

Flood ready ... flood safe!

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Planning and preparation is the most cost-effective way to minimise flood damage to your investment

INFRA - STRUCTURE

Disclaimer:

Information provided is broad level guidance only; landowners should seek region-specific and location-specific information and professional advice prior to action.



Planning

Property management plans are valuable management tools for rural enterprises; they are just as relevant for lifestyle blocks and hobby farms. A well written plan identifies the resources under a landholder's control, and is a valuable tool in managing a property sustainably and profitably. For assistance with property management planning, web search 'Regional Groups Collective' to find the contact details of your local regional NRM body.

If you live in a flood-prone area, your property management plan should recognise this, and include a flood preparedness and response section. The historic flood levels in your area are shown on the interactive map at <http://flood.dnrm.esriaustraliaonline.com.au/floodcheck/>, or at your local Department of Natural Resources and Mines (DNRM) office.

A plan should identify the least vulnerable location for chemicals and fuel storage, fences, roads, machinery and sheds, and how to minimise the damage or loss of high-risk assets like dams, irrigation pumps, equipment and machinery and road crossings. The flood preparedness and response section of your property management plan should include a checklist to assist with an annual review of

insurance cover many people are covered for rain and storm damage, and flash flooding, but not for water that backs up out of a creek or stream across a floodplain. Being uninsured or underinsured could be a financial disaster for your enterprise.

It is a good idea to maintain an up to date photo record of major infrastructure that is at risk of flooding; this can be very useful to provide baseline condition and evidence of flood damage for insurance purposes post flooding.

Mitigation

Fencing is the most obviously flood-prone infrastructure on many farms, and there are numerous flood tolerant fence construction techniques, each with pros and cons. Your local fencing specialist should be able to give you good advice in this regard, or you can research it yourself on the web, or by talking to others with many years experience and success in this field. Local catchment groups or natural resource management bodies are sources of information, and may connect you to residents who have experience in local flood preparedness measures.

Planning checklist

Local NRM body: _____

Contact person: _____ Contact number: _____

- | | | |
|---|--|-------------------------------------|
| <input type="checkbox"/> Property management plan | <input type="checkbox"/> Insurance cover | <input type="checkbox"/> Irrigators |
| <input type="checkbox"/> Flood mapping | <input type="checkbox"/> Photo records | <input type="checkbox"/> Roads |
| <input type="checkbox"/> Flood-free consumables storage | <input type="checkbox"/> Fences | <input type="checkbox"/> Dams |
| <input type="checkbox"/> Flood-free chemical storage | <input type="checkbox"/> Fixed equipment | <input type="checkbox"/> Flood boat |

Any earthworks in a flood zone will affect water flows to some degree, often causing unexpected consequences. For instance, levee banks may protect from a low minor flood, but increase inundation in a moderate flood, or concentrate water flows that lead to higher velocities, more erosion and adverse effects on downstream properties. If you are unsure, seek the advice of expert neighbours, officers of DNRM, or an engineering professional. Additionally, the construction of levees, dams, embankments, channels or roads may be subject to regulation, so check with your local council, and DNRM office, before you commit. Such constructions may also affect your insurance cover.

As a general rule, roads across flood-prone areas should have the lowest possible profile and be constructed, wherever possible, at right angles to the water flow to reduce erosion damage. Talk to your neighbours and local council road crew if you believe their roadworks have caused flood impacts on your property or infrastructure.

The flood preparedness and response section of your property management plan should indicate the measures you need to take before a flood is looming there may be little time when a flood is actually on the way. These may include ensuring:

- fences and road culverts are debris free;
- dam spillways are maintained and unobstructed;
- pumps, machinery and inventory are raised or moved;
- water tanks and fuel storages are filled; and
- standby generators have been serviced and tested.

In the west of the State, where inundation can last for weeks, watercraft should be serviced and prepared for use.

Recovery

The first job for any landholder, post flood, is to get out and assess the damage; however, it is important to put personal safety first. Avoid fast flowing streams, unstable banks, areas that are still inundated, and vegetation and debris areas where visibility is poor. A variety of venomous and non-venomous animals may not only be active, but in a defensive state if they have been dislocated by flooding.



Courtesy SEQ Catchments

Engines that have been submerged should be drained, flushed, refilled and fully serviced before attempting to start them. Irrigation controllers and electric motors that have been submerged should be thoroughly inspected by a qualified electrician before attempting to use them. Likewise, irrigation structures such as centre pivots should be inspected for structural damage and erosion around their drive wheels and along their paths of travel.

Irrigation lines should be flushed and inundated machinery cleaned, dried, serviced and tested as soon as possible. Electric motors, tools and appliances should be dried, cleaned and tested by an authorised electrician to avoid further damage to the item, and physical danger to the operator.

Silt deposited by receding flood waters should be hosed out of sheds and other buildings as soon as practical, using a moderate pressure, starting at the high water mark and working your way down to the floor. Be mindful of the potential for harmful bacteria in floodwaters and silt, especially in urban fringe areas where raw sewage is likely to have entered streams.

The priority for livestock operators is to secure the boundary fence, or internal fences that prevent stock from straying. Most fences in a flood area will, at some stage, succumb to the weight of debris and water pressure, and may have collapsed or completely washed away. Electric fencing can be used as a temporary fence, with solar operated units being more practical in the potential absence of mains power.

If a conventional fence is to be re-stood, it should be done as soon as practicable, before any silt dries and makes it more difficult to resurrect, and before the grass binds the fallen fence to the ground.

Most immediate post flood repairs need to be done by hand and on foot because of wet ground. This places limits on what can reasonably be achieved, and also brings the consideration of personal safety to the fore.

Even if a fence has stood up to the flood waters, it will more than likely be draped with debris and, in some cases, rubbish. Both will need to be removed, and the latter disposed of, at all times bearing in mind personal safety. For more information on rubbish and debris, see the blue fact sheets.

Always exercise caution and adhere to safe work practices when working with fallen timber, on stream banks, with machinery, and in damp or overgrown conditions debris, fallen timber and grass can hide hazards, and wet stream banks can be prone to slumping or collapse.

Your infrastructure is critical; after your soil, it is your key asset. Protecting your investment and ensuring it's earning for you is smart operating... be flood ready and flood safe!