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## **ORIGINAL RESEARCH ARTICLE**



## **OPEN ACCESS**

## WATER FOR PEOPLE AND THE ENVIRONMENT

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#### ABSTRACT

Water is an essential part of our everyday life, yet for most of us especially those living in urban areas, we probably do not think about water very often. We have come to expect that water will be there when we turn on our faucet. Only if we turn on our tap and nothing comes out, or if the water tastes bad or smells strange, or if we find our home flooded by a nearby creek during a heavy rain, do we give much thought to water. Our relative lack of attention to water is rapidly becoming a luxury that we in Texas cannot afford. The population of our state is expanding dramatically; many of our underground water sources are being depleted. Our fish and wildlife populations dependent upon water are struggling to survive in various parts of state. Much of the water is being wasted through inefficient use and infrastructure. For these reasons and many more we need to inform ourselves about water and take action to assure a dependable and safe water supply for the future for both people and the environment. If you know where the water that you use in your house comes from, you will be able to keep tabs on the quality and quantity of that water source and take steps to protect it, for example, you wouldn't want to accidentally pollute your own water source, someone else's water source downstream from you or the aquatic habitat for wildlife that depend on clean water. In addition, knowing where your water comes from or what new sources are being considered, may help you make decision about how much water you use, or what actions you should encourage your water supplier to take. For example, if your water comes from an aquatic that is in danger of depletion you may choose to reduce the amount of water you use so that your water supply will last longer. If your water supplier process to build a new reservoir that would reduce the amount of freshwater flowing into the bay where you fish, you may decide to encourage that supplier to first explore potential water savings from conservation.

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## **INTRODUCTION**

If you know where the water that you use in your house comes from, you will be able to keep tabs on the quality and quantity of that water source and take steps to protect it. For example, you wouldn't to accidentally pollute your own water source, someone else's water source downstream from you, or the aquatic habitat for wildlife that depend on clean water. In addition, knowing where your water comes from, or what new source are being considered, may help you make decisions about how much water you use, or what actions you should encourage your water supplier to take. Basically, the water cycle is an illusion of the natural cycle of water moving from the atmosphere to the earth and back to the atmosphere.

\**Corresponding author:* Dr. Ramamohana Reddy Appannagari, Environmental Ecologist/Supervisor Chemtex Laboratory, Texas USA. Think of it as nature's way of recycling water. It begins with water evaporating form bodies of water (rivers, oceans, or aquafers) and land surfaces, then condensing into rivers, streams, or aquafers, etc. Water that is not absorbed into the ground runs off into streams and rivers. When the streams and rivers reach the ocean and some of the water evaporates, the cycle begins again. The water cycle also acts as a filter, purifying and removing salts from the water.

#### Water contamination

This is where it is helpful to know the source of your drinking water, if your water supply is surface water, try to determine what the potential sources of pollution are upstream from your home water supply. Pollution sources can be non-point source, meaning the pollution may come from many small, non-

specific sources rather than one identifiable source. Examples of non-point sources are pesticides, herbicides, leaky septic systems, animal waste, oil, and grease. Point source pollution comes from a specific, identifiable source, and can include wastewater treatment plant discharges, factories, confined animal feeding operations and oil and gas production. If your water supply is ground water, try to determine whether there are pollution sources on the surface that might be transmitted into the aquifer when it rains through sinkholes, abandoned but unplugged oil and gas or water wells, seepage through sandy soils, or other means. In portions of the Edwards Aquifer region, where water flows directly from the surface into the aquifer very quickly, special efforts have been made to restrict certain actions on the surface that might results in groundwater contamination. In other aquifers, the movement of contaminations into and through the aquifer may be much slower. In almost all cases, once an aquifer is contaminated it is difficult, if not impossible to clean it up, and the cost of cleaning it can be prohibitive.

#### **Types of Water and its Process**

**Waste Water:** Wastewater is the dirty water that leaves your home after it is used for showers, toilet flushing, laundry, dishwashing and other purposes and travels through pipes to a wastewater treatment plant or into your home septic system. That water is then cleaned and released into a body of water and is referred to as "effluent".

Recycled water: Recycled water is wastewater effluent that has traveled through the sewer to the wastewater treatment plant and has been treated (cleaned up) with a specialized process for reuse. This water is then used directly or indirectly for industrial uses, landscaping, and other non- consumptive uses. Recycled water is also referred to as water reuse. When properly treated to appropriate standards, highly -quality reclaimed wastewater can be a sustainable supplement to any water utility's supply portfolio. Reclaiming water from wastewater systems for irrigation, industrial, ecological and municipal uses has been successful in many places and many hold promise for many others. Water and Wastewater utilizes worldwide are finding the quality of and quantity of their conventional water supplies increasingly affected by population growth, urbanization, prolonged and severe droughts, and climate change. In addition, opportunities to develop new groundwater or surface water sources have become more challenging to discover and act upon. Such increased pressure on a water system may make a diversified water sources portfolio a requirement to meet future water demands, ensure public health, and provide economic and environmental sustainability. Besides working to increase water conservation, many communities are seeking new strategies to develop sustainable water supplies for the future. Accordingly, there's clear need to use existing local water resources effectively to produce and provide reliable highquality water. One viable approach to address existing and anticipated water shortages is to implement water reuse, in which used water from homes and businesses is highly treated and used to augment public water supplies.

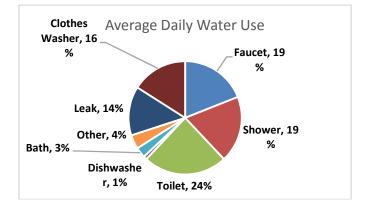
# How Water effect to Human and Wildlife, Environmental implications

Human need water to live, without it, we would dehydrate and die quickly. Two-third of our body mass is water. If your local

water source has poor water quality, it will affect not only your health that of every other living organism is your area and downstream. The quantity and quality of water can have direct effect on your health, you really are what you drink. Wildlife need water to survive, just like all living organisms, plants, animals and microorganisms alike. In addition, wildlife needs water in sufficient quality and quantity. We call this type of water need "environmental flows", Environmental flows are made up of both "in stream flows", flows in a river or stream and freshwater inflows the flows of freshwater that make it down the river or stream and into an estuary system. Estuaries are where fresh water and salt water mix and they are among the most productive natural systems on earth. Everything in nature is connected and should be considered as a system. For instance, if we received inadequate rain, certain plants would die, or their overall numbers would decline. As a result, planteating animals that depend on that plant would be affected, as would the omnivores and carnivores that depend on that plant eating animal for survival. When drought is combined with human impact, like mining aquifers without adequate conservation precautions, water quantity and quality problems are compounded.

#### **Importance of Water Conservation**

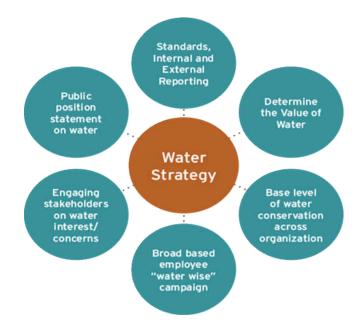
Water conservation is a pretty simple concept. It means that you and your community do what you can to prevent water waste. Turning the water off when you brush your teeth, taking shorter showers, installing low flow toilets and shower heads, putting aerators on faucets, and reducing the amount of water you put on your lawn are all water conservation techniques. There are a variety of factors that affect how much water is used in your home and community such as climate, affluence and house hold size. Water conservation is an important method to manage water supplies sustainably. It protects the environment and allows water utilities to better meet current and future water needs.



Stakeholders are informed of scientific and come up with ways to protect and acquire more water for the environment. Stakeholders are people who have an interest in water allocation and show live in the river basins. They make suggestions that include water conservation and efficient use incentives, use of treated wastewater, and the purchase or donation of existing water rights. How much water we will have for the future will depend on what we do to conserve water today. We can't make it rain more, but we can more efficiently manage the water we get from the hydrologic cycle and water in our aquifers. Our primary users of water are our farmers and ranchers who grow our food, our workers in business and industry who make and sell our products, and all of us who live in cities and towns and use water for drinking, washing, and watering our lawns, gardens, and parks. Improved irrigation methods and agricultural practices have already reduced the water needed by many of our farmers and ranchers.

#### **Managing Water resources**

We need to plan so that there are sustainable, reliable water supplies for people and businesses, whilst also protecting the environment. This will become increasingly important in the face of climate change, population growth and an uncertain future. With a potential 20 million extra people living and working in England and Wales by the 2050s, the additional demand they will impose on the water environment will need to be managed carefully. We believe that a balance of managing demand and developing resources is both necessary and the most flexible approach to maintain future water supplies. As pressure on water increases, we believe that more strategic approach to planning for public water supplies is required. There is evidence that water resources are not being shared effectively, particularly in the South East of England. If there is no action, we will need to strengthen the way we use our powers to that water resources are shared more effectively. This will help to make better use of existing and planned resources to meet demand.



Our Strategy sets out actions that will

#### Conclusion

Clean water is necessary for all living things. All animals and plants are made mostly of water and require a constant supply of clean water to remain healthy. Water falls to Earth as rain to water plants, provide drinking water for animals, and maintain rivers, lakes and oceans. It evaporates and forms the clouds that then release rain to repeat the water cycle. A healthy environment provides nutrients that flow up the food chain, from plants to animals, to provide energy.

The nutrients are then recycled to repeat the process. By preserving nature, the planet and all its inhabitants are guaranteed a constant supply of clean water and fresh air, according to the Nature Conservancy. Trees produce the oxygen that humans and other animals need to breathe and absorb the carbon dioxide that they exhale. Trees absorb airborne pollutants such as carbon monoxide, sulfur dioxide and nitrogen dioxide. They also remove toxins from the soil and help to reduce noise pollution. Overbuilt environments disrupt and overwhelm nature's processes by removing trees and polluting the water and air, which leads to decreased biodiversity and overall natural health of People and Environment. Preserving nature is important because the biodiversity of the planet, including the human race, is dependent upon properly functioning natural processes. Without a healthy natural environment, most life would cease to exist. Just one percent of the water on Earth is available fresh water that we can use to meet our needs - drinking, cooking, irrigating crops, manufacturing goods and much more. We all have a stake in protecting natural areas that clean it and deliver it to us via rivers and lakes. When forests, grasslands and other habitats are cleared away or degraded, our waterways lose natural filtration and regulation systems. Downstream that can mean water shortages, floods and higher costs of treating dirty water. Protecting —green infrastructure is a more cost-effective way to protect water than losing services that nature provides and facing the need for engineered solutions, such as more water treatment plants and dams. Additionally, healthy natural areas provide more benefits to more sectors of society, especially the rural poor who are less likely to benefit from water infrastructure than those in urban areas. These financial considerations suggest untapped opportunities to further engage the private sector in watershed protection as well as government agencies responsible for supplying water to citizens.

## REFERENCES

- Environmental Experiments About Water (Science Experiments for Young People)by Thomas R. Reblot and Robert C. Mebane May 1, 1993.
- Estimating the Water Requirements for Plants of Floodplain Wetlands: A Guide Jane Roberts, Bill ... Australia 109 A2–2 Range of reference values, relative to well-watered grass 110Preface 7 ...Date: 7/29/2002.
- FLN Networker No. 109: June 13, 2012 The FLN Networker is a publication of the Fire Learning Network—a partnership of the USDA Forest Service, Department of the Interior (BIA, BLM ...Date: 6/13/2012.
- International Encyclopedia of Geography, 15 Volume Set: People, the Earth, Environment and Technology by Douglas Richardson and Noel Castries Mar 20 2017.
- The Year-End Books Issue 2012 Jeff Opperman: An Environmental Scientist's First Read of Inequality (Karelia) The Year-End Books Issue 2012 Table of Contents.
- Water in the Environment by Rachel Bowles and Margaret Smeaton Mar 1992.

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