

Assessing barriers to fish passage in the Canterbury Region



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Policies and strategies protecting/ promoting fish passage in Canterbury

CWMS :- fish targets

↑ abundance/diversity of native fish

↑ salmonid spawning counts

↓ loss of habitat for salmon spawning and loss of freshwater species in general.

↑ abundance of mahinga kai

- RMA (1991)– RC’s obligations to protect aquatic life
- Freshwater Fisheries Regs (1983) structures should provide for fish passage
- Canterbury operative NRRP:- 3 key rules re: structures and fish passage
- pLWRP – rules on culverts, weirs, defences against water (e.g. FCGs)

Consenting process for instream structures and fish passage protection

New activities:

Will undergo consenting process & expected to meet operative rule conditions

Existing structures/ consents –

Pre-legislation OR limited recognition of fish passage

ECan fish passage project

- 1) Identify candidate barriers
- 2) Conduct in-situ appraisal of structure
- 3) Ground-truthing – fish and habitat surveys
- 4) Prioritisation of sites for modification / removal of barriers

1) Identifying candidate barriers - Desktop Assessment:

- ECan managed FPS - largely hydrologic capacity

:- Sources - ECan publications, structure description sheets (Engineers)

- Id Road /waterway intersections - very large number!

:- tools - LINZ cadastral database and REC (5,10,20,30,40,50km)

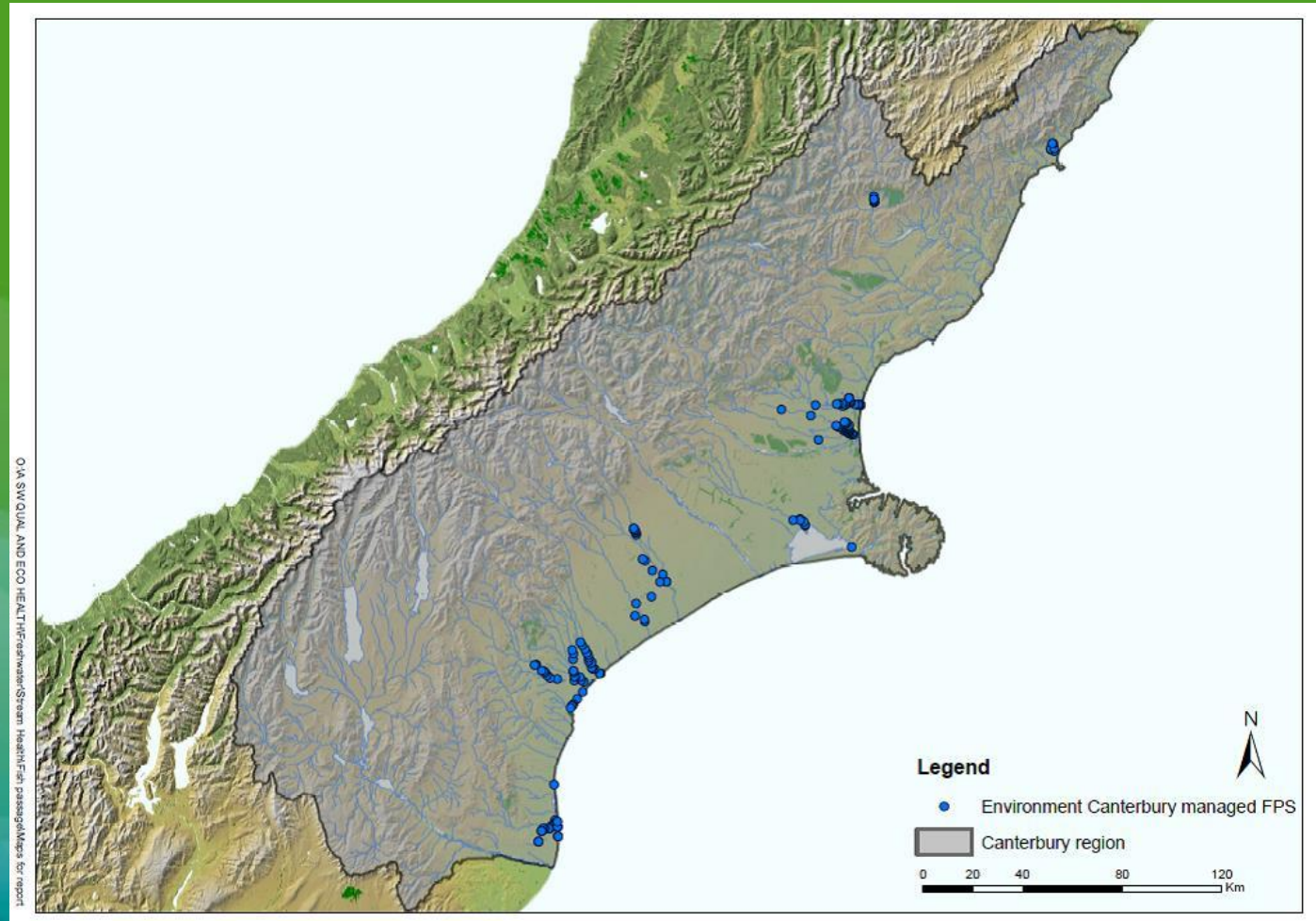
- Identify catchment/ ecological features of candidate sites using WRENZ, REC, NZFFD

2) In-situ assessment

- Assess risk to fish passage at pre-identified sites
- Site inventory for ground-truthing

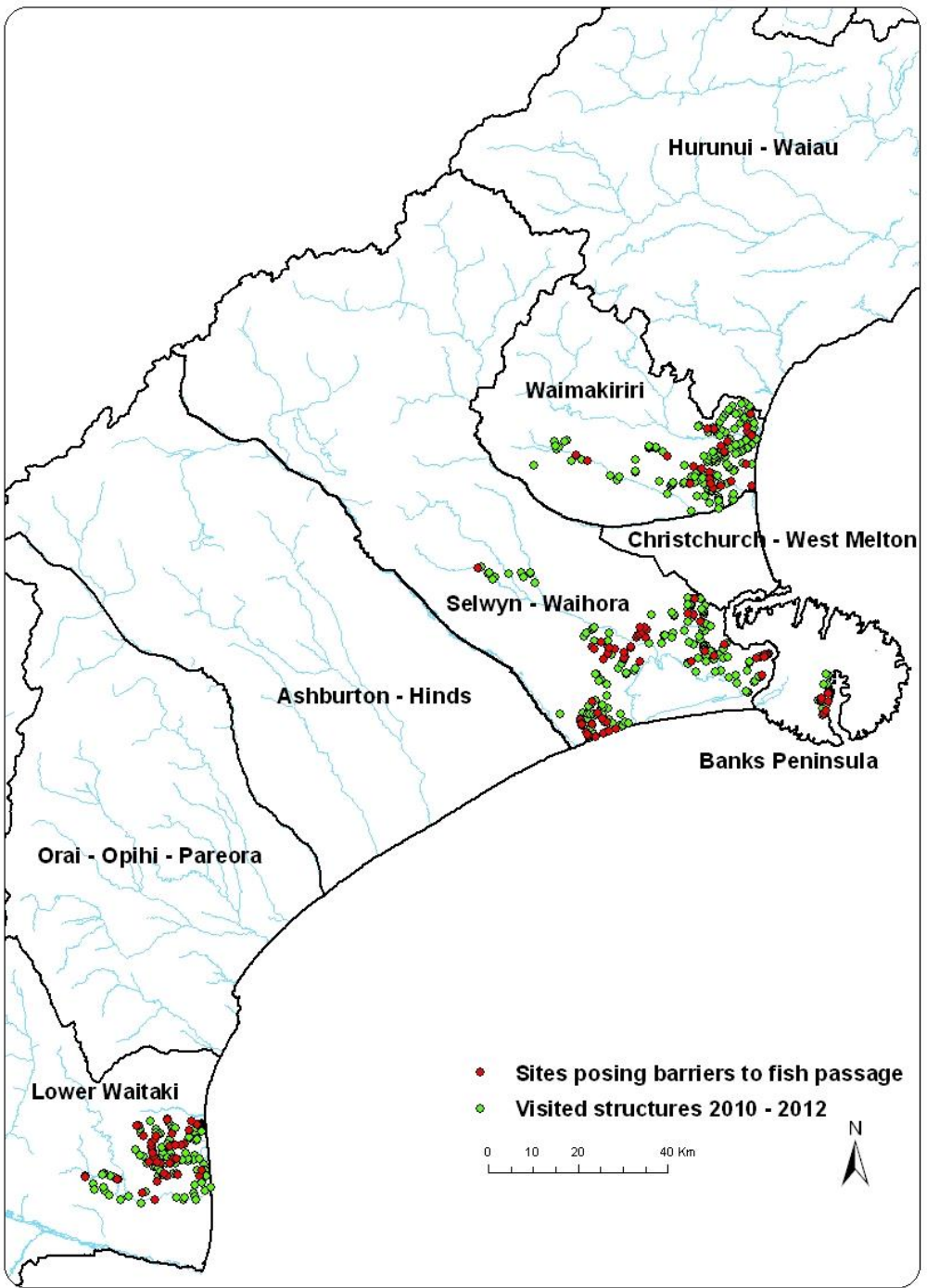
Results thus far

192 ECan managed FPS
Most floodgates



595 structures visited

127 are potential barriers



Ground-truthing potential barriers

Are sites really acting as barriers?

- Contractor to conduct fish / habitat surveys
 - Waimakariri/ Ashley
 - Wainono

Continuation of surveys for remainder of region

- time/ resources constraints for regional assessment
- Potential barriers on private land
- Need to get some “numbers on the board”

Prioritising catchments

- 450k IMS funding available over next 5 years
- Fish habitat focus group prioritised 10 projects

Must:-

- Align with existing catchment management initiatives
- ZIPs – e.g. increase in inanga spawning habitat

Dedicated summer assistant 2013/14 on priority areas

- same methods plus fish surveys
- Recommend areas for remedial work
- Scope/ cost works