Additional benefits

Applying compost to soil can also result in:

- improved water retention which equates to lower irrigation requirements
- assisted plant growth and disease resistance which equates to lower maintenance requirements
- reduction of filter runoff, ensuring less pollution into our waterways
- less need for commercial herbicides or pesticides which results in a reduction in costs and less possibility of chemical pollutants being washed into waterways
- increased soil structural stability which equals higher water and nutrient retention
- improved weed suppression which means less competition for growth and establishment of desired species
- increased soil nutrient levels, resulting in stronger, healthier plant growth.

Did you know?

Compost can:

- save up to 73 per cent of water evaporation
- reduce soil erosion by up to 30 per cent through adding structure to the soil
- assist in the slow release of macro and micro-nutrients in the soil that are vital for plant growth, reducing the need for chemical fertilisers
- be applied at any time of year
- assist in addressing the cause of nitrification and salinity of soil
- save money by reducing the need for water and synthetic fertilisers.

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Focusing on the benefits of compost for…

URBAN AMENITY

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ACT NOW FOR THE FUTURE

Department of Environment and Conservation
Our environment, our future

Community groups across Western Australia have identified urban amenities, including adequate areas for public open space and bushland, as an increasingly valuable feature of our cities, towns and suburbs. The same level of importance has also been placed on areas of vegetation along roadsides which stabilise embankments, provide wildlife corridors and help maintain urban biodiversity.

At the same time, WA's climate and other environmental conditions, in particular the condition of our soil, can present challenges to local governments and other authorities responsible for providing such amenities.

About WA's soil

Most of the soil in the Perth metropolitan area is sandy and has low fertility, poor nutrient retention and is often water repellent. This combination of factors can lead to the poor growth of many plant species, essentially due to the majority of water and nutrients added by management authorities being lost through leaching to groundwater and/or erosion.

WA soil can also be either too acidic or alkaline. Some native species, for example banksias and grevilleas, have adapted to the low nutrient sandy soil, but others grow poorly unless given a high degree of maintenance.

What can be done?

The use of organic compost can contribute to successful and sustainable land management by improving soil quality and structure. This can markedly benefit the establishment of plants and turf on areas that have been converted into parklands, public open space or roadside plantations.

What is compost?

Composting is the process implemented to break down organic matter into small particles which can then be integrated into soil for overall improvement. Essentially compost is a natural fertiliser and its use enables valuable organic matter to be returned to the soil.

What has been discovered about the use of compost in association with urban amenities?

Research has shown that using compost as part of the underlay for turf reduces the need for costly rectification work where plant and turf growth has been poor.

In a recent Australian study undertaken three months after sowing turf cover in a local parkland area, growth was estimated to be about 94 per cent in areas where compost was applied, compared to a relatively low cover of 37 per cent elsewhere.

These findings demonstrated that compost assisted in rapid turf establishment and the prevention of soil erosion. In addition, excellent vegetation growth was recorded in areas where compost was used.

Environmental benefits

When unstable soils are exposed to the erosive forces of the elements, soil, sediment, organic matter and nutrients can be washed into stormwater and ultimately end up in our waterways. This can reduce water quality and negatively impact on aquatic fauna and flora.

However, with the use of compost, the stability of soil can be increased, enabling it to become more resistant to erosion and compaction, and also enabling it to retain more moisture and nutrients.

Composting can also help reduce the amount of waste that goes into landfill and reduce the emission of greenhouse gases into the environment.

Because composting can decrease the need for fertilisers, herbicides and pesticides, its use can reduce the leaching of these chemicals into groundwater.