**WATER AND ITS IMPORTANCE**

Water is the most important compound on Earth for a variety of reasons. Oceans cover over 70% of the Earth's surface, and all that water drives the weather. The earth’s 97.5% water is saline and only 2.5% is fresh water and 68.9% of the freshwater is locked in ice caps and glaciers and 29.9% of freshwater is found in sub surface. The surface water contains only 0.3% of the freshwater and it includes lakes and rivers whereas 0.9% of the freshwater exist in the form of humidity, fog and soil moisture. So, fresh water is a scarce resource if we pollute it then it can cause health effects. Similarly, ocean water which is saline, if anthropogenic activities pollute then aquatic or marine life will be affected.

Water is sign of life.

The role of water in an ecosystem is manifold. Like air,sunlight and food, without water, there would be no life on planet. Water links and maintains all ecosystems on the planet. The main function of water is to propel plant growth; provide a permanent dwelling for species that live within it, or provide a temporary home or breeding ground for multiple amphibians, insects and other water-birthed organisms; and to provide the nutrients and minerals necessary to sustain physical life. As nature's most important nutrient, people need water to survive. water helps to restore a more natural flow regime to rivers, creeks and wetlands and also maintain a healthy, productive,and resilient river system for the benefit of plants, animals and people.

In living world, importance of water is inevitable. Water helps to transport oxygen, minerals, nutrients and waste products to and from the cells. The digestive system needs water to function properly, and water lubricates the mucous layers in the respiratory and gastrointestinal tracts. Without of calories, water serves as the medium for the metabolic functions and other chemical reactions that produce energy in the body. Water regulates body temperature and serves as the space between spinal cord and the brain and between the joints in the skeletal system.

 In human and animal biology, water is used for transport, excretion, chemical reactions and many other processes. Water plays an important role in plant production- some seeds are dispersed by water. It also provide a habitat for different animals and plants and is important for photosynthesis.

Water evaporates off the surface of the ocean, forms clouds, storms and hurricanes. Those clouds can create rain which falls to the ground and fills our aquifers. Those aquifers are used to produce crops, Used as source of drinking water, used as a solvent in industrial applications, evaporated in power plants to drive steam turbines. In nature the water fills the roots of plants, is consumed by animals, and regulates the temperature globally.