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Syllabus

This is an introductory course intended to acquaint students with many of the essential roles of water in the environment. Topics range from fundamental properties of water to the importance of water and water quality to society. Course topics also will include water in oceans, lakes, rivers, soils, and the atmosphere as well as the importance of water to various environmental processes and life.

Abundance/Distribution
Quality
Relevance

Homework I

Water in Music

Three songs with water as a theme or metaphor

Title, Composer, and one verse

Due: Wednesday, September 2nd

Water Use



How much water do you use?



<http://ga.water.usgs.gov/edu/sacsq.html>

Click on link and go to: [How much water do you use at home on a typical day?](#)

Water Usage

Use	Gallons per Capita	Percentage of Total Daily Use
Showers	12.6	17.3%
Clothes Washers	15.1	20.9%
Dishwashers	1.0	1.3%
Toilets	20.1	27.7%
Baths	1.2	2.1%
Leaks	10.0	13.8%
Faucets	11.1	15.3%
Other Domestic Uses	1.5	2.1%
Total	74 gallons	

How do you conserve water?

Does it make a difference?

Domestic water use: 10%
Industrial water use: 20%
Irrigation water use: 70%

1 pound of Rice 650 gallons 4800 pounds
1 pound of Wheat 130 gallons 1000 pounds
1 pound of Sugar 400 gallons 3000 pounds
1 pound of coffee 2650 gallons 10 tons

1 beer: 66 gallons

Secondary Water

Grain → Livestock



3000 gallons 11 tons
1000 gallons >3 tons
650 gallons 2.5 tons

Carnivores consume 100 times their weight in water each day
Vegetarians consume about 1/2 as much.

Yearly Totals

Drinking water: 250 - 300 gallons

Total water: 1500 - 3000 tons



Some Water Facts

Water Facts

Americans drink more than **1 billion glasses** of tap water per day.

In some cases, **50 to 70 percent** of home water is used outdoors for watering lawns and gardens.

Average **household** water use annually: 127,400 gallons

Average daily **household** water use : 350 gallons

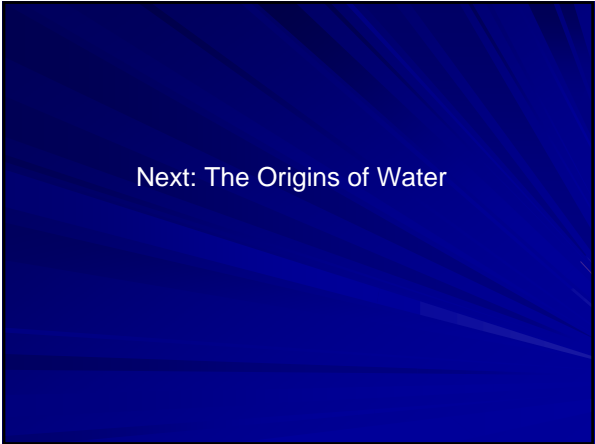
Holidays

Christmas It takes about 4,776 gallons of water to raise a Christmas tree. To raise the 35 million Christmas trees U.S. families enjoy each year, a total of **167 billion gallons** is required.

Mother's Day If mothers refresh their floral arrangements and flowering plants during the Mothers' Day week, they will use **almost 3,000,000 gallons of water**.

Thanksgiving After Thanksgiving dinner in 1999, 16.4 million Americans watched football. At halftime, American toilets flushed 16.4 million times and used **48.5 million gallons of water**.

In 2006 an estimated 80 million people watched the Superbowl with similar results, using 236 million gallons.



Next: The Origins of Water
