Flood ready ... flood safe!

RUBBISH & DEBRIS

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Don't let your carelessness cause problems downstream – prevention is better than cure.

RUBBISH & DEBRIS


Courtesy Fitzroy Basin Association

Planning

For the purposes of this factsheet, 'rubbish' (household and agricultural waste) is human generated, and 'debris' (wood, leaves, grass and other loose plant material) is naturally generated. Rubbish can be split into general waste and hazardous waste, while debris can be helpful or unhelpful.

In some cases, debris should remain in place as part of the natural process (e.g. bank stabilisation). However, debris should be removed if it is likely to have detrimental effects, such as creating flow patterns that lead to erosion of topsoil.

A good property management plan should include should include a strategy for disposing of both general and hazardous waste in a responsible manner. This may be done either on-property or through an accredited waste disposal facility, generally run by local government.

If waste is disposed of on property, it should always be in a pit well out of flood reach. Rubbish should never be dumped into convenient gullies, or used as attempted erosion control. If rubbish is dumped anywhere but in a pit, it can quickly become waterborne and create health and safety hazards in flood time.

Remember, if you live upstream from anyone, your treasures can become their trash; your rubbish, their responsibility, so plan to be tidy at all times so you are always flood ready and flood safe!

Mitigation

Most rural enterprises use hazardous materials of some sort; all generate waste. Hazardous materials include solvents, fuels, oils, paints, agricultural chemicals and veterinary medicines - all are, or contain, chemicals.

Some chemical companies have product stewardship programs that seek the return of empty containers - this may also apply to the packaging, so check labels for disposal advice. The drumMUSTER program accepts clean chemical containers for recycling, phone 1800 008 707 or visit www.drummuster.com.au, while ChemClear can assist with the disposal of expired or unused chemicals or veterinary medicines - phone 1800 008 182 or visit www.chemclear.com.au.

If containers are non-returnable, and an accredited, off-farm facility is not available, use a secure on-farm chemical waste pit, which should be:

- out of flood reach;
- away from depressions or areas where overland flow may mobilise rubbish (plastic containers float!);
- away from homes, crops, livestock, surface water and underground water;
- on level ground;
- 50 to 100 centimetres deep
- lined with clay with lime spread in the bottom; and
- lined with heavy duty plastic if there is a risk of chemical leakage.

Prior to disposal of chemical containers, triple rinse (into a secure container), uncap, puncture and crush (do not burn) - personal protective equipment (PPE) should be worn whenever handling chemicals. Rinse water (rinsate) should be securely stored and used to mix a fresh batch of the same chemical at a future date.

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General waste can be split into organic, recyclables and other. Ideally, contaminant-free organic waste should be composted and returned to the soil. Recyclables can be split into steel, timber, etc. for reuse, and plastics, paper, aluminium, etc. for industrial recycling, otherwise it should join the balance of general waste in a secure waste pit.

While recycling is not convenient in many parts of rural Queensland, enterprising individuals are finding a way. For example, motor oil (stored in used drums), plastic containers, aluminium and tin cans (flattened and stored in bags or boxes), and cardboard (flattened, stacked and bundled), can all be opportunistically taken to an accredited collection or recycling facility in an empty car or truck.

While flood debris is a natural process, agricultural processes such as tree lopping, slashing and cropping on a floodplain may add to it. Removing loose vegetation waste from the flood zone can help to minimise flood debris, while zero tillage allows erosion preventing stubble to remain anchored in the soil, rather than floating loose to become waterborne debris catching on fences and blocking drains.

Recovery

When safe to do so, survey your flood-affected area to assess rubbish and debris deposits. All rubbish and non-beneficial debris should be cleared before returning animals to the area. Rubbish will often be embedded or entangled in debris, so care should be taken to ensure no injuries are sustained. Wire, broken glass, boards with nails protruding and jagged sheet metal are all potential injury sources for livestock and humans.

As contamination in flood waters can increase the risk of infections from scratches and bites, it is best to wear gloves, boots and long sleeves, long pants and insect repellant when working with rubbish and debris.

Rubbish and debris can also harbour snakes, spiders, centipedes, scorpions and adult mosquitoes. Mosquito numbers spike post flood when there is plenty of standing water for breeding, especially in shallow pools, tyres and other suitable receptacles. Drain all such water as soon as possible.

It is not unusual to have building waste amongst flood rubbish… if you suspect asbestos, use caution! Keep the material dampened to prevent the release of fibres and dust, wrap it in several layers of heavy builders plastic, tape it securely and take it to a waste facility - not all waste facilities accept asbestos, so check in advance. Do not bury asbestos without checking with your local council… it may be illegal. For more information, web search ‘asbestoswise’.

In addition to harbouring rubbish and hazardous creatures, debris is the natural location of waterborne weed seeds - it also acts as mulch to keep the ground moist, providing ideal growing conditions for unwanted plants. Whether you leave or remove debris, the area should be regularly checked for the emergence of weeds, some of which may be toxic to livestock. Bear in mind that, under State law, landholders are responsible for the control of declared plants.

Debris covered fences and logs can also provide refuge for rabbits and feral cats. These deposits may also divert subsequent flows and cause serious erosion; therefore, they should be removed.

Some debris, especially if infested with weeds or other invasive species, may need to be burnt on site. Ensure you obtain the appropriate permits, and don’t burn rubbish, especially treated timber, plastics, chemical containers and aerosol containers - these may release toxic fumes or explode. Remember, these items, and others, may be hidden in debris.

If carcasses are encountered, they need to be disposed of appropriately to minimise the risk of contamination and disease. While on-property burial is often the easiest and cheapest option, if this is unavailable, many local government waste facilities accept carcasses in landfill.

Burial pits should be sited well away from houses and watercourses, in heavy soil (stable, low permeability), at least two metres above the water table, and deep enough to allow two metres of soil on top of the carcasses. Backfill should be mounded to accommodate subsidence and to shed water rather than allow infiltration; drains may be necessary to keep adjacent surface runoff away from the pit. Contact the Department of Environment and Heritage Protection for further information.

Returning livestock

When the area has been checked and cleared of unwanted material, and conditions are favourable, normal agricultural activity can resume. Livestock can be returned; however, they should be checked regularly to ensure they don’t ingest overlooked rubbish, injure themselves on unseen hazards, or fall ill from post flood disease.

Qld Regional NRM GROUPS COLLECTIVE

This Flood Preparedness and Recovery factsheet was prepared by the Regional NRM Groups Collective for the Queensland Government.

Queensland Government