

What Price Safer Water?

by Scott J. Rubin

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Good afternoon. First, I would like to thank Commissioner Walker for having poor enough judgment to ask me to speak with you today.

Now let's get one thing straight. I don't think anyone in this room – certainly not me – would argue that our drinking water shouldn't be safe. But with all due respect to the previous speakers, that's not the issue. The real issue is how much should we pay for a marginal improvement in the safety of drinking water. We're usually talking about spending millions, or even billions, of dollars to slightly reduce the probability that someone will get sick from the water.

Simply, it is a question of the costs and benefits associated with an incremental reduction in the risk of illness. Thus my title: What Price Safer Water?

This is an extremely important question. There are millions of people in this country who cannot afford all of the basic necessities. More than 20 million households in this country have incomes that are less than \$20,000 per year. If we increase the price of any necessity – including water – then we are forcing millions of low-income families to give up something that may have an even greater impact on their health.

Let's be specific.

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The US Census Bureau concluded that one person out of every five lives in a household that cannot meet its basic needs – they couldn't pay their rent or mortgage or utility bills, they couldn't afford to see a doctor or dentist, they didn't get enough to eat, or they couldn't afford telephone service.

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Importantly, that research also shows the relative priority that people place on these necessities. The first thing to go is full payment of the energy bill, then dental care, next is the full rent or mortgage payment, medical care, food, and telephone service. At the bottom of the list are the loss of energy service and, finally, eviction.

Where does water service fit on this list? That question wasn't answered in this study, but from my discussions with low-income advocates and water utilities, there's a general consensus that water and wastewater service would fall between energy service and eviction – assuming that the utility disconnects service for non-payment.

In other words, in order to pay the water bill, low-income families will forego dental and medical care, food, telephone service, and even energy service.

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A later study confirms these results and adds two more necessities to the list. The first is health insurance, which goes right to the top of the list; that is, it's the first thing to go. The second is child care, which is very far down on the list – falling right after the loss of telephone service.

In light of these findings, we must ask the question: Is the marginal health benefit from enhanced drinking water treatment causing more harm than good for low-income households? Does a low-income family do more to

protect its health by spending a dollar to buy slightly safer drinking water or would it be better off spending that dollar to buy more food, medical care, and heat? That's the very real trade-off that millions of families face.

I know ... many of you are thinking that these questions are really red herrings because low-income households don't actually pay water bills. They have the cost included in their rent or, in rural areas, they're not on a public water supply anyway.

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Well, let's look at some real data. First, a quick note – in these next few slides, when I'm talking about paying for "water" it means water and wastewater service. As a practical matter, you can't keep the water flowing in the home unless you pay for both water and wastewater.

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This is just a note on the source of the data – the data were collected from more than a million households as part of the 2000 census.

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So, who pays for water? Nationally, about 62% of all households pay a water and wastewater bill. The other households are pretty much evenly split between those that have the cost included in their rent or maintenance fee, and those that aren't connected to a public water supply.

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What about low-income households? Almost half of low-income households pay a water bill. Frankly, that figure is much higher than I expected. About 10 million households with incomes less than \$20,000 per year pay a water and wastewater bill. That's a huge number.

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Do renters pay for water? More often than you might think. Nationally, almost 30% of renters pay a water bill.

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Even in larger apartment buildings 0 those with 10 or more units – about 10% are paying a water bill. Of course, in lower-density housing, the percentages are much higher.

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But here's an important warning – your state won't look like this. These are national averages, and the differences among the states – and even within some states – are enormous. For example, while nationally 60% of households pay a water bill, the range is from 35% in Vermont to 80% in Alabama.

So, while these numbers are interesting at a national level, you can't just rely on them if you're focusing on your state.

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Nationally, for households that pay a water bill directly, the average bill for water and wastewater service is \$476 per year. The average household spends about 1.6% of its income for water and wastewater service.

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But, again, your state may not look like the national average. The range of average costs is from about \$330 per year in Nebraska to almost \$600 per year in California and more than \$720 per year in Hawaii. We also know, however, that there's a wide divergence in income levels throughout the country.

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So this map looks at the average percentage of income paid for water and wastewater service. There are a number of states – shown in white – where the average cost is less than 1.25% of income. The states shown in red have costs between 1.75% and 2% of income. And ... my apologies Commissioner Walker ... West Virginia is the highest in the country, with the average household spending about 2.2% of its income for water and wastewater service.

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Here's another important warning. The data we've just talked about are from the 2000 census. All of this could change significantly under a new EPA proposal. This summer, EPA proposed to change its interpretation of the law which could make it more feasible for landlords to submeter and bill tenants for water service. I know that some of your commissions will have something to say about the terms, conditions, and rates for submetering. But if EPA finalizes its proposal, it could have a dramatic effect on the number of renters – especially low-income renters – that are required to pay a water bill. We need to be alert to see if there is an increase in submetering and, if so, whether it is having an adverse effect on low-income families.

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I would be remiss if I didn't discuss what some water utilities are doing to help their low-income customers. Two recent surveys have asked water utilities if they have rate discounts for low-income customers. One study that surveyed about 150 larger water utilities – most of which are municipally owned – found that 14% had discounts for low-income customers. The other study, which surveyed a much larger cross-section of water utilities, including many smaller ones, found that only about 4% offered low-income discounts.

Neither of these studies asked for many details about the programs and neither asked for information about other programs the utilities or communities may offer to help low-income water customers.

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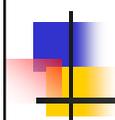
Finally, I want to make sure you are aware of some on-going initiatives that might help low-income water customers. Several national groups, including NARUC, NASUCA, NAWC, and others are discussing the possibility of a federal water assistance program similar to LIHEAP or the telephone Lifeline program. Right now, it's just in the talking stages, but it might begin to move forward over the next several months.

In addition, we know that there are several water utilities that have assistance programs that do not involve rate discounts and, so, would not have been picked up in the surveys I discussed. The American Water Works Association has some on-going research that is attempting to better understand the types of low-income assistance programs that are currently in place, and to determine if there is a need for a federal assistance program.

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In closing, I want to leave you with one final question: How much food or medical care should a low-income family have to give up in order to pay its water bill? When we're willing to acknowledge the legitimacy of that question, then we can have a meaningful discussion about the costs and benefits of drinking water regulation.

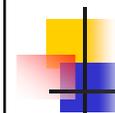
Thank you again for allowing me to speak with you today.



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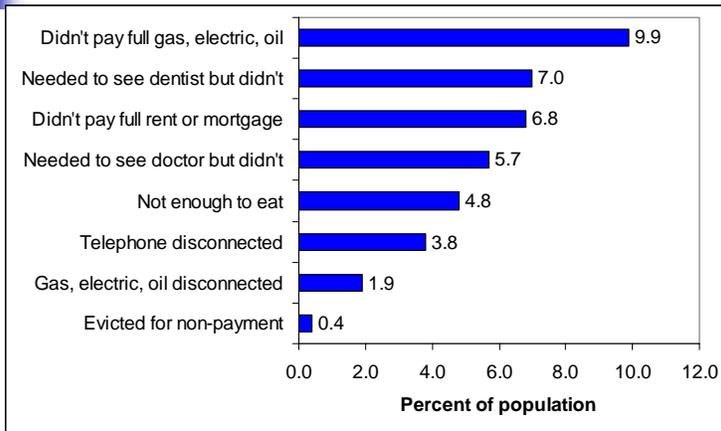


Prevalence of hardships

"In 1995, ... about 1 person in 5 lived in a household that had at least one difficulty meeting basic needs. These included households that didn't pay utility bills, didn't pay mortgage or rent, needed to see the doctor or dentist but didn't go, had telephone or utility service shut off, were evicted, didn't get enough to eat, or otherwise didn't meet essential expenses."

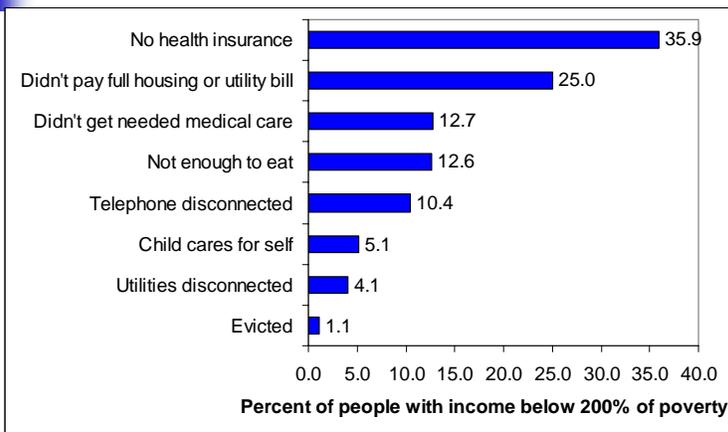
- Bauman, Kurt, *Extended Measures of Well-Being: Meeting Basic Needs*,
U.S. Census Bureau Current Population Reports, P70-67 (1999)

What goes first? Percent of people experiencing hardship

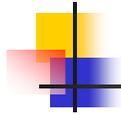


Source: Bauman, Kurt, *Direct Measures of Poverty as Indicators of Economic Need: Evidence from the Survey of Income and Program Participation*, U.S. Census Bureau Population Division Technical Paper No. 30 (1998)

Hardships at 200% of poverty level and below

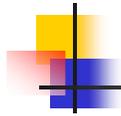


Source: Boushey, Heather, *et al.*, *Hardships in America: The Real Story of Working Families* (Economic Policy Institute, 2001)



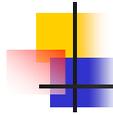
Important definition

- To the customer, the “cost of water” includes both water and wastewater service
- In this presentation, “water” always means water + wastewater

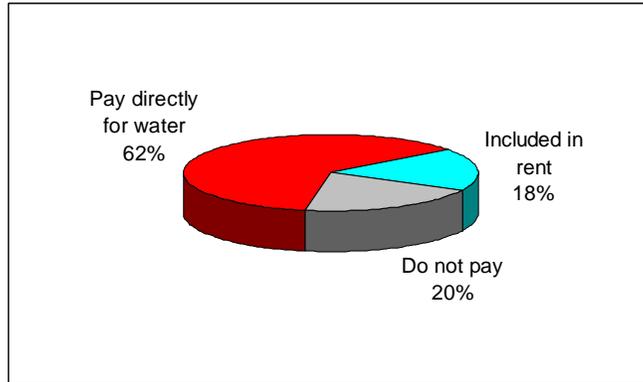


Note on data sources

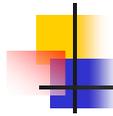
- Next several slides from U.S. Census Public Use Microdata Survey (PUMS)
- Conducted as part of 2000 census
- Scientific, stratified survey of 1.2 million households (approx. 1% of U.S.)
- Recently completed study for National Rural Water Association: “The Cost of Water and Wastewater Service in the United States”



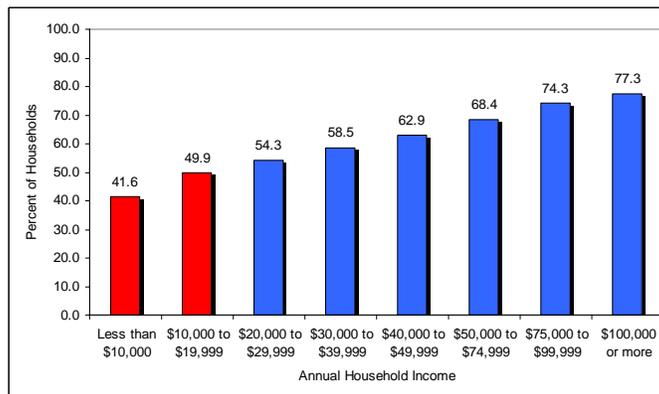
Who pays for water?



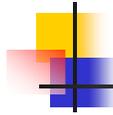
All Households



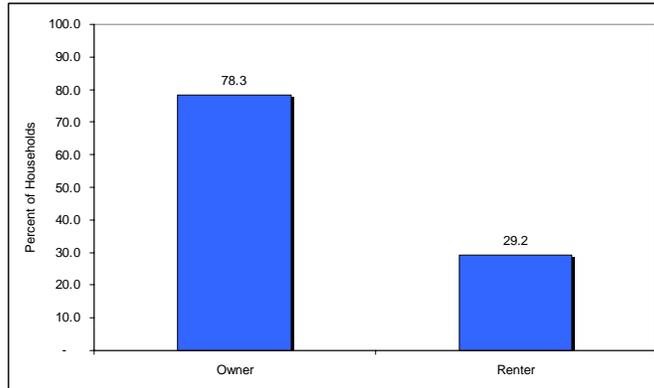
Who pays for water?



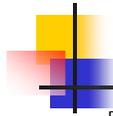
Percent of Households Paying Directly for Water, by Income



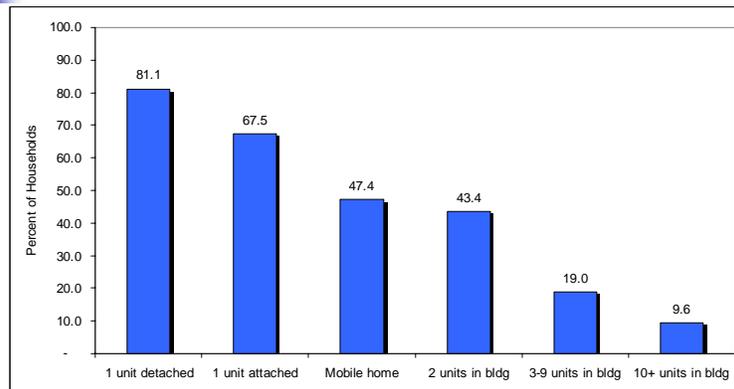
Who pays for water?



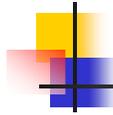
Percent of Households Paying Directly for Water, by Tenure



Who pays for water?

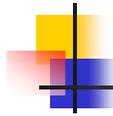


Percent of Households Paying Directly for Water, by Type of Building



Your state won't look like this

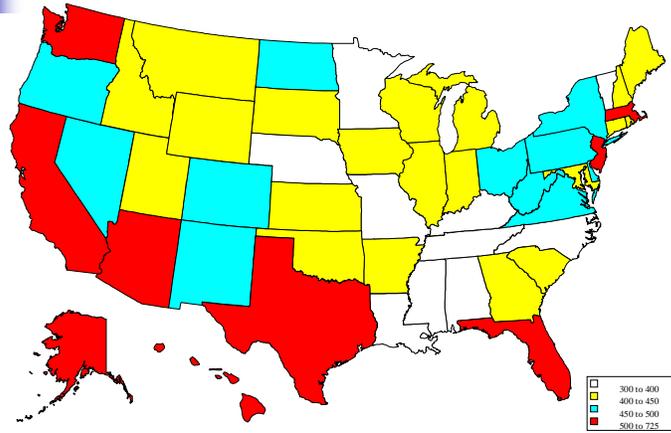
- Diversity among the states, and even within some states, is tremendous. For example, the following percentage of households pay directly for water:
 - All households: 35% (VT) to 80% (AL)
 - Mobile homes: 14% (ME) to 74% (AL)
 - 10+ unit bldgs: 1% (NY) to 33% (GA)



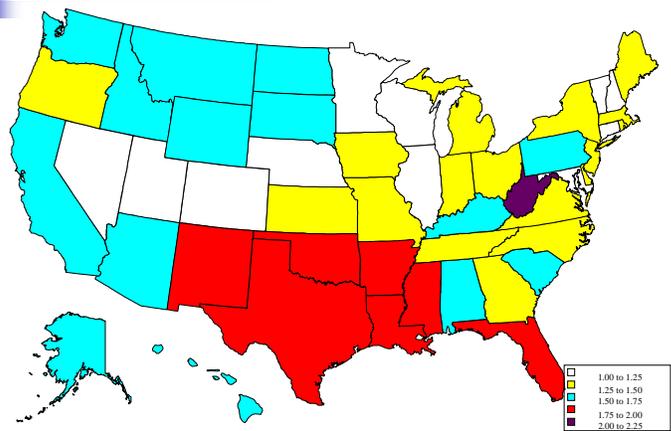
How much does water cost?

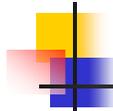
- National average among households that pay directly for water: \$476 / year
- Average household spends 1.6% of income for water
- Median household spends 0.8% of income for water
- 25% of households spend more than 1.6% of income

Average cost of water



Average percentage of income spent for water





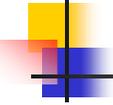
Warning!

- EPA has proposed to modify its interpretation of SDWA to make it more feasible for landlords to submeter and bill tenants for water (68 Fed. Reg. 51777-80, 8/28/03)
- How will this affect low-income households and their communities?



Are water utilities helping low-income customers?

- Survey of 150 larger water / wastewater utilities in 2002 found that 21 (14%) offer discounts for low-income customers (Raftelis Financial Consulting, *2002 Water and Wastewater Rate Survey*, Table 4)
- EPA's Community Water System Survey in 2000 found that about 4% of water utilities offered a discount for low-income customers (US EPA, *Community Water System Survey 2000*, Question 30)
- According to EPA survey, almost all (99%) water utilities offering rate discounts are publicly owned



Initiatives to help low-income water customers

- Low-Income Water Assistance Program
- Utility and private programs that do not involve rate discounts
 - Hardship / charitable funds
 - Targeted conservation programs
- On-going research



The resource for utility professionals

The Public Utility Home Page
www.publicutilityhome.com