



## Wirra Wirra Vineyards: Creek line restoration, disposal of treated winery wastewater onto native plantings, and the production of compost for use in the vineyard

### Viticulturist:

Vineyard Manager (Richard Wellsmore) and Viticulturist (Kevin Fiddaman) are in the process of restoring the creek lines bordering Wirra Wirra's McMurtrie Road vineyards. They are working on an innovative solution to reusing treated winery wastewater and Richard has been producing high value compost for use on the vineyards from locally sourced 'waste' materials.



### McLaren Vale Wine Region

## Key observations

- What worked well?**
  - Reusing winery waste (grape marc), straw and locally sourced manure to produce high value composted mulch for use in the vineyard.
- Pitfalls to avoid**
  - Revisit woody weed removal in creek lines regularly, as good progress can be set back if a regular upkeep is not maintained.



## Case Studies

**Creek restoration:** Creek restoration (Pedler Creek tributary) started in 2004 and is ongoing. Wirra Wirra are working with the Adelaide and Mount Lofty Ranges NRM Board and have developed a three-year plan.

Work will soon commence to remove woody weeds such as olives, bamboo and ash trees in creek lines on existing properties (and a newly acquired neighbouring property), while ensuring the banks remain stable. The removed woody weeds will then be converted into woodchips, which will be applied as mulch around the new revegetation plantings.

**Treated winery wastewater:** A Shiraz block was recently removed adjacent to the winery wastewater holding ponds. Instead of replanting this block to winegrapes Wirra Wirra have decided to plant this area to native plants and irrigate it with treated wastewater using 'Wobble-Tee' sprinklers (**photo left**).

A number of tree species have been planted (including sheoaks which will be used in biodynamic preparations) along the perimeter of the block to create a hedgerow and this will act as a buffer zone to reduce any drift from the sprinklers onto neighbouring plantings. A range of native grasses including windmill, wallaby and kangaroo grass have all been found on the block and their growth will be encouraged in the future.

**Composted mulch:** Local waste products including grape marc from the winery, local turkey/chicken manure and straw are being used to produce compost for use in the vineyards. The composting process comprises the formation of windrows and static mulching piles. Materials are deposited in layers (starting with grape marc, then straw, then manure) and then this process is repeated. Biodynamic preparations are added to the mix and the piles are left to mature. Then finished product is applied in the vineyards (**photo bottom left**).



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