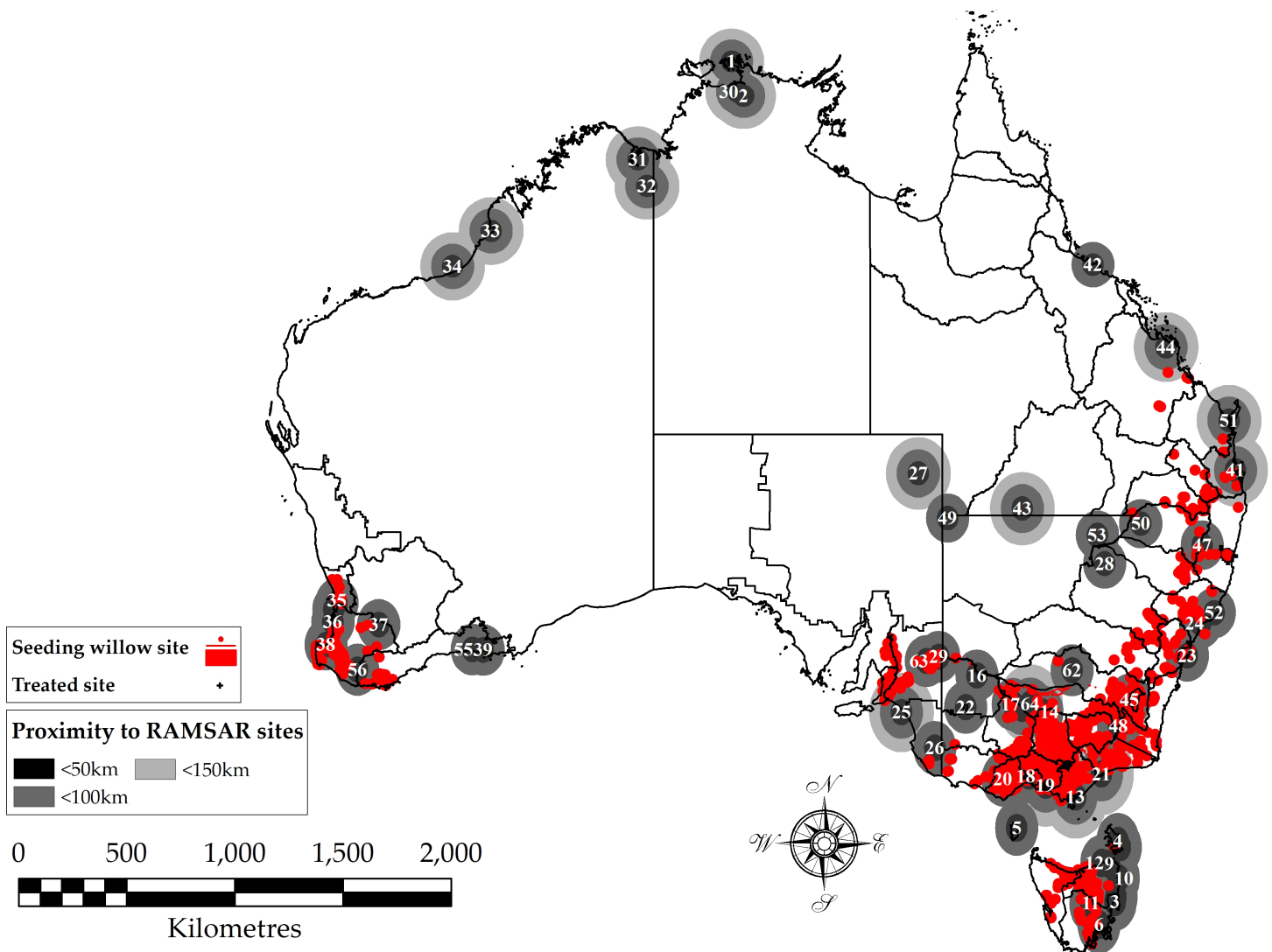
Three Ramsar sites were selected as part of this case study for on-ground investigation. The sites were chosen due to potential threat of willows, which had been previously reported in or near these sites. The three sites, all in New South Wales were:

1. The Gwydir Wetlands, Gingham and Lower Gwydir (Big Leather) watercourses: located 60km west of Moree on private land across 4 farm enterprises.
2. Narran Lake Nature Reserve: located 75km North West of Walgett near Brewarrina.
3. Macquarie Marshes Nature Reserve: located south west of Walgett near Carinda.

Resources were directed to these three sites for on-ground mapping and ground truthing. A mapping project officer visited each of these sites and carried out extensive on-ground observation for any willows within and near the vicinity.

Ramsar sites were also investigated during on-ground mapping in southwest Western Australia, as a separate task from priorities developed for this case study.

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Presence of seeding willows in relation to Ramsar sites

What was found?

No willows were found in or near the vicinity of the New South Wales sites. This would suggest that either the willow taxa had been misidentified, or had been completely removed from the area. Had willows been found, they would have been assigned a high priority to direct on-ground management efforts.

In Western Australia, no willows were found within any of the Ramsar wetlands. However, seeding willows were confirmed nearby and have potential to spread into these important wetlands.

This case study can be used as an example of how, and where, to direct on-ground mapping resources in order to protect highest priority assets first.

Further information

For further information on prioritising willow management based on assets, see Steel, J. Holland Clift, S. & Snell, K. (2008). *Developing willow management priorities from the local to the national level*. Department of Primary Industries, Victoria.