

## **USA TODAY analysis: Water costs gush higher**

**Kevin McCoy, USA TODAY, September 29, 2012**

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*A USA TODAY study of residential water rates over the past 12 years finds that crumbling infrastructure is forcing repairs from coast to coast, with costs more than doubling in 1 of 4 localities.*

While most Americans worry about gas and heating oil prices, water rates have surged in the past dozen years, according to a USA TODAY study of 100 municipalities. Prices at least doubled in more than a quarter of the locations and even tripled in a few.

Consumers could easily overlook the steady drip, drip, drip of water rate hikes, yet the cost of this necessity of life has outpaced the percentage increases of some of these other utilities, carving a larger slice of household budgets in the process.

"I don't know how they expect people to keep paying more for water with the cost of gas and day care and everything else going up," complains Jacquelyn Moncrief, 60, a Philadelphia homeowner who says the price hikes would force her to make food-or-water decisions. She gathered signatures on a petition opposing a proposed water rate increase in her city this year.

USA TODAY's study of residential water rates over the past 12 years for large and small water agencies nationwide found that monthly costs doubled for more in 29 localities. The unique look at costs for a diverse mix of water suppliers representing every state and Washington, D.C. found that a resource long taken for granted will continue to become more costly for millions of Americans. Indeed, rates haven't crested yet because huge costs to upgrade or repair pipes, reservoirs and treatment plants loom nationwide.

In three municipalities — Atlanta, San Francisco and Wilmington, Del. — water costs tripled or more. Monthly costs topped \$50 for consumers in Atlanta, Seattle and San Diego who used 1,000 cubic feet of water, a typical residential consumption level in many areas. Officials in the three municipalities and elsewhere, however, say actual consumption is often lower. But conservation efforts counter-intuitively may raise water rates in some localities.

The trend toward higher bills is being driven by:

- The cost of paying off the debt on bonds municipalities issue to fund expensive repairs or upgrades on aging water systems.
- Increases in the cost of electricity, chemicals and fuel used to supply and treat water.
- Compliance with federal government clean-water mandates.
- Rising pension and health care costs for water agency workers.
- Increased security safeguards for water systems since the 9/11 terror attacks.

### **Higher rates still ahead**

The costs continue to rise even though residential water usage dropped sharply nationwide in the past three decades amid conservation efforts.

U.S. water systems will need as much as \$1 trillion in infrastructure improvements by 2035 to keep up with drinking water needs, according to a survey of industry experts released in June.

The bond debt needed to fund those projects' work will be passed on to consumers, including the many Americans struggling with the economic fallout of the great recession.

A virtually irreplaceable resource that Americans rely on for health and daily living "could potentially get more and more expensive," says John Chevrette, who heads the management consulting arm of Black & Veatch, the firm that conducted the industry survey.

He predicts rate increases of 5% to 15% every few years, saying the cost of water "could take a larger and more significant bite out of otherwise disposable income."

"You're talking about greater than inflationary costs," says Doug Scott, managing director for Fitch Ratings, which similarly projects 5% annual rate increases among the many water and sewer agencies his company tracks.

Some water agencies, including Philadelphia, have special water programs to help cut costs for those with low incomes. Even so, the economic forecasts frighten Moncrief, a single mother who bought her home in Philadelphia's Mount Airy neighborhood decades ago, and now lives there on a disability income.

The monthly cost of 1,000 cubic feet of water in her hometown has jumped 164%, to \$39.22, since 2001. Even when the costs were lower, Moncrief says at times she had to work out installment payments with the Philadelphia Water Department.

Testifying at a July hearing in an ongoing water rate increase proceeding, Ruth Bazemore said she and other Philadelphia senior citizens were astounded that the city's water commissioner proposed hikes that would "increase our bills by almost 30% in less than three years."

Community opposition prompted a tentative settlement that would save consumers at least \$80 per year from the ultimate cost of the city's original proposal, says Robert Ballenger, a Community Legal Services attorney who represents the public in the Philadelphia rate hike proceeding.

Bazemore, a representative of the Action Alliance of Senior Citizens of Greater Philadelphia, says even a lower increase "would be difficult for a lot of people to pay."

Efforts to compare water costs of any given area with another produce misleading or even false results, because of differences in population, geography, geology, bonding debt for infrastructure work and other variables. However, what most water agencies across the nation share is increasing costs that make higher bills all but inevitable.

In Baltimore, where water costs are up 140% since 2001, the public works agency in the last decade completed a \$65 million upgrade of the water system's Ashburton Filtration Plant.

After a series of major water main breaks in 2009, the city made plans to speed the pace of pipe cleaning, relining and rehabilitation work to 40 miles per year, a five-fold increase. The cost? About \$300 million over five years, says agency spokesman Kurt Kocher.

At the same time, Baltimore, like water systems nationwide, was forced to implement costly security upgrades at its facilities. "It's not the world of 1990. It's the post-9/11 security world we have to deal with," says Kocher.

### **'A race against time'**

In San Francisco, the monthly cost of 1,000 cubic feet of water jumped nearly 211% since 2001 as the city's regional water system ended a seven-year rate freeze and began a massive, five-year infrastructure improvement program.

Harlan Kelly Jr., the system's assistant general manager for infrastructure, says the work was vital because the freeze had left little funding for expanding and strengthening the system that serves more than 30 cities and 2.6 million people in the Bay Area.

A 2002 city economic study warned that the Bay Area would suffer a \$30 billion economic hit if an earthquake severely disrupted the water network for two months. The California Division of Safety of Dams delivered an even more immediate warning in 2001, deeming the Calaveras Dam seismically unsafe. That forced the San Francisco Public Utilities Commission to drain the

reservoir created by the dam to a third of its normal level, significantly reducing the system's water storage.

"I think everyone realized this work was needed," says Kelly. "It's a race against time. Here in California, it's not if, it's when" the next major earthquake will hit.

Consumers have little choice but to pay for infrastructure improvements and repairs to the nation's often aging water systems, says Scott, the Fitch Ratings executive.

If they don't, water mains and other parts of the systems "will break, and the breaks will be catastrophic. It would be the equivalent of somebody not replacing their water heater when it is leaking, and then having it fall from the attic and tear up their entire house."

Municipal water systems typically fund major repairs and other infrastructure work by issuing bonds that are repaid over time. The annual cost of paying off debt servicing those bonds is passed on to consumers in higher rates.

The financial impact is already being felt. Fitch Ratings showed water agencies' debt per customer rose from \$1,012 in 2006 to \$1,611 in 2011.

Diane Clausen, a Seattle Public Utilities official, says her agency has outpaced many other municipal water suppliers by working to place protective coverings over reservoirs, building a filtration plant on one major water source and installing an ultraviolet treatment facility on another major source.

"We've pretty much done our major capital projects," says Clausen. "The debt service on those are included in the rates that our customers pay, so the rates for us, we believe, would tend to be higher than the rates for other utilities that aren't as far along in their infrastructure development."

Similarly, Atlanta officials say their rates — up 233% since 2001 for monthly usage of 1,000 cubic feet of water — partly result from \$1.3 billion in spending to upgrade the city's water supply system in compliance with federal clean water mandates.

### **Conserving, yet costs still rise**

Unique geographic conditions and other circumstances can also raise costs. In Augusta, Maine, the monthly cost of 1,000 cubic feet of water has topped \$40 since 2000. That's partly because the city has a small base of approximately 5,800 mostly residential customers and lacks major industrial customers that would help share the cost, says Brian Tarbuck, general manager of the Greater Augusta Utility District.

"Coupled with our 10 storage tanks, deep frost conditions — pipes are literally 'six feet under' to avoid freezing — low (number of) customers per mile of pipe and lots of granite and hills, it gets expensive," says Tarbuck.

U.S. homeowners who reduce their water consumption in an effort to save money can cut their costs. But they may end up raising the rates they're charged. Why? Because water suppliers collect less income as consumption drops, but ongoing costs -- such as bonding debt, salaries and chemicals -- either increase or, at best, remain stable.

A 2010 report by the Water Research Foundation, a non-profit organization that studies drinking water issues, concluded that residential usage per customer dropped more than 380 gallons annually in the last 30 years, a changing era when conservation became more prevalent. Compounded over time, the report says the trend implies that a customer would have used 11,673 fewer gallons in 2008 than an identical customer in 1978, a 13.2% decline.

As a result, many water agencies have been forced to raise rates.

"When we explain that part of the reason you're paying more is because you're using less, that doesn't go over real well with a lot of people," says Joseph Clare, the Philadelphia Water Department's deputy commissioner for finance and administration.

The 2012 drought that continues to hold roughly half the nation in its grip has also had an impact on some water rates. In March, the Midland, Texas, City Council unanimously imposed a five-fold price increase on water customers who use more than 10,000 gallons per month, which surpasses consumption for a typical family.

In El Paso, the drought cut the city's ability to draw from the Rio Grande River, the source for about half the area's water. To help make up for the loss, El Paso Water Utilities for about 15 days in late May and early June ran its water desalination plant at its full 27.5 million gallons-per-day capacity, making brackish groundwater fit for drinking, said Christina Montoya, an agency spokeswoman.

"This is the first time that's ever happened," she said.

Although Scott and others expect increases in water costs around the nation to remain both regular and high, the good news is that the dollar costs are still relatively low in many municipalities.

"It's going to be a pretty good bargain for the foreseeable future," Scott says.

Try telling that to Americans hard pressed by the still sluggish economy, including low-income residents and senior citizens living on fixed incomes.

## **Something has to give**

Philadelphia homeowner Moncrief, who delights in watering her garden into bloom, says she understands her city's water agency faces higher costs for water system projects. That includes the \$50 million construction of a 5-million-gallon storage tank to prevent storm sewers from overflowing into the Schuylkill River — source of about 42% of local drinking water.

But she says higher rates — even those under the tentative compromise in the Philadelphia water rate increase proceeding — would make it harder for her to pay "my medical costs ... co-pays for medication," upkeep of her home, even food.

"It's been quite stressful just trying to budget. How am I going to maintain all these things on a fixed income that's not going to increase?" said Moncrief, who adds that she's cut back on hot baths and takes shorter showers.

Responding to that type of consumer concern, some municipalities have tried to limit or delay rate increases. For instance, Antioch, Calif., officials in May opted to defer some capital spending and use the savings and other measures to delay previously announced plans for an 8% water rate increase.

Clare, Philadelphia's deputy water commissioner, notes that his agency held rates stable from 1993 until 2001. But, ultimately, costs had to go up to maintain crucial water supply and delivery systems, he says.

"It's going to be a hardship for me; I think it's going to be a hardship for a lot of people," says Moncrief. "But there's a greater sense of hope and possibility ... when you know the increase is not going to be as high" as originally proposed.

"I may not be able to eat meat five days a week, but maybe I can eat meat three days a week."

Contributing: Oliver St. John, Tom McGarrity

## **ABOUT THIS REPORT**

### **How project was done**

To document the rising cost of drinking water, USA TODAY started by obtaining periodic municipal water-cost surveys conducted since 2000 or 2001 by Black & Veatch and Raftelis Financial Consultants, private firms that advise water agencies on financial issues. USA TODAY verified those companies' data with each municipality and also gathered 2012 costs from the localities. Reporters then independently collected the same information from dozens of other

municipalities to cover 100 in all, spanning all 50 states and Washington, D.C.

### **More about the data**

Local water costs vary widely because of geography, climate, population, a water company's borrowing costs and other factors. That makes it virtually impossible to compare one city's water costs to another's. For its survey, USA TODAY defined a typical household as one using roughly 7,500 gallons (1,000 cubic feet) a month and having a meter size of about 5/8 inch, or the closest equivalent. Actual average consumption may vary. Weighted averages were used for locations where rates change seasonally. The percentage change in rates shown is based on the change from 2000 or 2001, depending on the location.