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## **Commonsense Gardening after the Flood**

Gardeners are understandably concerned about their gardens following the recent flood events. It is time to take a deep breath and calmly consider what we know about soil and plants, then take positive steps to help get our gardens growing again.

### **Sewage Waste**

Many gardeners are concerned about possible soil contamination from flood water. Most of these concerns are unwarranted. Soil organisms like fungi and bacteria use things that we regard as soil contaminants as food.

Concerns expressed in the media and by some authorities in relation to vegetable gardens primarily relates to sewage contamination. Do not harvest and eat leafy green crops from vegetable gardens that have been covered with water. Most of these crops will have wilted and died anyway as they do not stand waterlogging.

Gardeners throughout the world use composted sewage waste for soil improvement. Council and shire authorities throughout Australia routinely use composted sewage waste in public parks, street median strip plantings and on sports ovals. They just do not tell local constituents. However unpleasant it may sound, sewage contaminated flood water will not cause long term damage to your garden.

### **Other Contaminants**

Your best defence against all contaminants is good biological soil life. Gardeners know that worms are a great indicator of good soil health. If you have worms, the soil will be fine.

The most common types of soil testing available from water and soil laboratories check for nutrients, not oil, petrol, heavy metal or other contaminants. You cannot ask a soil testing company to test for everything! Simple soil nutrient tests cost around \$250. Testing for possible soil contamination will cost much more and is really simply not warranted in most instances.

### **Vegetable Gardens**

If you remain concerned about your vegetable garden, you may be better to spend your \$250 starting again. After all, if you have your soil tested and they find some contamination (remember it could have been there before the flood, but you just did not know) the recommendation will be to start with new soil.

Remove the soil from vegetable garden areas. Build a new no dig garden in its place, make compost or import a soil blend from your local landscape supplier and add compost to start to rebuild your soil fertility.



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### **Planting for a Quick Harvest**

- Remove all dead or decaying plant material from flooded gardens. This can be added to the compost.
- Remove anything that is wilting (tomatoes, eggplants, capsicums, pumpkin vines, garden shrubs and trees,). Wilting is one of the first signs of root disease and it is not worth trying to save these plants.
- Aerate the soil with a garden fork. Look for signs of life within the soil – worms are very sensitive to contaminants, so their presence is a good barometer of soil health.
- Check the soil pH. Waterlogging can cause the soil to become temporarily acidic. There is no need to rush to apply lime. The pH will adjust itself in time. Have some liquid fertiliser and seaweed extract on hand to treat new seedlings and any existing plants you intend to save.
- Replant by sowing seeds of fast maturing crops like rocket, lettuce and beans or plant seeds or seedlings of cherry tomatoes.
- Plant pots of parsley, chives, garden sorrel, mint and basil. Look in the herb section in your local nursery for other perennial salad greens and herbs that will give you an instant harvest.

### **Not Ready to Replant?**

If you remain concerned about soil contamination or are not ready to plant, sow seeds of a green manure crop like cowpea or lablab (you can get seed from produce stores or on-line from Green Harvest). If you have old packets of flower or vegetable seeds (especially those where the packaging has become wet) sow them as a green manure. Buy some cheap dried beans (the type you soak and put into stews and soup) from the supermarket and sow them as a green manure.

Grow quick leafy greens or other vegetables in pots or containers using potting mix mixed with some coir peat, blood and bone or other organic fertiliser.

### **Trees and Shrubs**

Many trees and shrubs cope with temporary inundation, but many of those that cannot be saved will already be showing signs of deterioration. Grevilleas, salvias, coleus, gardenias, hibiscus and other shallow rooted understory plants are less likely to be saved. Palms with brown foliage are unlikely to recover.

Bottlebrush (callistemon), lillypillies, tea trees (leptospermum) paperbarks (bottlebrush), rainforest plants, roses and hedges are likely to be fine, providing you can remove mud and silt.

- Where possible wash mud and silt from the foliage of garden trees and shrubs. This may be a way of using relatively clean (but undrinkable) tank water that has been contaminated with flood water and needs to be emptied.



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If the mud is caked hard and a jet of water from the hose will not move it, it may be better to prune plants back and let them reshoot. Do not use powered water blasters on plants. It will strip the bark and kill any plants that might otherwise recover.

- Applying products like Yates Anti-Rot is a safe option for treating significant trees and shrubs that remain alive, but are likely to fall victim to root rot diseases in the months ahead. Prioritise the plants you want to try to save. Remember that buying new plants is often cheaper than spending money on plants that will always be unthrifty or misshapen regardless of what you do.
- Water plants with seaweed extract to help build disease resistance and encourage development of new roots.

### **What Gardeners Can Do To Help Others**

Not everyone is able to help out with the physical task of clearing homes and properties, but gardeners whose properties have not been flood affected can help out in unique ways.

- Share the surplus from your vegetable garden and fruit trees with flood affected households.
- Grow vegetable seedlings to give to others to replant vegetable gardens.
- Take cuttings of plants from your own garden to share with others.
- Visit less experienced gardeners and provide advice as to what plants might be saved or species that could be used when replanting.
- Make compost to share with others trying to get gardens re-established.
- Propagate native plants for community replanting efforts.
- Clear surplus garden tools and equipment from your garage or shed so that others can get back to work in their gardens as soon as possible.

### **Melioidosis**

Gardeners cleaning up flood ravaged homes and gardens should be mindful of the potential for simple scratches and cuts to develop into a life-threatening medical condition called melioidosis.

Melioidosis bacteria (*Burkholderia pseudomallei*) lives within the subsoil. During the wet season in northern Australia or elsewhere after flood events, it is found in surface water and mud. Infections are more common in north Queensland and the Northern Territory, but recent flood events have widened the risk. An increase in the incidence of the disease occurred in south east Queensland after the 1974 floods.

Melioidosis bacteria enters the body primarily through simple cuts and abrasions. Common symptoms include chest, abdominal pain and coughing or blood poisoning at the site of the injury. Gardeners with other underlying medical conditions are particularly at risk.

Always wear gloves and sturdy, waterproof footwear when you garden. Shower after working outdoors and pay attention cuts and infection. Keen gardeners should be particularly mindful of the symptoms of melioidosis. Make a note to ask your doctor about melioidosis next time you visit.



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## **Starting Over**

Where can I purchase inexpensive plants to get my garden started again?

### **Grovely TAFE Nursery**

The nursery at Grovely TAFE is accessible from Woking Street, Grovely. The nursery sells plants propagated by horticulture students at very reasonable prices during Saturday plant sale days run several times each year. A diverse range of native and exotic trees, shrubs and groundcovers are sold. Phone 3354 5504 to find out when the next plant sale will be held.

### **Kumbartcho Community Nursery**

15 Bunya Pine Court, Eatons Hill 4037

This fully functional community nursery has a wide range of native plants. Volunteers provide information and advice about growing local native plants and propagate a wide variety of native species that are sold at cost to members of the public.

The nursery is open to the public at the following times:

Thursday - 9am - 3.00pm

Friday - 9am - 3.00pm

Saturday – 8.30am till noon

Sunday – 8.30am till noon

Prices - \$1.50 forestry tube, \$3.00 larger pots inc GST

Phone: 07 3264 3953 for more information