IRB NUMBER: 11841 IRB APPROVAL DATE: 12/22/2020

You are invited to participate in research regarding socially sustainable solutions for water, carbon and infrastructure resilience in Oklahoma. This study will ask you about your perceptions and experiences with weather/climate in Oklahoma, and to characterize and evaluate problem areas and potential solutions to weather/climate challenges. This is an important long-term study and we are looking for research partners throughout the state who are willing to share their experiences and views. We are contacting you because you indicated an interest in participating. You must be at least 18 years of age and be willing to provide your contact information to participate.

If you agree to participate, you will respond to an Internet survey that should take about 30 minutes to complete.

There are no risks or benefits.

If you participate, you will receive a $10 gift card, either mailed or emailed to you after you complete the survey.

Your participation is voluntary, and your responses will be de-identified before they are shared for research purposes or published. After removing all identifiers, we might share your data with other researchers or use it in future research without obtaining additional consent from you.

Even if you choose to participate now you may stop participating at any time and for any reason.

Data are collected via an online survey system that has its own privacy and security policies for keeping your information confidential.

If you have questions about this research, please contact:
Dr. Hank Jenkins-Smith
Institute for Public Policy Research and Analysis
University of Oklahoma
(405) 325-1720 or ippra@ou.edu

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board at 405-325-8110 or irb@ou.edu with questions, concerns or complaints about your rights as a research participant, or if you don't want to talk to the researcher.

Please print this document for your records. By providing information to the researcher(s), I am agreeing to participate in this research.

consent_18: Are you 18 years of age or older?
0 - No (If no – cannot participate)
1 - Yes

contact_consent: This project focuses on problems that are different across Oklahoma and it is important that we know where you live so that we can understand the problems in your area. Are you willing to provide us with your home address so that we can identify your area?
0 - No (If no – cannot participate)
1 - Yes

consent: Do you agree to participate in this study? [two buttons]
0 - No, I do not want to participate in this study
1 - Yes, I agree to participate in this study [IF **consent** = 0, skip to new page that says: "You have indicated that you do not want to participate in this study. If you have reached this page by accident and do wish to participate in this study, please contact our technical support staff at: (405) 325- 1720 or ippra@ou.edu."]

Thank you for participating in this study. The survey you are about to complete is different than most. We are not simply asking for opinions and preferences. We are asking for advice and guidance on how to tackle some of the biggest problems facing Oklahoma. While we will keep your identity strictly confidential, we are going to share the answers you provide with a team of scientists and policymakers across the state who are studying these problems and trying to develop creative solutions. Your responses will provide extremely valuable input into this process.

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First, we would like to get some background information about you.

age: How old are you? [verbatim; numeric]

gend: Are you male, female, or other?
0 - Female
1 - Male
2 - Other (please specify)
gend_specify: [verbatim]

hispanic: Do you consider yourself to be Hispanic, Latino, or Spanish or to have Hispanic, Latino, or Spanish origins?
0 - No
1 - Yes

race: Which of the following best describes your race?
1 - White
2 - Black or African American
3 - American Indian or Alaska Native
4 - Asian
5 - Native Hawaiian or Pacific Islander
6 - Two or more races
7 - Some other race (please specify)
race_specify: [verbatim]

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current_zip: What is the zip code at your current residence? [verbatim; numeric]

current_lngth: How many years have you lived at your current residence? [verbatim; numeric] years

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ok_lngth: How many years have you lived in Oklahoma? [verbatim; numeric] years

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home_lot: Which of the following best describes the property where you live?
1 - Urban
2 - Suburban
3 - Rural

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Water, land, and infrastructure affect prosperity and quality of life in many parts of Oklahoma. Scientists and decisionmakers working on this project are evaluating each of these resources and we want to know if you have any concerns about them.

We are currently thinking about three aspects when evaluating *water resources* in Oklahoma:

- Water availability: the supplies of water for various purposes, such as drinking, farming/ranching, recreation, or industrial processes
- Water quality: the suitability (cleanliness) of water for various purposes, such as drinking, farming/ranching, or recreation
- Water cost: the cost of water for various purposes, such as such as drinking, farming/ranching, or industrial processes

concern_water_availability: Do you have any concerns about *water availability* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

concern_water_quality: Do you have any concerns about *water quality* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

concern_water_cost: Do you have any concerns about the *cost of water* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

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We are currently thinking about two aspects when evaluating *land resources* in Oklahoma:

- Wildlife habitat: ecosystems that support animals and birds that people enjoy watching and hunting, such as butterflies, deer, quail, and turkey
- Soil quality: the suitability of soil for sustaining plants, animals, and livelihoods, such as productive farming and ranching

concern_land_wildlife: Do you have any concerns about *wildlife habitat* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

concern_land_soil: Do you have any concerns about *soil quality* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

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We are currently thinking about two aspects when evaluating *infrastructure* in Oklahoma:

- Electricity infrastructure: the generation facilities, substations, transmission lines, and distribution lines that deliver electricity to businesses and homes

- Transportation infrastructure: the roads, bridges, waterways, railways, and airways that facilitate transportation from place to place

concern_infra_electricity: Do you have any concerns about *electricity infrastructure* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

concern_infra_transportation: Do you have any concerns about *transportation infrastructure* in your region of Oklahoma?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

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If you were advising the scientists and policymakers who are working on this project, which of the following would you tell them require the most attention? Please rank the items from one (most attention) to six (least attention). [table; randomize; rank]

rank_water_availability: Water availability
rank_water_quality: Water quality
rank_water_cost: Water cost
rank_land_wildlife: Wildlife habitat
rank_land_soil: Soil quality
rank_infra_electricity: Electricity infrastructure
rank_infra_transportation: Transportation infrastructure

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Researchers and policymakers are also studying the impact of weather and climate hazards on *water*, *land*, and *infrastructure* resources in Oklahoma. The team is focusing on forecasts/predictions at three different time scales:
- Short-range weather forecasts that focus on the next day to two weeks
- Medium-range (seasonal) weather forecasts that focus on the next two weeks to 90 days
- Long-range climate predictions that focus on the next season to decade or more

Weather hazards that occur during the short-range weather time frame include tornadoes, hail, high winds, lightning, flooding/flash flooding and snow/ice storms.

How do you rate the risk of these weather hazards to people in Oklahoma? [table; randomize]

risk_tornado: Tornadoes
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_hail: Hail
1 - No risk
2 - Low risk
3 - Moderate risk

4 - High risk
5 - Extreme risk

risk_wind: High winds
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_lightning: Lightning
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_flood: Flooding/flash flooding
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_snow_ice: Snow/ice storms
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

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Did you experience any of these weather hazards in the last 6 months? [table; randomize]

experience_tornado: Tornadoes
0 - No
1 - Yes

experience_hail: Hail
0 - No
1 - Yes

experience_wind: High winds
0 - No
1 - Yes

experience_lightning: Lightning
0 - No
1 - Yes

experience_flood: Flooding/flash flooding
0 - No
1 - Yes

experience_snow_ice: Snow/ice storms

0 - No
1 - Yes

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When you think about the next 25 years in Oklahoma, do you think the risk (frequency and severity) of these weather hazards will increase, decrease, or stay about the same? [table; randomize]

future_tornado: Tornadoes
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_hail: Hail
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_wind: High winds
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_lightning: Lightning
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_flood: Flooding/flash flooding
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_snow_ice: Snow/ice storms
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

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Hazards that occur during the medium-range (seasonal) weather time frame include:

- Flash drought: periods of intense drought that arise quickly and last for a few weeks
- Pluvials: periods of excessive precipitation/rain that last for a few weeks
- Heat waves: periods of excessively hot temperatures that last for a few weeks

- Cold spells: periods of excessively cold temperatures that last for a few weeks

How do you rate the risk of these seasonal hazards to people in Oklahoma? [table; randomize]

risk_flash_drought: Flash drought
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_pluvial: Pluvials (periods of excessive precipitation/rain)
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_heat_wave: Heat waves
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_cold_spell: Cold spells
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

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Did you experience any of these seasonal hazards in the last 6 months? [table; randomize]

experience_flash_drought: Flash drought
0 - No
1 - Yes

experience_pluvial: Pluvials (periods of excessive precipitation/rain)
0 - No
1 - Yes

experience_heat_wave: Heat waves
0 - No
1 - Yes

experience_cold_spell: Cold spells
0 - No
1 - Yes

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When you think about the next 25 years in Oklahoma, do you think the risk (frequency and severity) of these seasonal hazards will increase, decrease, or stay about the same? [table; randomize]

future_flash_drought: Flash drought
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_pluvial: Pluvials (periods of excessive precipitation/rain)
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_heat_wave: Heat waves
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_cold_spell: Cold spells
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

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There are multiple hazards that occur during the long-range climate time frame, but one of the most common in Oklahoma is long-term drought, which can last for several months.

risk_long_drought: How do you rate the risk of long-term drought to people in Oklahoma?
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

experience_long_drought: Did you experience long-term drought in the last 6 months?
0 - No
1 - Yes

future_long_drought: When you think about the next 25 years in Oklahoma, do you think the risk (frequency and severity) of long-term drought will increase, decrease, or stay about the same?
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

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In addition to weather and climate hazards, Oklahoma also experiences other natural hazards, including wildfires and earthquakes.

How do you rate the risk of these hazards to people in Oklahoma? [table; randomize]

risk_wildfire: Wildfires
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

risk_earthquake: Earthquakes
1 - No risk
2 - Low risk
3 - Moderate risk
4 - High risk
5 - Extreme risk

Did you experience any of these hazards in the last 6 months? [table; randomize]

experience_wildfire: Wildfires
0 - No
1 - Yes

experience_earthquake: Earthquakes
0 - No
1 - Yes

When you think about the next 25 years in Oklahoma, do you think the risk (frequency and severity) of these hazards will increase, decrease, or stay about the same? [table; randomize]

future_wildfire: Wildfires
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

future_earthquake: Earthquakes
1 - Significantly decrease
2 - Decrease
3 - Stay about the same
4 - Increase
5 - Significantly increase

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When you think about the wide variety of short-, medium-, and long-range hazards in Oklahoma (such as tornadoes, heat waves, drought, and wildfires), do you think… [table; randomize]

gw_ej_exp: All Oklahomans, regardless of race, education, and income, experience the effects of these hazards in the same way?
1 - Definitely no
2 - Probably no
3 - Unsure

4 - Probably yes
5 - Definitely yes

gw_ej_prot: All Oklahomans, regardless of race, education, and income, have the same opportunity to protect themselves from these hazards?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

gw_ej_pol: All Oklahomans, regardless of race, education, and income, have the same opportunity to influence policies that limit the effects of these hazards?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

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As you may know, the issue of global climate change has been the subject of public discussion over the last few years.

glbcc: In your view, are greenhouse gases, such as those resulting from the combustion of coal, oil, natural gas, and other materials, causing average global temperatures to rise?
0 - No
1 - Yes

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glbcc_cert: On a scale from zero to ten, where zero means *not at all certain* and ten means *completely certain*, how certain are you that greenhouse gases are/are not ["are" if **glbcc** = 1; "are not" if **glbcc** = 0] causing average global temperatures to rise?
0 - Not at all certain
1
2
3
4
5
6
7
8
9
10 - Completely certain

glbcc_risk: On a scale from zero to ten, where zero means *no risk* and ten means *extreme risk*, how much risk do you think global warming poses for people and the environment?
0 - No risk
1
2
3
4
5
6
7

8
9
10 - Extreme risk

glbwrm_ok: In your view, is global warming causing the weather patterns in Oklahoma to change?
0 - No
1 - Yes
2 - Don't know

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Listed below are statements about the relationship between humans and the environment. For each one, please indicate whether you *strongly agree*, *mildly agree*, are *unsure*, *mildly disagree* or *strongly disagree* with it. [table; randomize]

nep_1: We are approaching the limit of the number of people the Earth can support.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_2: Humans have the right to modify the natural environment to suit their needs.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_3: When humans interfere with nature it often produces disastrous consequences.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_4: Human ingenuity will ensure that we do not make the Earth unlivable.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_5: Humans are seriously abusing the environment.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_6: The Earth has plenty of natural resources if we just learn how to develop them.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_7: Plants and animals have as much right as humans to exist.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_8: The balance of nature is strong enough to cope with the impacts of modern industrial nations.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_9: Despite our special abilities, humans are still subject to the laws of nature.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_10: The so-called “ecological crisis” facing humankind has been greatly exaggerated.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_11: The Earth is like a spaceship with very limited room and resources.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_12: Humans were meant to rule over the rest of nature.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_13: The balance of nature is very delicate and easily upset.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_14: Humans will eventually learn enough about how nature works to be able to control it.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

nep_15: If things continue on their present course, we will soon experience a major ecological catastrophe.
1 - Strongly disagree
2 - Mildly disagree
3 - Unsure
4 - Mildly agree
5 - Strongly agree

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Solving problems as a group or community can be contentious and technically complex, so getting information you can trust is important. How much do you trust information from the following groups and organizations? [table; randomize]

trust_policy: State and local policymakers and elected officials
1 - No trust
2 - Low trust
3 - Moderate trust
4 - High trust
5 - Complete trust

trust_agencies: State and local agencies that regulate water, land, and infrastructure resources
1 - No trust
2 - Low trust
3 - Moderate trust
4 - High trust
5 - Complete trust

trust_private: Private companies whose operations use water, land, and infrastructure resources
1 - No trust
2 - Low trust
3 - Moderate trust
4 - High trust
5 - Complete trust

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party: Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?
1 - Democratic party
2 - Republican party (or GOP)
3 - Independent
4 - Other party (Please specify)
party_spec: [verbatim]

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[If **party** = 1 or 2]

iden: Would you call yourself a strong [Democrat if **party** = 1; Republican if **party** = 2] or a not very strong [Democrat if **party** = 1; Republican if **party** = 2]?
2 - Strong
1 - Not very strong

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[If **party** = 3 or 4]

lean: Do you think of yourself as closer to the Republican or Democratic Party?
1 - Democratic Party
2 - Republican Party
3 - Neither

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ideol: On a scale of political ideology, individuals can be arranged from strongly liberal to strongly conservative. Which of the following categories best describes your views?
1 - Strongly liberal
2 - Liberal
3 - Slightly liberal
4 - Middle of the road
5 - Slightly conservative
6 - Conservative
7 - Strongly conservative

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Next, we have some questions about the water you use at your residence.

wtr_inside: What is the primary source of the *tap water used inside your home* for things like drinking, cooking, bathing, and laundry?
1 - Private well
2 - City, town, or municipality
3 - Rural water coop
4 - Other (please specify)
5 - Don't know
wtr_inside_othr_spec: [verbatim]

----------End Web pg----------

[if **wtr_inside** != 1]

Cities, towns, and municipalities get their water from different (often multiple) sources, including local groundwater wells and/or surface water impoundments or reservoirs. Many also purchase water from distant groundwater wells and/or surface water impoundments or reservoirs.

know_source: Do you know where your water comes from?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

----------End Web pg----------

[if **wtr_inside** = 1]

In Oklahoma, most private wells get their water from aquifers.

know_aqui: Do you know which aquifer your water comes from?
1 - Definitely no
2 - Probably no
3 - Unsure

4 - Probably yes
5 - Definitely yes

----------End Web pg----------

Can you rate the quality of *tap water used inside your home* on each of these dimensions? [table; randomize]

rate_taste: Taste
1 - Poor
2 - Fair
3 - Good
4 - Excellent

rate_smell: Smell
1 - Poor
2 - Fair
3 - Good
4 - Excellent

rate_color: Color
1 - Poor
2 - Fair
3 - Good
4 - Excellent

rate_softness: Softness (opposite of hardness)
1 - Poor
2 - Fair
3 - Good
4 - Excellent

rate_safety: Safety
1 - Poor
2 - Fair
3 - Good
4 - Excellent

----------End Web pg----------

Some people use water treatment equipment or "point of use devices" to improve water quality at their home. Do you use any of the following? Please select all that apply.

whole_home_trt: Whole house water treatment system (such as a reverse osmosis, distillation, ultraviolet, or water softener system)
single_faucet_trt: Single faucet water treatment system(s) (such as an under-sink filter or filter in a refrigerator)
portable_trt: Portable water treatment system(s) (such as a Brita type pitcher)
no_trt: No, I do not use any water treatment equipment or devices
trt_oth: Something else (please specify)
trt_oth_spec: [verbatim]

----------End Web pg----------

As you may know, the US Environmental Protection Agency (EPA) and Oklahoma Department of Environmental Quality (DEQ) set rules and regulations to limit contaminants in drinking water that are known to cause health issues. Some example contaminants may include nitrates, arsenic, bacteria, aluminum, lead, and copper. They also

set water-testing schedules and methods to ensure that water systems follow these rules. Establishing and enforcing these rules and regulations requires *scientific expertise*, *technology*, and *public management*.

We rely on *scientists* to know the contaminants (and amounts) that may cause health issues.

wtr_trust_sci: How much trust do you have in the *scientists* who study water systems?
1 - No trust
2 - Low trust
3 - Moderate trust
4 - High trust
5 - Complete trust

We rely on *technology* (e.g., monitors, filters) to identify, limit, and/or remove potentially dangerous contaminants.

wtr_trust_tech: How much trust do you have in the *technology* we use in water systems?
1 - No trust
2 - Low trust
3 - Moderate trust
4 - High trust
5 - Complete trust

Finally, we rely on *public officials/employees* to routinely test for potentially dangerous contaminants and address/report possible issues.

wtr_trust_gov: How much trust do you have in the *public officials/employees* who manage water systems?
1 - No trust
2 - Low trust
3 - Moderate trust
4 - High trust
5 - Complete trust

----------End Web pg----------

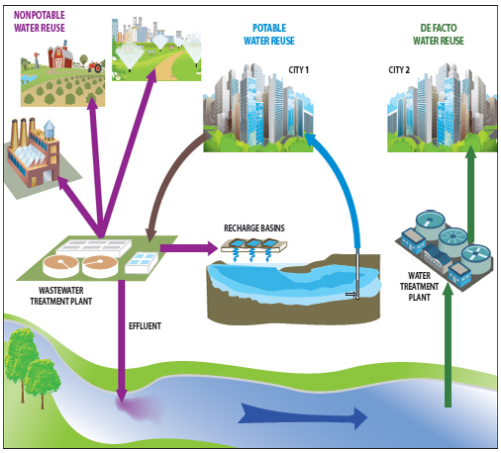
Now we have some questions about water *reuse* (also known as water *recycling* and water *reclamation*). But before we get into the details, we want to know the first word or phrase that comes to you when you to think about the term water *reuse*.

reuse_img_1: [verbatim]

reuse_img_valence: When you think about this word or phrase, do you have positive or negative feelings?
1 - Very negative
2 - Negative
3 - Neither positive nor negative
4 - Positive
5 - Very positive

----------End Web pg----------

There are many types of water reuse scenarios. In this section, we want you to think about *municipal wastewater reuse*, a process where cities and towns intentionally capture, treat, and reuse wastewater from household sinks, toilets, showers, and washing machines.



Currently, most cities and towns in Oklahoma capture and treat municipal wastewater (effluent) then discharge it into streams and lakes that carry the water to other cities and towns before it re-enters the water supply. Some people call this *de-facto reuse* (or *unplanned reuse*), when one city/town reuses a different city/town's treated wastewater (effluent). Municipal wastewater reuse systems change this process by intentionally directing treated wastewater (effluent) back into a city's water supply for potable (e.g., drinking) or nonpotable reuse (e.g., irrigation). Some people call this *planned wastewater reuse* (as opposed to *unplanned reuse*).

In addition to increasing water *availability* in a city/town, municipal wastewater reuse often improves water *quality* because it adds new treatment steps to the water/wastewater treatment process. Instead of directly discharging treated wastewater (effluent) into streams and lakes for unplanned reuse, planned reuse systems re-treat effluent (e.g., remove additional contaminants) before it re-enters the city/town's water supply.

Many cities/towns in the US are currently operating municipal wastewater reuse systems. Several Oklahoma cities/towns have explored the possibility of wastewater reuse, but none of them have built full-scale systems.

mwr_sense: Does this short explanation give you a basic idea of how municipal wastewater reuse works?
0 - No
1 - Yes
2 - Not sure

mwr_link: If not, you can click here for more information on municipal wastewater reuse. [track clicks]

----------End Web pg----------

State officials in Oklahoma are considering a program that would provide financial assistance (e.g., infrastructure grants and low interest loans) to cities, towns, and municipalities that implement municipal wastewater reuse projects. The program is expensive, but estimates suggest that it will **increase water *availability* by** [**rand_supply_increase**: 10%, 40%, 70%] in Oklahoma. It will also increase water *quality* throughout the state.

mwr_vote: Imagine that government officials were asking you to vote on the program. If it would not cost you anything, would you vote for a program that provides financial assistance to cities, towns, and municipalities to build municipal wastewater reuse systems?
1 - Definitely vote *against* the program
2 - Probably vote *against* the program
3 - Not sure
4 - Probably vote *for* the program
5 - Definitely vote *for* the program

----------End Web pg----------

[ask if **mwr_vote** = 4 or 5]

mwr_wtp: Would you vote *for* the wastewater reuse program if it were to increase your water bill by [randomize **bid**: $1:30] each month for the next 120 months (10 years)?
0 – No (vote *against* the program)
1 – Yes (vote *for* the program)
2 - Not sure

----------End Web pg ----------

[ask if **mwr_wtp** = 1]

mwr_wtp_wtp_con_yes: On a scale from zero to ten, where zero means not at all certain and ten means completely certain, how certain are you that you would vote *for* the program if it would cost your household [bid] each month for the next 120 months?
0 - Not at all certain
1
2
3
4
5
6
7
8
9
10 - Completely certain

----------End Web pg ----------

[ask if **mwr_wtp** = 0]

mwr_wtp_wtp_con_no: On a scale from zero to ten, where zero means not at all certain and ten means completely certain, how certain are you that you would vote *against* the program if it would cost your household [bid] each month for the next 120 months?
0 - Not at all certain
1
2
3
4
5
6
7
8
9
10 - Completely certain

----------End Web pg ----------

[ask if **mwr_wtp** = 1]

Can you explain why you would vote *for* the program? Please select all that apply.
mwr_wtp_yes_avail: To increase water *availability* in Oklahoma
mwr_wtp_yes_qual: To increase water *quality* in Oklahoma
mwr_wtp_yes_othr: Something else (please specify)
mwr_wtp_yes_othr_spec: [verbatim]

----------End Web pg ----------

[ask if **mwr_vote** = 1 or 2 or **mwr_wtp** = 0]

mwr_comm_agnst: Can you explain why you would vote *against* the program? [verbatim]

----------End Web pg----------

[ask if **mwr_vote** = 3 or **mwr_wtp** = 2]

mwr_comm_unsur: Can you explain why you are *not sure* if would vote for the program? [verbatim]

----------End Web pg----------

mwr_your_city: If Oklahoma were to implement a municipal waste reuse program, would you want your city/town to apply for resources to build a wastewater reuse system?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

----------End Web pg----------

This set of questions is nearly complete. We have just one more thing to ask you about.

While the US EPA and Oklahoma DEQ regulate contaminants that are known to cause health problems, they do *not* regulate a variety of chemicals and microbes that *may cause health issues or have negative impacts on the environment*. For example, some oral drugs (such as antibiotics) pass through the human body and end up in the water supply. Some personal care products (such as soaps, cosmetics, and fragrances) also make their way into the water supply. These are known as *contaminants of emerging concern* because they *may affect human health or the environment*, but the possible effects are not yet fully known.

cec_hear: Have you ever heard of these contaminants?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

cec_concerns: Do you have any concerns about these contaminants?
1 - Definitely no
2 - Probably no
3 - Unsure
4 - Probably yes
5 - Definitely yes

cec_concerns_exp: If so, can you briefly explain your concerns? [verbatim]

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education: What is the highest level of education you have COMPLETED?
1 - Less than High School
2 - High School / GED
3 - Vocational or Technical Training
4 - Some College — NO degree

5 - 2-year College / Associate's Degree
6 - Bachelor's Degree
7 - Master's degree
8 - PhD / JD (Law) / MD

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inc: Was the estimated annual income for your household in 2021:
1 - Less than $50,000 [skip to **inc50**]
2 - At least $50,000 but less than $100,000 [skip to **inc100**]
3 - At least $100,000 but less than $150,000 [skip to **inc150**]
4 - $150,000 or more [skip to **inc200**]

----------Page----------

inc50: Was the estimated annual income for your household in 2021:
1 - Less than $10,000
2 - $10,000 to less than $20,000
3 - $20,000 to less than $30,000
4 - $30,000 to less than $40,000
5 - $40,000 to less than $50,000

----------Page----------

inc100: Was the estimated annual income for your household in 2021:
6 - $50,000 to less than $60,000
7 - $60,000 to less than $70,000
8 - $70,000 to less than $80,000
9 - $80,000 to less than $90,000
10 - $90,000 to less than $100,000

----------Page----------

inc150: Was the estimated annual income for your household in 2021:
11 - $100,000 to less than $110,000
12 - $110,000 to less than $120,000
13 - $120,000 to less than $130,000
14 - $130,000 to less than $140,000
15 - $140,000 to less than $150,000

----------Page----------

inc200: Was the estimated annual income for your household in 2021:
16 - $150,000 to less than $160,000
17 - $160,000 to less than $170,000
18 - $170,000 to less than $180,000
19 - $180,000 to less than $190,000
20 - $190,000 to less than $200,000
21 - $200,000 or more

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As part of this project, we are inviting a select group of people to participate in a citizen science initiative where we are asking participants to provide pictures of a nearby landscape using smartphone app called **Field Photo 2**. In exchange for participating, participants will receive an extra $10 gift card.

smartphone: Do you have a smartphone that can download applications and take pictures?
0 - No
1 - Yes

citizen_science: Are you willing to download and use **Field Photo 2** to provide pictures of a nearby landscape?
0 - No
1 - Yes

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Thank you very much for completing this survey. Your responses will help our team of scientists and policymakers identify and solve some of the biggest problems facing Oklahoma. As a token of our appreciation, you will be receiving a $10 gift card by mail or email in the next few weeks.

giftcard_selection: Please select the type of gift card you would most like to receive from the four options shown below. You will be able to change your selection each time you complete the survey. Please note, if you do not select from the choices below, we will select a $10 Walmart gift card for you.
1 - $10 Walmart gift card
4 - $10 Amazon **e-card (will be sent via email)**

Please verify that our records are correct: [verbatim; autofill with prior data if available]
confirm_fname: First name: [verbatim]
confirm_lname: Last name: [verbatim]
confirm_address: Address: [verbatim]
confirm_city: city: [verbatim]
state: Oklahoma
confirm_zip: zip: [verbatim; 5-digit numeric]
confirm_county: What is the name of the county where you live? [drop down list of counties]
confirm_phone: Phone: [verbatim; numeric
confirm_email: Email: [verbatim]

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[If **smartphone** = 1 and **citizen_science** = 1 and participant is one of the first 500 to qualify]

Thank you for volunteering to participate in our citizen science project! To participate, please follow these directions:

(1) Use your smartphone application store (such as the Apple App Store or Google Play) to find and download **Field Photo 2**

(2) Open **Field Photo 2** and create an account using the email address we have on file: [autofill]

(3) Follow these instructions to take and upload pictures of a nearby landscape within 1 week of completing this survey. [video in webpage: http://www.eomf.ou.edu/static/Field%20Photo%20Animation%20Draft%2003.mp4]

(4) That's it! We will watch for your pictures and mail you a gift card within a few weeks of receiving them!

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[If **smartphone** = 1 and **citizen_science** = 1 and participant is not one of the first 500 to qualify]

Thank you for volunteering to participate in our citizen science project. We will provide instructions for participating on the next survey!

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Thank you very much for your participation in the Oklahoma Weather, Society and Government Survey! We greatly appreciate your time and attention. As a token of our appreciation, you will be receiving a $10 gift card by mail or email within the next few weeks.