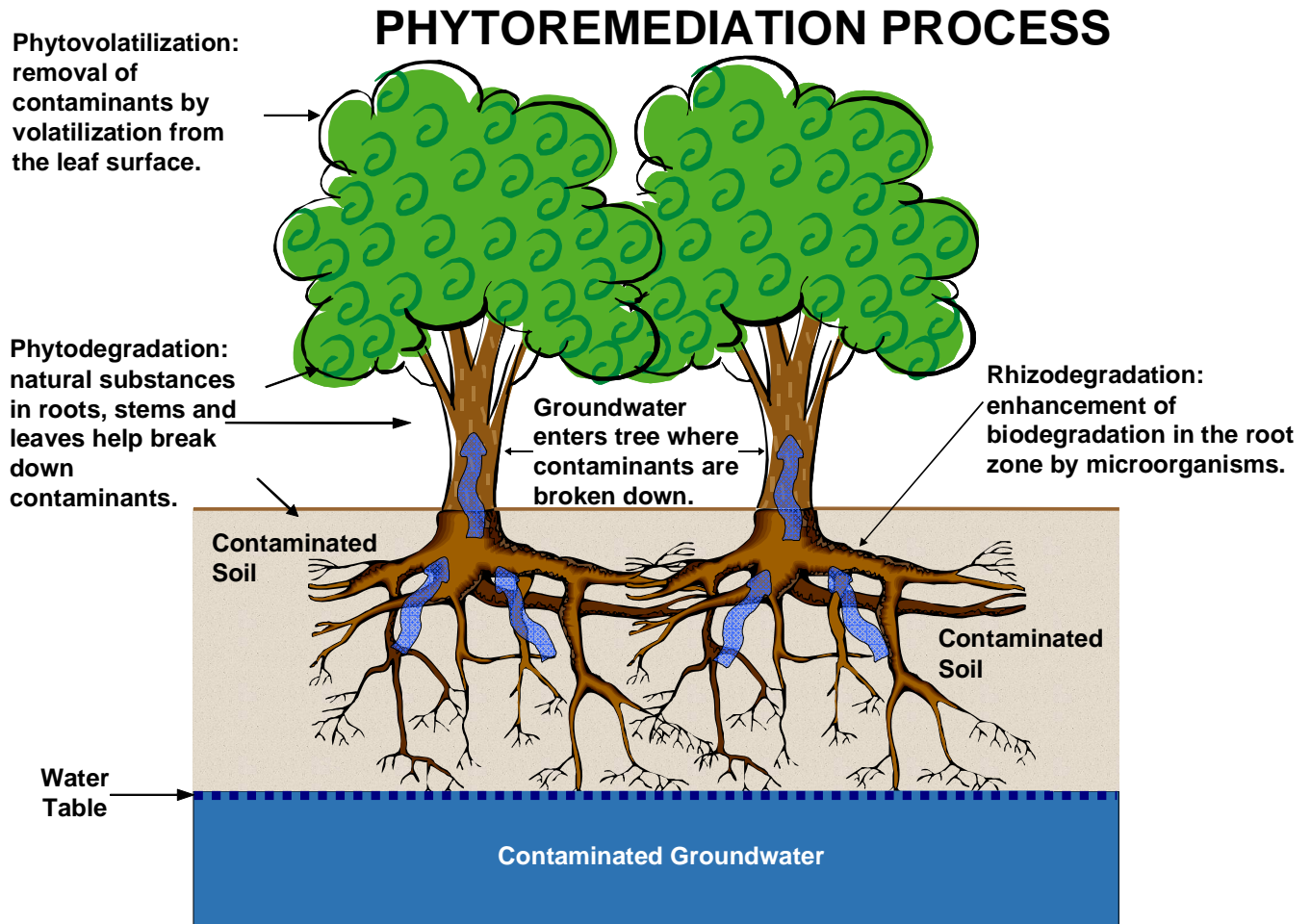


The Phytoremediation Process

Phytoremediation is the use of plants to partially or substantially remediate contaminants in soil, sludge, sediment, groundwater, surface water, and waste water. At the former American Quality Fibers site we are using a variety of trees to assist in the cleanup of contaminated soil and groundwater.



Phytoremediation encompasses a number of different methods that can lead to contaminant degradation, removal (through accumulation or dissipation), or immobilization:

Degradation - for destruction or alteration of organic contaminants.

Rhizodegradation: enhancement of biodegradation in the below-ground root zone by microorganisms.

Phytodegradation: contaminant uptake and metabolism above or below ground, within the root, stems, or leaves.

Accumulation – for containment or removal of organic and/or metal contaminants.

Phytoextraction: contaminant uptake and accumulation for removal.

Rhizofiltration: contaminant adsorption on roots for containment and/or removal.

Dissipation – for removal of organic and/or inorganic contaminants into the atmosphere.

Phytovolatilization: contaminant uptake and volatilization.

Immobilization – for containment of organic and/or inorganic contaminants.

Hydraulic Control: control of groundwater flow by plant uptake of water.

Phytostabilization: contaminant immobilization in the soil.