

# Lake Margin Vegetation

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# Main indicators

- Location, extent and type of lake habitats and vegetation cover within defined lake shore survey area.
- Lake shore vegetation surveys 1983 and 2007. Trends analysed over monitoring interval for c. 4,400 ha area.
- Next survey planned for 2017.

# Lake margin habitats

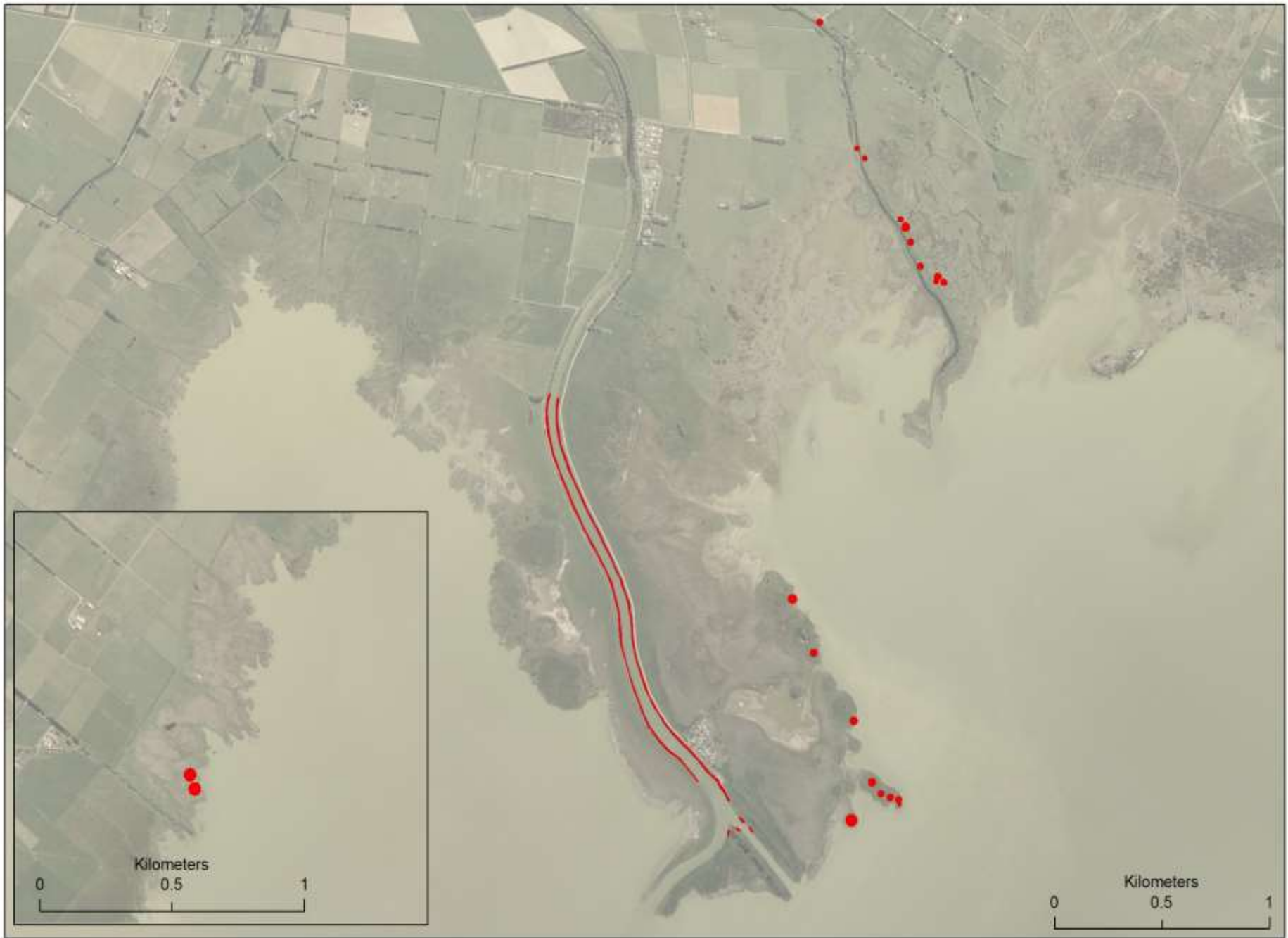
Habitat	1983	2007
Brackish wetland	3,606 ha	3,534 ha
Freshwater wetland	452	555
Terrestrial	332	337

# Lake margin vegetation types

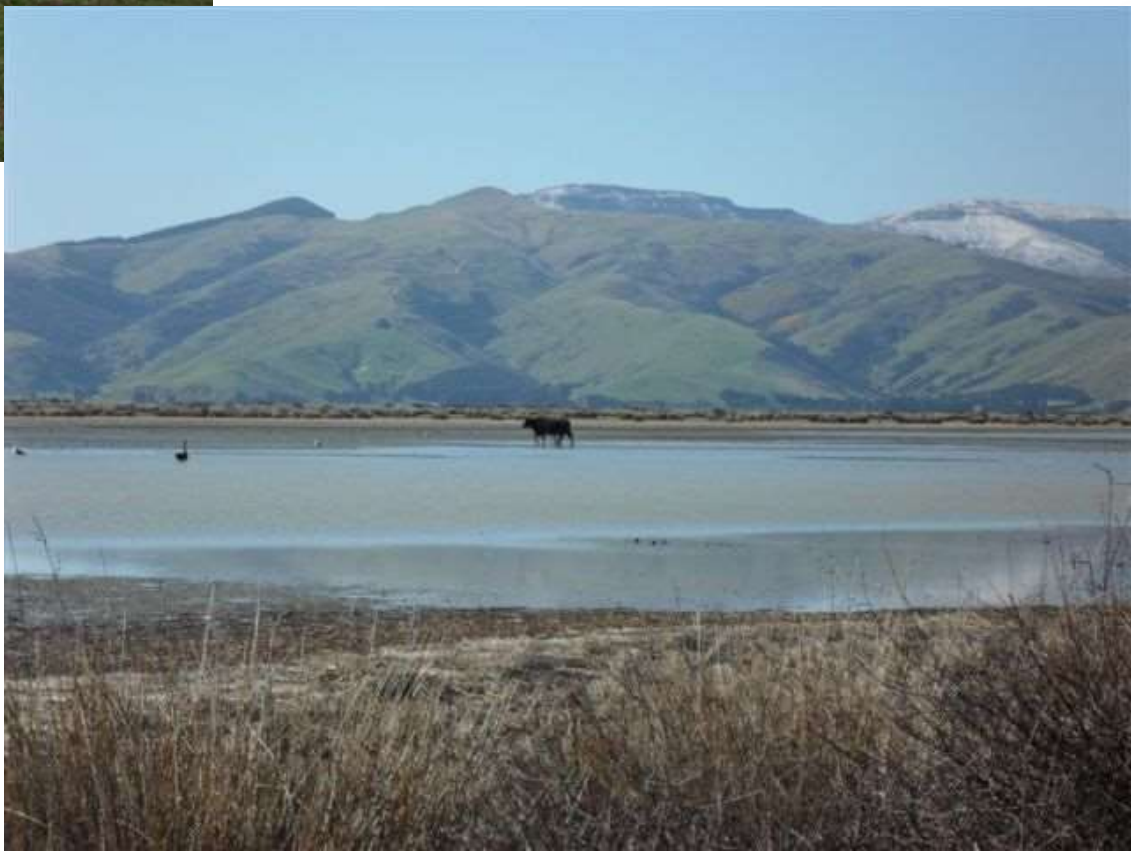
	1983	2007
Native brackish wetland vegetation	3,065 ha	3,180 ha
Exotic brackish wetland vegetation	541 ha	354 ha
Native freshwater wetland vegetation	244 ha	194 ha
Exotic freshwater wetland vegetation	208 ha	361 ha

# Pressure Indicators

- New drains, stopbanks
- Change in land use, water quantity & quality
- Change in abundance and distribution of environmental weeds
- Pollution hotline complaints; Enforcement action.







# Response Indicators

- Location and areal extent of willow control operations (and other weeds).
- Area of lake shore retired from grazing and/or formally protected.
- Location of restoration planting projects.







# Recommendations – other pressures we should measure

- Drain maintenance works in tributaries
- Vegetation clearance
- Vehicle impacts
- Decline or loss of rare/threatened native plant populations

# Recommendations – other response indicators we should measure

- Persistence or recovery of rare/threatened plant populations.
- Survival and growth rates of restoration plantings.
- Area (ha) and type of native vegetation restored at lake shore planting sites.
- Location and extent (ha) of wetland and riparian habitats restored in tributaries.

# Conclusion

- Waihora lake shore vegetation important in regional and national context - e.g. supports >80% of Canterbury's coastal saltmarsh.
- Future survey of lake shore vegetation will allow assessment of pressure effects and success of response actions.