

Dear Participant,

Please complete this online survey on water consumption. The survey is anonymous, and no one will know what answers you give. This brief survey should take no more than 15 minutes to complete.

Thank you for your time and help with this effort.

If you have any questions, please do not hesitate to send me an email at: [survey.iub@gmail.com](mailto:survey.iub@gmail.com) .

Sincerely,

Dr. Shahzeen Attari

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### **Water Survey**

[Note: The following two questions are randomized]

What is the single most effective thing that you can personally do to conserve water in your life?  
[open ended]

[Error message: “Sorry, you cannot continue until you correct the following: Your response must be at least 5 characters.”]

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What is the single most effective thing that Americans can do to conserve water in their lives?  
[open ended]

[Error message: “Sorry, you cannot continue until you correct the following: Your response must be at least 5 characters.”]

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Think about typical circumstances of each water use behavior listed below.

How many ***gallons*** of water do you think each of the following behaviors require?  
Your best estimates are fine. Please enter whole numbers with no other text (not decimals or ranges).

[Error message: “Please enter whole numbers with no other text (not decimals or ranges).” Note: Numeric validation. Randomize order of behaviors.]

	Gallons
Running a standard bathroom faucet for 10 minutes at its maximum flow rate	
Running a high-efficiency bathroom faucet for 10 minutes at its maximum flow rate	
Flushing a standard-flow toilet one time	

Flushing a low-flow toilet one time	
Taking a standard-flow shower for 10 minutes at its maximum flow rate	
Taking a low-flow shower for 10 minutes at its maximum flow rate	
Filling one typical bathtub	
Using a high-efficiency, front-loading home washer for one load of laundry	
Using a standard, top-loading home washer for one load of laundry	
Washing one load of dishes with a standard home dishwasher	
Washing one load of dishes with a high-efficiency home dishwasher	
Washing a car at a drive-in, conveyor automatic car wash	
Filling one jacuzzi (6 person capacity)	
Filling one Olympic sized competition swimming pool	
Filling one typical backyard in-ground pool (5'x15'x30')	
A leaking faucet (1 drip per 1 second) for one day (24 hours)	
Watering a lawn with a garden hose at its maximum flow rate for 10 minutes	

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Embodied water is the amount of water needed to produce a particular good. This water includes all sources (example: rainfall, surface water) and all stages of production (example: feed, irrigation).

In your opinion, which of the following activities embodies the most amount of water over the course of production? *Rank these products* in order from 1 (most embodied water) to 4 (least embodied water). Your best estimates are fine.

Recall that 1=Most embodied water and 4=Least embodied water

	1	2	3	4
1 pound of rice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 pound of coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 pound of sugar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 pound of cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[Error message: “Please assign a value from 1 to 4 for each item. Values may not be repeated.”  
Note: “Must Rank all” validation. Randomize order of behaviors.]

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Think about your household.

How many gallons of water does *your household* use in a typical day?  
Your best estimate is fine. Please enter whole numbers with no other text (not decimals or ranges).

[open ended; text box; numeric validation]

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Think about an average household in the United States.

How many gallons of water does *the average American household* use in a typical day?  
Your best estimate is fine. Please enter whole numbers with no other text (not decimals or ranges).

[open ended; text box; numeric validation]

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This page is a test to confirm that you are reading the instructions carefully. For the question which follows this paragraph, please give the following answer: reader. Please just ignore the text of the question, and type the word reader as your answer for the item. Thank you for reading carefully.

On average, how many times a day do you think about things you need to do? Please give your best estimate:

[open ended; text box]

### **Attitudes**

For each statement below, please indicate how strongly you agree or disagree with the statement:

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
We are approaching the limit of the number of people the earth can support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans have the right to modify the natural environment to suit their needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When humans interfere with nature, it often produces disastrous consequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human ingenuity will ensure that we do NOT make the earth unlivable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans are severely abusing the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The earth has plenty of natural resources if we just learn how to develop them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plants and animals have as much right as humans to exist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The balance of nature is strong enough to cope with the impacts of modern industrial nations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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For each statement below, please indicate how strongly you agree or disagree with the statement:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Despite our special abilities, humans are still subject to the laws of nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human destruction of the natural environment has been greatly exaggerated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The earth has only limited room and resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans were meant to rule over the rest of nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The balance of nature is very delicate and easily upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Humans will eventually learn enough about how nature works to be able to control it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If things continue on their present course, we will soon experience a major ecological disaster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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### **Math Questions**

To answer the following questions, please enter whole numbers or decimals with no other text (not ranges or percent signs).

Imagine that we flip a fair coin 1,000 times. What is your best guess about how many times the coin would come up heads in 1,000 flips?

\_\_\_\_\_

In the BIG BUCKS LOTTERY, the chance of winning a \$10 prize is 1%. What is your best guess about how many people would win a \$10 prize if 1000 people each buy a single ticket from BIG BUCKS?

\_\_\_\_\_

In ACME PUBLISHING SWEEPSTAKES, the chance of winning a car is 1 in 1,000. What percent of tickets to ACME PUBLISHING SWEEPSTAKES win a car?

\_\_\_\_\_

[open ended; text box; numeric validation]

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Which of the following items do you pay attention to on your water bill? *(please check all that apply)*

- Cost of bill
- Amount of water used
- Tips to decrease water use

- I do not pay attention to any information
- I do not receive a water bill
- Other \_\_\_\_\_

[multiple answers allowed]

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Which of the following do you have in your home? Please mark all that apply.

	Standard Appliance	Low-Flow or High-Efficiency Appliance	Do not own	Do not know
Toilet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bathroom faucet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dishwasher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clothes washing machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**Drought Question**

The U.S. National Drought Monitor classifies areas experiencing drought into one of five categories:

Category	Description
<b>Abnormally Dry</b>	<ul style="list-style-type: none"> <li>• Going into drought: short-term dryness slowing planting, growth of crops or pastures.</li> <li>• Coming out of drought: some lingering water deficits; pastures or crops not fully recovered</li> </ul>
<b>Moderate Drought</b>	<ul style="list-style-type: none"> <li>• Some damage to crops, pastures</li> <li>• Streams, reservoirs, or wells low, some water shortages developing or imminent.</li> <li>• Voluntary water-use restrictions requested</li> </ul>
<b>Severe Drought</b>	<ul style="list-style-type: none"> <li>• Crop or pasture losses likely</li> <li>• Water shortages common</li> <li>• Water restrictions imposed</li> </ul>
<b>Extreme Drought</b>	<ul style="list-style-type: none"> <li>• Major crop/pasture losses</li> <li>• Widespread water shortages or restrictions</li> </ul>
<b>Exceptional Drought</b>	<ul style="list-style-type: none"> <li>• Exceptional and widespread crop/pasture losses</li> <li>• Shortages of water in reservoirs, streams, and wells creating water</li> </ul>

	emergencies
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**Based on the information above, which of the following best describes conditions in your area in the past 12 months?**

- Not Applicable: I have not lived in my area for 12 months
- No abnormal dryness or drought
- Abnormally Dry
- Moderate Drought
- Severe Drought
- Extreme Drought
- Exceptional Drought

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**Based on the information above, which of the following best describes conditions in your area in the past month?**

- Not Applicable: I have not lived in my area for one month
- No abnormal dryness or drought
- Abnormally Dry
- Moderate Drought
- Severe Drought
- Extreme Drought
- Exceptional Drought

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### **Drought Question**

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**Based on the information above, which of the following best describes conditions in your area in the past week?**

- Not Applicable: I have not lived in my area for one week
- No abnormal dryness or drought
- Abnormally Dry
- Moderate Drought
- Severe Drought
- Extreme Drought
- Exceptional Drought

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**Which of the following best describes future drought conditions in your area in the next year?**

- Drought will increase
- Drought will stay the same
- Drought will decrease

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### **Demographics**

How many people are there in your household (including yourself)?

\_\_\_\_\_

[numeric validation]

How would you describe your political beliefs?

Very Liberal  Liberal  Slightly Liberal  Moderate  Slightly Conservative  Conservative  Very Conservative

*(Answer text is horizontal on the same line)*

What is your gender?

Male

Female

Other, please specify: \_\_\_\_\_

During 2012, what was your yearly household income before tax? Your best estimate is fine.

Did not have an income

< \$20,000

\$20,000 - \$49,999

\$50,000 - \$79,999

\$80,000 - \$109,999

\$110,000 - \$139,999

\$140,000 - \$169,999

> \$170,000

What is the highest level of education you have attained?

Some schooling, but no diploma or degree

High school diploma or GED

Some college

College degree

Some graduate school

Graduate degree

What is your age? \_\_\_\_\_

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Have you lived at your current address for one year or more?

Yes

No

Please select the state and county in which you currently reside.

State: \_\_\_\_\_ [drop down menu, including option 'not applicable' or 'Not from United States']

County: \_\_\_\_\_ [drop down menu, including option 'not applicable' or 'don't know']

What is your ZIP code?

\_\_\_\_\_ [Zip code validation]

Do you have any additional thoughts about water use or water conservation, or any comments about the survey that you would like to share with us?

[open ended; not required]

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