

## **Request for Review by the CSUS Committee for the Protection of Human Subjects**

Project Title: Water Meters and Water Conservation in an Arid Region

Submitted by: Kevin Wehr  
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Anticipated starting date: August 2004

1. Approximately 1200 people will be surveyed via telephone regarding their water use and conservation practices using the attached survey. The subjects are all residents of the City of Sacramento, and were chosen because they presently have water meters, as identified by the Sacramento Department of Utilities (who is cooperating with this study). Participation will be voluntary and the Department of Utilities is considering a one-time discount to help spur participation.
2. Informed consent will be obtained verbally at the initiation of the telephone survey after an introductory note. Though the subjects are not anonymous (subjects were chosen through the Sacramento Department of Utility dataset, which includes street address and the name of the account-holder), the survey information will be kept completely confidential and will be aggregated by social group—individual-level data will not be subject to scrutiny. Individual level data markers will be stored separately from the aggregate data and will be destroyed when no longer needed. As this is a telephone survey, there will be no signed informed consent form. Please see the attached draft of introductory remarks and informed consent disclosure.
3. Participants will not be subject to any physical harm or discomfort for this study. They will be asked a series of personal questions involving the demographics of the household (the age range, economic status, racial or ethnic identity, etc) and the attitudes and behaviors in regards to water use (such as how often they might wash their car, water their lawn, or use the dishwashing machine). These questions involve only every-day behaviors and pose no risk of social, psychological, or economic harm. The subjects' right to privacy will be guaranteed by separating individual-level identification markers which will be stored separately from the main data set. These markers will be destroyed when they are no longer needed. The individual-level data will not be subject to analysis, only aggregated data by social group will be analyzed.
4. The study will examine existing data on water use in the city of Sacramento, conduct a survey of these users to gain demographic, attitudinal, and behavior information. This data will then be examined statistically in an attempt to understand how water metering and price mechanisms might be related to conservation practices.
5. There will be no tests or questionnaires. The survey will consist solely of a telephone interview of approximately 15 minutes. The telephone survey involves no unduly personal questions and is appropriately categorized as no risk of discomfort or harm. Please see the attached survey draft.

6. There are no physical procedures used.
7. There are no equipment, apparatus, drugs, or pharmaceuticals used in the study.
8. Taking all aspects of this research into consideration, this study appears to be “no risk” because it does not involve any social, psychological, or economic harm or discomfort for the subjects.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## Sacramento water metering survey draft

Introductory script for telephone interviews:

“Hello, I am calling from the California State University at Sacramento may I speak to \_\_\_\_\_?  
I am doing a telephone survey for Dr. Kevin Wehr of the California State University at Sacramento, in conjunction with the Sacramento Department of Utilities. We are not part of any business or for-profit venture, we are calling to ask you to participate in an academic study about water conservation in the Sacramento area. As the population of our region continues to expand we need to know as much as possible about water use and conservation practices in the area. We would like to ask you to participate in this volunteer study, with the assurance that your information will be held **privately** and kept **completely confidential**. Participation is of course **voluntary**, you may choose not to answer any question or can stop the survey at any time, and we strongly urge you to consider giving us 15 minutes of your time for this important study. Is this a good time to proceed?

### Demographics Questions:

What is the number of residents living at this address?

Are there people who live at this address part time? (e.g. dependants home from college during the summer)?

What are the ages of the residents?

What is the approximate household income?

How would the members of this household identify their race or ethnic identity?

Do you own or rent this home?

### Attitudinal and behavior questions:

What do you see as the major social problems confronting the US today?

What do you see as the major social problems confronting the State of California today?

What do you see as the major social problems confronting the City of Sacramento and the Sacramento Region today?

Do you read a daily newspaper: almost every day, 4-5 times per week, 2-3 times per week, rarely?

Do you read a weekly newspaper or magazine: almost every week, every other week, rarely?

Do you watch news on network TV: almost every day, 4-5 times per week, 2-3 times per week, rarely? Which ones?

Do you watch the news on Cable TV: almost every day, 4-5 times per week, 2-3 times per week, rarely? Which ones?

Do you read the news on the internet: almost every day, 4-5 times per week, 2-3 times per week, rarely? Which ones?

Do you listen to the news on the radio: almost every day, 4-5 times per week, 2-3 times per week, rarely? Which ones?

Do you consider yourself an active gardener?

How often does the lawn get watered in the summertime?

- a. 0 (no lawn or doesn't water)
- b. less than one time per week
- c. 1-2 times per week
- d. 3-5 times per week
- e. more than 5 times per week

Is the watering system automatic?

Is a garden kept at this address? If yes, how often is the garden watered?

Is the watering system automatic for the garden?

Does the watering system primarily use

- a. sprinklers
- b. drip irrigation
- c. flooding with hose
- d. equal mix of two of the above (specify which two)

How often are indoor plants watered at this address?

How often does a car get washed at this address (specify time period of interest)?

How often does a motorcycle, jet ski, or other sporting equipment get washed at this address?

How often are sidewalks or porches hosed off at this address?

How many loads of laundry are washed at this address in an average week?

How often is a dishwasher run at the address?

How often are dishes hand-washed?

How many showers are taken at the address in an average week?

How many baths are taken at the address in an average week?

How many animals (excluding fish) are kept? If yes, approximately how much does the animal drink? How often is the animal bathed?

Is there a fish tank or aquarium at this address? How large is the tank? How often is the water changed?

What is the source of drinking water at this address?

- a. faucet or spout on refrigerator
- b. bottled
- c. filtered

Are there leaky or inefficient pipes or faucets at this address?

Is there a swimming pool at this address? If yes, how often is it filled?

Is there a Jacuzzi or hot tub at this address? If yes, how often is it filled?

Is there a child's pool kept at this address? If yes, how often is it filled?

How often is the hose run for recreation (e.g., children running through sprinklers in the summer months)

How often is the house hosed down (e.g., city soot, spider webs, etc)

Do people in the household minimize flushing? yes/no

Is there a low flush system? yes/no

Do people in the household reclaim water from laundry or other sources (i.e. grey water recycling)? yes/no

How would you rate your level of concern about water resources in Sacramento? (1. not at all concerned/2. very slightly concerned/3. moderately concerned/4. extremely concerned)

Do you practice conservation measures (such as water saving technologies, low flow shower heads or low flow toilets, a programmable thermostat, native plants in the yard)?

Do you consider yourself an environmentalist?



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### Committee for the Protection of Human Subjects

April 22, 2004

03-04-095 (April)

Kevin Wehr, Assistant Professor  
Sociology

**RE: Water Meters and Water Conservation in an Arid Region**

We are pleased to inform you that your request was approved as “No Risk” on April 19, 2004. The approval applies to the conditions and procedures described in your protocol. Your approval expires one year from this date.

Approval carries with it the understanding that you will inform the Committee promptly should an adverse reaction occur, and that you will make no modification in the protocol without prior approval of the Committee.

If you need any further information about the use of human subjects, please contact me at 278-6666 or the Office of Research & Sponsored Projects at 278-7381.

Thank you.

John Schaeuble, Chair  
CSUS Committee for the  
Protection of Human Subjects

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