What will Southland farming look like in the future?

Southland farmers are facing sustainability challenges amid the need to remain profitable - and the ACE Future Farming workstream is designed to allow farm systems to evolve to meet these increasing needs.

The recently announced Healthy Waterways package by Central Government, He Waka Eke Noa, and the Environment Court Proceedings for the proposed Southland Water and Land Regional Plan, point towards a future where farmers will need to reduce emissions to water and air.

It's clear that current farm systems are unlikely to achieve these outcomes, especially when coupled with animal welfare, health and safety, labour, biosecurity, and food safety needs, while also supporting the post COVID-19 economic recovery.

New ways of farming with a lower environmental footprint are needed, but these need to remain profitable.

The Future Farming workstream is one of the four workstreams in the ACE (Aparima Community and Environment) project. The ACE project involves all six catchment groups within the Aparima Freshwater Management Unit (Upper, Mid, Lower Aparima groups, Pourakino, Orepuki and Waimatuku groups), as well as DairyNZ, Beef + Lamb NZ, Fonterra and Environment Southland.

The Future Farming workstream is exploring alternative farm systems that can meet a wide range of regulations, including nutrient and greenhouse gas regulations. The focus of the workstream is to work with farmers to identify practical alternative systems that can be implemented.

Five case study farms have been carefully selected to represent a diverse range of locations, farm types, farm systems and climate throughout the catchment. Most farmers in the catchment will be able to identify a case study farm they can relate to. Famers will not be required to implement the alternatives that are explored, instead the alternatives will be modelled.

Agri Magic Ltd is the consultancy partner for the project. Agri Magic Ltd specialises in supporting farmers as they respond to the challenges of environmental and regulatory constraints and uses an understanding of the whole farm business to support farm owners and managers in maintaining resilient farm businesses.

All five farms have had their baseline data collected and modelled in Overseer and Farmax by Chris Beatson from Agri Magic Ltd. This baseline data gives a detailed picture of the farms' environmental footprint during the baseline period.

The current phase of the project involves individual workshops where trusted advisors for each farm (neighbours, consultants, catchment group members) help develop a suite of possible mitigations for each farm. Agri Magic Ltd will then model these mitigations and determine what reductions in environmental footprints are achieved, and the impact on the financial sustainability of the farm.

Once the mitigations and possible alternative systems are modelled for each case study farm, Agri Magic Ltd will prepare a report of the findings, that will be peer reviewed and released to the ACE catchment groups and wider public. Extension events will be held to allow the findings to be presented and discussed.

The findings of this workstream will allow farmers and land users, within the ACE catchment and Southland region, to see the detailed impacts of different nutrient and greenhouse gas mitigations on current farming systems, and how these could work on their own farms.