## 5.7. PEST MANAGEMENT STRATEGY FOR MANCHURIAN RICEGRASS

**Description of the Pest**
Manchurian ricegrass (*Zizania latifolia*) is an aquatic perennial grass which looks similar to raupo but grows somewhat taller. It can grow to a height of 3 metres. The plant spreads in several ways. It has far reaching rhizomes, while seeds can be carried by birds and water. Fragments of rhizomes are spread by water and on machinery.

**Distribution of the Pest**
The plant is found primarily in the Kaipara area, especially along the banks of the Northern Wairoa river where it is widespread and forms dense, continuous infestations. There are other small infestations around the Kaipara Harbour and parts of the Far North and Whangarei districts.

**Problems Caused**
Manchurian ricegrass forms dense stands in aquatic or semi-terrestrial situations. It can block drains, cause flooding and invade pasture, causing lowered livestock production. The plant grows in both fresh and brackish water and by blocking drainage can cause good land to become water-logged and swampy. It is a very invasive plant and quickly spreads on land which is not grazed or controlled in some manner. The plant has a biological rating of 19 out of 21 and a weediness rating of 18 out of 24 on the Esler, Liefting and Champion index.

**Parties Affected**
Landowners are the main parties affected, particularly farmers, and authorities responsible for drainage systems, reserves and roadsides.

**Impact Evaluation**

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

**Regional Effects**
Because Manchurian ricegrass is resistant to most herbicides, it is a major threat to low lying agricultural land and associated water bodies. It invades drains, stopbanks and other facilities essential to farming operations in areas around the Northern Wairoa River and upper Kaipara Harbour. The plant also detracts from the recreational and scenic values of rivers and streams.

**Need to Intervene**

Ricegrass, being a very invasive plant, has the potential to seriously affect the use of farmland and associated waterbodies. Once established, it is difficult to eradicate with herbicides being the most effective means. The herbicides used to date have had varying success rates. The plant poses a threat to important drainage systems, indigenous ecosystems and a range of economic and environmental values. On-going action is needed to control it within the Kaipara district, this being the major area of infestation. A Regionally co-ordinated approach is also necessary to prevent its spread to other unaffected areas of the Region.

**Goal (Long Term)**

- To prevent the spread of Manchurian Ricegrass and eradicate scattered sites when found outside the main infestation area (see map D).

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

- Identify and contain infestations which are outside the main infestation area (see map D).
- Monitor areas at risk of invasion by Manchurian Ricegrass.
- Provide a Council funded control programme to reduce density levels at these sites in order of priority.

**Tactics and Technical Methods to be Used**

| | |
|---|---|
| Education | Advice to landowners and other interested parties.<br>Community meetings and field days.<br>Contractor's code of practice.<br>Media releases and publicity brochures.<br>Research (chemical control) where applicable. |
| Regulation | Rule 6.4.2.9 Prohibition on Distribution & Sale of Pest Plants<br><br>Failure to comply with these rules creates an offence under section 154 (r) of the Biosecurity Act 1993. |
| Services | Council funded total control service outside major infestation area of the lower Northern Wairoa river and its tributaries. |

**Tactics and Technical Methods Rejected**

| | |
|---|---|
| Economic | Subsidies on herbicides (not effective). |
| Regulation | Rules on occupier total control (plant too widespread). |
| Services | Regional Council eradication service for whole Region (plant too widespread in the Kaipara District). |

**Effects of the Strategy**

| | |
|---|---|
| Beneficial | Enhanced primary production.<br>Protection of native plant life along river margins.<br>Enhanced recreational values of waterbodies. |
| Detrimental | Possible contamination of waterbodies if chemical control methods are used. |

**Cost of Strategy**
The Strategy is estimated to cost the Regional Council approximately $21,000 each year.

**Funding**
The Strategy is funded from a Regional pest management rate. This includes the cost of controlling the plant at sites outside the major infestation area. The cost of controlling Manchurian ricegrass within the major infested area will be borne by the individual landowners.

**Management Agency**
The Northland Regional Council is responsible for managing the Strategy.

**Relationship of Strategy to Other Pest Management Strategies**
The Auckland Regional Council has a similar Strategy for the plant in that Region.

**Monitoring and Reporting**
The Regional Council will maintain a database recording all sites of ricegrass outside the major infestation area. Area and levels of infestation will be recorded along with control methods used. All such sites will be inspected annually and this information updated. Progress towards the objectives in the Strategy will be recorded in the Regional Council's Annual Plan or LTCCP as appropriate.

**Term of Strategy** **5 years**

**Rules**

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.