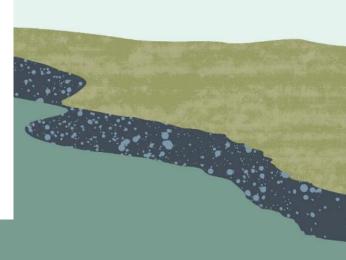
Dune and estuary restoration by weed control in Murihiku and Fiordland – Department of Conservation





New Zealand Government



#### Spartina spp

Invading Southlands estuaries since the 1930s

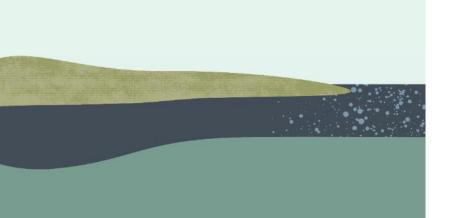
Now a very threatened plant

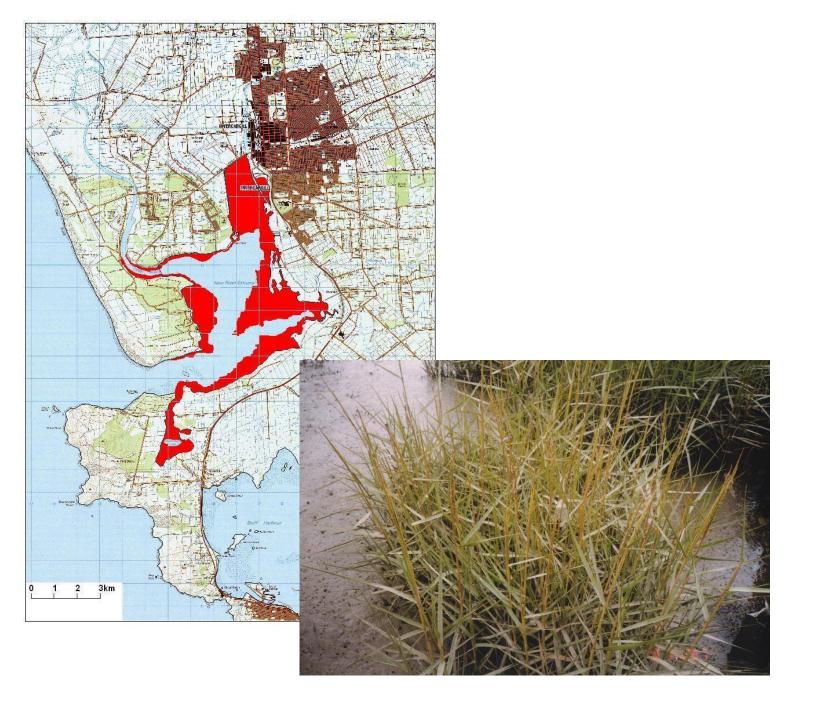


The spread of *Spartina spp* within New River Estuary

1930s - 14 ha planted

By 1990s – 800ha affected





# Control programme



Dragging hoses through the mud



Aerial control



Argo control – still used today



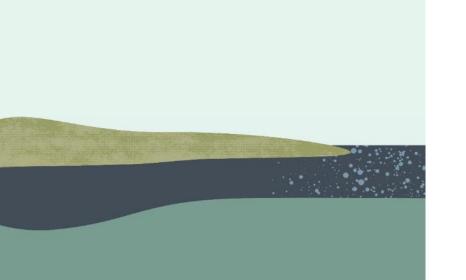
Hovercraft

### Comparison

# Before and after control











# Comparison of the Waihopai arm











### Eradication

Searching tools



Size of some of the plants



Searching



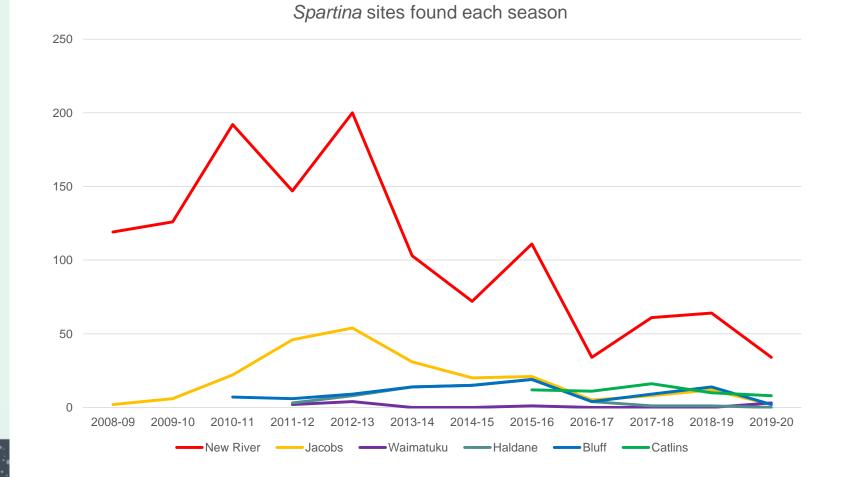
Our new helpers



Wink and Bailey

#### Results

Number of *Spartina* sites found each season



Fiordland coastline searching

- Skilled staff aerially searching
- Or ground based from boats
- Gorse and marram are the main threats
- Control as you do





# Big River and South coast

 Ongoing marram control for 30 years



**Big River** 



Pingao at Grace or Angus burn



Spraying in the early days.



Euphorbia glauca along the coast line

#### **Coal River**

- 30 years of marram control work
- Full team working for a week, now a couple of hours searching









#### Martins bay

- Searching for marram
- Extensive gorse ground control out the back of the dunes using Argos



Vast areas of scattered pingao



Struggling to find a marram plant

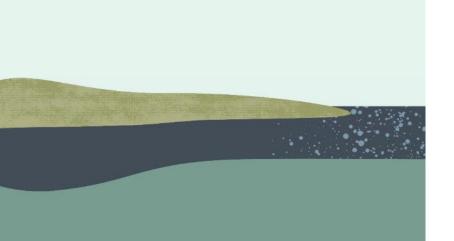


February's floods have changed the landscape



This is NOT Martins bay but shows Argo spraying occuring

## Fortrose spit





Caption



Caption



Caption



Caption

### Whenua hou – Codfish Island

- Kakapo sanctuary
- Culturally
  significant
- Restoration plan being completed at moment



