Preparing for dry weather

It's important to have a plan if dry conditions are forecast for your region. Information is available to support you practically, financially, and for your wellbeing, and to assist your business to thrive.



Being prepared

- Make a plan and act early, and then review your plan regularly.
- Consider the outcomes you want to achieve. Set specific dates for making key decisions depending on financial, weather, soil, moisture, and crop or animal condition at those times.
- Discuss your plan with trusted advisers and keep it up-to-date.
- Monitor daily and seasonal forecasts, and extreme weather and fire risk conditions. On-farm weather stations can be useful.
- Use irrigation water efficiently, plan for restrictions, ensure your systems are well maintained, and be cautious about drawing on water reserves from storage or annual allocations, including keeping water on hand for firefighting.
- Think of ways to protect livestock, buildings, and infrastructure in the event of a wildfire. Ensure your accessways are clear and wide enough for fire trucks.
- A changing climate increases the likelihood of intense

rainfall events, especially following dry periods, which can cause flash flooding.

- Have a robust and realistic budget and check it frequently to manage any financial impacts of reduced crop yields or increased costs associated with drought. Your levy organisation has resources available if you need them.
- Talk to experts, such as your bank, accountant, vets, professional advisers, and peers who have been through this before. Banks may be able to offer help for affected businesses.
- Make time for yourself, your staff, and family. Sometimes a few hours away from the business can make a huge difference.
- Check in and connect with your neighbours and whānau. Peer support and sharing knowledge of previous dry weather in your area can help.
- Ask for support if you need it.
- If you are unsure where to go for advice or assistance, you can contact MPI's On Farm Support Team at 0800 707 133 or email onfarmsupport@mpi.govt.nz





Advice for growers

- Undertake water budgeting to plan for restrictions and to use irrigation water as efficiently as possible.
- Consider your irrigation output as well as all water inputs such as rainfall, surface water, and sub-surface water.
- Regularly check your irrigation systems to ensure they are well maintained, free of leaks and optimised for economical water use.
- Water plants during the coolest part of the day to minimise water losses due to evaporation.

Other techniques for adjusting your irrigation programme you can consider include:

- using a Regulated Deficit Irrigation (RDI) strategy, which involves fully irrigating during critical periods for crops and limiting irrigation during noncritical periods. This is an effective strategy as the sensitivity of crops to water deficit varies at different growing stages.
- irrigating your most profitable blocks first. Focusing fixed water resources on smaller areas may increase net yield compared to spreading the same volume of water across larger areas.
- monitoring soil moisture using sensors and taking plant water stress measurements and using these to schedule irrigation and direct water to the plants that most need it.

Dry weather resources

There are many climate-related tools to help you manage.

- NIWA's Seasonal Climate Outlook a monthly outlook of temperature, rainfall (flood and drought potential), soil moisture, and river flows: niwa.co.nz/climate/seasonal-climate-outlook
- NIWA's Drought Forecasting Dashboard a onestop-shop for monitoring and predicting the risk for dryness and drought across the country with daily updates: shiny.niwa.co.nz/drought-forecast
- NIWA's Drought Monitor a system for keeping track of drought conditions across New Zealand: niwa.co.nz/hazards/weather-hazards/new-zealanddrought-monitor
- NIWA's Daily Climate maps: niwa.co.nz/climate/ daily-climate-maps
- MetService rain radar: metservice.com/maps-radar/ rain-radar/all-new-zealand
- When Wildfire Threatens advice for being prepared: www.fireandemergency.nz/outdoor-and-rural-fire-safety/when-wildfire-threatens
 - Check fire risk conditions: www.checkitsalright.nz
 - Fire permit website: www.firepermit.nz

Advice for livestock farmers

- Regularly monitor livestock condition and any signs of heat stress in your animals.
- Animals must have access to enough clean water daily. In hot and dry conditions your animals might drink three times more water than usual, especially if they are eating dry feed like hay or pellets. They also need more water if they are working, pregnant or lactating.
- Having a reticulated water supply offers the most control over providing water to your animals. Plan for an alternative water supply if you start to run low, or if the water for your animals becomes contaminated.
- If you haven't extended your rotation length already, check your pasture cover and forecasted growth rates and extend the round before the dry slows pasture growth. Consider the best stock culling policy and/or milking frequency to manage feed reserves and heat stress.
- Ensure animals have access to shade. If your property does not have natural shade (like trees), create shade using buildings or shade sails.
- Plan to shear your animals before the summer heat to keep them naturally cooler and help prevent flystrike. Closely monitor sheep to ensure appropriate flystrike prevention treatments are working.
- For pastoral farmers, feed is key. If you have a genuine surplus now, consider deferring some grazing as a cheaper alternative to making silage.
- Implement and monitor a feed budget to meet your planned livestock numbers, and act on forecast deficits early.
 Prioritise livestock classes for destocking early and feed the remainder as well as possible.
- Keep in touch with your livestock agent or meat processor. Book livestock into the meatworks well in advance, noting closures in some regions.
- If stock are heat stressed, they may not be fit for transport. During warm weather ensure animals have access to water, and adequate shelter and ventilation, while they wait for the stock truck.

Water usage

Normal water consumption

Class of stock	Water (litres/head/day)
Cattle	45
Sheep and goats	4
Deer (Red)	5
Horses	30
Alpacas	7
Pigs	20
Poultry	0.2

Get help with feed planning

Getting a plan in place can help give you peace of mind. Having a feed budget can help you:

- calculate your feed demand and supply
- investigate options to fill feed gaps
- proactively make decisions.

Support is available from your local veterinarian, farm advisers, industry organisations and specialist services.

DairyNZ options during and after a drought: **dairynz**. **co.nz/support/crisis-and-adverse-events/drought**

Beef+Lamb New Zealand feed management: beeflambnz.com/knowledge-hub/adverse-events/ drought-resources

Deer Industry New Zealand drought feeding and management: deernz.org/assets/Deer-Facts/ DeerFact_DroughtFeeding_Web.pdf

Fire and Emergency New Zealand hay-making guide: fireandemergency.nz/assets/Documents/Files/fenz-1413-hay-safety-fa2-nobleed.pdf

Key contacts and further information

Managing drought

Ministry for Primary Industries Drought resources: mpi.govt.nz/drought On Farm Support: mpi.govt.nz/on-farm-support 0800 707 133

Beef+Lamb New Zealand beeflambnz.com/knowledge-hub/adverse-events/ drought-resources

0800 233 352

DairyNZ

dairynz.co.nz/business/adverse-events/drought dairynz.co.nz/feed/feed-management/deferred-grazing 0800 4 DAIRY NZ (0800 4 324 7969)

Irrigation NZ www.irrigationnz.co.nz/RiskAdvice

Foundation for Arable Research

far.org.nz/resources/no-100-feeding-grain-to-sheep far.org.nz/resources/far-focus-10-crops-for-cows far.org.nz/resources/far-focus-4-irrigation-managementfor-cropping-a-growers-guide

Horticulture New Zealand hortnz.co.nz or 0508 467 869

Managing wildfire

Fire and Emergency NZ information on wildfire: fireandemergency.nz/fire-safety-campaign-resources/ wildfire-readiness-and-prevention

Fire safety checklist www.fireandemergency.nz/farms-rural-properties-andrural-businesses/rural-farm-and-business-fire-safetychecklist

Lighting fires safety checkitsalright.nz

MPI information on wildfire mpi.govt.nz/forestry/protecting-forests-from-summerwildfires

Water conservation

DairyNZ dairynz.co.nz/environment/on-farm-actions/water-use

Irrigation NZ irrigationnz.co.nz/PracticalResources/GMP/Overview

Water Services Authority – Taumata Arowai www.taumataarowai.govt.nz/for-communities/dryweather

Foundation for Arable Research far.org.nz/resources/irrigation-planning-for-a-dry-season

Regional and local council websites

Heat stress in stock

Ministry for Primary Industries mpi.govt.nz/dmsdocument/30777-animals-affected-by-aheat-wave

DairyNZ

dairynz.co.nz/animal/animal-health/heat-stress

Beef+Lamb New Zealand beeflambnz.com/knowledge-hub/PDF/sheltermaintaining-welfare-and-productivity-sheep-and-cattledrystock-farms.pdf

Health and wellbeing

Health New Zealand — Te Whatu Ora tewhatuora.govt.nz/our-health-system/environmentalhealth/heat tewhatuora.govt.nz/our-health-system/environmentalhealth

Need to talk? Call or text 1737 anytime.

The Depression Helpline 0800 111 757 or text **4202**

Youthline Text 234, call 0800 37 66 33 talk@youthline.co.nz youthline.co.nz

Alcohol Drug Helpline 0800 787 797 or text 8681

Support networks

Farmstrong farmstrong.co.nz or gettingthrough.farmstrong.co.nz

Rural Support Trusts rural-support.org.nz 0800 787 254

Federated Farmers fedfarm.org.nz 0800 Farming (0800 327 646)

Rural Women New Zealand ruralwomennz.nz 0800 256 467

Dairy Women's Network dwn.co.nz 0800 396 748

Financial assistance

Inland Revenue ird.govt.nz/topics/tax-relief-for-emergency-events 0800 473 566

Work and Income

Help with living expenses including household water tank refill: workandincome.govt.nz/livingexpenses 0800 559 009

For more wellbeing tips, resources, and tools, go to allsorts.org.nz