

# Benefits of Trees

## AIR QUALITY

Trees have a wide range of benefits for humans. One of these benefits is improving air quality.

Overall, trees **improve** the air that we breathe. They directly remove some air pollutants such as carbon monoxide, nitrogen dioxide, ozone, lead, sulfur dioxide, and particulate matter. These pollutants have been shown to negatively affect human health.



On the other hand, there are some ways in which trees actually **decrease** air quality on a local level. You may be surprised to learn that trees emit volatile organic compounds (VOCs). While VOCs from trees often provide the smells we enjoy from plants, they are one of the biotic precursors (when mixed with other urban air pollution components) in smog and ozone formation. Of course, trees also produce pollen which if you suffer from allergies, you're highly aware of!

When weighing both their air quality improvements and emissions, trees have an **overall positive effect on the air quality**. By utilizing proper planning and species selection, we can optimize the beneficial effects that trees have on our air quality.

