Hello, I’m Jim Nash, your Oakland County Water Resources Commissioner and today I’m going to talk about a subject that has been on a lot of people’s minds recently – water rates. Specifically, I will explain how they’re established, what they entail and why they seem to be going up year-after-year.

To assist me in that task, I’ve prepared a brief PowerPoint presentation that will highlight some of the important elements that go into the water rate-setting process. We’re going to pull back on the curtain on how rates are established.
As the Oakland County Water Resources Commissioner, I am an elected official.

As an elected official, I oversee the job of providing services to the public in an efficient and cost-effective manner. With the loss of state and federal dollars, that job is becoming increasingly more difficult.
The environmental advocates, the regulators and a subset of my constituents often push to broaden my responsibilities. While I welcome the challenges of providing increasing services, I can do so only if there is money to pay for those services. Additionally, most of what I do as the water resources commissioner is dictated by state law.
I’m often asked when will we see a reduction in water rates. My answer is, unfortunately, we won’t – at least not in the foreseeable future. Rates will continue to increase for a number of reasons. There are state and federal mandates that must be met. But, perhaps the biggest reason can be associated with “fixed costs.”
Fixed costs are expenses that are associated with providing water and wastewater services. These costs include such things as maintenance, repair and replacement of infrastructure, operational expenses and a host of other items that aren’t subject to change regardless of the amount of water provided.
It must be remembered that providing clean, fresh water is different than most other services because we are dealing with issues of health, safety and environmental concerns.
Providing those services while doing what we can to keep costs as low as possible involves a delicate balancing act.
Quality cannot be sacrificed. We cannot jeopardize the health, safety or welfare of the people who rely on us for drinking water.
In other words, we can’t cut corners.
When we talk about typical rate components, we first must consider the initial cost to buy water from the water supplier. There are costs associated with the treatment of the water and the cost to transport it from intake locations such as Lake Huron or the Detroit River to your community. Rates can vary depending on the distance water needs to be transported before reaching its final destination.

Operations and maintenance costs includes things such as valve exercising and repair, pressure regulating valve maintenance, hydrant maintenance, main break repair, meter reading and billing.

The reserve contributions provide funds to deal with aging infrastructure while protecting and preserving the system to ensure reliable service. It also is used for unanticipated emergencies. It varies by community, but make no mistake about it, communities need to have a savings plan to deal with these inevitable costs.

The capital improvement plan contributions provide for infrastructure replacement and special programs and projects such as security upgrades, fencing and lighting projects.
As part of our information gathering process, we review prior fiscal year sales, and we look at purchases from either the Detroit Water and Sewerage Department or another authority. We also estimate water loss caused by water main breaks, leaks, water used in fire protection, and in some cases, theft.

We also consider customer growth projections because slow growth translates into reduced residential and commercial water use.

Finally, the weather greatly impacts water sales. If there is a wet summer, less water is used for lawns and landscaping. Conversely, water sales increase during dry summers.
This is a typical water graph showing the relationship between the amount of water actually purchased from a water supplier and the amount sold to our customers. The difference represents water loss due to such things as main breaks and leaks. The purchases are noted by the red line while the sales are depicted by the blue line below it. The difference represents the amount of water lost.

This graph shows that in 2008 a major leak was discovered and repaired which resulted in a significant decrease in water loss. This saves our customers money because they are no longer paying for water they don’t actually receive.
Prior year expenses are from the fiscal year financial report. The inflationary increase is forecasted from reasonable assumptions that include such things as the county’s annual salary adjustment, cost of living forecasts and increasing energy costs.

New programs may include those mandated by the Michigan Department of Environmental Quality (MDEQ) and system component maintenance.

Capital improvements addresses aging infrastructure issues such as replacing and/or relining water mains. Identification of high priority projects that address fire flow, redundancy, high break areas and vulnerability on the existing water supply system. Based on the need to protect and preserve our system and ensure continued reliable service to our current customers, a water infrastructure replacement program was initiated.
Still, as water delivery collection systems age, maintenance costs increase. Failure to properly maintain the infrastructure in a timely manner contributes to more expensive fixes down the road and dramatic rate increases to pay for them. Additionally, when proper and timely maintenance is delayed or neglected, the useful life of the pipes and other infrastructure is greatly reduced.
Extraordinary expenses include significant costs for system component repairs, both future and past. Future costs are added and one-time only prior year costs are subtracted.
That’s why it’s so frustrating for some consumers who conserve water only to see their bills stay the same or even increase. Conserving water is good for the environment and an activity I wholeheartedly endorse, but it is not a path toward rate reduction because it has little or no impact on fixed costs. It seems backwards that water rates should increase when sales go down, but about 80 percent of the costs are the kinds of fixed costs mentioned above.
Reserve contributions are necessary for such things as infrastructure replacement associated with aging Infrastructure. As I indicated earlier, it also is used to protect and preserve the system and ensure reliable service. It cannot be overstated how important it is to have a savings plan for these inevitable costs. I also want to mention that these funds earn interest which is used to offset rates.
Now let’s talk about what goes into the rate calculation equation. First, we have the water supplier rate. We add our operation and maintenance costs and the funds we set aside for capital improvements and reserves and those figures, added together, results in your community water rate. But we don’t stop there.
Here at the WRC, we’re doing what we can to reduce costs and save money for our customers. Employees have taken a pay cuts in recent years and we’ve reduced the size of our workforce, reduced the number of vehicles in our fleet and cut vehicle use. We’ve also consolidated and realigned jobs to save money.
These are just a few of the steps we’ve taken to ensure that we provide the best possible service at the lowest possible cost while providing quality drinking water and maintaining a reliable infrastructure system.
Remember, it's our water, our future, ours to protect!
I hope you found this presentation informative and entertaining.
Remember, we all live in a watershed and everything we do has some effect on water quality.
Remember, we all live in a watershed and everything we do has some effect on water quality. Send any water-related questions you have to the address that appears on your screen.

I’m Jim Nash, and on behalf of all of us at the Oakland County Water Resources Commissioner’s Office, here’s wishing you good health and a very good day.

For additional information, please visit our website:

www.oakgov.com/water