

Joe Sernett

Iowa Water Center Essay Contest

Research Track

6 April 2024

The Indispensable Fount of Life

Water is crucial to the continuity of life, and it can be greatly overlooked and often wasted or polluted. Over seventy-one percent of the earth is covered by this life source which supports and sustains all plants, animals, and people (Water Science School). Water is not given as much value as it deserves credit for. More efforts should be made to reuse water to get the most out of it, and polluted water sources should be cleaned up, so that aquatic life is not hindered. Water should be conserved, recycled when possible, and kept clean in reservoirs.

Water is wasted too often, and should have a higher standard of care. This may be due to the many drink options available today, or the number of times someone uses water without even thinking about it. Water is given less value than most other drinks and it is used daily without scarcity, so the thought of savoring and efficiently using water goes right down the drain. A shocking total of about one trillion gallons of water is wasted every year in America alone (“How Much Water Do We Waste in a Year?”). Some



Fig. 1. Sernett, Joe. “Old Hydrant”.

options to support water conservation are: make sure pipe connections and water fixtures are tight, purchase more water efficient products, and regularly check to make sure there are no leaks (“How Much Water Do We Waste in a Year?”). These tactics will both help to save more water and save money for the consumer.

As water is wasted, efforts are made to recycle it and reuse it, so the effects of wasted water are less prominent. Around 365 billion gallons of water are recycled each year in the U.S. (“Wastewater Stats in the U.S.”). These efforts to recycle water are surely helpful, but they are just a drop in the bucket compared to the amount of water wasted. These numbers should encourage others to attempt to save and conserve more water, in order to keep the water supply up. Much work is being done to recycle, reuse, and clean up water sources.

Lakes, ponds, rivers, streams, and other freshwater reservoirs are other important water sources that need to be kept clean. They house many different species of plants and animals which serve as food for other animals, and some serve as food for people. Unfortunately these reservoirs are often dirtied over time, both by pollution and natural deterioration. “Nutrients like phosphorus and nitrogen often build up in lakes due to stormwater runoff, fertilizer, and urban development” (“How to Achieve A Beautiful, Clean Lake”). This, along with other pollutants, require these water sources to be purified, and sometimes even drained. A process called nutrient remediation works to remove excess nutrients to improve water quality (“How to Achieve A Beautiful, Clean Lake”). This can be given likeness to how a fish tank gradually gets dirtier until it needs to be cleaned and a new filter is needed for proper oxidation, but of course nutrient remediation is on a much larger, more complicated, scale. As many states do, Iowa has both a lake and river restoration program that are used to promote wildlife health and improve recreational opportunities (“Lake Restoration”). In the same sense, when a fish tank gets excessively murky, the fish in the tank are no longer living in healthy conditions and people can no longer watch them which takes away the enjoyment. Fish, aquatic plants, and other living organisms associated with these freshwater reservoirs are much more likely to thrive in a clean, purified, and balanced lake than a murky, polluted, low quality lake. Processes like nutrient

remediation, and lake draining are so important to freshwater ecosystems because they keep the habitat pristine and healthy for the organisms living in them.

Saving water, recycling water, and cleaning aquatic ecosystems are three exceptionally important aspects of water conservation. An effort is being made in each of these areas, but even people not directly involved can do their part to savor water and support the people that are involved in this project. The vital role that water plays in every person's life should drive them to make good choices with it, and keep lakes and other freshwater sources clean and uncontaminated. If people unite in order to improve the quality and quantity of water, both the checkbook, and the aquatic wildlife will be grateful.

Works Cited

- “How Much Water Do We Waste in a Year?”. *Ace Plumbing Heating & Air Conditioning*, 2023,
[https://www.aceplumbing.com/plumbing-faq/how-much-water-do-we-waste-in-a-year/#:~:text=The%20Environmental%20Protection%20Agency%20\(EPA,you%20tally%20the%20national%20average.](https://www.aceplumbing.com/plumbing-faq/how-much-water-do-we-waste-in-a-year/#:~:text=The%20Environmental%20Protection%20Agency%20(EPA,you%20tally%20the%20national%20average.) Accessed 14 March 2024.
- “How to Achieve a Beautiful, Clean Lake with Natural Management Solutions”. *SOLitude Lake Management*, 2024,
<https://www.solitudelakemanagement.com/how-to-achieve-a-beautiful-clean-lake-with-natural-management-solutions/#:~:text=Nutrient%20remediation%20is%20the%20process,%2C%20fertilizer%2C%20and%20urban%20development.> Accessed 14 March 2024.
- “Lake Restoration”. *Iowa Department of Natural Resources*, 2024,
<https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Lake-Restoration.>
 Accessed 3 April 2024.
- Sernett, Joe. “Old Hydrant”. 2024. JPEG.
- “Wastewater Stats in the U.S.”. *Zonda Media, Concrete Construction*, 10 September 2013,
https://www.concreteconstruction.net/projects/infrastructure/wastewater-stats-in-the-u-s_o. Accessed 14 March 2024.
- Water Science School. “How Much Water is There on Earth”. *US Geological Survey*, 13 November 2019,
<https://www.usgs.gov/special-topics/water-science-school/science/how-much-water-there-earth#:~:text=About%2071%20percent%20of%20the,in%20you%20and%20your%20dog..> Accessed 3 April 2024.