

Recovery from a natural disaster

It's easy to become overwhelmed after a disaster. It may help to take a bit of time to jot down all the jobs that need to be done. The headings below and the attached table may help you put things in priority order.

People

Your business's recovery could be set-back if you rush or make poor decisions – try to include sufficient 'down-time' to ensure you are fit and healthy enough to navigate the path ahead.

Use a trusted adviser to work through different options and strategies – does the event provide any opportunities for process or farm design improvements?

Review your staffing needs – are there resources and government assistance available to help?

Take time to communicate your plans to family and employees.

Stock

Try to re-establish the milking routine, as soon as possible after the event.

Safe stock containment is critical so check/reposition electric fences and prioritise boundary fences.

Consider how best to use paid contractors or any local offers for help – clearing debris and essential repairs will likely need to be done promptly to minimise business disruption.

Check water supply – has there been any damage to pumps or contamination of home or dairy water supply?

Check drains to see if they are clear.

Animal welfare

Thoroughly assess sick or injured stock. If recovery is unlikely (e.g. from clinical mastitis, burns or lameness), consider humane destruction.

Be practical – time spent on poor prognosis animals could distract you from providing more care to the rest of the herd.

Feed/Nutrition

Write down an inventory of feed availability and accessibility – use it to budget daily cow requirements.

Wherever possible make feed mix changes slowly.

After a stressful event, reintroduce a fibre source (hay) and consider using causemag (MgO at 60grams/cow/day) over the hay to reduce the chance of grass tetany (hypomagnesemia).

Check hay stores for mould or risk of spontaneous combustion.

Health

Mastitis

If labour resources allow; reduce the risk of clinical mastitis by the following steps:

- › Wash and dry all teats before cups go on (1 paper towel per cow)
- › Strip cows every day to detect, treat and isolate clinical cases
- › Aim to cover 100% of teat skin with teat disinfectant
- › Keep teats clean for an hour after the cows leave the shed, and
- › Set up feeding and other routines so cows don't lie down soon after milking.

Lameness

Identify lame cows and separate into smaller groups, close to the dairy, on the best feed available - consider milking them once a day.

Treat lame cows as soon as possible – it will be a win/win for their welfare and your business (Remember to observe any withhold periods for treated cows).

Be extra patient when moving all cows – tell staff to expect it to take twice as long as usual. Reschedule staff working hours to accommodate the change in routine.

Try to keep yard concrete clear of stones to reduce injury to soft feet - e.g. putting in a 125mm post at the entrance to the yard will help reduce the stones lifted onto the yard.

Consider using material (>30cm deep) over parts of the laneways to reduce injury to cow's feet (within 30m of dairy yard) such as wood chips, sawdust, limestone.

Downer cows

Provide feed, water, bedding and shelter for downer cows. If you do not have time to nurse, lift and regularly reassess, consider humane destruction.

Pasture Management

Assess feeding demands in the coming days/weeks - how long does your available pasture need to last?

Can you go to on-off grazing (2–4 hours on every 20–24 hours) to minimise pugging/overgrazing by establishing a sacrifice paddock.

Sacrifice paddocks need good shelter, should be well drained, are best positioned away from busy main roads and need to be an appropriate size for stocking rate.

Capital

Source immediate supplies of feed and animal health products.

Use your phone or digital cameras to take photos of any damage and/or water levels for insurance claims and to help your future planning.

Contact your Bank, landlord and business partners to let them know what has happened.

Other Resources

dairyaustralia.com.au

Search: extreme weather



Priorities list

Jobs	Task	Who is going to do it?	Who can help?	What resources are required?
Today				
This week				
This month				

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Recovery priority checklist

It is easy to become overwhelmed in a crisis. Use the checklist below to help you group priority tasks. Remember, lots of things can wait and don't be afraid to ask for help.

People

- Are family and staff safe?**
Do not put yourself or others in harm's way (flood water, fire – grass, bushfire or electric)
- Who needs to be contacted?**
Staff, milk company field officer, local Council
How can they be contacted?
Who will do it and when?
- Can staff work?**
Can they access the property and/or do they need to focus on their family?
Who else can work/help?
- Access to supplies?**
Do you have access to clean water, food and a quiet haven for a break and sleep?

Livestock

- Are all livestock safe and securely contained?**
Are any animals injured or down? Are you able to humanely destroy injured stock if required?
Are boundary fences intact and are electric fences working?
- Do any stock need to be moved?**
Where to, when and who will move them?
- Is fresh water available and is supply adequate**
Power available? Yes/no?
- Can cows be milked as normal?**
Access to milking shed, power, tanker access?
- Other animals?**
Are the dogs, chickens, horses and any other animals safe?

Power

- Is the power off or likely to go off?**
 - Is it a general power cut or is it just your farm?**
 - What is the highest priority for power?**
Milking?
Vat refrigeration?
Water pumping to troughs and/or for household use?
- Communications**
- Are landline phones working?**
 - Are mobiles working and charged?**
Can you charge them in a car?
 - Do you have an operational CB radio?**
 - Who is listening to updates on the radio?**
Can you use a battery powered radio or the car radio for weather updates and emergency information from local ABC?

Feed supplies

- How much pasture is damaged/affected?
- What supplementary feed is on hand?
- Does fodder need to be moved to be nearer stock and/or a safer area?

Buildings

- What damage has occurred to buildings/sheds, bridges, underpasses or power lines?
- What repairs can safely be done?
Who will do it, when and who can help?

Access

- Are vehicles usable?
- Do you need to move vehicles or equipment to safer ground?
- Are the tracks clear and safe for livestock, are roads open, do you have access for a milk tanker?

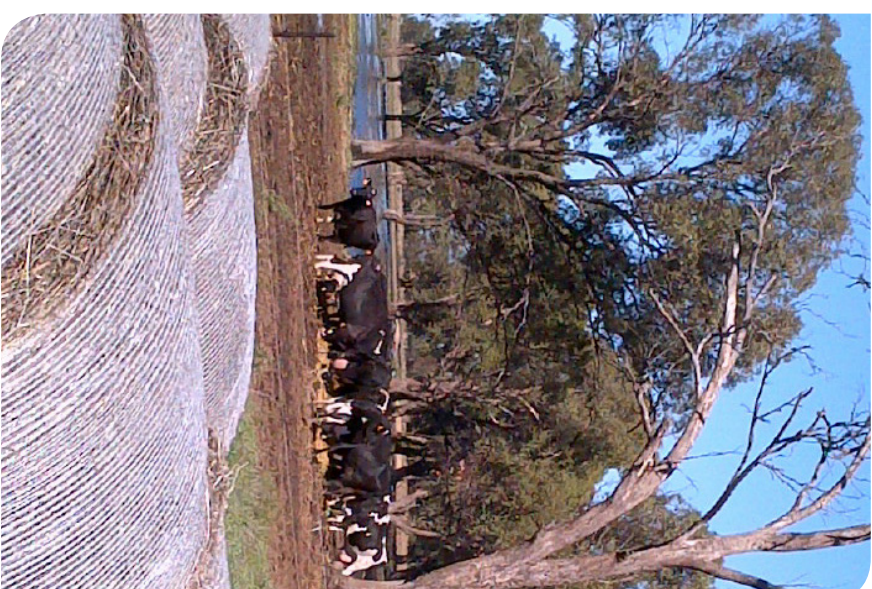
Neighbours

- Are they OK? Can they help or do they need help?
- Have you contacted local people who are likely to need help?

Recovery

Advice and assistance is available from the state dairy farming organisations, Dairy Australia, the milk companies and government agencies, including Departments of Primary Industry, local Councils, Centrelink, Departments of Human Services

See dairyaustralia.com.au



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PRIMARY PRODUCERS ASSISTANCE GUIDE

RURAL RESILIENCE PROGRAM

The NSW DPI Rural Resilience Program (RRP) has staff across NSW and can provide support by way of referrals, liaising with other services and delivering initiatives tailored to the particular need of the community. The RRP work closely with other partners such as the NSW Rural Assistance Authority, Rural Financial Counsellors, the Rural Adversity Mental Health Program (RAMHP) and the Local Lands Services to do this. The RRP run a number of programs including educational, personal and business resilience building activities. The RRP contribute to Rural Service Support Networks across NSW and work to ensure there is an informed and cohesive approach to supporting farmers across various agencies.

Web www.dpi.nsw.gov.au/about-us/rural-support/rural-resilience-program

The Rural Resilience Team aims to *listen* to farming communities, *learn* about their issues and needs. Where appropriate we *link* farmers into existing services and initiatives. If particular services do not exist, then wherever possible, we work with our community partners to create new initiatives and *opportunities*.

Rural
Resilience
Program



Listen, Learn & Link

TO CREATE OPPORTUNITIES FOR FARMERS
& FARMING COMMUNITIES

Department Primary Industries, Rural Resilience Program

LISTEN, LEARN AND LINK

TO CREATE OPPORTUNITIES FOR FARMING FAMILIES & COMMUNITIES

Rural Resilience Officers and Rural Support Workers provide information on support available for farming families and can connect them to relevant service providers.

Northern Rivers	Jen Haberecht	Coffs harbour	0400 160 287	jen.haberecht@dpi.nsw.gov.au
Northern Rivers	Kathy Goulding	Wollongbar	0407 175 043	kathy.goulding@dpi.nsw.gov.au
North West NSW Animal Welfare support	Ray Weinert	Tamworth	0447 634 507	ray.weinert@dpi.nsw.gov.au
Riverina	Danny Byrnes	Hay	0400 374 258	danny.byrnes@dpi.nsw.gov.au
Southern	Ted O'Kane	Goulburn	0427 781 514	ted.okane@dpi.nsw.gov.au
Hunter & New England	Karen Sowter	Scone	0400 869 136	karen.sowter@dpi.nsw.gov.au
Lower Hunter & Mid Coast	Peter Brown	Taree	0437 671 459	peter.brown@dpi.nsw.gov.au
North West Plains	Grace Murray	Bourke	0439 531 107	grace.murray@dpi.nsw.gov.au
Far West	Ellen Day	Broken Hill	0427 639 761	ellen.day@dpi.nsw.gov.au
Central West	James Cleaver	Dubbo	0408 687 165	james.cleaver@dpi.nsw.gov.au
Central West/ Riverina	Lisa McFayden	Condoblin	0448 366 395	lisa.mcfadyen@dpi.nsw.gov.au
Central West	Sue Freebairn	Coonabarabran	0429 212 368	sue.freebairn@dpi.nsw.gov.au
Central North	Amanda Glasson	Coonamble	0438 082 731	amanda.glasson@dpi.nsw.gov.au

FARM FAMILY GATHERINGS

There may be opportunities to work with your local Rural Resilience Officer or Rural Support Worker to have a Farm Family Gathering in your area. These 'gatherings' are an opportunity for support services such as financial, production and emotional/physical health providers to share knowledge and experiences with farming communities. They are a great opportunity for farmers to share knowledge of the impact of adverse events on them personally and how they are coping. These gatherings have proven to lift the spirits of people when they realise that 'they are not in this alone!'

DROUGHT HUB

What is the DroughtHub?

NSW DroughtHub provides a one stop online destination for information on a vast range of services and support available to primary producers, their families and communities to prepare for and manage drought.

The DPI makes every attempt to ensure the information supplied is current, however the individual circumstances of DroughtHub users should be taken into account when considering the linked services.

Web www.dpi.nsw.gov.au/climate-and-emergencies/droughthub

LOCAL LAND SERVICES

Local Land Services delivers quality, customer focused services to farmers, landholders and the community across rural and regional NSW. Local Land Services is one statewide organisation offering integrated services, delivered regionally and tailored for each community, industry and landscape.

Local Land Services helps secure the future of agriculture and the environment for NSW communities. The Local Land Services team is here on the ground when it matters, with knowledge, networks and experience. Its programs and partnerships grow farm productivity and healthy environments. Its services and partnerships play a vital role in helping to protect against pests, diseases and environmental threats while we connect our customers with the best services, advice and networks.

Contact Tel 1300 795 299

Web www.lls.nsw.gov.au

Ag and Animal Services Hotline - 1800 814 647

Producers are encouraged to call the hotline to report damage and stock losses and to request assistance.

Available help includes;

- Emergency fodder
- Emergency stock water
- Veterinary assistance
- Stock destruction and burial
- Livestock feeding and management advice
- Assistance for companion animals and pets, and wildlife

OFFICE OF EMERGENCY MANAGEMENT (OEM)

DISASTER WELFARE

Contact Tel 1800 018 444
Web www.emergency.nsw.gov.au
Facebook NSW Disaster Recovery

FINANCIAL

Rural Financial Counselling Service (RFCS)

The RFCS provides free and impartial rural financial counselling to eligible primary producers, fishers and small rural businesses. Rural Financial Counsellors can:

- help identify your financial and business options
- help negotiate with your lenders
- help you develop an action plan
- help support you to access the Farm Household Allowance (FHA)
- give you information about government and other assistance schemes

Rural financial counsellors do not provide family, emotional or social counselling or financial advice, but they can provide referrals and information.

RFCS Northern Region Contacts

Mobile Counsellor

Veronica Mortell
Location: Mobile
Mobile: 0447 343 663
email veronica@rfcsnr.org.au

Armidale

Deborah Maddox
Phone: 02 6778 4784
Mobile: 0408 936 268
Fax: 02 6778 4101
email armidale@rfcsnr.org.au

Casino

Steve Sibley
Phone: 02 6662 6191
Mobile: 0429 626 191
Fax: 02 6662 3107
email steve.sibley@rfcsnsw-northernregion.org

Ross Turvey
Mobile: 0458 222 216

Fax: 02 6662 3107

email ross@rfcsnsw-northernregion.org

Glen Innes

Stuart Brummell
Phone: 02 6732 3325
Mobile: 0448 035 152
Fax: 02 6732 6723
email stuart.brummell@rfcsnsw-northernregion.org

Gunnedah

Andrew Formann
Phone: 02 6742 0578
Mobile: 0447 393 624
email gunnedah@rfcsnr.org.au

Inverell

Geoff Mill
Phone: 02 6721 0030
Mobile: 0429 787 609
Fax: 02 6721 0960
email geoff.mill@rfcsnsw-northernregion.org

Macksville

Terry Pearce
Phone: 02 6568 3888
Mobile: 0429 626 503
Fax: 02 6568 3866
email macksville@rfcsnsw-northernregion.org

Moree

Leah Bailey
Phone: 02 6752 3561
Fax: 02 6752 3249
Mobile: 0439 807 712
email leah.bailey@rfcsnsw-northernregion.org

Score

Angela Hayes
Phone: 02 6545 3544
Mobile: 0447 800 040
Fax: 02 6545 3550
email angela.hayes@rfcsnr.org.au

Tamworth

Julie Roy
Phone: 02 6761 3336
Mobile: 0427 924 798
email tamworth@rfcsnr.org.au

Taree

Michael Ramstadius
Phone: 02 6551 5879
Mobile: 0448 035 143
Fax: 02 6551 2288
email taree@rfcsnr.org.au

Tocal

Shannon McCormack
Phone: 02 4393 8942
Mobile: 0439 956 165
email hunter@rfcsnr.org.au

Web www.agriculture.gov.au/ag-farm-food/drought/assistance/rural-financial-counselling-service

FARM HOUSEHOLD SUPPORT

The Federal Government Department of Human Services (DHS) provides help for farmers and their families experiencing financial hardship. To be eligible:

- you must be a farmer or the partner of a farmer. If you are the farmer you must contribute a significant part of your labour and capital to the farm enterprise based on specific criteria
- meet an income and assets test
- be willing to undertake a Farm Financial Assessment, and
- be willing to enter into a Financial Improvement Agreement to help you improve your financial circumstances

To apply Use your Centrelink online account through myGov or download paper forms at www.humanservices.gov.au/individuals/forms/su694

Contact Tel 132 316 Department of Human Services Farmer Assistance Line
Web www.humanservices.gov.au/individuals/services/centrelink/farm-household-allowance

CENTRELINK – FARM HOUSEHOLD CASE OFFICERS



The Federal Government Department of Human Services (DHS) provides help for farmers and their families experiencing financial hardship. To be eligible:

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- meet an income and assets test
- be willing to undertake a Farm Financial Assessment, and

- be willing to enter into a Financial Improvement Agreement to help you improve your financial circumstances

Telephone 132 316 Department of Human Services - Farmer Assistance Line

Web www.humanservices.gov.au/individuals/services/centrelink/farm-household-allowance

THE RURAL ASSISTANCE AUTHORITY

The Rural Assistance Authority sits with the NSW Department of Primary Industries and provides a range of assistance measures to farm and rural businesses during droughts, natural disasters and for other specific purposes. Various loans and grants are available to aid recovery and preparedness for adverse events.

Tel 1800 678 593

Web www.raa.nsw.gov.au

FB www.facebook.com/NSWRRAA

FARM INNOVATION FUND

The Farm Innovation Fund is an incentive-based initiative to assist farmers to identify and address risks to their farming enterprises, improve permanent farm infrastructure, ensure long term productivity and sustainable land use plus assisting to meet changes to seasonal conditions.

The availability of loans is subject to funds being available. No loans will be offered beyond the allocated funding. Applicants should contact the Rural Assistance Authority prior to lodging an application.

- A loan of up to \$1,000,00
- Current interest rates 2.5% fixed – waived for 2019-2020 financial year
- Term of Loan up to 20 years

This program is funded by the Australian Government and delivered in New South Wales by the NSW Rural Assistance Authority.

DROUGHT ASSISTANCE FUND

The Drought Assistance Fund is an interest free loan to cover 100% of costs (GST exclusive) to assist with:

- Transport of stock, fodder and /or water
- Fodder and water infrastructure
- Banking of Genetic Material
- Activities that promote profitability and resilience as a result of the on-farm investment
- Maximum amount of \$50,000 available in 2018/19 and \$50,000 in 2019/20
- Term of loan is 7 years with 2 years repayment free from fully drawn date and the up to 5 years of principal only repayments

EMERGENCY DROUGHT RELIEF TRANSPORT SUBSIDY

Subsidy of up to 50% of the full cost of freight up a maximum of \$7.50/km/journey for transport of:

- Stock to/from agistment
- Stock to sales/slaughter
- Transport of fodder
- Transport of water
- From July 1, 2019 also includes transport of farm chemicals, fertiliser and seed to farms
- Maximum amount per farm business is \$40,000 in the 2019/20 financial year

ANIMAL WELFARE TRANSPORT SUBSIDY

Subsidy of 50% of eligible costs for the permanent transport of stock off a farm facing financial hardship and where livestock are at fat score 2 or below (dairy cattle 3 or below). The subsidy on the transport of stock is permanently available to primary producers where:

- Animals are at significant risk in terms of animal welfare
- There is little or no feed and/or water available. This includes both pasture and stored fodder
- Animals leave the farming enterprise permanently
- The enterprise demonstrates a significant financial need
- Maximum amount of \$20,000 per financial year

NATURAL DISASTER LOANS

Concessional interest rate loans are available for Primary Producers and Small Business Operators; Not for Profit Organisations; and Sporting and Recreational Clubs for **Declared Natural Disasters**

Primary Producers and Small Business Operators: To meet the essential working capital required to continue operations and the replacement and repair of damaged caused to property and associated improvements not covered by insurance.

- Maximum amount of loan \$130,000
- Current interest rate 1.37% fixed
- Term of loan up to 10 years preceded by 2 years repayment free

Not for Profit Organisations: To meet the restoration of essential facilities, equipment or other assets that have been damaged or destroyed.

- Maximum amount of loan \$25,000
- Current interest rate 1.73% fixed
- Term of loan up to 5 years

Sporting and Recreational Clubs: To meet the restoration of essential facilities, equipment or other assets that have been damaged or destroyed.

- Maximum amount of loan \$10,000
- Current interest rate 1.73% fixed
- Term of loan up to 5 years

Natural Disaster Transport Grant

Available to farmers affected by a declared natural disaster event for transport of:

- Stock to/from agistment
- Stock to sale/slaughter

- Transport of fodder
- Transport of water
- Maximum amount of grant \$15,000 per financial year

For full details of these and the full range of assistance available, contact the NSW Rural Assistance Authority at www.raa.nsw.gov.au or ring 1800 678 593 or contact your Rural Financial Counsellor.

EMERGENCY WATER INFRASTRUCTURE REBATE SCHEME

The On-Farm Emergency Water Infrastructure Rebate scheme is available to eligible primary producers who can claim a rebate of 25% of the cost for; new purchases, and installation of pipes, water storages and water pumps, de-silting dams, and associated power supplies such as generators. This Rebate scheme can be applied to costs incurred from 1st July 2018.

The maximum that can be claimed is \$25,000 per farm enterprise. The availability of rebates is subject to funds being available. No rebates will be offered beyond the allocated funding of \$12 million.

Applications close 30 June 2021 or when the funding allocation is exhausted, whichever occurs first.

The Water Infrastructure Rebate is available to farmers in NSW who own and operate a farm business and applies to the purchase and installation of emergency water infrastructure for livestock.

More info here www.raa.nsw.gov.au/grants/emergency-water-infrastructure-rebate-scheme

Apply here www.raa.nsw.gov.au/grants/emergency-water-infrastructure-rebate-scheme/apply-online

REGIONAL INVESTMENT CORPORATION (RIC)

COMMONWEALTH FARM BUSINESS LOANS

The Australian Government has established the [Regional Investment Corporation](http://www.ric.gov.au). From 1 July 2018, farmers will need to apply to the RIC for the Commonwealth's farm business concessional loans. The RIC will offer two loan products for farm businesses – Farm Investment Loans and Drought Loans.

If you have an existing Commonwealth Concessional loan, the Rural Assistance Authority will continue to administer this loan.

Contact Tel 1800 678 593 if you have any questions about your loan
 Tel 1800 875 675 for eligibility requirements
 Web www.ric.gov.au

AUSTRALIAN TAX OFFICE

PROFIT FROM FORCED DISPOSAL OR DEATH OF LIVESTOCK

You can elect to spread profit earned from the forced disposal or death of livestock over a period of five years. Alternatively, you can elect to defer the profit and use it to reduce the cost of replacement livestock in the disposal year or any of the next five income years. Any unused part of the profit is included in assessable income in the fifth income year.

If you are forced to shear your sheep a second time in the same financial year there may be an opportunity to carry forward the income from the second shearing.

You can elect to spread or defer profits if you dispose of stock or stock dies because;

- land is compulsorily acquired or resumed under an Act
- a state or territory leases land for a cattle tick eradication campaign
- pasture or fodder is destroyed by fire, drought or flood and you will use the proceeds of the disposal or death mainly to buy replacement stock or maintain breeding stock for the purpose of replacing the livestock
- they are compulsorily destroyed under an Australian law for the control of a disease (including bovine tuberculosis) or they die of such a disease
- you receive official notification under an Australian law dealing with contamination of property.

For more information, please contact the ATO or your accountant.

ATO - FINANCIAL HARDSHIPS TAX PROVISIONS

The Australian Tax Office has a range of options for farmers experiencing financial hardship such as deferred payment plans.

Contact: 13 72 86
Web www.ato.gov.au/General/Financial-hardship/

WAIVERS

Bee Site Permit

- The NSW Government is waiving bee keeping fees for existing public bee site permits for 24 months. Those beekeepers who paid or have been invoiced for their 2018/19 fees will either receive a refund or will be provided with a credit for the next billable financial year.
- If you are a beekeeper with existing permits in NSW please read the Frequently Asked Questions for further details on fee waiver periods.

Agricultural Vehicle Registration

- The NSW Government is delivering relief to farmers for new registrations and renewals of agricultural vehicles.
Visit [Service NSW](#) for more details or call Service NSW on **13 22 13**.
- Read the [Frequently Asked Questions](#) for more information.

Farm Innovation Fund Interest Charges

- All existing Farm Innovation Fund customers, and all applicants who submitted on or before 30 June 2020, will have applicable interest charges for the 2018/19 and 2019/20 financial years refunded and waived.

- You do not need to apply for this waiver as it will be automatically applied to FIF customers. For more information contact the Rural Assistance Authority on 1800 678 593.
- Read the [Frequently Asked Questions](#) or contact the Rural Assistance Authority on 1800 678 593 for more information.

Grazing permit waiver

- The NSW Government is waiving 2019 fees for existing grazing permit holders on National Parks land in the Riverina. You do not need to apply for this waiver as it will be automatically applied.

NSW Local Land Services Rates

- The NSW Government are waiving all Local Land Service rates for 2019 and 2020, including general rates and rates for animal health and pests, the meat industry levy and costs for routine stock moving permit and stock identification. You do not need to apply for this waiver as it will be automatically applied to landholders.
- Read the [Frequently Asked Questions](#) for more information.

Water Licences

- The NSW Government is providing financial assistance of up to \$4000 to all general water security licence holders (and supplementary water access licence holders) in rural and regional NSW across surface and groundwater systems, and to customers of Irrigation Corporation. You do not need to apply for this waiver as it will be automatically applied to landholders on their next bill.
- WaterNSW is administering the waiver on fixed charges on behalf of the NSW Government, and has already waived fees for 2017/18. The waiver will also be applied to fixed charges on general security water licences for 2019/20.
- For more information, read the [Frequently Asked Questions](#), visit [WaterNSW](#) or call 1300 662 077.

Wild Dog Fence

- The NSW Government will pay the annual Border Fence Maintenance, known as 'dog rates', which cover the NSW Border Fence for 2019 and 2020. You do not need to apply for this waiver as it will be automatically applied to the eligible landholders.

RESOURCES

OFFICE OF THE NSW SMALL BUSINESS COMMISSIONER

Small Biz Connect is a quality, personalised and highly subsidised business advisory program for small businesses in NSW, including agribusinesses.

Tel: 1300 134 359

Web: www.smallbusiness.nsw.gov.au

NSW FARMERS ASSOCIATION

NSW Farmers Association is a membership organisation representing farmers across NSW. The NSW Farmers advocates on behalf of the NSW industry on key issues that affect farming businesses including biosecurity, farm trespass, animal welfare, imports and product labelling. The Committee is made up of farmers from across the state, who work throughout the year to ensure the views of NSW farmers are being heard, both at the state and national level.

Tel: 9478 1000

Web: www.nswfarmers.org.au

NSW FARMERS DROUGHT NETWORK

NSW Farmers' Drought Network has launched a page to provide service information, links to assistance and services to individuals and families conducting, directly or indirectly, primary production businesses, who are being impacted by drought conditions in NSW.

Web: www.nswfarmers.org.au/NSWFA/Content/IndustryPolicy/Resource/Drought_Network.aspx

AUSTRALIAN PORK LIMITED

APL is a unique rural industry service body for the Australian pork industry. It is a producer owned company delivering integrated services that enhance the viability of Australia's pig producers. The organisation aims to enhance opportunities for the sustainable growth of the Australian pork industry by delivering integrated marketing, innovation and policy services along the pork industry supply chain. APL pursues opportunities for the industry at both the domestic and international level.

Tel: 1800 789 099

Web: www.australianpork.com.au

DAIRY AUSTRALIA

Dairy farmers navigating the fodder shortage can now access a new Dairy Australia campaign, Feed Shortage, as dry conditions continue. The campaign provides:

- Free one-on-one sessions with experienced advisors
- Resources, tools, advice and support to maximise home grown feed in late winter and spring

- Assists farmers to determine ongoing feed requirements and plan ahead with feed budgeting tools
- Ensures farmers are up to date with the latest regional and national feed, fodder and water market information to support key decision-making on farm.
- Guide to relevant Government support available

The feed planning one on one sessions will help farm families work through key decisions and identify support available. The sessions are confidential and personalised to reflect each individual farmer's situation.

Tel: 1800 270 778

Email: info@dairynsw.com.au

Web: www.dairyaustralia.com.au/dairynsw/farm/dairy-nsw-farm/nsw-feed-shortage

NSW DPI - FEED QUALITY SERVICE

Feed Testing is an integral part of good animal nutritional management to achieve the best and most profitable results.

The Feed Quality Service is unique in Australia; it is the only feed testing laboratory that integrates feeds evaluation, ruminant nutrition, and pasture and crop research with commercial feed testing and has links with development officers to package research and related information generated by the service.

FQS currently provides a range of analytical services to internal research programs, external research and commercial organisations, and private individuals (farmers) using both wet chemistry methods and Near Infrared (NIR) Spectroscopy.

FQS also reports calculated feed quality parameters including Metabolisable Energy (ME; ruminants), Apparent Metabolisable Energy (AME; poultry) and Digestible Energy (DE; pigs, horses & fish) (Appendix 3).

Tel: 1800 675 623

Email: wagga.csu@dpi.nsw.gov.au

CHARITIES AND OTHER SUPPORT

farmhub.org.au

Farmhub.org.au is a Federal Government Initiative administered by the National Farmers Federation. FarmHub connects Australian farmers with services and support during tough times, such as drought.

GIVIT

The NSW Government appointed GIVIT as the official charity partner to manage offers of drought assistance. GIVIT works with local charities, schools and community service providers to match donations with the people who need them the most.

Website: www.givit.org.au
Email: info@givit.org.au



THE SALVATION ARMY

www.salvationarmy.org.au/about-us/news-and-stories/disasters-other-appeals/2018-droughts/access-drought-assistance/

Telephone 13 72 58
Central NSW Captains Jon and Leah Belmonte 0401 690 877
Western NSW Majors David and Robin Pullen 0419 013 320
North NSW Majors Rusty and Di Lawson 0417 797 785
Southern NSW Majors Max and Karen Smith 0428 650 915



ST VINCENT'S DE PAUL

Website: www.vinnies.org.au/page/Find_Help/NSW/Disaster_Recovery/NSW_Drought_Assistance/
Telephone: (02) 9560 2666



ROTARY

Website: <https://rotary9700.org.au/page/farm-drought-relief-committee>
Telephone: 02 6862 5424



Fencing repairs – BlazeAid

If you have damaged or destroyed fences, please register your request for assistance directly with BlazeAid:

- Casino – Ron Murphy 0414 088 251
- Ewingar – Kevin and Shirley Jones 0427 990 267
- Macksville – Greg and Maxine Dyson 0409 926 225
- Wingham – John Male 0488 414 368
- Ebor – Tony Samuel 0407 583 544

If you can volunteer or make a financial donation to support their wonderful work, please visit blazeaid.com.au.

ASSISTANCE WITH BILLS

COUNTRY WOMEN'S ASSOCIATION (CWA)

\$3000 Assistance with household expenses only. E.g. food, vehicle maintenance, school expenses, electricity (house use), rates (house block), telephone, and dental and medical (gap payments or cost of travel to access treatment).

Applications: www.cwaofnsw.org.au/droughtaid.html

Email: drought@cwaofnsw.org.au

Telephone: 02 8337 0210



DONATED FODDER AND HAY

Register online through one of these charity groups or call if you have poor internet connection. NSW Charities are currently receiving a 100% transport subsidy for donated fodder from the NSW State Government. For more information and applications, please visit each of their websites.

RURAL AID (BUY A BALE)

Applications: <https://www.buyabale.com.au/can-we-help-you/>

Telephone: 1300 327 624

Email: contact@buyabale.com.au



LIONS NEED FOR FEED

Applications: www.needforfeed.org/apply-for-assistance.html

Telephone: 0459 444 111

Email: Lionsneedforfeed@yahoo.com.au



AUSSIE HELPERS

Applications: Send Email to admin@aussiehelpers.org.au

Telephone: 1300 665 232



DROUGHT ANGELS

Applications: <https://www.droughtangels.org.au/apply-for-assistance/>
Telephone: 07 4662 7371
Email: admin@droughtangels.org.au



EVENT FUNDING

RED CROSS 'LET'S TALK' CAMPAIGN

Mark McMullen – Drought Resilience Coordinator
Telephone: 02 8295 2749
Email: mmcmullen@redcross.org.au
Website: www.redcross.org.au/get-help/emergencies/recovering-from-emergencies



NATIONAL ASSOCIATION FOR LOSS AND GRIEF (NALAG)

'OUR SHOUT' PROGRAM

Brenda Baker – Our Shout Program Coordinator
Telephone: 0428 676 528
Email: Brenda@nalag.org.au
Website: www.nalag.org.au



ROTARY CLUBS – RAWCS APPLICATIONS

Email: jmaconsulting@gmail.com
Website: <https://rotary9700.org.au/page/farm-drought-relief-committee>
Telephone: 0402 018 318



TOOLS

Drought Feed Calculator

A free mobile app helping farmers determine feeding requirements and budgets for their livestock.

Drought and Supplementary Feed Calculator (DASFC)

A world first App designed to help farmers calculate drought and supplementary feed rations for sheep and cattle.

The DASFC incorporates the functionality of the Drought Feed Calculator with the addition of ‘Supplementary feeding’ to help develop rations in dry periods as well periods leading into and out of drought.

The DASFC enables the user to:

- Assess pasture to see if supplementary feeding’s needed.
- Compare different supplements to assess which is best.
- Calculate the amount of feed required for different livestock classes.
- Develop rations for single and twin bearing ewes.
- Develop rations to meet livestock growth targets.
- Calculate the costs of different feeding options.
- Compare and develop mixed rations containing five feeds.
- Calculate quantities and feed-out timings for different sized mobs/herds and feeding schedules.
- Save and clone mobs/herds.
- Track feed quantities using an inbuilt feed inventory.
- Share the farm feeding schedule with workers.

Assistance Near You Map

Search the “Assistance Near You” map on Drought Hub to find a regional location where staff can meet with you in person to assist with lodging application forms, internet access and scanning documents.

HEALTH AND WELLBEING

For access to local mental health services, please contact the organisations listed below

THE RURAL ADVERSITY MENTAL HEALTH PROGRAM

RAMHP provides a range of information services to individuals, communities and service providers to link rural and remote people to the help they need. This includes information on where to [access services](#), [common mental illnesses](#) and [how to keep mentally healthy](#), as well as the Glove Box Guide to Mental Health.

To find the location of your nearest RAMHP Officer call **02 6363 8444**.

Lismore	Steve Carrigg	0477 368 183	Orange	Phil Worrad	0436 921 076
Grafton	Samantha Osborne	0402 892 642	Canowindra	Di Gill	0427 460 430
Moree	Letitia Cross	0477 343 628	Lithgow	Sonia Cox	0448 125 676
Port Macquarie	Orry Berry	0409 834 501	Cootamundra	Faith Rogers	0427 273 895
Tamworth	Matt Milne	0437 989 044	Yass	Judy Carmody	0417 131 301
Dubbo	Camilla Kenny	0419 299 493	Nowra	Alison Tye	0436 826 672
Forster	Kylie Atkinson	0437 268 325	Wagga Wagga	Aimee Makeham	0428 249 719
Ivanhoe	Marie Kelly	0429 674 307	Bega	Jennie Keioskie	0447 278 957
Mudgee	Cas Mastrone	0436 932 919			

Kids Helpline Tel. 1800 551 800 telephone counselling service 24 hours, seven days a week

Community Mental Health Line Tel. 1800 011 511

Mensline Australia Tel. 1300 789, 24 hours a day, 7 day telephone counselling for men

Beyondblue depression information line. Tel. 1300 224 636

Lifeline 131114

Australian Red Cross The Red Cross provides personal support during a disaster and an outreach service to affected households. Contact 1800 660 066 or (02) 49413200 in the Hunter area.

Black Dog Institute Tel. 9382 4530

Grief Line 1300 854 745

Virtual Psychologist www.virtualpsychologist.com.au text 0488 807 266

MANAGING IN DROUGHT

If you are reading this information in a printed form, please go to www.dpi.nsw.gov.au/climate-and-emergencies/drouthub/information-and-resources to access all the links below.

Area	Title
General Drought Management	Managing and preparing for drought <ul style="list-style-type: none">• a book covering all topics Livestock transport costs calculator Drought Feed Calculator app: Apple iTunes or Google Play
Local Land Services drought response	2018 drought response
Feeding Livestock	Feed and fodder : Requirements for fodder purchased from interstate Video: Drought feeding pregnant and calving cows <ul style="list-style-type: none">• Strategies, management tips and feeding options.
Water Quality	Farm water quality – testing and treating for stock and domestic use

RURAL WOMEN'S NETWORK

The Rural Women's Network (RWN) is a state wide government program within the Department of Primary Industries. The small RWN team works in innovative ways to share information and promote action on rural women's issues, often in partnership with individuals, groups and non-government and government agencies.

From meeting at crossroads with drought stricken women in 1992, the NSW Rural Women's Network continues to reflect and improve how we listen to rural women, link them to information and services and create opportunities that build personal and business resilience and strengthen rural communities.

Tel: 02 6391 3620
Email: rural.women@dpi.nsw.gov.au
Web: www.dpi.nsw.gov.au/about-us/rural-support/rural-womens-network
FB: www.facebook.com/NSWRWN

COMBINED DROUGHT INDICATOR (CDI)

This interactive tool provides more detailed seasonal conditions information than ever before. This data will be used to inform policy and Government responses to changing seasonal conditions, including drought.

Web: <https://edis.dpi.nsw.gov.au>

NSW DEPARTMENT OF PRIMARY INDUSTRIES (NSW DPI)

Web: www.dpi.nsw.gov.au/contact-us
Facebook: www.facebook.com/NSWDPI/

Head Office: 02 6391 3100
Biosecurity: 1800 680 244
Agriculture: 1800 808 095

Rural Support www.dpi.nsw.gov.au/about-us/rural-support
Rural Women's Network www.dpi.nsw.gov.au/about-us/rural-support/rural-womens-network

EMERGENCY ASSISTANCE

INSURANCE CLAIMS

If you are insured, talk to your insurance company as soon as possible about how to make a claim. Take photos or video of damage to your property and possessions as evidence for your claim.

If you have clearance from your insurer and evidence for your claim, you can start cleaning up.

The Insurance Council of Australia can be contacted with any questions, complaints or concerns about insurance on **1800 734 621**

The Insurance Council can assist communities with any issues related to insurance and the claims process. If necessary they can escalate particular issues to a higher level within your insurance company. The Insurance Council can also explain the dispute process and refer you to the Financial Ombudsman Office if necessary.

If you are not insured and have limited income, you may be eligible for a disaster relief grant.

Contact the Disaster Welfare Assistance Line on **1800 018 444**.

DISASTER RELIEF FOR INDIVIDUALS

DISASTER RELIEF GRANTS

Grants are available for eligible individuals and families whose homes and essential household contents have been damaged or destroyed by a natural disaster.

- To be eligible for this assistance you must:
 - be a low-income earner and meet an income assets test
 - demonstrate that the affected home is your principal place of residence
 - not be covered by insurance
 - demonstrate that the damage was caused by the disaster
 - lodge the application within four months of the disaster occurring

Contact the Disaster Welfare Assistance Line on **1800 018 444**.

DISASTER RECOVERY PAYMENT

The Australian Government Disaster Recovery Payment has been activated for people severely affected by the Northern NSW Bush Fires.

This provides a one-off payment of \$1000 per adult and \$400 per child if your home has been destroyed or severely damaged – including smoke damage.

Call **180 2266** or visit disasterassist.gov.au

DISASTER RELIEF FOR LANDHOLDERS

Disaster relief for landholders that have been impacted by fire includes:

Animal welfare

Local Land Services can assist with emergency fodder, stock water and assessment of animals impacted by the fire.

If you require emergency assistance or to report stock losses, contact the **Agriculture and Animal Services Hotline on 1800 814 647**.

Emergency fodder

If you still require emergency fodder, water or animal assessment please call the **Agriculture and Animal Services Hotline on 1800 814 647** to register your request. These requests will be considered on a case-by-case basis. Requests already received are still being processed. Thank you for your patience.

So far assistance has been provided to more than 350 landholders, assessed bushfire affected livestock and damage on 200 properties and distributed 756 tonnes of emergency fodder.

NSW Rural Assistance Authority

Provides disaster relief low interest loans of up to \$130,000 to eligible primary producers and small businesses, and transport subsidies of up to 50 per cent of the cost to transport livestock or fodder, to eligible primary producers.

<https://www.raa.nsw.gov.au/disaster-assistance>

Call Rural Financial Counsellors - RAA 1800 678 593

Telstra disaster relief

Impacted customers and people who have lost their home are encouraged to call **132 203** to report a fault and register for assistance. For Telstra customers who have suffered severe damage or loss of their premises:

- Free call diversion from the customer's Telstra fixed phone service to another Australian fixed or mobile service of their choice, regardless of the carrier. This offer is applicable for a maximum period of 6 months from the date of the fire.
- In addition, Telstra will apply a one off credit to the value of \$500 inc. GST to the customer's Telstra fixed phone account to help cover the costs of the following, if required: Connection of a Telstra fixed phone service at one temporary residence
- Re-connection of a Telstra fixed phone service at the customer's original permanent premises

Legal assistance

Legal Aid NSW lawyers can provide free legal advice and assistance to people affected by disasters on a range of issues including:

- insurance policies
- tenancy or employment
- credit and debt issues

Visit legalaid.nsw.gov.au or call 1800 801 529

LawAccess phone 1300 888 529

Water

If your potable water has been used by a fire fighting agency to fight the fire, you may be eligible to have it replaced.

This assistance is for residential properties in rural areas.

Disaster Welfare is working with NSW RFS to identify impacted properties.

Call the Disaster Welfare Assistance Line on **1800 018 444** to register or for more information.

Clean up

- Houses, sheds and other buildings that have been burnt in a bush fire can leave potential health and safety hazards in the remaining rubble and ash.

- Hazardous household materials that may be present after a bush fire include asbestos, ash from burnt treated timbers (i.e. copper chrome arsenate or CCA), medicines, garden or farm chemicals, other household chemicals and cleaning products, damaged gas bottles, metal and other residues from burnt household appliances as well as ash and dusts.
- Other hazards may include unsafe building structures, electrical hazards and missing fencing panels around swimming pools.

If returning to your property after a bushfire, consider the following precautions to protect your health:

- Do not enter your property until you are advised that it is safe to do so by emergency services, utilities companies or local council.
- Electrical hazards could exist such as live power lines that may be down or active solar panels.
- Buildings and other structures may be unstable to enter or walk over.
- Sewerage services may be disrupted causing health risks.
- Be aware that hot, smouldering coals and other potentially hazardous materials may be hidden under the rubble.
- Building rubble should not be buried as it may contain hazardous materials.
- Don't spread ash around your property, particularly if asbestos materials were used in your home or other structures, or CCA-treated timber was burnt.
- Moisten the ash with water to minimise dust and keep damp but do not use high pressure water sprays.

Asbestos

Asbestos dust and fibres have the potential to present a health risk during and after a fire if not properly managed.

- Asbestos clean-up and removal must be done by a licensed asbestos removalist.
- Avoid unnecessary entry, particularly entry by children.
- Asbestos debris may have been sprayed with PVA, or a similar sealant by Public Works to suppress the release of fibre until the material is safely removed.

For information about the safe handling and removal of asbestos, visit safework.nsw.gov.au.

For information about transport and disposal of hazardous materials, visit epa.nsw.gov.au.

Before removing any waste from your property, please contact your council for disposal advice.

Smoke damage

If your home has been damaged by smoke, including your clothes, furniture or carpets, you may be eligible for the Australian Government Disaster Recovery Payment.

Please call:

180 2266 or visit disasterassist.gov.au

Replacing personal documents

Service NSW can help replace many of your personal documents free of charge if they were damaged or destroyed. This includes birth certificates, marriage certificates, licences and number plates.

For assistance please visit your nearest NSW Service centre or call 13 77 88

JTN 14119

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Assessing bush fire burns in livestock

November 2018, Primefact 399, Fourth edition

Emergency Management Unit

WARNING: This document contains pictures of animals burnt in bush fires. These pictures may cause distress to some people.

This Primefact is provided as a guide for those staff assessing livestock burnt as a result of bush fires. The short-term and long-term welfare of the livestock is the prime concern.

Introduction

Many factors need to be considered when assessing burnt livestock. Factors include the immediate and long term welfare of the animals, the severity of the burns or injuries, the impact of the injuries on the animals' productivity and the availability of feed and water. The advisors and assessors must be mindful of the impact of the fire on the livestock owners. Some landholders may be in a state of shock or euphoria after having experienced or survived the disaster. In this state they may not be able to make rational decisions especially ones that are in their stock's long term interest. Repeat assessment of the livestock and continuing support for the owners will often need to be considered and/or provided.

Options for dealing with burnt livestock

a. Destruction

At the time of a fire, owners of burnt stock are often distressed. It is important that people involved in the assessment and destruction of burnt livestock are qualified and provide sound information to owners. Sound advice will ensure that landholders are spared additional stress through the needless destruction of stock or belated destruction of stock.

The decision to destroy injured stock should be made on welfare grounds.

Stock should be assessed by a veterinarian and records kept of the type, numbers and condition of animals killed directly by the fire or destroyed due to injuries.

After the assessment, livestock identified for destruction can be mustered into a corner of the yard for humane destruction. This is a more efficient and safer method than allowing people to roam around paddocks shooting animals. Only those animals that would suffer severely if moved or those that cannot travel should be destroyed where they are. During the destruction of livestock only the people

that are experienced and need to be involved should be present.

Livestock that show signs of obvious distress should be immediately treated by a veterinarian or be humanely destroyed without delay.

b. Keep, nurse and reassess

Animals that are mobile and alert and have burns that do not warrant immediate destruction are candidates for retention provided that veterinary care, facilities, labour and suitable feed are readily available **and** the owner is willing and able (both physically and emotionally) to undertake this often difficult task.

Where intensive veterinary treatment is available it may be worth attempting to save very valuable animals that have burns or injuries. In any event, treatment is likely to be a long and arduous process with no guarantee of success and the welfare of the animals is paramount.

Any stock retained need to be re-assessed regularly (initially on a daily basis and then every 2-3 days) and should either receive veterinary treatment or be humanely destroyed should their health deteriorate.

How to assess burn injuries

Assessing burn injuries is never easy and even with the most conservative assessment some livestock may deteriorate later due to burn injuries that are initially not obvious. It is therefore important that all burnt livestock be reassessed several times after the fire. Veterinary assistance should be sought as soon as practical if livestock start to

deteriorate or develop secondary problems after the fire.

When assessing burnt livestock several factors need to be taken into account before determining their fate. These include:

- the extent and severity of the burns and injuries
- the location of the burns
- whether the stock are pregnant and time of gestation
- any concurrent illnesses the stock may have
- the general body condition of the stock
- the age of the stock
- the facilities available for nursing
- the owners ability and willingness to nurse burnt stock (both physically and mentally)
- whether the type of property permits intensive care of stock
- the quality and quantity of feed and water available
- veterinarian's experience in assessing burnt stock.

Examination procedures are divided into two phases.

Emergency phase

The emergency phase occurs during or immediately after a fire. Destruction of stock at this time is essentially based on humane grounds. Severely burnt animals that are either unconscious, in obvious distress or are unable to get up or walk should be immediately destroyed.

Emergency destruction is warranted in the following cases:

- animals with severe charring of limbs, muscles or facial tissues
- animals suffering from smoke or flame inhalation resulting in acute pneumonia as evidenced by laboured breathing, frothing at the nose and mouth and coughing
- animals which are down and unable to rise because of burn injuries
- animals which are reluctant or unable to move
- inelastic skin or swelling of lower limbs in the first 24 hours post fire
- substantial swelling of the face in the first 24 hours post fire.



Figure 1 Sheep close to death, unable to get up, with burns to all bare skin areas should be destroyed



Figure 2 Burnt legs with severe swelling - warrants destruction



Figure 3 Extensive damage to underlying tissues in cattle warrants destruction (photo: Local Land Services)



Figure 4 Extensive damage to underlying tissues (bottom) - warrants destruction

Delayed phase

The delayed phase usually commences a day or so after the fire and may continue for some time afterwards. Where possible, the stock should be yarded so that each animal can be examined closely and be

critically appraised. Yards in close proximity or temporary yards can be used. The assistance of livestock owners and managers should be sought for mustering and identification of livestock, but it is important to consider the feelings of these people as they may be too upset or shocked at witnessing burnt and injured livestock and/or their destruction.

Sheep are more prone to fire injuries than other livestock. They tend to be driven before a fire in a mob and pack against fences or in gullies where they are burnt or suffocated. The types of burns often reflect this behaviour with animals on the outside of the mob being burnt. Those in the middle sometimes escape injury completely.

Singed wool is not always a good indicator of the severity of a sheep's burns. Sheep in full wool are less likely to have severe burns than sheep which are off-shears. The outside of the fleece can be quite charred yet the skin under the wool may be completely unaffected. It is important to be aware that apparently mild burns to vital areas may result in rapid deterioration, suffering and death.

For these reasons sheep need to be carefully examined and turned up for a closer inspection. It is important to reassess sheep daily for the first few days or if that is not possible, consider erring towards destroying the animals with apparent less severe initial burns.

The areas that must be closely examined on each animal include: the face, ears, lips, anus, vulva, teats, penis, prepuce, scrotum, axilla, inguinal areas, legs and the feet.



Figure 5 Animal with severe burns to the face and eyes should be destroyed on humane grounds

Sheep with the following burns/injuries should be destroyed:

- severe burns which have destroyed areas of skin making it split and slough away to more than 10-15 % of their body or to vital body parts (i.e. feet, inguinal areas)
- major swelling of limbs
- lame sheep with lost hooves or separation between the hooves and coronary band. Separation between the join of hoof and skin often occurs after fires and leads to loss of hoofs. While it is likely that new horn will eventually regrow, the animal will be in pain for considerable time and prone to flystrike or secondary infections leading to loss of condition. Also, regrown hoofs are often deformed making the animals more susceptible to foot problems. Unless pain relief and good consistent nursing can be provided the sheep should be destroyed.
- pneumonia through smoke inhalation evident by respiratory distress
- facial burns that interfere severely with eating, drinking or breathing.

Goats are more susceptible to stress than sheep. They are generally less protected against radiation burns because of their hair-coat. For this reason it is important that each animal be individually inspected including a close examination of the skin. Otherwise, assessment should be undertaken as for sheep.

Cattle generally manage to escape the full force of a fire, and are burnt only if they are trapped against fences or other obstacles. Teats and udders in females and penis, scrotum and prepuce in males are commonly affected and in some instances this may result in secondary problems (i.e. mastitis). Frequent reassessment is needed to ensure the normal function of these organs returns, otherwise animals should be culled.

Burns to feet will often result in painful conditions and cattle are reluctant to walk and feed. Prolonged treatment with antibiotics may be necessary. Repeated veterinary assessment is often required.

Owners need to be aware that nursing injured cattle can be costly, take a long time and be emotionally and physically draining.



Figure 6 Burnt feet with damage to the join between the hoof and skin a few days after the fire



Figure 7 The same sheep two weeks later with some separation of the join between the hoof and skin and outpouring of watery fluid. The sheep recovered uneventfully without losing the hoof



Figure 8 Burns to the udder and legs requires monitoring (photo: Local Land Services)



Figure 9 Burnt feet with hoof detachment - requires monitoring/destruction (photo: Local Land Services)

Horses, like cattle, will usually escape from the path of the fire. Horses with quite severe burns will often respond well to intensive veterinary treatment even though this may be tedious and expensive. Veterinary advice is essential if this option is to be pursued.

Pigs are very susceptible to heat stress and will often die from this alone. They do not withstand burns well and all pigs that have received burns should be destroyed.

Poultry are also very susceptible to heat stress and will usually die as a result. Those that survive a fire will normally recover without treatment. In order to reduce further stress to the survivors any birds that are injured and need destruction are best removed at night when other birds are roosting.

Nursing burnt stock

Animals that are assessed and not destroyed in the 'emergency and delayed phase' should be placed in a 'hospital' paddock or yard where they can be inspected regularly and nursed.

Points to consider and ensure are:

- place stock on the softest most level ground available, especially if their feet are burnt
- provide ready access to good-quality feed and water. Burnt animals are reluctant to move and usually do not eat for a few days. They should be given high-protein feeds such as good lucerne or meadow hay.
- inspect animals often enough to ensure they are able to move to water and drink. Animals which are unable to drink should be destroyed
- try to provide access to good shade

- remember to control worms especially after rain
- check all animals regularly for signs of flystrike, both on burnt areas of the body and on the feet and treat if necessary
- some animals may benefit from long acting antibiotics to treat secondary infections - seek veterinary advice.

Re-examine and reassess stock daily for at least a week after the fire and then 2-3 times weekly for a further 2-3 weeks. Humanely destroy animals as necessary based on these assessments. Particular attention should be given to mobility, inappetence and development of respiratory signs.

After the fire, longer term availability of nutrition or agistment needs to be assessed. Livestock owners should be made aware of assistance.

Methods of destruction

As a guide follow the directions given in the Primefact 310 *Humane destruction of stock*.

NSW Department of Primary Industries (NSW DPI) and Local Land Services (LLS), through the Local Emergency Operation Centre, can assist in coordinating the destruction and disposal of livestock.

Further information

NSW DPI and LLS have a responsibility for agricultural and animal welfare issues resulting from emergencies and will provide emergency support in these situations. Contact can be made through the Local Emergency Operation Centre in charge of the operation.

If you require assistance with any aspect of the examination and aftercare of burnt livestock contact your veterinary practitioner or a District Veterinarian with Local Land Services.

Acknowledgements

This Primefact is a collaboration between the NSW Department of Primary Industries and Local Land Services. Some photos have been supplied by the Victorian Department for Agriculture.

Reference number PUB18/735

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Humane killing and disposal of sick or injured cattle

Humane killing should be considered for any animal that is found to be in pain or suffering and where treatment is either not practical or not economically feasible. Every farm should have access to personnel who are competent and readily available to undertake humane killing. Suitable equipment should be readily on hand and be maintained in good working condition.

Where it is necessary to kill cattle, it must be done promptly, safely and humanely.

You must ensure:

- it is done without undue delay
- the method used results in immediate loss of consciousness followed by death while unconscious
- death has occurred in every animal every time by observing for the presence of specific signs (as illustrated).

Recommended methods of killing

Adult cattle

- › Options include close range firearms to the brain, captive bolt to the brain or chemical euthanasia.
- › A rifle should deliver at least the muzzle energy of a standard 0.22 magnum cartridge. For larger animals and bulls, 0.30-calibre high-power cartridges are recommended.
- › A captive bolt is a stunning device that does not discharge a free projectile and needs to be held against the head—it is potentially safer to use than a firearm.
- › Chemical euthanasia must only be carried out under direct veterinary

supervision. The carcass of a chemically euthanised animal is not fit for consumption by any species—it must be buried, burnt or composted.

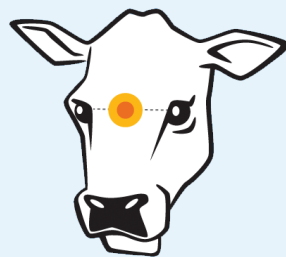
Calves

- › Options include firearms, captive bolt or chemical euthanasia.
- › A rifle should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.
- › A person must not use blunt trauma to the brain to kill a calf unless it is less than 24 hours old and no other humane killing methods are reasonably available.

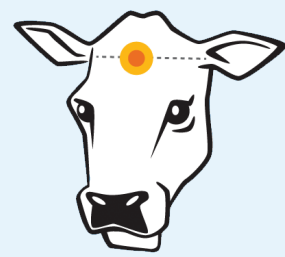
Target position for humane killing with firearm or captive bolt

Note the target for the frontal shot with a captive bolt or firearm. The direction of aim should be at a point

midway between an imaginary line connecting the base of the ears. Don't shoot between the eyes.



X Don't shoot between the eyes!



✓ Shoot between the ears!

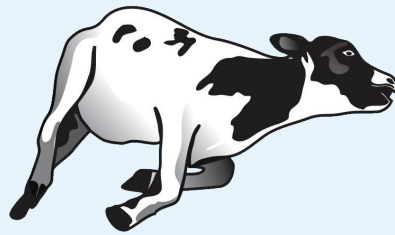
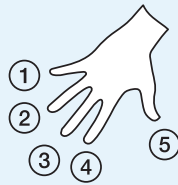
Take great care with firearms and captive bolts.
Keep this equipment securely locked away from children.



Signs of death

The following five head signs (the five finger head check) should be observed to determine whether the method used for humane killing has been effective in causing death. These are:

1. Absence of corneal 'blink' reflex when the eyeball is touched
2. Dilated pupils that are unresponsive to light
3. Flaccid jaw
4. Flaccid tongue
5. Absence of rhythmic respiratory movements for at least five minutes



Repeat the shot or blow if you are not confident that death has occurred. Aim between the ears again but use a different entry or striking point.

Further information

Humane killing

Australian Animal Welfare Standards and Guidelines for the Land Transport of Cattle (including standards for humane destruction)

www.animalwelfarestandards.net.au/files/2011/02/Land-transport-of-livestock-Standards-and-Guidelines-Version-1.-1-21-September-2012.pdf

National Model Code of Practice for the Welfare of Animals Cattle (applying directly to ACT, Queensland, New South Wales, South Australia and Western Australia)

Carcass disposal

Victorian DPI fact sheet – On-Farm Composting of Dairy Cattle Mortalities

Dairy Australia in association with Queensland Dairyfarmers' Organisation (QDO) and Natural Heritage Trust fact sheet – Composting carcasses on farm

Victorian DPI Agriculture Note AG1185 – Off Farm Disposal of Cattle – Tagging and Other Legal Requirements

Purchase of captive bolts

Livestock Health Systems

Australia Pty Ltd

20 Albert Avenue,
Strathdale, Victoria 3550
M: 0448 403 600
P: 03 5444 0368
E: info@livestockhealthsystems.com
www.livestockhealthsystems.com

Farmers Warehouse

P: 1300 667 537
F: 1300 667 567
www.farmerswarehouse.com.au

Membership Hotline on Freecall

P: 1800 004 377

Carcass disposal

It is very important that any cattle carcasses be disposed of appropriately.

- › The law prohibits leaving carcasses to rot or dumping them in waterways.
- › It is illegal in most states to allow anyone other than a licensed knackery to remove meat from a farm.

Disposal method	Note
Composting	A safe, effective and environmentally friendly method well suited to dairy farms: <ul style="list-style-type: none"> › No holes need to be dug › End product is useful soil conditioner applicable to pasture and crop land. › Waste hay, silage, calf pen litter and solid dairy effluent are suitable composting materials
Burning	<ul style="list-style-type: none"> › Used in the case of emergency diseases to destroy pathogens. › Significant air pollution is created. › Sufficient fuel is required for adequate burning—tyres are not permitted.
Burial	<ul style="list-style-type: none"> › Must not impact on the land, ground or surface waters or the air. › Carcasses must be buried deeply enough to prevent access by other livestock and scavengers. › Access information from state environmental protection agencies regarding depth of hole, distance from water, exclusion of stock and scavengers.
Knackery	<ul style="list-style-type: none"> › Collection sites should be confined to the farm and managed to minimise the potential for disease spread. › Not suitable for chemically euthanised carcasses. › Avoid communal collection sites in public areas.

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Mastitis control in and after wet conditions

Cow parking and mastitis risk

To minimise mastitis risk or reality around 'cow parking', the top priorities are:

- › Milk the herds separately if it is possible
- › Milk clinical cases last, or use a separate cluster for them only
- › Wear gloves and ensure milk is not spread from cow to cow
- › Cover 100% of teat skin with teat disinfectant spray
- › Use blanket Antibiotic Dry Cow Treatment (all quarters of all cows)

Have any of your cows have been milked on another farm?

Have you milked other people's cows on your farm?

A common way to introduce mastitis bacteria into a herd is in the udders of cows from somewhere else.

Bacteria such as *Strep agalactiae* can spread rapidly through a herd.

Countdown usually recommends that you don't buy-in or milk cows of unknown mastitis status with your herd, but during crises such as floods, necessity and generosity are driving factors beyond mastitis risk.

Host farms – reduce mastitis spread in the shed

- › **Milk the herds separately** where it is possible, with the guest cows last. This reduces the risk of spread, especially if you put a rinse through the machine between each herd.
- › **Ensure that all staff follow best practice for hygiene when milking.** The essentials are:

Milking gloves

- › Everyone wears gloves to milk
- › People stripping cows don't get milk on their gloves
- › Gloves are regularly washed with running water

Clinical Cases

- › Clinical cases are milked last, or with a separate cluster that is disinfected afterwards.

Teat disinfection

- › 100% of every teat is covered after every milking
- › Teat spray is a Ready-To-Use product (or made up daily at the correct concentration with good quality water)

Liners in good order

- › Liners are not past their use-by date – no more than 2500 'cow milkings'

Both farms – keep an eagle eye on mastitis rates

- › **Watch your Bulk Milk Cell Counts carefully.** If these are above 250,000 or trending up in a way that is unusual for your herd, speak to your mastitis adviser or vet.
- › **Count clinical cases and assess treatment success** – record all details – get advice from your vet if you have more than 2 cases per 100 cows per month, or more than 1 in 5 cases needs a second course of treatment.
- › Check which bacteria are present. Get a milk sample for **culture from all clinical cases** especially for early warning of Strep ag.
- › **Track new infection rates by Milk Recording** for the next 12 months. Get a one page
- › Countdown Mastitis Focus report from your HI centre after every Milk Recording visit. This is an accurate way to track new infections in your herd.

Both farms – review Dry Cow plans with your vet

- › Drying-off is the time that you have a chance to remove infections that have occurred during the lactation. When you discuss your Dry Cow plans with your veterinarian, tell him/her that you have hosted or sent cows cow parking.
- › After 'cow parking' you should seriously consider **blanket Antibiotic Dry Cow Treatment** – all cows treated with an appropriate Dry Cow Treatment.

When it is time to send cows home

- › If cows are sent home at the end of their lactation either send them home while still milking, or at least 2 weeks after drying off, when the udder has shrunk and the teats have sealed well. If still milking, continue twice daily for a few days to find and treat any clinical cases before drying off.
- › Make sure all mastitis records go home with the cows.

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Mastitis control in and after wet conditions

Clinical cases – reducing the headache

Clinical cases that are treated early have a better chance of resolving quickly.

Clinical cases may have large numbers of bacteria in their milk. To reduce the chance of spread to other cows, keep clinical mastitis cows out of the herd and milk them last.

Cows in wet or muddy conditions have a higher risk of clinical mastitis. Clinical cases are very costly (estimated \$277 each case) and time-consuming. Management of clinical cases can quickly become a headache, especially when numbers continue to rise. Outbreaks are often preceded by an upward trend or spike in Bulk Milk Cell Count.

Find clinical cases early – set up to quarter strip when needed

- › Check the filter sock for clots each milking, and looking for swollen quarters, quarters that don't milk out or have strings hanging after the cups come off. Check your Bulk Milk Cell Count daily for spikes or trends upwards.
- › At times of high risk (after heavy rain periods or when there is a lot of mud) make DAILY quarter stripping your policy. Quarter stripping is time-consuming but it is the only way of finding cases early. You can reduce the time by stripping only one or two teats per cow per milking, e.g. all front teats at a morning milking and all rear teats at the evening milking.
- › To make detection a reality you may need to arrange to have an extra person in the shed for the days that you are stripping. They may also be needed to assist with washing and drying teats if teats are dirty.
- › When the very wet period has passed you may only need to quarter strip once a week
- › Always wear gloves. Avoid getting milk on your gloves, and wash regularly with running water and disinfectant.
- › A quarter has clinical mastitis if it has abnormal milk (wateriness or clots) for 3 or more squirts of milk.
- › Recheck suspect cows at the next milking. Have a system in place that lets other staff know about suspect cows.



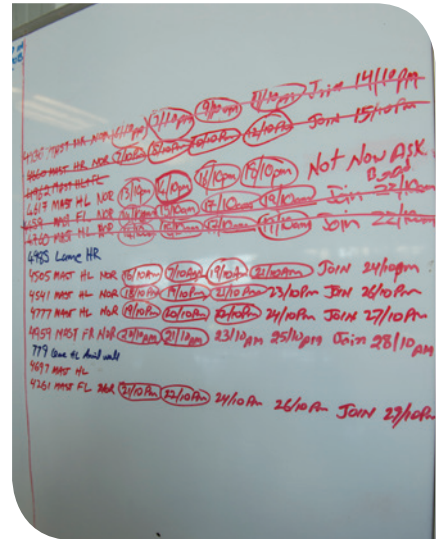
Treat and separate clinical cases

- › Ensure the correct infusion technique is used – that you are infusing tubes into clean, dry teats and that the teat end has been swabbed with an alcohol-saturated teat wipe.
- › Reduce the chance of spread of mastitis to other cows. Milk clinical cases last. Run a separate hospital herd with mastitis cases (and others such as lame cows).
- › If it is not possible to milk mastitis cows last, then use a separate cluster attached to the test bucket (put red tape on it to mark it clearly as the mastitis cluster), and rinse it with running water after each use.



Check the treatment of choice with your vet

- › Set up your mastitis treatment protocol with your vet. If what you are using is working – it is usually best to stick with it.
- › If about 1 in every 5 cows requires a second course of treatment, double-check the choice of treatment with your vet.
- › If you are dealing with an outbreak of mastitis you will need to establish the bacteria involved. Get a head start on this – collect a milk sample from each clinical case before treatment starts, label it and storing it in the freezer. If you end up with 10 or more cases, these samples can be sent for culture to identify the bacteria in your herd.



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Managing Stressed Stock

Large scale disasters can come in many forms however their effects on livestock are often very similar. Here are some general precautions which apply to most situations.

The effects on livestock will also be dictated by:

- time of year
- prior condition of livestock
- stage of pregnancy
- age of stock.

Priorities

- **Safety of humans and stock** - In cases of flooding move stock to higher ground
- **Clean water** - This is an essential item. Water heavily contaminated with ash or silt is not suitable, especially if stock are grazing silted/ashed pasture and/or eating feed of dubious quality. Remember that troughs that have been contaminated will need draining and cleaning out properly
- **Feed** - Pastures contaminated with silt/ash will have reduced palatability
- **Physical** - depending on particle size, origin, hardness of silt particles and quantity consumed they can act like sandpaper against the rumen wall. Particles can also block up 2nd and 3rd stomachs leading to ketosis, lack of appetite and scouring. Provide plenty of good water and energy to prevent ketosis
- **Chemical toxicity** - possible if contaminants in silt/ash - hard to identify or quantify. Good water and good rumen function hopefully avoids problems
- **Infectious problems** - mainly bacterial. Soil may contain clostridia spores and sewage and effluent contamination may lead to gut diseases such as Salmonella
- **Feed value issues** - poor energy and nutrient intake, cow dry matter intake poor rumen function, acidosis and ketosis. Direct impact of silt or other nutrients, such as reducing iron and copper uptake.
- Increased risk of mastitis from environmental bacteria eg. E.coli
- Dead animals in silt e.g. rats etc

Pasture damage effects on stock

- **Flooded and silted but little or no ponding.**
 - Pasture is green and growing but with some contamination
 - Pre-graze top if weather is suitable

- Provides increased intake, increased bite rate, possibly more time for cows to lie down - important in stressed cows, especially with soft or tender feet
- Get rid of rubbish grass and sets paddock up for re-growth next rotation
- **Pasture brown and dying but dry grass predominates**
 - Some green, some rotting ie roots may still be alive
 - In winter pasture is likely to survive submersion for long periods - up to 2 weeks even
 - Graze as above
 - This is low energy grass that needs compensation but is still useful for bulk dry matter and fibre
- **Predominantly slimy rotting grass, plant is dying.**
 - Don't graze as this is poor feed quality and can depress rumen function
 - No real effective fibre
- **Buried in silt**
 - no use what so ever.

If ash cover is your issue:

- Physical presence of ash will decrease palatability and blown dust many cause respiratory problems. Grass will grow through 15mm of ash
- Pasture will have a strong smell due to sulphur dioxide. This will increase acidity of pasture
- Ash in water will increase acidity and occasionally will be toxic if fluoride concentrations are high. More of a problem in puddles but also water troughs.

Health issues

Clean water and adequate feed and energy supplies are the priorities for stock in disaster situations.

Potential health problems

- Physical - depending on particle size, origin, hardness of silt particles and quantity consumed they can act like sandpaper against the rumen wall. Particles can also block up 2nd and 3rd stomachs leading to ketosis, lack of appetite and scouring. Provide plenty of good water and energy to prevent ketosis
- Chemical toxicity - possible if contaminants in silt/ash - hard to identify or quantify. Good water and good rumen function hopefully avoids problems
- Infectious problems - mainly bacterial. Soil may contain clostridia spores and sewage and effluent contamination may lead to gut diseases such as Salmonella
- Increased risk of mastitis from environmental bacteria eg. E.coli
- Dead animals in silt e.g. rats etc
- Feed value issues - poor energy and nutrient intake, cow dry matter intake poor rumen function, acidosis and ketosis. Direct impact of silt or other nutrients, such as reducing iron and copper uptake.

Associated issues with disasters

- Ensure magnesium levels are kept up to scratch
- Extra walking or wet condition will increase lameness cases
- Transporting of stock and mixing with new herds is very stressful from a physical and social point of view. Good feeding, watering and magnesium levels help. Also calcium if cows have recently calved. An energy drench before and after is likely to help. The after effects of long distance transport are detectable for up to 2 weeks
- Reduce stocking rate - removing animals and once a day milking are all options. Concentrate on smaller numbers and do them better.

Changing feeds

Floods and heavy snow will mean that cows will have limited or no access to pasture. They will be hungry and will try to eat as much as possible of whatever you give to them.

Beware of introducing a different feed type too quickly. Changing from mainly pasture to high carbohydrate supplements like tapioca, vegetables, cereals or kiwifruit, can cause rapid changes in rumen fermentation and there is a risk of developing acidosis, sometimes called "grain overload", which can kill cows.

Slowly introduce similar feeds first

If your herd was on pasture, introduce pasture-based supplements first - hay, grass silage.

Gradually add others

Start with 2-3kg of grain or other supplement per day and very gradually increase the amount as necessary over at least two weeks. Alternatively, start the herd on 4-5kg of brassica crop per day given in small breaks so that they eat little and often. It may be possible to graze deteriorating (but not rotting) pastures after flood waters or snow disappear, and this will allow quicker regrowth while providing some dilution of high carbohydrate supplements.

Low risk feeds include:

- Hay
- PKE

High risk feeds include:

- Kiwi Fruit
- Molasses
- Vegetable starches (tapioca, potatoes, carrots)
- Wheat
- Barley
- Oats
- Maize
- Sorghum
- Silages (some fibre present)
- Broll

Prevent metabolic issues

Keep up magnesium supplementation to ALL cows. Magnesium is especially important early in lactation when cows are vulnerable to ketosis, particularly if they are underfed. As cows may be drinking surface water rather than trough water, use an additional method to in-water application e.g. dusting. Consider supplementing your MILKING cows with calcium (lime flour).

Missed milkings

Power cuts will probably mean that some milkings will be missed, but cows are resilient.

DairyNZ research has shown that delays of up to a week can be tolerated by mid-lactation herds, and with careful handling they can return to full or near-full milk production.

Herds in early lactation are more problematic, but there may be the option of leaving calves on cows where shelter is available or reducing milking frequency for a short period of time.

If there are heavy demands on your time clearing away damage or sorting out problems it may be worthwhile to miss a few milkings and sacrifice some production in the short term to allow you to cope better for the rest of the season.

Keep feeding your herd well

Any sustained reduction in feed quality or volume will start the drying-off process and it will be harder to get cows back to full production (especially later in lactation), so feed cows as well as you can and ensure that they have access to clean water. Take care if feed type is radically changed.

When milking resumes

Remember that twice daily milking is not essential. If you are sharing milking facilities with neighbours or if more urgent things require time you can afford to be flexible and milk, say, once-a-day or twice in three days.

Ensure that cows are milked out completely

Resist the temptation to rush through milkings. Make sure cows are properly milked out properly to reduce the risk of mastitis developing.

Spray teats thoroughly

Stock are likely to be confined to smaller areas than usual and so udders will be dirty. Attention to hygiene is very important, and teats should be sprayed manually after each milking to ensure complete coverage.

Expect high SCCs for some days

SCCs typically take 2 to 5 days to fall below 400,000 cells/ml depending on the period without milking and the SCC of the herd prior to the changes in milking frequency.

Be vigilant with mastitis detection

In the DairyNZ trials, a quarter of the cows not milked for 7 days developed mastitis. Higher levels are likely in commercial herds. Vigilance is essential for the long-term health and productivity of the herd and for food safety.

Check SCC tolerances with your dairy company

In emergencies dairy companies are usually able to accept milk with higher cell counts. Fonterra for example will not penalise suppliers if SCCs are high in the first two consignments after an extreme weather event. Contact your area manager, field rep., or service centre.

Consult before dumping milk

Talk to district or regional councils. They will have contingency plans for emergency disposal of milk, and they will be keen to help and advise. What suits your situation will depend on volumes and facilities available and on soil conditions, etc. Options can include irrigation onto pasture or ploughed land, constructed ponds or trenches, and limited disposal to oxidation ponds.

More info



Adverse Events

Information to help you prepare your business for adverse events and overcome them.



You are here: [Home](#) > [Agriculture](#) > [Dairy](#) > [Managing effluent](#) > [Emergency disposal of milk](#)

Emergency disposal of milk

Note Number: AGO428

Published: June 1995

Updated: October 2008

Over time there is likely to be occasions when milk will have to be discarded due to a number of situations, such as refrigeration failure, a problem with milk collection from the factory, or contamination of the milk making it unsuitable for processing. The options for the disposal of milk on the farm without causing pollution, smell or damage to pasture are discussed below.

Introduction

Whilst the principles that need to be observed are common to all farms, each farm will have different constraints and opportunities that will influence the final decision as to the best option.

For example, the equipment available on the farm for applying the milk to pastures or available for digging trenches, the proximity of neighbouring houses and the farm house to the disposal site, the topography of the farm, the weather conditions at the time, the volume of milk involved, the possibility of selling the milk to neighbours with stock that could utilise the milk, the likely number of days milk will have to be disposed, are all factors that will need to be considered when deciding what the best option will be at the time.

Milk Disposal Methods

Feeding to livestock

Whole milk may be fed to animals where there are suitable storage facilities.

Discharging into effluent ponds

This is not a recommended option.

Effluent ponds that accept milk will produce odour, and a reduction in treatment efficiency. Ponds that have had large amounts of milk added will take many months to recover and severe odour problems will occur for many months to follow

Spray irrigation

Tractor mounted sprayers, or dairy effluent irrigation systems can be used to spray milk onto pasture; milk should be diluted to a ratio of 1 part milk to 10 parts water; if sufficient water is not available, then the milk should be sprayed onto the pasture, followed by, whatever water is available or shed washings, to rinse milk residues off the leaves; sprinklers should be kept well clear of watercourses and should be moved after each irrigation.

Dedicated pond or trench

A trench or pond, capable of holding 2 days milk, can be constructed using a front-end loader, siting of these ponds should be well away from any houses and the farm dairy as odour may occur; the pond should be back filled immediately after the last discharge to reduce odour. Subsequent ponds or trenches should be dug if more than 2 days milk is to be disposed. These trenches should only be used in areas where suitable soils exist, other wise the trench may allow the waste milk to leach into the ground water or a stream system.

Sacrifice area

Milk can be dumped onto a piece of non-productive land clear of watercourses, houses and the farm dairy; pasture damage and odour can be expected and to minimise this, each dumping should be carried out on a different site, followed by flushing with water to wash the milk off the leaves.

The application of the milk to an area that is to be cultivated will be advantageous.

Pollution avoidance

Milk is approximately a 100 times more powerful a pollutant than dairy-shed effluent.

Discharging milk into watercourses has two major effects:

- all aquatic life is killed and,
- agricultural and domestic users downstream cannot use the water due to contamination by the milk and by the dead fish and vegetation.

The damage to streams is long term and therefore under no circumstances should watercourses be subjected to discharges of milk.

Legal obligation

Under the Environment Protection Act, 1970, milk must not be discharged into watercourses. Offenders may be prosecuted.

Acknowledgements

This Agnote was developed by Andrew Crocos, June 1995.

It was reviewed by: Andrew Crocos, June 2000.

Barrie Bradshaw, Farm Services Victoria, October 2008.

ISSN 1329-8062



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Department of Environment and Primary Industries
1 Spring Street
Melbourne, Victoria

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Page last updated: 6 September 2017

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Milk Disposal

You may be in a position where your milk may need to be disposed of on your farm. Find out about your options below.

Land application

Milk can be applied directly to land. The following guidelines should be followed when applying milk to land (similar guidelines apply to the disposing of whey or any other liquid dairy products)

If you irrigate your effluent to land continue to add your milk to the effluent system and apply to land as you would with your effluent.

Dilute the milk with at least the same volume of water (i.e. 1 : 1 dilution) before applying it directly to land

- Dilutions up to 10 : 1 water to milk should be considered to reduce the possibility of odour problems and pasture damage
- Do not apply more than 50,000 litres of the diluted milk per hectare to pasture (i.e. 5 litres per square metre of land). Use as much land area as practically possible. If possible use land that can be worked following application
- Irrigate onto recently grazed pasture and following irrigation, flush with fresh water to rinse milk residues from foliage.

Do not apply milk to:

- Land within 20m of a drain or waterway
- Land close to public areas or neighbours where odour problems may arise
- Paddocks which are likely to flood, have steep slopes, are pipe drained or mole ploughed.

Under no circumstances should milk reach waterways.

Discharge to effluent ponds

Milk can be control-fed into a pond system, though land application is preferable to discharging to a waterway.

Odour problems may occur 5 days after milk has entered the system. Be aware that a mixture of milk and effluent can give off lethal or explosive gases. Do not mix them in confined spaces or buildings, or enter any enclosed effluent storage facility.

Properly designed 2-pond systems (adequate size and correct construction) can cope with milk from four consecutive milkings. After this, another option should be used, as additional milk will cause rapid deterioration in the quality of the discharge.

Ideally the treated effluent from the ponds should be spread onto land as soon as possible, (e.g. using a contractor) to reduce any impact on the receiving waterway.

Here are the following recommended disposal options:

- Using a slurry tanker spread the milk onto a paddock as if it was liquid fertiliser

- Set aside a paddock you intend to cultivate for a crop – e.g. Maize, and spread the milk onto the paddock. Take precautions to avoid runoff into waterways e.g. choosing a paddock that is flat, away from waterways, has a wide (20m) grassed margin between the application area and any drainage and streams
- If these options are not available to you, dig a ditch, preferably in an area where the water table is not high, and empty the milk into the ditch. Allow the milk to soak into the soil and cover the ditch with soil at a later date to avoid odour issues.

Please note in Northland your regional council does not recommend you discharge any milk into your oxidation ponds. They would prefer that where possible you apply to land and if this is not possible you dig an appropriate ditch as described above.

If you need help, contact your dairy company, the regional council or DairyNZ for advice.

Feeding milk to livestock

If at all possible, feed the surplus milk to livestock. Nutritionally, milk is low in dry matter content (i.e. approximately 13%), and is high in energy (i.e. 20 to 23 MJME per kg of DM), protein and fat.

Dairy cows can be fed up to 10 litres in a day. The milk could be fed via water troughs or spread on silage if it is suitably contained. The milk must be fit for purpose (i.e. must not contain antibiotics).

Calves can consume between 8 and 12 litres of whole milk per day before weaning. After weaning, up to 4 litres per day can replace 1 kg of concentrate feed. However, the use of milk should be limited to minimise the risk of digestive disorders. It should be introduced to the calves slowly, and be supplemented with digestible fibre-based feed to encourage proper rumen function. Ad-lib access to hay is advisable while milk is being fed.

Milk may also be transported to neighbours with piggeries or commercial calf rearers.

Milk is best fed consistently fresh or consistently sour to dairying stock. Souring in a storage facility can be prevented for up to one week by adding citric acid or acetic acid. Commercial yoghurt starters can also be used to make a coagulated yoghurt from the milk, and the yoghurt fed to stock. If in any doubt about the feeding of milk to stock, consult a veterinarian.

Power outages

Storms, floods, heavy snow, slips, fallen trees, lightning strikes on transformers, washed out bridges, and even vehicles hitting poles can all cause power outages.

Occasionally major faults at substations or with transmission lines some distance away can cut power and may take considerable time to repair.

What will a power outage mean?

- No electric fences: The stock may push through boundary fences and stray onto roads, unsafe areas on the property, winter crops or silage paddocks etc.
- No pumps: Access to clean water is a priority for stock and humans. Water contaminated with silt, ash, etc can be toxic to stock, so troughs may need to be emptied and cleaned. Storm water will accumulate if drainage pump don't operate?
- No milking: Cows can tolerate going for extended periods without milking, but it is best to avoid delays if possible. See the section on [Missed Milkings](#).
- No refrigeration: If milk already in the vat cannot be cooled to the required temperature you may have to use an emergency disposal method. See the section on [Missed Milkings](#).
- No hot water: So milking machine cleaning and other operations may have to be changed
- No cooking or heating at any houses on the property: unless you have a standby generator
- A generator large enough to power the milking machine and ancillary equipment is expensive, but may be a good investment if your property is prone to flooding, snow or other causes of power outages. Small generators that power domestic appliances or small pumps start at around \$500. Something large enough to run the dairy including refrigeration could be around \$30,000. Generators can be hired from hire centres.

Alternatives for cooking and heating

A gas oven or barbecue to provide heating and hot water will be a major advantage in a power outage. A chip heater or fireplace can also be useful for warmth, hot water, drying clothes etc.

What to do

- Check that family and staff are safe and that they know there is a power cut
- Phone a neighbour to see if they have power. Remember, cordless phones will not work in a power outage, so use a standard phone or cellphone
- If the neighbour has power, the fault may be on your property - perhaps a fallen tree. A quick check for obvious problems before phoning the power company could pinpoint the location and save considerable time. Do not handle fallen cables
- Always phone the power company, even if your neighbours have already phoned. The company may not realise that your power supply is out too. Also, if there is a widespread fault they will probably have an automated message telling you how long it will be before it is fixed

- If the power outage is likely to be prolonged, look at ongoing ways of containing stock and providing feed and water. Do you have generators? Should you hire one? If yes, do it right away.

No Phone?

Where cellphone coverage is available they can provide a great back-up to landlines. However, sometimes both the landline and cellular networks are out of commission.

What to do

- Check the obvious things first - connections etc. Use a corded phone if there is a power cut
- Use your cellphone to contact the phone company. For Spark, call 120. If your cellphone is with another company you can still contact Spark on 0800-800-123. Be prepared to wait - the fault service may be busy
- It may not be possible for someone else to report the fault on your behalf. Phone companies may insist on speaking to the phone line owner just so that they can warn you that if there is a simple fault in your house you may have to pay a callout fee. This can be incredibly inconvenient and frustrating
- Make sure you have a car (cigarette lighter socket) charger for your cellphone so that you can recharge it as required from your vehicles or tractor
- If the cellular network is down it is likely that there are widespread problems. Listen to the local radio for information, and consider a trip to the nearest town if that is feasible
- Communication with family and staff by two-way radio may be an option.

More info



Adverse Events

Information to help you prepare your business for adverse events and overcome them.