Would you drink water from a mud puddle or a retention pond? Not even on a dare, right? But why not? We are surrounded by water, but only one percent of it is usable by humans for drinking, bathing, cooking and other household uses. Water that is untreated for human use contains viruses and other pathogens that can cause illness. Retention pond water may contain fertilizers and other chemicals used to maintain grass and landscape plants. Those chemicals, along with oil and dirt from roads, wash into ponds and other waterways when it rains. It's easy to take for granted the clean water that flows out of our faucets every time we want a drink. One billion people in the world don't have access to safe drinking water. With population growth, we are using more water, and some countries are grappling with providing a clean and safe water supply. Water shortages and disputes over water are occurring even in the United States.

**DO YOU KNOW where our water goes?**

Match these four sectors in the United States with the amount of fresh water they use each day:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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<tbody>
<tr>
<td>142 billion gallons of water</td>
<td>136 billion gallons each day</td>
<td>43 billion gallons each day</td>
<td>20 billion gallons each day</td>
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</tbody>
</table>

1. Households, Businesses and Cities, including firefighting, public pools and street cleaning.
2. Power Plants to cool energy created from fossil fuels, nuclear and geothermal sources.
3. Agriculture, for crop irrigation and dairies, fish farms and livestock.
4. Manufacturing and Mining, for cooling in industrial processes.

**USE THE NEWS:**

Ecology is the relationship between living and nonliving things in their total environment. If you were to observe a person who is working in the garden watering plants, tilling the soil and stopping for a break to take a drink of water, you would be witness to an ecological relationship. News stories often report on the abuse of ecology. Monitor the articles in the newspaper for a week to find articles focused on positive and negative ecological relationships. Using these articles as a basis for research, write a well-developed essay about your observations of useful or abusive ecological relationships locally as well as internationally. Include observations you have made regarding ecological relationships you have seen at home and at school.

**FUN FACT:**

One billion years ago, dinosaurs drank the same water that you drink today. The water cycle is never ending, so water keeps moving and changing from a solid to a liquid to a gas over and over again, and has since the beginning of time.

Source: Fairshare Water AWWA

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