



A guide to the benefits of natural wetlands



Southland peat bog wetland

Natural wetlands have not typically been valued for the farm system, despite the benefits to water quality and biodiversity they can provide.

The economic drive to increase agricultural and urban development has resulted in the loss of 90% of Southland's natural wetlands. Despite rules to prevent further losses of natural wetlands, aerial surveys showed that between 2007 and 2015 a further 1315ha have been lost through development. Now new, more stringent rules from central Government will provide greater protection for the remaining natural wetlands, support enhancement and make it more difficult to remove them.

The important role natural wetlands have in a unmodified natural system is well understood, and we now have good knowledge of how natural wetlands benefit the farm system and business. Now is the time to reset how we value natural wetlands from land to be developed to land that will provide financial benefits and ecosystem services to help your farm be more sustainable and resilient in the future.

► Benefits of natural wetlands

Storing carbon

Traditionally, the effective area of a farm is based on land that is valued by the measure of producing sellable products. But this is no longer the case. The natural wetlands on your farm are now highly valued for the on-farm benefits and contribution to the agriculture industry national requirements and global commitments.

Capturing sediment

Natural wetlands are very good at capturing sediment before it enters a waterway. Water captured in a natural wetland slows, allowing sediment to settle out before the water makes its way to a connected farm drain, creek or river. This leads to a reduction in impacts sediment can have on instream biodiversity, and increases the opportunity for recreation and other uses of the water.

Removing nitrogen

Natural wetlands are extremely good at removing nitrogen from water. In high levels nitrogen can be toxic to fish and other aquatic life, and can increase nuisance weed growth. A natural wetland helps to reduce your nitrogen losses making them a cheaper option than things like reducing stock numbers, limiting fertiliser use or constructing wetlands.

Saving money

The return on investment for wetland development is relatively low due to the developed wetland providing poor pasture production, high drainage costs and high fertiliser cost because of the excessive leaching. The return on investment from retaining your natural wetlands is higher because they support many current and future farming and environmental requirements.

Overall, natural wetlands provide direct benefits to your farm and the wider agriculture sector by:

- Storing carbon, reducing your emissions
- Reducing nutrient and sediment losses to waterways, lakes or estuaries
- Storing water during heavy rain events reducing flooding
- Slowly releasing water in dry periods reducing droughts
- Storing sediment reducing drainage system maintenance and repair costs



A protected wetland in Southland

- Reducing farm system change costs to meet water quality requirements
- Improve farm profitability by directing investment into better land use returns
- Increased biodiversity like bees for pasture pollination, birds for bug control
- Water quality and quantity downstream of farm for other users and community values
- Contributes to New Zealand's commitment to atmospheric carbon storage
- Contributes to New Zealand's commitment to biodiversity protection and enhancement
- Contributes to New Zealand's international 'Clean and Green' reputation
- Contributes to New Zealand's access to high value export and local markets

Actions you could consider now to protect your natural wetland:

- Remove weeds from wetlands and any close by that could be a seed source
- Maintain water levels by keeping drainage well back from wetland margins
- Minimise potential for fires to reach the wetland
- Exclude stock (required under national legislation)

More information

Environment Southland – www.es.govt.nz

Further assistance

For more specific advice on your natural wetland, give us a call to arrange a free visit by one of our land sustainability team on 0800 76 88 45.

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