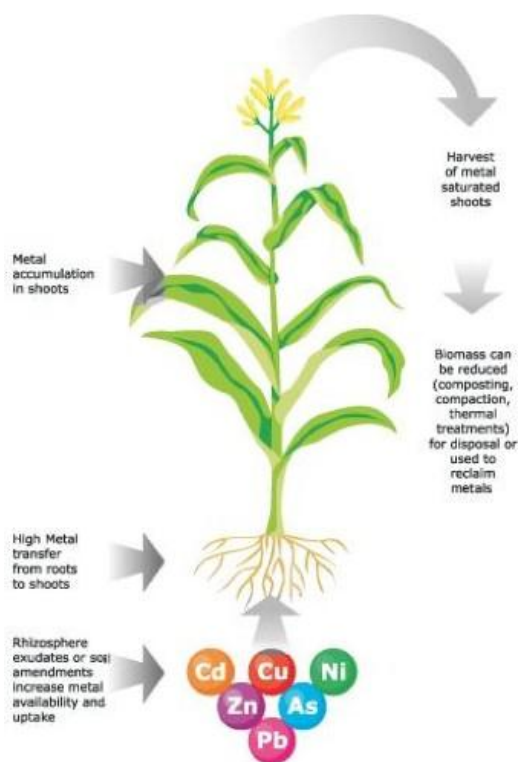


# SUSTAINABLE REMEDIATION

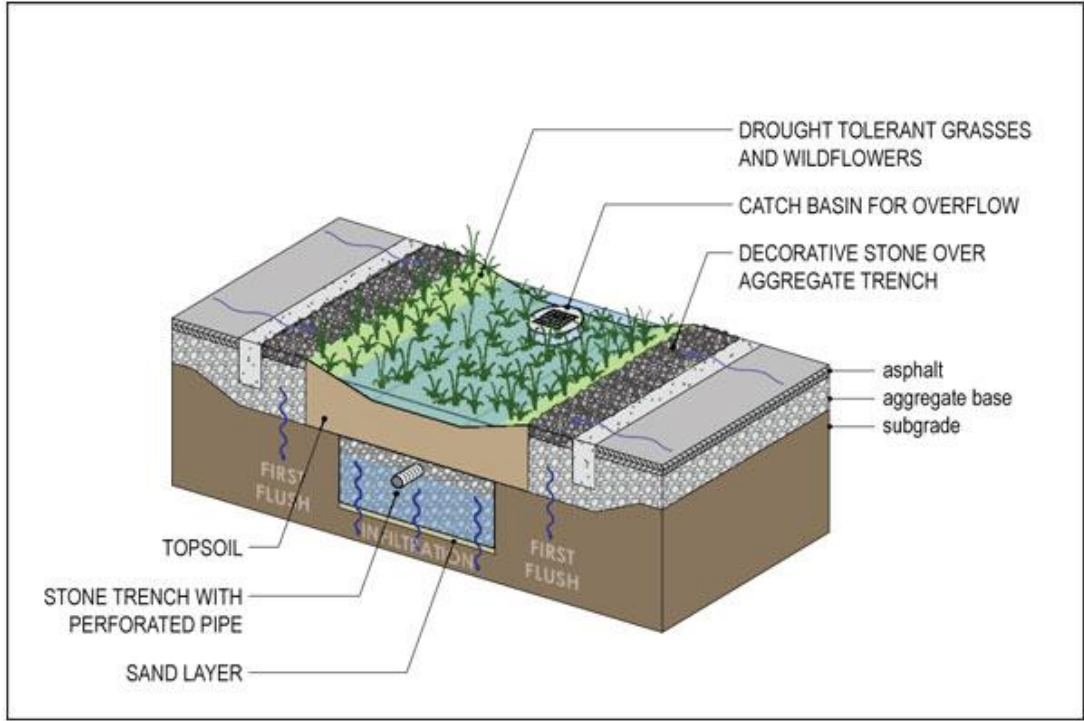
## Bioremediation and Phytoremediation

Heavily contaminated soil, air, and water can be efficiently remediated through natural processes carried out by plants and microorganisms. Utilizing soil, plants, and microbes to breakdown contaminants is a cost-effective, low maintenance alternative to improving soil and water quality. Plant tissues bio-accumulate and extract heavy metals, solvents, and pesticides for easy removal while microbes naturally degrade contaminants such as petroleum. Bioremediation eliminates the need to excavate and further treat soil or water thereby significantly reducing costs. Here at UET we can design a phyto/bioremediation system to remediate a site or simply integrate them into an existing treatment system.



## Low Impact Development

Low impact development also utilizes plants, soil, and microbes to improve water quality and manage flow. Features such as bioretention basins, grassed swale, infiltration trenches, constructed wetlands and media filters will naturally reduce stormwater and runoff contaminants. By incorporating “green” features into the treatment system or landscape, UET can create an effective yet environmentally friendly remediation system. UET can design the right treatment-train that will naturally clean up a wide variety of contaminants.





## **RENEWABLE ENERGY**

In the past solid waste was viewed as a costly burden but now can be considered a valuable resource. By converting waste to energy UET alleviates stress on landfills, protects the environment, and produces a renewable source of energy. Universal Environmental Technologies is currently involved in the design and construction of several waste-to-energy projects. UET staff is building a biodigester designed to produce energy from organic waste. Through the process of anaerobic digestion, waste is easily converted to a valuable source of green energy. The anaerobic digestion of organic waste is quickly and efficiently converted to a methane-rich biogas that can later be burned for heat or electricity. At present, UET is designing a digester to convert tannery waste into methane gas. Animal hides, fur, bones and entrails will be converted to energy once they are processed in our digesters. Our scientists and engineers are also designing systems to convert industrial food waste into biodiesel and methane gas as well as farm waste and cow manure into biogas. We offer a broad range of technologies that are

customized to suit your waste-to-energy needs. UET designs site-specific anaerobic, pyrolyzation and gasification systems to convert your waste into a renewable source of energy.

