

## Insights from previous flood events

Our thoughts are with all those who have been impacted by recent flood waters. Being in the middle of such devastation can be confronting and challenging.

With this in mind, a few of our colleagues wanted to share some insights they gained while assisting communities recovering from floods in north west Queensland during 2019.

More information about support for agribusinesses impacted by the western Queensland floods can be found [here](#).

## Things to do as soon as you can

### Take date-stamped photos

Taking photos is important to support insurance claims and future grant applications. Be sure to capture damage to:

- infrastructure (fences, roads, bores, tanks, troughs, etc)
- plant/machinery
- livestock, including carcasses.

### Notify financial institutions/shareholders

Initiating discussions with financial backers and interested parties of your current situation, including any possibilities of not meeting obligations, early in the recovery phase will encourage transparent conversations and understanding before deadlines are reached. Potential discussion points include:

- anticipated stock losses
- recovery estimates in terms of time, cost and inputs required
- anticipated impact on cash flow.

### Report damages and losses

Report damages and losses to your farm through the [disaster impact survey](https://bit.ly/3LTn5p7): <https://bit.ly/3LTn5p7>

More information on [Agricultural recovery after flooding and high rainfall](https://bit.ly/45QZsnS): <https://bit.ly/45QZsnS>

## Things to do when you get time

### Prepare repair estimates

When you are able to get an idea of the damage done, start preparing repair estimates so you can be on the front foot to apply for grants. Examples include:

- \$/km of fencing needing to be fixed
- \$/km of new fencing required
- quotes for replacement troughs/water infrastructure
- earth moving equipment rate and expected achievable repairs km/day.

### Disposing of carcasses

[Disposing of carcasses](#) may be required when they present a disease risk to humans or other animals eg close to water points, close to homes. More information can be found here: <https://bit.ly/3YO4yNZ>

Before you consider moving any dead animals, it's important to consider your own safety first.

There are several bacterial diseases in water, wet soil & carcasses that can cause serious diseases in humans. Please wear appropriate personal protective equipment, such as gloves, leather or rubber boots, clothes that cover as much skin as possible, respiratory and eye protection. Handle the carcasses as little as possible and use machines if they are available. Always practice good hygiene after contact with a carcass by washing your hands well with soap and water.

If you feel unwell after doing so, don't mess about, call the 13HEALTH hotline (13 43 25 84).

## *Burying carcasses*

Where possible, burying carcasses is recommended to prevent surviving stock from coming in contact with the decaying material. There are some factors to keep in mind when doing so to minimise the risk of contaminating soil, groundwater and surface water sources.

If the carcasses are intact, the general recommendation is to not put more than 10-15 carcasses in each burial pit. This is to minimise the potential for fluid movement as one adult bovine carcass can release up to 160L. For this reason, it is also recommended to space burial pits more than 25m apart.

In instances where burial pits need to accommodate more than 10-15 head each, it would be best to contact the Department of the Environment, Tourism, Science and Innovation (DETSI), as they will be able to provide advice with individual site suitability. The DETSI Pollution Hotline is 1300 130 372.

A 'good' site for burial pits will be:

- more than 300m from a bore
- more than 200m from a house/dwelling
- more than 250m for underground or above ground infrastructure (e.g. powerlines, water pipes, sewerage, etc.)
- more than 100m from a surface water source in its usual location
- on a slope of less than 6%.

Burial pits should be made on stable soils with low permeability and have groundwater at a depth of greater than 10m (i.e. minimum 5m deep pit + 5m buffer = 10m surface to groundwater level).

Importantly, if you do construct burial pits, be sure to cover the carcasses with at least 2m of soil over the top.

## *Alternative carcass disposal options*

If burial pits aren't an option and you have some lime on-hand, applying lime over the carcasses will discourage flies and insects – a relatively small but important consideration for limiting the spread of diseases to surviving stock. Don't use lime on carcasses in burial pits as it will slow the decomposition down.

If you have any questions, contact your local biosecurity officer (call 13 25 23), or [extension officer](#).

## **Monitor hay drop sites**

While hay drops are a blessing, it is worth monitoring drop sites for sneaky, invasive, opportunistic weeds.

## **Participate in surveys**

You will no doubt be asked to participate in numerous surveys requesting estimates of the scale of damage. Completing these surveys will help inform all levels of government and assistance organisations where future funding should be directed and what resources are needed to help recovery.

## **Look for supporting evidence such as photos and invoices**

While proof of the damaged infrastructure will be required, accompanying those photos with supporting evidence of what it looked like when it was in working order, can also be beneficial in demonstrating the amount of damage. Examples of supporting evidence include invoices and photos of the infrastructure in working order at an earlier date.

## **Pasture recovery**

In extensive flood events such as these, widespread erosion can be expected.

This is what we observed during the 2019 floods:

- mass germination of Mitchell grass, however many died in the following weeks
- extensive top soil loss
- weak and pedestalled mature Mitchell grass tussocks were at risk of being pulled out of the ground when grazed
- downstream pastures were buried in silt
- mass germination of short lived forbs, some of which were [poisonous](https://futurebeef.com.au/resources/poisonous-forbs/):  
<https://futurebeef.com.au/resources/poisonous-forbs/>

The general recommendations that came from these observations were:

- Allow seedlings to grow for four to six months (until mid-winter) through delayed re-stocking or low stocking rates.
- Allow weak tussocks to become firmly established in the ground through delayed re-stocking or low stocking rates.
- Avoid high impact grazing with large mobs of cattle that will trample seedlings and weak tussocks.
- Monitor seedling and tussock establishment at easy to access sites you are likely to revisit every three to four weeks. Look for evidence of stock impact on their health and survivability.
- Review stock numbers and pasture recovery in July/August.
- Budget stock numbers to leave a minimum of 15–20 cm residual Mitchell grass stubble height by the end of the dry-season.

Some additional resources:

- [Re-stocking and pasture recovery advice](https://futurebeef.com.au/after-the-north-west-queensland-floods/). <https://futurebeef.com.au/after-the-north-west-queensland-floods/>
- [Pasture recovery from flooding](https://bit.ly/3NuRUks) (digital PDF). <https://bit.ly/3NuRUks>
- [Weeds following floods](https://bit.ly/3LuD5Oh) (digital PDF). <https://bit.ly/3LuD5Oh>

## Livestock recovery

Unfortunately, further stock losses can be expected. In the north west Queensland floods, we saw a number of the 'survivors' go down due to:

- Poor gut function after being off feed for several days, meaning they couldn't digest the feed supplied.
- The resulting green flush of grass growth in the weeks that followed was too rich for weak animals.
- [Three-day sickness](https://bit.ly/4bchqES) (<https://bit.ly/4bchqES>), [akabane](https://bit.ly/3LXP2vW) (<https://bit.ly/3LXP2vW>), [tetanus](https://bit.ly/463mYhq) (<https://bit.ly/463mYhq>), [leptospirosis](https://bit.ly/4r5x5KU) (digital PDF, <https://bit.ly/4r5x5KU>), pneumonia, and other infections.
- Poisonous plants were the first pasture species to germinate, these included pigweed, button grass and Noogoora burr. If cattle have access to a mix of pasture species, the risk is reduced.
- Ticks flourished in the warm and wet conditions. A large increase in tick numbers could cause issues in cattle that may not have been exposed to cattle tick previously and could increase the occurrence of [tick fever](https://bit.ly/4sTno3K).  
<https://bit.ly/4sTno3K>

Surviving cattle may be scared to drink from surface water.

Some additional resources:

- [Managing feedlot ponds for heavy rainfall events and flooding](https://bit.ly/4sTb6Z8) <https://bit.ly/4sTb6Z8>
- [Animal health after a flood](https://bit.ly/49PYVns) <https://bit.ly/49PYVns>
- [Animal health and welfare](https://bit.ly/4sSMnEw) <https://bit.ly/4sSMnEw>
- [Humane killing of injured livestock](https://bit.ly/3Lp75Lu) <https://bit.ly/3Lp75Lu>

## Your recovery

The damage caused by floodwaters can be confronting and challenging not only financially and logistically, but emotionally as well.

### Actions that helped communities to heal

- Neighbour morning teas on a semi-regular basis assisted people to feel heard by those who understood. It also provided an opportunity to share ideas for recovery and infrastructure improvement while coordinating bulk purchases in an informal co-op approach.
- If you think someone is struggling mentally with the weight of the situation, sit with that person and suggest they call Lifeline (13 11 14), even going so far as to dial the number for them and leaving them alone to talk in private. Be nearby for when they get off the phone.

Other helplines include:

[TIACS](#) by TradeMutt, ph: 0488 846 988

[Beyond Blue](#), ph: 1300 224 636

[Headspace](#) (youth mental health and wellbeing), ph: 1300 650 890

Be sure to keep in touch with your local beef extension officers as they will be able to connect you with any grants, advice or assistance that become available.

**Contact us:** <https://futurebeef.com.au/contact-us/>