

The rate of rise for atmospheric carbon dioxide is less than 3 parts per million (red line) (ppm) per year. This graph shows (blue line) we can replace grass in medians and sides of roads with native trees and shrubs. This location has 161 thousand vehicles per day traffic. The forested area will consume a large portion of the carbon dioxide from vehicles. We have two National Institute of Standards and Technology (NIST) certified carbon dioxide sensors calibrated within 1 ppm. The data in the graph is guaranteed by the USA government.

### The Carbon Dioxide Experiment

Things to note in the graph.

At no time did the blue line go below the red line.

On December 20th, a very dark and rainy day the difference was 9 ppm. In April through June we had very little rain. The graph shows this period as a lower difference. For photosynthesis we need these things, light, vegetation, moisture and carbon dioxide.

This is applicable for  $\pm 50^\circ$  from the equator.

The graph shows lower photosynthesis in the spring of 2021. That spring was a dryer than a normal spring. The chemical reaction for photosynthesis is  $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$ . It takes equal amounts of water and carbon dioxide to make cellulose.

The carbon dioxide experiment finished 6/13/2021. The results will go into our Equilibrium manuscript. Then it will go to publishing. We received an extension from Oregon Department of Transportation for another year to verify this data. In July 2022 the theory will become scientific law.

Experiment Summary: This experiment proves we can plant native trees and shrubs instead of grass and they will eventually (within 10 years) consume all the carbon dioxide from the vehicles.

