

Storms in New Zealand are common and include snow and rain storms, high winds and cyclone/tornado events. Weather warnings are often in place before such events occur. Farmers can decide to mitigate storm affects by moving stock to higher ground, ensuring drains are clear, and by planting up highly erodible land, amongst other things, to minimise the damage and losses storms can cause.

Clean up after storms can be a major undertaking. Trees may be uprooted, orchards submerged, debris may litter the farm and stock still need to be fed. Recovering from these storm events can be overwhelming.

WHERE DO I START?

Are you ok? Check on family, pets, stock, and neighbours. Check what your neighbour's situation is? If your neighbour has power, the fault may be isolated to your farm.

Get connected: Contact telephone, power, dairy companies and local councils early with fault and access issues. Start up generators or consider hiring one, to get power back on for pumps, milking and essential household appliances.

Stock wellbeing: Animal welfare remains the primary responsibility of the stock owner or person in charge of the animal. Check stock are safe and contained – are electric fences working? Have stock got access to water and shelter? Consider moving stock to higher ground or to a stand off area.

Document damage: Assess and document damage. Take photos! Note immediate actions taken for insurance purposes and if relevant, for government assistance applications.

Work out an action plan: Storm damage can be significant – tree, crop and stock losses, unsecured fences, compromised feed supplies, access issues for milking, damaged water and power lines, debris clearing, pasture and soil renovation. Working out an action plan can help prioritise tasks and itemise jobs for work sharing. Having an action plan helps to manage stress and reduce the risk of depression.

Get help/offer help: Your local Rural Support Trust, industry leader groups, bank managers and insurance representatives can all provide help and advice. Government assistance may be available. Your local Rural Support Trust can help you to find out what is on offer to get you, your family and farm, back in businessyou can also let them know if you are able to offer help.

WHAT SHOULD I CONSIDER IN MY RECOVERY ACTION PLAN?

Prioritise actions: Next day, next week, and next month. Consider milking issues, stock/orchard/forest health, farm access, water systems, fences, feed plans and replanting.

Milking: Power cuts may mean milking may be delayed. If you are sharing milking facilities with neighbours or more urgent things require your time, consider milking once a day or twice in three days. Milking delays of up to a week can be tolerated by mid-lactation herds and with careful handling and feeding they can return to full milk production. Check somatic cell count tolerances with your dairy company following an adverse weather event (some leniency may be offered in the first two consignments).

If you need to dump milk, first seek advice from your district and regional councils on the best way, depending on soil types (options can include irrigation onto pasture or onto ploughed land or constructed ponds).

Stock/orchard/forest health: Keep a check of herd health, make sure cows are properly milked out to reduce mastitis and spray teats. Adverse weather conditions can create adverse nutrition levels. Herbage/foilage tests and blood sampling of stock can identify any nutritional imbalances.

- **Ketosis:** In early lactating, cows use magnesium oxide dusted on their feed or magnesium chloride or sulphate in their water.
- **Nitrate poisoning:** Slow the rate of food intake by feeding straw or silage before putting hungry animals onto crops.
- **Acidosis:** Be aware of introducing a new feed type – acidosis can occur if there is a sudden change to high carbohydrate supplements such as tapioca, cereals and kiwifruit. If your herd was on pasture before the storm, introduce pasture-based supplements first.

Drain orchards as soon as possible to avoid root suffocation. Watch for signs of disease. If applicable, horticulturalist may wish to spray crops to limit disease spread.

Straighten trees carefully while soil is still wet and remove heavy silt deposits.

Water systems: Clean water for your family, staff, stock and orchards is vital. Test water if supplied by a farm bore. Check irrigators have not been damaged by the storm event. Approximate peak drinking water daily requirements vary with feed type, temperature and stock type/condition. As a guide:

- **Lactating cow** – 70 litres/head;
- **Dry cow** – 45 litres/head;
- **Calves** – 25 litres/head;
- **Mature beef cattle** – 30-55 litres/head;
- **Sheep** – 3-4.5 litres/head;
- **Deer** – 6-12 litres/head.

A feed plan for stock: Some pastures may be out of action for some time, it's important to re-access feed requirements and pastures availability. Do you buy in more feed, reduce stock numbers or dry off early and what classes of animals get priority? DairyNZ has feed budget templates available on their website: www.dairynz.co.nz.

Take care with rapid feed changes. Heavy snow or floods will limit stock access to pasture and stock will be cold and hungry. Utilise feed on hand first.

Depending on temperatures and depth you may have up to three weeks before pasture under snow rots, 7–10 days before established pasture in cold conditions underwater rots but only 2–4 days for new pasture that's been under water in warmer temperatures.

Think about the different stock classes – breeding stock are more sensitive to underfeeding in early lactation. Feeding post-calving is more important than pre-calving. Could prime stock be sent to slaughter at lighter weights without significantly compromising value to reduce on-farm feed pressures?

Relocating stock: It may be worth considering relocating stock off the property to give you a chance to clean up and renovate pastures. The owner of stock and the grazer should have a written agreement outlining responsibilities and expectations. Federated Farmers may be able to help and have templates for this. Clearly, tagged stock is a must.

Regrass, Recrop, Replant: Seek advice on your individual situation and do it once by doing it properly. Soil test and boost growth with fertiliser. Under-sow undamaged paddocks by direct drilling for extra winter and spring feed.

- **Silt less than 5cm deep:** Mulch organic matter and lightly till.
- **5–10cm of silt:** Mix sediment with existing soil profile.
- **11–22cm silt:** Aim to reconstitute a soil profile by using subsoilers to bring buried soil to the surface, and then re-sow.

Re-sow using a roller drill to improve establishment of pasture legumes. Fertiliser inputs and weed control are important considerations to re-establish pasture after flooding. Keep heavy equipment off very wet soil. Consider cover crops.

WHAT'S THE NUMBER?

Rural Support Trusts	0800 787 254 (0800 RURAL HELP)
Work and Income	0800 559 009
Victim Support	0800 842 846
Inland Revenue (IR)	0800 227 774
IR Emergency line	0800 473 566
DairyNZ	0800 4 324 7969 (0800 4 DAIRYNZ)
Beef + Lamb NZ	0800 733 466
Federated Farmers	0800 327 646 (0800 FARMING)
MAF Policy offices by region	0800 008 333 (ask for regional offices) Hamilton, Rotorua, Hastings, Nelson, Christchurch, Dunedin

A compilation of website resources contributed to the information provided in this brochure from MAF, DairyNZ and Beef + Lamb NZ.

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Email: policy.publications@maf.govt.nz
Web: www.maf.govt.nz



CHECK IT OUT

Website resources with more detailed information.

MAF – www.maf.govt.nz has a **Decision tree for flood damaged farms**, what government assistance may be available and information about Rural Support Trusts and what they do.

DairyNZ – www.dairynz.co.nz has an array of technical articles on adverse event recovery for different storm events. These include articles on:

- developing a flexible feed plan;
- monitoring stock health;
- dealing with snow in early lactation;
- mating after adverse events;
- a checklist for insurance claims;
- a dairy floods checklist – preparing and responding to floods.

Beef + Lamb NZ – beeflambnz.com under their 'Tools and resources' webpage have articles on:

- feed budgeting in snow; and
- recovering from tough lambing and spring conditions.

Federated Farmers – www.fedfarm.org.nz



BE PREPARED

The business of farming is always at risk of storm events. These storms can be stressful, time-consuming to recover from and costly.

Prepare your business for adverse weather events with sustainable land management and by maintaining some “give” in your farm system and business:

- **Pole plant where soil is sufficiently deep and moist to protect tracks, crossings, fence lines, dam catchments, gullies, and medium hill country** – the time and cost in planting will be recouped by the reduced fence and track maintenance and through preventing the loss of grazing land slipping after storm events.
- **Plant very steep erosion prone hill country** – a number of studies indicate landslide rate under forest is about 10 times less than under pasture and that erosion on hill slopes can cause permanent reductions in mean herbage accumulations.

In addition:

- maintain adequate insurance;
- maintain supplementary feed reserves;
- incorporate adverse event recovery costs into your farm budget to use in preventive measures and in recovery;
- maintain a working generator;
- maintain an emergency survival kit;
- keep a corded phone not requiring power.

The Met Service provides severe weather warnings via email or text. You can sign up to this service at

www.metservice.com

**Keep connected with your community.
Build your farms resilience and recovery quickly.**

WEATHERING THE STORM



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THIS PAMPHLET CONTAINS GENERAL INFORMATION ABOUT HELPING FARMERS RECOVER FROM STORM EVENTS.

New Zealand Government