Control of the Cockspur Coral Tree along the Ballina Foreshores of the Richmond River

The A Ward committee requested the following;

That information on the measures that might be taken, including the likely cost, to completely eradicate the noxious Coxspur Coral Trees from the banks of the Richmond River east and west of the CBD to stop this weed overtaking the entire riverbank as it has in Broadwater and with a view to funding being allocated to this beautification project in next year's Operational Plan.

Plant Description

The Cockspur Coral tree (Erythrina Christa-galli) is a deciduous tree growing to10m high and originating from South America. In Australia it has been cultivated as an ornamental plant but has become invasive along waterways in coastal areas of New South Wales from Sydney to the Queensland border.

Figure 1: Cockspur Coral tree flowering habit

Figure 2: Cockspur Coral Tree Deciduous Habit

Weed Declarations

The Cockspur Coral tree is a recognised environmental weed in NSW. It has not been declared a noxious weed under the NSW *Noxious Weeds Act 1993* for this area.

Weed Infestation and Distribution

The Cockspur Coral tree currently heavily infests large areas of the upper Richmond River catchment. This has resulted in many foreshore areas along the length of the river being densely infested with the Coral tree which then displaces native vegetation, reduces aesthetics and removes access and usability of the river foreshore area.

The tree continuously spreads via its seeds that float and wash downriver from the upper catchment infestation areas. The tree can also spread via branch fragment growth whereby fallen branches washed downstream touching the soil regrow into trees.

Flooding along the Richmond River exacerbates the infestation by allowing seeds and branch fragments to wash up higher than normal above the high tide mark onto the surrounding land. This removes them from the tidal swash zone improving their survival.

In time these seedlings will grow into trees impacting on the wider community and foreshore ecology. Currently there are a few mature, uncontrolled Cockspur Coral trees on the Ballina Island.

Figure 3: Cockspur Coral tree seedlings growing along the Ballina breakwalls above the high tide mark

Foreshore Land Tenure Distribution

A survey of the immediate Ballina Island and East Ballina foreshore areas above the high tide mark identified three main categories of land ownership. These are identified below:

Ballina Foreshore

The Ballina Foreshore area was surveyed from the car ferry along the river to the CBD area and around to Cawarra Park in North Creek. This is and area covering approximately 8.4km in length not including many tributaries and inlets. 53% of the foreshore area is Crown land owned by the NSW State Government with a majority of this Trust managed or devolved to Council for management. 21% is Council owned public reserves or road reserves and 26% is privately owned.

East Ballina Foreshore

The East Ballina foreshore area was also surveyed from North Wall around to Prospect Street on North Creek covering 2.5km. 73% of the foreshore land is Crown land owned by the State Government with a majority of this Trust managed or devolved to Council for management. 23% is Council owned public reserves or road reserves and 4% is privately owned.

Control

Control is undertaken by hand pulling and removing seedlings offsite, mowing, spraying or cutting and painting stems with a registered herbicide. Larger trees need to be stem injected and removed when dead. Alternatively complete removal of the tree with poisoning of the stump or complete removal of the root mass.

To ensure maximum success from any control of the seedlings the timing of the work needs to ensure appropriate time is permitted to allow for the germination of seeds.

Previous weed control sweeps targeting Cockspur Coral tree seedlings along the Ballina and East Ballina foreshore areas were last undertaken in 2009 by Council's Aboriginal Bush Regeneration crew following a previous flood event and seedling infestation. This control only covered public land and did not enter onto private property. This work was funded by both Council and the Catchment Management Authority as part of a bigger program targeting all weeds.

Complete eradication of Cockspur Coral tree along the Ballina foreshores of the Richmond River is not feasible given the existing uncontrolled infestation of the tree along the entire length of the Richmond River and the huge seed source that these trees provide.

The Cockspur Coral tree has not previously been considered a high priority weed as it is not a listed as a Noxious Weed under the Act.

Funding and work is targeted at a number of other noxious weeds that have much higher legal priority status in the Northern Rivers.

Control Costs

The estimated cost for a one off treatment the 10.1km foreshore area, targeting just the Cockspur Coral tree would be $2100. This costing would include chemicals and a two person weed control team for threes days.

To include controlling existing mature Cockspur Coral trees an additional five days work would be required costing an additional $3,520.

The estimated total cost of $5,620 which would cover 85% of the foreshore area. The remaining 15% of the foreshore is privately owned.

No funding has been allocated for this work in the current budget or the 2013/14 budget.

Recommendations

The Coral Tree is not a noxious weed or priority weed and so it is very unlikely that grant funding would be available to assist with the control of the weed.

It is recommended that Coral tree seedlings located on public reserves be sprayed as part of the regular maintenance cycle carried out in the reserves.

Any mature trees can be targeted and removed on a staged basis. There are very few mature trees so this could be managed within existing budget allocations.

An education program could be implemented to encourage private land owners to control trees located on private land. No funding has been allocated for this work.

To monitor the spread of the trees a survey should be undertaken every five years and this could be carried out within existing budget allocations.

In summary there is no funding allocated for a one off project to remove the Coral trees. However the trees could be included for control as part of the existing maintenance work carried out by the Open Spaces & Reserves staff.