

# Nualgi

## Sustainable Solution 😊 to Pollution ☹️

### Problems

CO2 emissions from fuel, N and P from sewage and fertilizer runoff i.e., food are considered problems and cause / result in the following problems:

Sewage Treatment, Sanitation and prevention of water borne diseases,  
Food availability – declining fish yield and scarcity of land,  
Lake and River Remediation,  
Harmful Algal Blooms, Red Tides, Mass fish kills,  
Dead Zones in Oceans, Ocean Acidification, Climate Change,  
Fuel for vehicles.

### The Solution

CO2, N and P are inputs for photosynthesis.

Diatom Algae, during photosynthesis they  
Consume Carbon dioxide, Nitrogen and Phosphorus.  
Release Oxygen – are responsible for 25% of oxygen in Atmosphere and  
are the best natural food for fish and  
they account for about 50% of primary production in oceans.

### What is Nualgi?

**Nualgi** is a liquid and it contains micronutrients required by Diatom Algae in nano size. 5 nano meters to 20 nano meters.  
It contains Si, Fe, Mn, Ca, Mg, Zn, Cu, B, S, Mo, etc.

### How does it work?

**Nualgi** causes a rapid growth of Diatom Algae in any type of water – freshwater or saline water. Water has most of the nutrients required by Diatom Algae to grow but lacks micronutrients and silica.

**Nualgi** provides these micro nutrients and silica.

### Why Diatom Algae?

Diatoms have a silica shell, unlike other algae such as Green Algae and Blue Green Algae which have cellulose cell walls.

Diatoms are consumed by zooplankton and these by fish, unlike Green and Blue Green Algae which die in the water and decompose and thereby release CO2 back into the atmosphere when they decompose.

In Oceans some Diatoms sediment and sequester huge quantities of Carbon.

### Diatoms

1 liter of **Nualgi** causes growth of upto 900 kgs of Diatoms.

900 kgs of Diatoms ...

### Oxygen

Produce 1,200 kgs of Oxygen.

### Carbon dioxide

Consume 1,700 kgs of Carbon dioxide.

### Nitrogen

Consume 80 kgs of Nitrogen.

### Phosphorus

Consume 11 kgs of Phosphorus.

### Methane

Methane is emitted in Sewage Treatment Plants, Septic Tanks, polluted lakes, flooded paddy fields, etc. Diatoms increase the Dissolved Oxygen level of water in every nook and corner of the tanks and thereby convert Anaerobic conditions to Aerobic conditions. This will reduce Methane emissions.

### Food for Fish

Diatoms and Zooplankton provide most of the food required by fish in aquaculture ponds, lakes, rivers and oceans and fish are a good source of protein for humans.

### Economics

1 liter of **Nualgi** is to be used in about 2 million to 100 million litres of water.