

## 5.14. PEST MANAGEMENT STRATEGY FOR SPARTINA



### Description of the Pest

Three species of Spartina (Cordgrass) are present in Northland - (*Spartina alterniflora*, *S. anglica* and *S. x townsendii*). The plant grows in estuaries and other coastal areas. It has short rhizomes and forms dense mats in inter-tidal zones. The plant grows 60-80 cm high.

### Distribution of the Pest

The plant is found in most harbours in the Region, with major infestations in the Kaipara harbour, and smaller areas in the Parengarenga, Houhora, Rangaunu, Mangonui, Taipa, Bay of Islands, Whangaroa, Hokianga and Whangarei harbours.

### Problems Caused

The dense mats of the plant cause silt to accumulate and severely affect marine life in mud flats. Small plants and animals can become smothered by the plant and the associated silt which in turn affects shellfish, fish and birds further up the food chain. Extensive areas of the plant can cause surface flooding on adjacent dry land.

### Parties Affected

The plant affects all people who use estuarine areas.

### Impact Evaluation

<u>Impact</u>	<u>Current</u>	<u>Potential</u>
Cultural	Low	High
Ecological	Low	High
Human Health	-	-
Soil & Water	-	-
Production	-	Medium
Public Infrastructure	-	Medium
Public Safety	-	-
Recreation	-	Medium
Trade (International)	-	-
Overall Regional	Low	High

### Regional Effects

Spartina has over recent years become a significant pest plant in the Region. It is now present in nearly all harbours. Its spread in the Kaipara is indicative of how it can dominate estuarine areas and affect their ecological values. The loss of habitat and associated recreational fisheries has not been quantified.

Spartina also threatens the shallow inter-tidal areas on which Northlands extensive oyster farms have been established.

### **Need to Intervene**

Spartina is capable of taking over large estuarine areas in Northland. The resultant loss of natural habitat, recreational fisheries and seafood sources for Maori would have serious consequences for the Region. A Regional management Strategy involving education, publicity and control is required. The Crown, through the Department of Conservation, manages all foreshore and seabed areas, however due to constraints on the allocation of resources and the requirement to prioritise their control efforts in harbours of high ecological values, many infestations of Spartina will not be controlled in the foreseeable future unless a joint programme of control work is adopted.

Affected private landholders will meet their own control costs.

### **Goal (Long Term)**

- To eradicate spartina from Northland.

### **Objectives (Five Year)**

- To control the spread of the plant in the Kaipara, Hokianga, Rangaunu, and Parengarenga harbours and reduce infestation levels by 50%.
- In conjunction with the Department Of Conservation eradicate other small and isolated infestations in the Region

### **Tactics and Technical Methods to be Used**

Education	Advice to occupiers and other interested parties. Community meetings and field days. Media releases and publicity brochures.
Regulation	Rule 6.4.2.8 Total Control of Pest Plants on Properties Rule 6.4.2.9 Prohibition on Distribution and Sale of Pest Plants  Failure to comply with these rules creates an offence under section 154(r) of the Biosecurity Act 1993.
Services	Regional Council Total Control service on sites within the Kaipara and Hokianga harbours . Department Of Conservation Total Control service on sites within the Rangaunu and Parengarenga harbours Regional Council and Department of Conservation eradication and total control service on other small and isolated infestations within the Region.

### **Tactics and Technical Methods Rejected**

Services	Biological control programmes (no agents known at present time but option not yet totally discarded).
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### **Effects of the Strategy**

Beneficial	Protection of estuary marine life. Enhanced commercial and recreational fisheries. Reduced surface flooding.
Detrimental	Possible damage to non-target species through chemical application and physical removal.

### **Cost of Strategy**

The total cost of the Strategy is estimated at approximately \$26,000.00 each year.

The Regional Council work is estimated at \$13,000.00 each year.

The Department Of Conservation work is estimated at \$13,000.00 each year.

### **Funding**

The Strategy is to be funded by the Crown through the Department of Conservation.

The Regional Council component of the Strategy is to be funded from a Land Management Rate.

### **Management Agency**

The Northland Regional Council is responsible for management of the Strategy.

### **Relationship of Strategy to Other Pest Management Strategies**

The Auckland Regional Council has adopted a similar Strategy for its Region.

### **Monitoring and Reporting**

The Regional Council and Department of Conservation will maintain a database showing all infestations and control programmes in place or planned. Progress towards objectives in the Strategy will be recorded in the Regional Council's Annual Plan or LTCCP as appropriate.

### **Term of Strategy    5years**

### **Rules**

#### 6.4.2.8            Total Control of Pest Plants on Properties

The occupier or owner of a property on which any of the following pest plants are growing shall prepare and implement a programme aimed at achieving eradication of that plant on that property:

- Bathurst bur
- Nodding thistle and Californian thistle
- Spartina

#### 6.4.2.9            Prohibition on Distribution and Sale of Pest Plants

- (i) No person shall distribute to other persons or offer for sale, or hold in a premises where plants are offered for sale, any pest plant which is subject to a Northland Regional Council Pest Management Strategy or included in the National Accord List of Plants Banned from Sale & Distribution.
- (ii) No person shall distribute or offer for sale to other persons any agricultural lime, roading aggregate, sand or fill material which contains the seeds or any other vegetative material capable of propagation from a pest plant subject of a Northland Regional Council Pest Management Strategy or included in the National Accord List of Plants Banned from Sale & Distribution.
- (iii) No person shall transport or use any equipment, machinery or product which contains the seeds or any other vegetative material capable of propagation from a pest plant subject of a

Pest Management Strategy or included in the National Accord List of Plants Banned from Sale & Distribution.

- (iv) No person shall plant, transplant or re-distribute any pest plant subject of a Pest Management Strategy or included in the National Accord List of Plants Banned from Sale & Distribution.