How biosolids are produced

Sydney WATER

Our biosolids process

1

Collection

Initially, wastewater is collected from houses, businesses and public utilities within Sydney, the Blue Mountains and the Illawarra. It is then transported to the wastewater treatment plant in the area.

2

Separation

Next, solids are separated from the wastewater and screened to remove grit and other non-organic items such as plastics and food scraps that should not be put down toilets and sinks.

3

Treatment

Solids are treated through a process, such as digestion to completely breakdown any organic solids and reduce any pathogens and odour.

4

De-watering

The last step of the process is removing water from the solids to produce the final product a nutrient rich multipurpose fertiliser.

Our biosolids product

What is left at the end of the regulated wastewater treatment process outlined above, is a fertiliser that can be applied directly to land for agricultural or mine rehabilitation purposes or composted for agriculture, horticulture and landscaping.

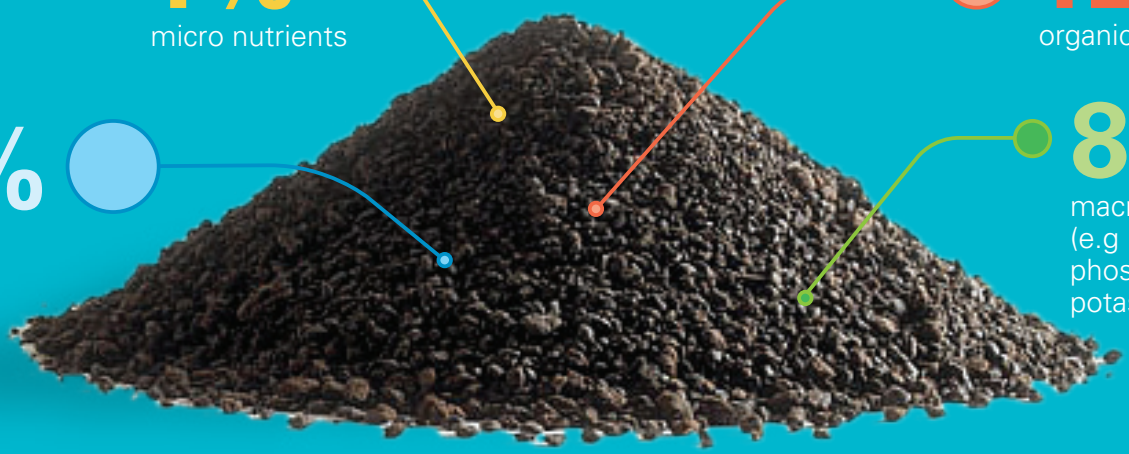
Biosolids are made up of...

1%
micro nutrients

12%
organic matter

80%
water

8%
macro nutrients (e.g Nitrogen, phosphorus, potassium)



Why are biosolids beneficial?

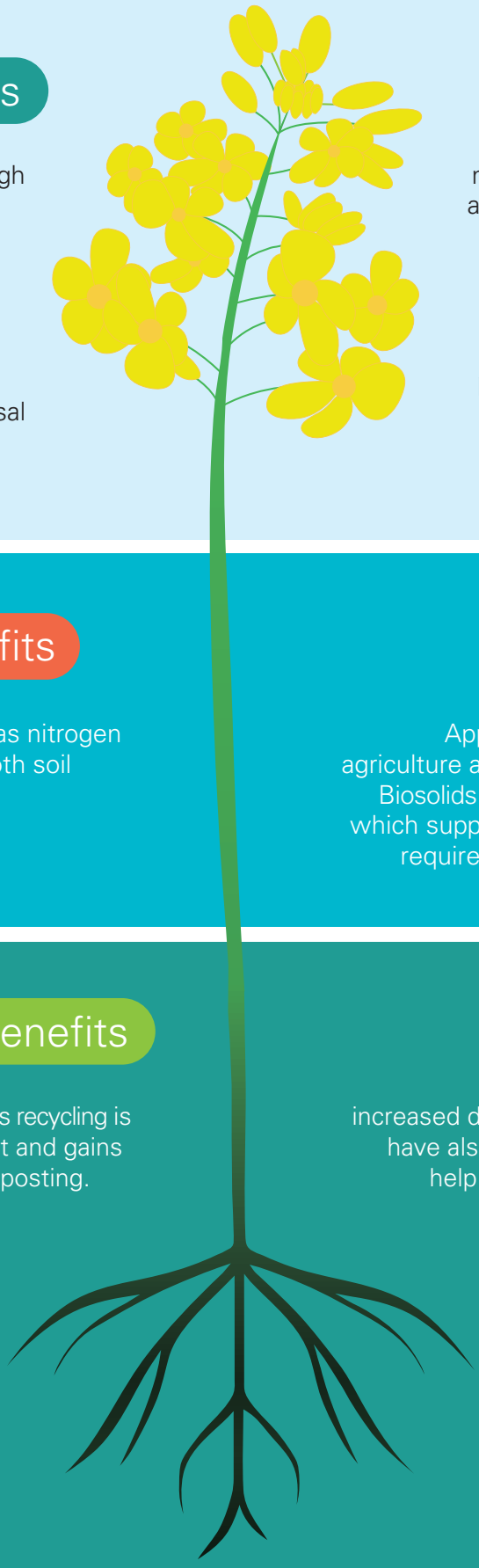
Sydney WATER

Flower: general benefits

Biosolids are a recycled product. Through a regulated biosolids program, treated wastewater can be turned into a recyclable resource that Australian farmers and communities can use for agriculture and other methods.

Historically, wastewater was simply disposed of into the ocean. This disposal process was potentially harmful to our natural aquatic environment and was re-evaluated by the NSW Government in 1989.

Biosolids recycling is an environmentally sound alternative to disposal and provides a valuable product that benefits both our environment and our communities.



Stem: agricultural benefits

Biosolids contain plant nutrients such as nitrogen and phosphorus which can improve both soil quality and plant yields.

Applying biosolids can sustain agriculture and replenish degraded land. Biosolids are a slow-release fertiliser, which supplies nutrients gradually and requires less frequent application.

Roots: environmental benefits

The root of all benefits provided by biosolids recycling is the several environmental improvement and gains received from land application and composting. Applying biosolids to land can help improve and maintain healthy soil by adding important nutrients which are essential, boosting soil water holding capacity and reduce topsoil runoff.

Organic matter in biosolids aids the binding of soil particles. This means that both land application and composting can reduce soil erosion and improve water quality, resulting in enhanced root growth and increased drought resistance. Biosolids have also been used successfully to help reclaim disturbed land such as coal strip mines, gravel pits, quarries,construction sites and landfills. Biosolids can replace lost topsoil and improve soil and stability of soil damaged land. Lastly, biosolids can increase forest production for several tree species.